

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 112/TT/2013

Coram:

**Shri Gireesh B. Pradhan, Chairperson
Shri A.K. Singhal, Member
Shri A.S. Bakshi, Member**

Date of Hearing : 16.09.2014

Date of Order : 07.10.2015

In the matter of:

Determination of transmission tariff of 9 nos. of assets under Transmission System for Phase-I Generation Projects in Orissa-Part-A in Eastern Region for tariff block 2009-14 under Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009.

And in the matter of:

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

.....Petitioner

Vs

1. GMR Kamalanga Energy Limited,
Skip House, 25/1, Museum Road,
Bangalore, Karnataka-560 025
2. Monnet Power Company Limited,
Monnet Marg, Mandir Hasaud,
Raipur, Chattisgarh-492 101
3. Lanco Babandh Power Limited,
Plot No. 397, Phase-III, 2nd Floor,
Udyog Vihar, Gurgaon,
Haryana-120 016
4. IND Barath Energy (Utkal) Limited,
Plot No. 30-A, Road No. 1,
Film Nagar, Jubilee Hills,
Hyderabad, Andhra Pradesh-500 033



5. Navbharat Power Private Limited,,
Navbharat Chambers, 6-3-1109/1,
3rd Floor, Left Wing, Rajbhawan Road,
Somajiguda, Hyderabad,
Andhra Pradesh-500 082
6. Jindal India Thermal Power Limited,
Plot No. 12, Sector-B, Pocket-1
Local Shopping Complex,
Vasant Kunj, New Delhi-110 070
7. Sterlite Energy Limited,
Sipcot Industrial Complex,
Tuticorin, Tamil Nadu-628 002
8. Bihar State Electricity Board,
Vidyut Bhawan, Bailey Road,
Patna-800 001
9. West Bengal State Electricity Distribution Company Limited,
Bidyut Bhawan, Bidhan Nagar,
Block DJ, Sector-II, Salt Lake City,
Kolkata-700 091
10. Grid Corporation of Orissa Limited,
Shahid Nagar,
Bhubaneswar-751 007
11. Damodar Valley Corporation,
DVC Tower, Maniktala
Civil Centre, VIP Road,
Kolkata-700 054
12. Power Department,
Govt. of Sikkim, Gangtok-737 101
13. Jharkhand State Electricity Board,
In front of Main Secretariat,
Doranda, Ranchi-834 002

.....Respondents

For petitioner : Shri R. Prasad, PGCIL
Shri S.S. Raju, PGCIL
Ms Sangeeta Edwards, PGCIL

For respondents : None



ORDER

The petition has been filed by Power Grid Corporation of India Limited (PGCIL) seeking approval of the transmission charges for 9 nos. of assets (hereinafter referred to as "transmission asset") under Transmission System for Phase-I Generation Projects in Orissa-Part-A in Eastern Region for tariff block 2009-14 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations").

2. The Investment Approval (IA) for the project was accorded by the Board of Directors of the petitioner vide Memorandum No. C/CP/ Orissa Ph-I IPPs (Part-A) dated 17.9.2010 at an estimated cost of for ₹207486 lakh, including IDC of ₹12820 lakh (based on 1st Quarter, 2010 price level). The transmission project was scheduled to be commissioned within 30 months from the date of IA and accordingly the scheduled commissioning of the project works out to 16.3.2013 i.e. 1.4.2013. The petitioner, vide affidavit dated 8.6.2015 submitted the Revised Cost Estimate (RCE) which was approved by the Board of Directors of the petitioner vide Memorandum No. C/CP/RCE-ER dated 23.2.2015 at the revised estimated cost of ₹234837 lakh including IDC of ₹24472 lakh (based on June, 2014 price level).

3. The broad scope of work covered under the project is as follows:-

Transmission Lines:

- i) Angul Pooling Station-Jharsuguda Pooling Station 765 kV 2xS/C line
- ii) LILO of Rourkela-Raigarh 400 kV D/C line at Jharsuguda Pooling station
- iii) LILO of Meramundali-Jeypore 400 kV S/C line at Angul Pooling Station



- iv) LILO of one Ckt. Of Talcher-Meramundali 400 kV D/C line at Angul Pooling Station

Sub-stations:

- v) 2x1500 MVA, 765/400 kV Pooling station at Jharsuguda (new)
vi) 4x1500 MVA, 765/400 kV Pooling Station at Angul (new)

4. The petitioner initially in the petition sought tariff for nine assets based on actual date of commercial operation (COD) for Asset-I and Asset-VI and on anticipated COD for the remaining seven assets. Later, vide affidavit dated 11.7.2014, the petitioner submitted the actual COD and the details are as given hereunder:-

Srl. No.	Name of the Asset	Scheduled COD	Actual COD	Delay
1	Asset-I: LILO of Meramundali-Jeypore 400 kV S/C line at Angul Sub-station	1.4.2013	1.4.2013	No delay
2	Asset-II: one no. of 125 MVAR Reactor (1 st) and associated bays at Angul Sub-station		1.11.2013	7 months
3	Asset-III: one no. of 125 MVAR Reactor (2nd) and associated bays at Angul Sub-station		1.6.2013	2 months
4	Asset-IV: one no. of 125 MVAR Reactor (3rd) and associated bays at Angul Sub-station		1.5.2013	1 month
5	Asset-V: LILO of one Ckt. Talcher-Meramundali 400 kV D/C line at Angul Sub-station		1.4.2014	12 months
6	Asset-VI: LILO-I (Ckt.-III) of Rourkela-Raigarh 400 kV D/C line at Jharsuguda Sub-station		1.4.2013	No delay
7	Asset-VII: LILO-II (Ckt.-I) of Rourkela-Raigarh 400 kV D/C line at Jharsuguda Sub-station		1.6.2013	2 months
8	Asset-VIII: one no. of 125 MVAR Reactor (1st) and associated bays at Jharsuguda Sub-station		1.5.2013	1 month
9	Asset-IX: one no. of 125 MVAR Reactor (2nd) and associated bays at Jharsuguda Sub-station		1.6.2013	2 months

5. All the assets covered in the petition, except Asset-V have been commissioned during the 2009-14 tariff period and Asset-V was commissioned on



1.4.2014 i.e. during the tariff period 2014-19. Accordingly, tariff for all the assets, except Asset-V is allowed in the instant petition. The petitioner has already, vide ROP dated 16.9.2014, been directed to submit a separate tariff petition for Asset-V as per the 2014 Tariff Regulations.

6. This order has been issued after considering the petitioner's affidavits dated 25.11.2013, 11.7.2014, 11.9.2014, 26.11.2014 and 8.6.2015.

7. No comments have been received from the general public in response to the notices published in news papers by the petitioner under Section 64 of the Electricity Act, 2003 (the Act). None of the respondents have filed any reply.

8. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

9. The details of the transmission charges claimed by the petitioner are as under:-

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2013-14	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Depreciation	146.87	21.11	42.65	44.91
Interest on Loan	475.43	20.25	40.39	41.25
Return on equity	433.30	20.93	42.32	44.57
Interest on Working Capital	31.16	2.87	5.77	6.18
O & M Expenses	137.43	27.28	54.55	60.01
Total	1224.19	92.44	185.68	196.92
Particulars	Asset-VI	Asset-VII	Asset-VIII	Asset-IX
	2013-14	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Depreciation	267.01	157.97	45.47	43.27
Interest on Loan	423.56	147.87	28.86	29.68
Return on equity	428.96	156.67	45.06	42.89
Interest on Working Capital	32.79	17.08	5.93	5.55
O & M Expenses	140.92	123.70	60.01	54.55
Total	1293.24	603.29	185.33	175.94



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

Particulars	(₹ in lakh)			
	Asset-I 2013-14	Asset-II 2013-14 (pro-rata)	Asset-III 2013-14 (pro-rata)	Asset-IV 2013-14 (pro-rata)
Maintenance Spares	20.61	9.82	9.82	9.82
O & M expenses	11.45	5.46	5.46	5.46
Receivables	204.03	36.98	37.14	35.80
Total	236.09	52.26	52.42	51.08
Rate of Interest	13.20%	13.20%	13.20%	13.20%
Interest	31.16	2.87	5.77	6.18
Particulars	Asset-VI 2013-14	Asset-VII 2013-14 (pro-rata)	Asset-VIII 2013-14 (pro-rata)	Asset-IX 2013-14 (pro-rata)
	2013-14	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Maintenance Spares	21.14	22.27	9.82	9.82
O & M expenses	11.74	12.37	5.46	5.46
Receivables	215.54	120.66	33.70	35.19
Total	248.42	155.30	48.98	50.47
Rate of Interest	13.20%	13.20%	13.20%	13.20%
Interest	32.79	17.08	5.93	5.55

Capital cost

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

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

- (a) The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan – (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the fund deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check.
- (b) 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.”

12. The petitioner has submitted the management/auditors' certificate for



expenditure up to COD and for total estimated expenditure in respect of the instant assets vide affidavits dated 25.11.2013 and 26.11.2014. The petitioner has also submitted the details of additional capitalization (add-cap) for the year 2013-14 and in the case of Asset-I, Asset-II and Asset-VI for the year 2014-15 also. However, as the add-cap for the year 2014-15 in the case of Asset-I, Asset-II and Asset-VI falls in the tariff period 2014-19, the same is not considered in this order.

The details submitted by the petitioner are as under:-

S. No.	Asset	Apportioned FR cost (Z)	Cost incurred as on COD(A)	Projected Add. Cap.		Total Estimated Completion Cost (D)=(A+B+C)	Cost Overrun [D-Z]	Cost Overrun in %
				COD to 31.03.14 (B)	1.4.2014 to 31.3.15 (C)			
1	Asset-I	5,529.98	7,051.48	2,421.72	1,100.00	10,573.20	5,043.22	91.20%
2	Asset-II	864.09	910.37	95.35	109.91	1,115.63	251.54	29.11%
3	Asset-III	864.09	787.66	361.58	-	1,149.24	285.15	33.00%
4	Asset-IV	864.09	732.65	389.04	-	1,121.69	257.60	29.81%
5	Asset-VI	7,218.07	7,339.77	1,679.51	250.00	9,269.28	2,051.21	28.42%
6	Asset-VII	3,844.94	3,168.49	832.78	-	4,001.27	156.33	4.07%
7	Asset-VIII	890.89	748.41	377.97	-	1,126.38	235.49	26.43%
8	Asset-IX	890.89	809.47	344.07	-	1,153.54	262.65	29.48%
	Total	20,967.04	21,548.30	6,502.02	1,459.91	29,510.23	8,543.19	40.75%

*Above cost details are as per Affidavit dated 26.11.2014 for Asset-II and Affidavit dated 25.11.2013 for Asset-I, III, IV, VI, VII, VIII and IX.

13. The total apportioned FR cost of instant assets is ₹20,967.04 lakh. The estimated completion cost upto 31.3.2014 and 31.3.2015 is ₹28050.32 lakh and ₹29,510.23 lakh (including additional capital expenditure for 2014-15) respectively. Thus, there is cost over-run in case of the instant assets. The petitioner was directed vide letter dated 25.10.2013 to explain the reasons for cost over-run. The petitioner vide affidavit dated 11.7.2014 submitted the following reasons for cost over-run:-

(a) The prime reason for increase in cost of various items is due to award of contract of these items was made on the basis for various items under the sub-station package. Number of bids was received from different vendors



through Domestic & Global Competitive Bidding and the award was made to lowest evaluated bidder. The item-wise comparison of different items under the turnkey package with respective cost estimates may not lead to appropriate results as the actual prices solely depend on how the bifurcation of total price has been made by the vendor while quoting different items under complete turnkey package. The bids for a particular package containing many small components are invited on overall basis and comparison of bidder's prices and decision of the successful bidder is done on the basis of the total bid price of each bidder. As such, the comparison of individual components is not done. The package, based on the above overall comparison is awarded on a whole based on the lowest cost of complete package which include many small items. The rates of individual items is asked only for the purpose of "On Account" payment and not for any comparison;

(b) The cost of these assets given while seeking regulatory approval in Petition No. 233/2009 were only an indicative figure based on the thumb rule calculation of cost/km or cost/bay etc. This indicative cost given was before conducting the walkover survey/land identification etc. was made. As per normal practice and norms, the cost estimates prepared for FR are based on the walkover surveys and land identification for sub-station. The FR was prepared considering the recent last three quotations/bids received in similar type of projects after assessment of quantity/type of towers/conductors and other equipments. In addition, the apportionment of cost of common equipments is made to various elements in mathematical proportions, in the FR. Therefore, the comparison of cost indicated in



Petition No. 233/2009 (which is purely indicative and prepared without any input/assessment) with FR cost (which is prepared based on various input) may lead to variation in the cost; and

(c) The instant assets are only a part of the elements under the scope of Orissa Part-A and only a part of expenditure of the total approved cost of the project has been incurred. Comparison of the completed cost and the total approved cost should be only made.

14. The petitioner, vide affidavit dated 8.6.2015, has submitted the RCE and the total estimated completion cost as on 31.3.2014 is within the RCE. The total estimated completion cost as on 31.3.2014 is approved as it is within the RCE. We would like to clarify that the petitioner's claim for projected additional capital expenditure during 2014-15 for Assets I, II and IV shall be dealt as per the 2014 Tariff Regulations.

15. The details of apportioned approved cost, cost as on the date of commercial operation and estimated/projected additional capital expenditure to be incurred for the instant assets have been considered for tariff purpose and are as under:-

(₹ in lakh)

Particulars	Original Apportioned approved cost	Revised approved cost Estimate (RCE)	Cost incurred as on COD (A)	Projected additional expenditure from COD to 31.3.2014 (B)	Total estimated completion cost upto 31.3.2014 (C) = (A+B)
Asset-I	5529.98	10585.00	7051.48	2421.72	9473.20
Asset-II	864.09	1125.00	910.37	95.35	1005.72
Asset-III	864.09	1160.00	787.66	361.58	1149.24
Asset-IV	864.09	1131.00	732.65	389.04	1121.69
Asset-VI	7218.07	9276.00	7339.77	1679.51	9019.28
Asset-VII	3844.94	4016.00	3168.49	832.78	4001.27
Asset-VIII	890.89	1139.00	748.41	377.97	1126.38
Asset-IX	890.89	1165.00	809.47	344.07	1153.54



Total	20967.04	29597.00	21548.30	6502.02	28050.32
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Time over-run

16. As per the investment approval, the scheduled completion date of the assets filed in the instant petition was 1.4.2013. Asset-I and Asset-VI were commissioned on 1.4.2013 and there is no time over-run. However, there is time over-run of 7 months, 2 months, 1 month, 2 months, 1 month and 2 months in case of Asset-II, Asset-III, Asset-IV, Asset-VII, Asset-VIII and Asset-IX respectively. The petitioner vide affidavit dated 11.9.2014 submitted the reasons for time over-run. The time over-run is due to delay in land acquisition and RoW constraints. The petitioner has submitted correspondence it had with the Government agencies to expedite the land acquisition and to solve the RoW issues. The submissions made by the petitioner are as under:-

(a) Delay in handing over the land by the Government of Odisha for 765/400 kV pooling station at Angul: Assets-I, II, III & IV involve commissioning of assets at Angul Sub-station. The application for land acquisition was submitted to the Government of Odisha on 17.12.2009, 22.12.2009 and 2.2.2010, approximately 9 months before Investment Approval for these assets. After completion of all formalities i.e. publications of Notification under Section-IV, VI, IX & XI in case of private land and approval of Government. of Odisha for government land (on lease), land acquisition authorities delivered the possession of land as under:-

- a) Private land: 30.19 Acre on 28.12.2011
- b) Private land: 00.47 Acre on 28.12.2011
- c) Govt. land: 30.19 Acre on 13.2.2012
- d) Govt. land: 30.19 Acre on 15.2.2012
- e) Private land: 30.19 Acre on 26.3.2012



Though the application for land acquisition was made in December, 2009, about 9 months prior to investment approval, land acquisition for Angul Sub-station took almost 2 years;

(b) Delay in handing over the land by the Government of Odisha for 765/400 kV pooling station at Jharsuguda: The application for land acquisition was submitted to the Government of Odisha on 29.9.2009 around 12 months before the investment approval. After completion of all formalities i.e. publications of Notification under Section-IV, VI, IX & XI in case of private land and approval of Government of Odisha for government land (on lease), land acquisition authorities delivered the possession of land as under:-

a)	Private land:	118.02 Acre on 5.12.2011
b)	Govt. land (on lease):	10 Acre on 13.12.2011
c)	Govt. land (on lease):	0.67 Acre on 26.9.2012
d)	Govt. land (on lease):	1.41 Acre on 17.1.2013

Though the application for land acquisition was made in September, 2009, about 12 months prior to investment approval, land acquisition for Jharsuguda Sub-station took almost 2 years and three months;

(c) Delay due to ROW constraints at Angul and Jharsuguda end: There were severe ROW obstructions from the beginning of the construction of Angul and Jharsuguda Sub-stations and associated transmission lines. The local villagers along with anti-social elements sometimes threatened the contractors and stopped the work inside the sub-station area. This necessitated several meetings at District Administration level.



As per the L2 network, the petitioner was to handover the sub-station land after site leveling in September 2011. However, because of the aforesaid reasons, the land for Angul and Jharsuguda Sub-stations was acquired in March, 2012 and December, 2011 and the land was handed to the contractor after site leveling, which took two to three months. The sub-station work was frequently stalled and interrupted due to severe RoW problems. The work was taken up progressively and hence the commissioning of reactors was done on different dates. Inspite of the unforeseen delay, the petitioner managed to complete the work and commissioned the assets with marginal delay of one to seven months or no delay. The reasons for delay are beyond the control of the petitioner and hence the time over-run may be condoned.

17. The Commission, vide RoP of the hearing dated 16.9.2014 had directed the petitioner to submit the latest status of generating projects as the assets covered in the instant petition have been constructed as a part of HCPTC-I and the status of ICTs at Pooling Stations both at Angul and Jharsuguda. In response, the petitioner vide affidavit dated 26.11.2014 had submitted the status of generating projects and of ICTs at Pooling Stations both at Angul and Jharsuguda as under:-

Status of generating projects:

- i) Sterlite Energy Ltd (4x600 MW): All units commissioned.
- ii) GMR Kamalanga Energy Ltd (3x350 MW): All units commissioned.
- iii) Navbharat Power Pvt. Ltd (2x525 MW): Yet to be commissioned.
- iv) Monnet Power Company Limited (2x525 MW): Yet to be commissioned.
- v) Jindal India Thermal Power Ltd (2x600 MW): One unit commissioned.
- vi) Lanco Babandh Power Ltd (2x660 MW): Yet to be commissioned.
- vii) IND Bharat Energy (Utkal) Limited (2x350 MW): Yet to be commissioned.

Status of ICTs at Angul End:

- i) ICT-I-Supply completed, expected to be commissioned by December, 2014.



- ii) ICT-II-Supply expected to reach site by 30.11.2014. Expected completion in Q4 of 2014-15.
- iii) ICT-III-Supply expected to reach site by 30.11.2014. Expected completion in Q4 of 2014-15
- iv) ICT-IV-Supply expected to reach site by 30.11.2014. Expected completion in Q4 of 2014-15.

Status of ICTs at Jharsuguda End:

- i) ICT-I-Expected to be commissioned by October/November, 2014
- ii) ICT-II-Commissioned on 3.7.2014.

18. We have considered the submissions of the petitioner in respect of time over-run in case of six assets. The petitioner has submitted that the time over-run is due to delay in handing over the land by the Government of Orissa for pooling stations at Angul and Jharsuguda and ROW constraints at Angul and Jharsuguda Sub-stations. We note that the petitioner has not submitted any documentary evidence to establish that it pursued the matter with land authorities for handing over the land after writing a letter in 2009. The petitioner should have pursued with land authorities to facilitate timely handing over of land. However, considering the documentary evidence submitted by the petitioner in support of its claim of RoW constraints, we are inclined to condone the delay in completion of assets as being reasons beyond the control of the petitioner and therefore the time over-run in case of six assets ranging from one to seven months is allowed.

Treatment of IDC & IEDC

19. Detailed working of IDC calculations on cash basis as well as IDC paid after COD are not available. In view of non-availability of complete information by the petitioner, the claim of IDC has been considered by calculating interest paid on the loans, except Foreign Loans deployed for the instant assets, as per details furnished by the petitioner in Form-13, assuming that the petitioner has not made



any default in the payment of interest. Accordingly, IDC upto the COD has been worked out on cash basis. The amount of IDC accrued as on COD and to be discharged after COD has not been considered in the capital cost due to non-availability of information. The details of IDC claimed, IDC considered and disallowed are as under:-

(₹ in lakh)			
Particulars	IDC Claimed	IDC worked out till COD on Cash basis	IDC accrued and hence disallowed
Asset-I	189.37	188.94	0.43
Asset-II	106.55	28.66	77.89
Asset-III	104.22	13.31	90.91
Asset-IV	96.17	12.93	83.24
Asset-VI	573.31	279.90	293.42
Asset-VII	359.86	105.30	254.56
Asset-VIII	97.96	8.41	89.55
Asset-IX	106.18	8.41	97.77

20. The interest during construction, accrued upto COD and to be discharged after COD will be considered as undischarged liability once it is discharged subject to prudence check and submission of the relevant information i.e. detailed working corresponding to the IDC in respect of all loans deployed including Foreign Loans and cash expenditure in Form-14A at the time of truing-up by the petitioner.

21. Similarly, the petitioner has claimed Incidental Expenditure During Construction (IEDC) of ₹432.86 lakh, ₹32.49 lakh, ₹68.43 lakh, ₹48.93 lakh, ₹510.74 lakh, ₹170.93 lakh, ₹49.88 lakh and ₹68.82 lakh for Assets-I, Asset-II, Asset-III, Asset-IV, Asset-VI, Asset-VII, Asset-VIII and Asset-IX respectively. The petitioner has not submitted detailed computations for admissible IEDC. In the absence of detailed computation of IEDC by the petitioner, the percentage on Hard Cost indicated in the Abstract Cost Estimate, as submitted by the petitioner, is considered as the allowable limit of the IEDC. In the instant petition, 5% IEDC is



claimed by the petitioner in the abstract cost estimates. Thus, in the absence of sufficient details, IEDC claim is restricted to 5% of Hard Cost or the amount claimed, whichever is lower, upto date of commercial operation and allowed for the purpose of tariff calculation in the instant petition.

22. The details of IEDC claimed by the petitioner, IEDC considered and disallowed are as under:-

(₹ in lakh)				
Particulars	Hard cost claimed	IEDC claimed	IEDC considered (5% of Hard Cost or claimed amount whichever is lower)	IEDC disallowed
Asset-I	6429.25	432.86	321.46	111.40
Asset-II	771.33	32.49	32.49	-
Asset-III	615.01	68.43	30.75	37.68
Asset-IV	587.55	48.93	29.38	19.55
Asset-VI	6255.72	510.74	312.79	197.95
Asset-VII	2637.70	170.93	131.89	39.05
Asset-VIII	600.57	49.88	30.03	19.85
Asset-IX	634.47	68.82	31.72	37.10

23. Regulation 9 of the 2009 Tariff Regulations provides for the treatment of undischarged liabilities after the same are discharged. However, as the petitioner has not submitted the required information with regard to the IDC/IEDC actually discharged, we are not inclined to allow the amount of IDC/IEDC as claimed by the petitioner. The petitioner is directed to submit the amount of IDC/IEDC paid specific to the transmission asset considered in this petition upto date of commercial operation and balance IDC/IEDC discharged after date of commercial operation. The petitioner is directed to submit year wise details of actual IEDC paid till COD of the instant assets. IDC/IEDC now allowed will be reviewed at the time of truing up on submission of complete and adequate information by the petitioner



in respect of interest during construction and incidental expenses during construction at the time of truing-up.

Initial spares

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

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

25. The petitioner has claimed the initial spares for the instant assets as under:-

(₹ in lakh)			
Particulars	Transmission line	Sub-station	Total
Asset-I	8.32	31.16	39.48
Asset-II	-	10.28	10.28
Asset-III	-	10.28	10.28
Asset-IV	-	10.28	10.28
Asset-VI	20.96	29.52	50.48
Asset-VII	20.18	16.42	36.60
Asset-VIII	-	13.64	13.64
Asset-IX	-	13.64	13.64

26. The petitioner's claim for initial spares in respect of the instant assets except Asset-I (for transmission line portion), is within the specified ceiling limits and accordingly it is allowed. The excess initial spares claimed in respect of Asset-I is deducted to arrive at the capital cost considered for the purpose of calculation of tariff and they are as overleaf:-



(₹ in lakh)							
Asset-I	Capital Cost claimed as on cut-off date (31.3.2014)	Initial Spares claimed against capital cost claimed as on cut-off date (31.3.2014)	Capital cost after adjustment of IDC/IEDC disallowed as on cut-off date (31.3.2014)	Proportionate claim of initial spares against the adjusted capital cost after cut-off date (31.3.2014)	Ceiling limit	Initial spares worked out	Excess initial spares
T-line	1091.69	8.32	1077.56	8.21	0.75%	8.08	0.13

27. The petitioner has claimed additional capital expenditure in respect of Asset-I, Asset-II and Asset-VI for the financial year 2014-15 and as discussed at para 12, the same has not been considered in this order for tariff purpose as it falls beyond the current tariff period of 2009-14, though is within the cut-off date. However, in this order the petitioner's claim with regard to initial spares has been allowed by considering additional capitalisation only upto 31.3.2014. Accordingly the details of capital cost considered for the purpose of tariff after disallowing IDC/IEDC and initial spares are as under:-

(₹ in lakh)					
Particulars	Capital cost before adjustment of disallowed IDC/IEDC and initial spares as on COD (A)	Disallowed			Capital cost considered for the purpose of tariff as on COD (E)= (A)-(B+C+D)
		IDC (B)	IEDC (C)	Excess initial spares (D)	
Asset-I	7051.48	0.43	111.40	0.13	6939.52
Asset-II	910.37	77.89	-	-	832.48
Asset-III	787.66	90.91	37.68	-	659.07
Asset-IV	732.65	83.24	19.55	-	629.86
Asset-VI	7339.77	293.42	197.95	-	6848.40
Asset-VII	3168.49	254.56	39.05	-	2874.88
Asset-VIII	748.41	89.55	19.85	-	639.01
Asset-IX	809.47	97.77	37.10	-	674.60

Additional Capital Expenditure

28. As regards Additional Capital Expenditure clause 9(1) of the 2009 Tariff Regulations provides as hereinafter:-



“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.”

29. Further, the 2009 Tariff Regulations define cut-off date as:-

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

30. Accordingly, the cut-off date for the instant assets is 31.3.2016.

31. The additional capital expenditure claimed for the period 2013-14 is admissible under Regulation 9(1) of the 2009 Tariff Regulations and is allowed. As discussed at para 12, the petitioner has also claimed additional capital expenditure for the year 2014-15 in the case of Asset-I, Asset-II and Asset-VI and the same has not been considered as it would be part of the next tariff period i.e. 2014-19.

Debt- Equity ratio

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

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

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

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

Explanation.- The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and



investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

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

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

33. The petitioner has claimed debt equity ratio of 70:30 as on COD of the asset and for additional capitalization which is in accordance with the above regulations. The debt equity ratio of 70:30 has been considered to allow the tariff. The details of debt and equity as on COD and as on 31.3.2014 are as under:-

(₹ in lakh)

Particulars	Asset-I		Asset-II	
	As on COD	As on 31.3.2014	As on COD	As on 31.3.2014
	Amount	Amount	Amount	Amount
Debt	4857.67	6552.87	582.73	649.48
Equity	2081.85	2808.37	249.74	278.35
Total	6939.52	9361.24	832.48	927.83
Particulars	Asset-III		Asset-IV	
	As on COD	As on 31.3.2014	As on COD	As on 31.3.2014
	Amount	Amount	Amount	Amount
Debt	461.35	714.46	440.90	713.23
Equity	197.72	306.20	188.95	305.66
Total	659.07	1020.65	629.86	1018.90
Particulars	Asset-VI		Asset-VII	
	As on COD	As on 31.3.2014	As on COD	As on 31.3.2014
	Amount	Amount	Amount	Amount
Debt	4793.88	5969.54	2012.42	2595.37
Equity	2054.52	2558.37	862.47	1112.30
Total	6848.40	8527.91	2874.89	3707.67
Particulars	Asset-VIII		Asset-IX	
	As on	As on	As on	As on



	COD	31.3.2014	COD	31.3.2014
	Amount	Amount	Amount	Amount
Debt	447.31	711.88	472.22	713.07
Equity	191.70	305.09	202.38	305.60
Total	639.01	1016.98	674.60	1018.67

Return on Equity (RoE)

34. Regulation 15 of the 2009 Tariff Regulations provides that:-

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

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

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

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

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

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

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

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

(5) The generating company or the transmission licensee as the case may be, shall recover the shortfall or refund the excess Annual Fixed charge on account of Return on Equity due to change in applicable Minimum Alternate/ Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission;

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



35. The details of return on equity calculated are as under:-

(₹ in lakh)				
Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2013-14	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Opening Equity	2081.85	249.74	197.72	188.95
Addition due to Additional Capitalization	726.52	28.61	108.47	116.71
Closing Equity	2808.37	278.35	306.20	305.66
Average Equity	2445.11	264.04	251.96	247.31
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.33%	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	427.43	19.23	36.70	39.63
Particulars	Asset-VI	Asset-VII	Asset-VIII	Asset-IX
	2013-14	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Opening Equity	2054.52	862.47	191.70	202.38
Addition due to Additional Capitalization	503.85	249.83	113.39	103.22
Closing Equity	2558.37	1112.30	305.09	305.60
Average Equity	2306.45	987.38	248.40	253.99
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.33%	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	403.19	143.84	39.80	37.00

36. The petitioner's prayer to recover the shortfall or refund the excess Annual Fixed Charges, on account of return on equity due to change in applicable Minimum Alternate Tax/Corporate Income Tax rate as per the Income Tax Act, 1961 of the respective financial year directly without making any application before the Commission shall be dealt under Regulation 15(5). Return on Equity has been computed @ 17.481% p.a on average equity as per Regulation 15 of the 2009 Tariff Regulations.

Interest on Loan

37. Regulation 16 of the 2009 Tariff Regulations provides that:-

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



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

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

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

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

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

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

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

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

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

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

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

38. In view of provisions of the 2009 Tariff Regulations, interest on loan has been considered as detailed hereinafter:-



- (a) Gross amount of loan, repayment of instalments and rate of interest on actual loan have been considered as per the petition;
- (b) The yearly repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that year/period; and
- (c) Weighted average rate of interest on actual average loan worked out as per (a) above is applied on the notional average loan during the year to arrive at the interest on loan.

39. Detailed calculation of the weighted average rate of interest has been given at Annexure-1 to 8 of this order.

40. Details of interest on loan calculated are as given under:-

(₹ in lakh)				
Particulars	Asset-I 2013-14	Asset-II 2013-14 (pro-rata)	Asset-III 2013-14 (pro-rata)	Asset-IV 2013-14 (pro-rata)
Gross Normative Loan	4857.67	582.73	461.35	440.90
Cumulative Repayment upto Previous Year	-	-	-	-
Net Loan-Opening	4857.67	582.73	461.35	440.90
Addition due to Additional Capitalization	1695.20	66.75	253.11	272.33
Repayment during the year	145.37	19.39	36.99	39.94
Net Loan-Closing	6407.50	630.09	677.47	673.30
Average Loan	5632.58	606.41	569.41	557.10
Weighted Average Rate of Interest on Loan	8.3261%	7.3618%	7.3824%	7.1805%
Interest	468.98	18.60	35.03	36.67
Particulars	Asset-VI	Asset-VII	Asset-VIII	Asset-IX
Gross Normative Loan	4793.88	2012.42	447.31	472.22
Cumulative Repayment upto Previous Year	-	-	-	-
Net Loan-Opening	4793.88	2012.42	447.31	472.22
Addition due to Additional Capitalization	1175.66	582.95	264.58	240.85
Repayment during the year	251.94	145.03	40.17	37.34
Net Loan-Closing	5717.60	2450.33	671.71	675.73
Average Loan	5255.74	2231.38	559.51	573.98
Weighted Average Rate of Interest on Loan	7.5741%	7.3002%	4.9705%	5.3519%
Interest	398.08	135.75	25.49	25.60



Depreciation

41. Regulation 17 of the 2009 Tariff Regulations provides for computation of depreciation in the following manner, namely:-

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

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

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

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

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

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

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

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

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

42. Clause 17 (4) of the 2009 Tariff Regulations provides that 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. It further provides 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 asset. The transmission asset i.e. Asset-I, Asset-II, Asset-III, Asset-IV, Asset-VI, Asset-VII, Asset-VIII and Asset-IX were put under commercial operation on 1.4.2013, 1.11.2013, 1.6.2013, 1.5.2013, 1.4.2013, 1.6.2013, 1.5.2013 and 1.6.2013 respectively during the financial year 2013-14 in the instant petition and will complete 12 years beyond 2013-14. Thus, depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III of the 2009 Tariff Regulations.

43. Accordingly, the details of the depreciation worked out are as under:-

(₹ in lakh)				
Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2013-14	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Opening Gross Block	6939.52	832.48	659.07	629.86
Additional Capital Expenditure	2421.72	95.35	361.58	389.04
Closing Gross Block	9361.24	927.83	1020.65	1018.90
Average Gross Block	8150.38	880.15	839.86	824.38
Rate of Depreciation	1.7836%	5.2874%	5.2847%	5.2848%
Depreciable Value	2661.56	792.14	755.88	741.94
Remaining Depreciable Value	2661.56	792.14	755.88	741.94
Depreciation	145.37	19.39	36.99	39.94
Particulars	Asset-VI	Asset-VII	Asset-VIII	Asset-IX
	2013-14	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Opening Gross Block	6848.40	2874.89	639.01	674.60
Additional Capital Expenditure	1679.51	832.78	377.97	344.07
Closing Gross Block	8527.91	3707.67	1016.98	1018.67
Average Gross Block	7688.16	3291.28	827.99	846.64
Rate of Depreciation	3.2770%	5.2879%	5.2925%	5.2923%
Depreciable Value	4392.31	2962.15	745.19	761.97
Remaining Depreciable Value	4392.31	2962.15	745.19	761.97
Depreciation	251.94	145.03	40.17	37.34

Operation & Maintenance Expenses (O&M Expenses)

44. Clause (g) of Regulation 19 of the 2009 Tariff Regulations specifies the norms for O&M Expenses for the transmission system based on the type of sub-



station and the transmission line. Norms prescribed in respect of the elements covered in the instant petition are as follows:-

Elements	2009-10	2010-11	2011-12	2012-13	2013-14
S/C (twin & triple conductor) Transmission line (₹ lakh/km)	0.358	0.378	0.400	0.423	0.447
D/C (twin & triple conductor) Transmission line (₹ lakh/km)	0.627	0.663	0.701	0.741	0.783
400 kV bay (₹ lakh/bay)	52.40	55.40	58.57	61.92	65.46

45. As per the norms of Tariff Regulations, 2009, allowable O&M Expenses for the asset covered in the petition are as given under:-

(₹ in lakh)			
Particulars	Asset	Element	2013-14
Asset-I	LILO of Meramundali-Jeypore 400 kV S/C line at Angul S/S	Line Length: 8.456 km (0.326 km S/C & 8.130 km D/C) and 2 nos. of 400 kV line Bays	137.43
Asset-II	1 no. of 125 MVAR Reactor (1 st) & associated bays at Angul S/S	1 no. of 400 kV bus reactor-1 Bay	27.28
Asset-III	1 no. of 125 MVAR Reactor (2 nd) & associated bays at Angul S/S	1 no. of 400 kV bus reactor-2 Bay	54.55
Asset-IV	1 no. of 125 MVAR Reactor (3 rd) & associated bays at Angul S/S	1 no. of 400 kV bus reactor-3 Bay	60.01
Asset-VI	LILO-I (ckt-III) of Rourkela-Raigarh 400 kV D/C line at Jharsuguda S/S	Line Length: 22.378 km 2 nos. of 400 kV Line bays	148.44
Asset-VII	LILO-II (ckt-I) of Rourkela-Raigarh 400 kV D/C line at Jharsuguda S/S	Line Length: 22.378 km 2 nos. of 400 kV Line bays	123.70
Asset-VIII	One no. of 125 MVAR Reactor (1 st) & associated bays at Jharsuguda S/S	1 no. of 400 kV Line bay	60.01
Asset-IX	One no. of 125 MVAR Reactor (2 nd) & associated bays at Jharsuguda S/S	1 no. of 400 kV Line bay	54.55

46. The petitioner has submitted that O&M Expenses for the year 2009-14 had been arrived at on the basis of normalized actual O&M Expenses during the period 2003-04 to 2007-08 and by escalating it by 5.72% per annum for arriving at norms



for the years of tariff period. 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 may approach the Commission for suitable revision in norms for O&M Expenses in case the impact of wage hike with effect from 1.1.2007 is more than 50%.

47. The petitioner has also submitted that the claim for transmission tariff is exclusive of any statutory taxes, levies, duties, cess or any other kind of impositions etc. Such kinds of payments are generally included in the O & M Expenses. While specifying the norms for the O & M Expenses, the Commission has in the 2009 Tariff Regulations, 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

48. As per the 2009 Tariff Regulations the components of the working capital and the interest thereon are discussed under:-

(i) Maintenance Spares

Regulation 18 (1) (c) (ii) of the 2009 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M Expenses from 1.4.2009. The petitioner has claimed maintenance spares for the instant



assets and value of maintenance spares has accordingly been worked out as 15% of O&M Expenses.

(ii) O & M Expenses

Regulation 18 (1) (c) (iii) of the 2009 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 assets and value of O & M expenses has accordingly been worked out by considering 1 month O&M Expenses.

(iii) Receivables

As per Regulation 18(1) (c) (i) of the 2009 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.

(iv) Rate of interest on working capital

In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended, rate of interest on working capital shall be on normative basis and in case of transmission assets declared under commercial operation after 1.4.2009 shall be equal to State Bank of India Base Rate as applicable on 1st April of the year of commercial operation plus 350 bps. State Bank of India base interest rate on 1.4.2013 was 9.70%. Therefore, interest rate of 13.20% has been considered in respect of instant assets.

49. Necessary computations in support of interest on working capital are as overleaf:-



(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2013-14	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Maintenance Spares	20.61	9.82	9.82	9.82
O & M expenses	11.45	5.46	5.46	5.46
Receivables	201.68	34.91	33.73	33.11
Total	233.74	50.18	49.01	48.38
Rate of Interest	13.20%	13.20%	13.20%	13.20%
Interest	30.85	2.76	5.39	5.85
Particulars	Asset-VI	Asset-VII	Asset-VIII	Asset-IX
	2013-14	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Maintenance Spares	22.27	22.27	9.82	9.82
O & M expenses	12.37	12.37	5.46	5.46
Receivables	205.56	112.91	31.11	31.94
Total	240.19	147.55	46.38	47.21
Rate of Interest	13.20%	13.20%	13.20%	13.20%
Interest	31.71	16.23	5.61	5.19

Transmission charges

50. The transmission charges being allowed for the transmission assets are summarized hereunder:-

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2013-14	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Depreciation	145.37	19.39	36.99	39.94
Interest on Loan	468.98	18.60	35.03	36.67
Return on equity	427.43	19.23	36.70	39.63
Interest on Working Capital	30.85	2.76	5.39	5.85
O & M Expenses	137.43	27.28	54.55	60.01
Total	1210.06	87.26	168.66	182.10
Particulars	Asset-VI	Asset-VII	Asset-VIII	Asset-IX
	2013-14	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Depreciation	251.94	145.03	40.17	37.34
Interest on Loan	398.08	135.75	25.49	25.60
Return on equity	403.19	143.84	39.80	37.00
Interest on Working Capital	31.71	16.23	5.61	5.19
O & M Expenses	148.44	123.70	60.01	54.55
Total	1233.35	564.55	171.09	159.68



Filing Fee and the Publication Expenses

51. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication 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 A (1) (a) of the 2009 Tariff Regulations.

Licence Fee

52. The petitioner has submitted that in O&M norms for tariff block 2009-14 the cost associated with license fees had not been captured and the license fee may be allowed to be recovered separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42 A (1) (b) of the 2009 Tariff Regulations.

Service Tax

53. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if notification regarding granting of exemption to transmission service is withdrawn at a later date and it is subjected to such service tax in future the beneficiaries shall have to share the service tax paid by the petitioner. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

Sharing of Transmission Charges

54. The Commission while granting regulatory approval for the instant assets vide order dated 31.5.2010 in Petition No. 233/2009, has observed as follows:-

“11.....After examination of the submissions made by CTU, we are of the view that out of the seven IPPs, four developers have signed the BPTA and submitted the Bank Guarantee. The report of physical progress shows that work is in



progress in all these projects. The remaining three projects viz. Sterlite (Long-term access (LTA) sought for 400 MW), Jindal India Thermal Power (LTA for 1044 MW) and Navbharat Power Pvt. Ltd. (LTA for 720 MW) have submitted the Bank Guarantee, though they have not signed the BPTA as yet. However, out of these, both Sterlite and Jindal India Thermal Power have fulfilled all the milestones shown in Annexure-I. In the case of Sterlite, commissioning of Unit no. I is also under progress. All these plants have also awarded the EPC contract. We fully agree with the suggestion of the CTU that HCPTC-I be taken up for implementation. However, the commissioning of the projects shall be phased out in keeping with the progress of the generating units.....”

55. The Commission had further observed as follows:-

“41.....Based on the affidavits submitted by the project developers of IPPs and on the spot assessment by CTU, the progress of IPPs at different stages of implementation is satisfactory and utilization level of proposed HCPTC at the time of their progressive commissioning is expected to be sufficient. Moreover, the project developers of IPPs have signed BPTA and submitted Bank guarantee in many cases. Hence, we accord regulatory approval for execution of the nine nos. of HCPTCs proposed by CTU as per the project scope as mentioned in Annexure - I to IX of this order.”

“42.... The petitioner is directed to ensure that the proposed transmission projects for which regulatory approval has been granted are executed within the time frames matching with the commissioning schedules of the IPPs so that the beneficiaries are not burdened with higher IDC.....”

56. The transmission system covered under this petition is covered under Part-A of this HCPTC-I. These projects have been granted LTA by the CTU. The petitioner has confirmed that the LTA of the instant project and other projects has not been operationalised.

57. In this regard we have perused BPTA signed on 5.7.2010 by the project developers, which provides as follows:-

“2.0 (a).....Long term transmission customer shall share and pay the transmission charges in accordance with the regulatory/tariff order issued by CERC from time to time of POWERGRID transmission system of concerned applicable Region i.e. Northern Region/Western Region/Eastern Region including charges for inter regional links/ULDC/NLDC charges and any additions thereof. These charges would be applicable corresponding to the capacity of power contracted from the said generation project through open access from the scheduled date of commissioning of generating projects as indicated at Annexure-I irrespective of their actual date of commissioning.....”



“(c) Each Long term transmission customer (including its successor/assignee) shall pay the applicable transmission charges from the date of commissioning of the respective transmission system which would not be prior to the schedule commissioning date of generating units as indicated by the respective developer as per Annexure-I. The commissioning of transmission system would be preponed only if the same is agreed mutually by concerned parties.”

“6.0 (a) In case any of the developers fail to construct the generating station /dedicated transmission system or makes an exit or abandon its project, POWERGRID shall have the right to collect the transmission charges and/or damages as the case may be in accordance with the notification/regulation issued by CERC from time to time. The developer shall furnish a Bank guarantee from a nationalized bank for an amount which shall be equivalent to Rs.5(five).Lakhs/MW to compensate such damages. The bank guarantee format is enclosed as Annexure-Y. The details and categories of bank would in accordance with clause 2(h) above. The Bank guarantee would be furnished in favour of POWERGRID in accordance with the time frame agreed during the meeting held at CEA on 1.2.2010.”

“(d) In the event of delay in commissioning of concerned transmission system from its schedule, as indicated at Annexure-4 POWERGRID shall pay proportionate transmission charges to concerned Long Term Access Customer(s) proportionate to its commissioned capacity (which otherwise would have been paid by the concerned Long Term Access Customer(s) to POWERGRID) provided generation is ready and POWERGRID fails to make alternate arrangement for dispatch of power.”

58. Regulation 8 (5) of Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010, (hereinafter “the 2010 Sharing Regulations”) provides as under:-

“In the case of Approved Withdrawal or Approved Injection is not materialising either or fully for any reasons whatsoever, the Designated ISTS customer shall be obliged to pay the transmission charges allocated.”

59. Regulation 8(6) of the 2010 Sharing Regulations provides as follows:-

“(6)..... For Long Term Transmission Customers availing power supply from inter-State generating stations, the charges attributable to such generation for long term supply shall be calculated directly at drawal nodes as per methodology given in the Annexure-I. Such mechanism shall be effective only after commercial operation of the generator. Till then it shall be the responsibility of the generator to pay transmission charges....”



60. We have gone through the above mentioned provisions of the BPTA and the generators and the 2010 Sharing Regulations. As per the provisions of BPTA, a long term transmission customer shall share and pay the transmission charges fixed as per the Regulations specified by this Commission from the date of commissioning of the transmission system. The BPTA provides for preponement of the commissioning of the transmission system only with the mutual consent of the concerned parties. Further as per the BPTA, if there is any delay in commissioning of the transmission system, the petitioner shall pay the proportionate transmission charges to the LTA customer and similarly if the generator fails to construct the generating station or makes an exit or abandons its project, the petitioner shall be eligible to collect the transmission charges from the generator. In the instant case, the petitioner has commissioned the transmission system and the generator has not performed its part of the BPTA and hence the generator has to bear the transmission charges as provided in clause 2.0(a) and 2.0 (c) of the BPTA. Further, as per Regulation 8(5) and 8(6) of the 2010 Sharing Regulations, the generators having long term access are liable to bear the charges for the transmission system till they achieve "commercial operation". However, the generators under the instant petition do not have an arrangement with identified beneficiaries for long term supply of power. Taking into consideration the provisions of the BPTA signed by generators and the 2010 Sharing Regulations, we are of the considered view that the generators are liable to bear the Yearly Transmission Charges (YTC) of transmission system till the date their LTA is operationalised post which generators shall be charged as per prevailing Regulations. The tariff for such lines shall be excluded from PoC, till LTA for the generators are operationalised. However, the transmission assets shall be



considered in base case for calculation of PoC rates at “Zero Cost”. On operationalisation of LTA for the generators covered under the instant petition, the transmission assets covered under the petition shall be considered under PoC pool. We also direct the petitioner to take necessary action to operationalise LTA for the projects as per the capacity available as provided in Regulation 8(5) of the 2010 Sharing Regulations.

61. Thereafter, the transmission charges will be shared by the long term customers/beneficiaries in accordance with the 2010 Sharing Regulations.

62. It is observed that in the Standing Committee meeting on Power System Planning in Eastern Region held on 14.9.2009, it was decided that the associated transmission systems upto the pooling stations of Jharsuguda and Angul would be under the scope of the generation developers as per the details given below:-

- (a) Sterlite: Sterlite-Jharsuguda pool 400 kV D/C line with associated bays.
- (b) Ind-Bharat: Ind Bharat-Jharsuguda Pool 400 kV D/C line with associated line bays.
- (c) GMR: GMR-Angul Pool 400 kV D/C line along with 3X1500 MVA 765/400 kV ICTs.
- (d) Jindal: Jindal-Angul Pool 400 kV D/C line with associated bays.

63. Further, in the said meeting Member (PS), CEA observed as under:-

“M (PS) stated that in view of the possibility of the IPP generations being stranded on account of delay in implementation of ATS, LILO of one circuit of 400 kV Rourkella-Raigarh D/C line at Sterlite and LILO of the other circuit at Ind-Bharath would be made as temporary arrangement to avoid such situation. These LILO would be removed when the project specific transmission system as decided would be in place.”



64. In the meeting of the Standing Committee on Power System Planning in Eastern Region held on 20.9.2010, the temporary interim arrangements under the scope of the respective generation developer for evacuation of power from Sterlite, Ind-Bharat, GMR and Jindal IPPs were decided with the concurrence of all constituents of the Eastern Region as under:-

Sterlite	LILO of one ckt of Rourkela-Raigarh 400 kV D/C line
Ind Bharat	LILO of other ckt of Rourkela-Raigarh 400 kV D/C line
GMR	LILO of one ckt of Talcher-Meramundali 400 kV D/C line
Jindal	LILO of Meramundali-Jeypore 400 kV S/C line

65. The associated transmission lines were to be constructed by the generation developer matching with the transmission system to be developed by the petitioner and the LILOs constructed by generation developers which were temporary arrangement were to be replaced by the associated transmission system. It is noticed that some of the generation developers have not commissioned the dedicated lines and are continuing to evacuate power through the temporary LILO arrangements. We direct the petitioner to discuss the issue in the Standing Committee Meeting on Transmission and finalize the timeline for replacement of the LILOs of generation developer by dedicated transmission lines within a period of six months from the date of connection of LILO of the petitioner.

66. Since the generation developers have failed to construct the dedicated transmission lines due to which assets created by the petitioner covered under the present petition are not serving the intended purpose, we are of the view, that the tariff for these assets shall be borne by the generators till operationalisation of their



LTA as required under Regulation 8(5) of the 2010 Sharing Regulations as stated in para 60 herein. Till such time, the tariff for the assets shall be excluded from PoC pool.

67. This order disposes of Petition No. 112/TT/2013.

sd/-
(A.S. Bakshi)
Member

sd/-
(A.K. Singhal)
Member

sd/-
(Gireesh B. Pradhan)
Chairperson



(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN-Asset-I		
	Details of Loan	2013-14
1	Bond XLI	
	Gross loan opening	1494.18
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1494.18
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1494.18
	Average Loan	1494.18
	Rate of Interest	8.85%
	Interest	132.23
	Rep Schedule	12 annual instalments from 19.10.2016
2	Bond XXXIV	
	Gross loan opening	300.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	300.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	300.00
	Average Loan	300.00
	Rate of Interest	8.84%
	Interest	26.52
	Rep Schedule	12 annual instalments from 21.10.2014
3	Bond XXXV	
	Gross loan opening	60.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	60.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	60.00
	Average Loan	60.00
	Rate of Interest	9.64%
	Interest	5.78
	Rep Schedule	12 annual instalments from 31.05.2015.
4	Bond XXXVI	
	Gross loan opening	150.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	150.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	150.00
	Average Loan	150.00
	Rate of Interest	9.35%
	Interest	14.03



	Rep Schedule	15 annual instalments from 29.08.2016.
5	Bond XXXVII	
	Gross loan opening	320.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	320.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	320.00
	Average Loan	320.00
	Rate of Interest	9.25%
	Interest	29.60
	Rep Schedule	12 annual instalments from 26.12.2015.
6	Bond XXXVIII	
	Gross loan opening	80.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	80.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	80.00
	Average Loan	80.00
	Rate of Interest	9.25%
	Interest	7.40
	Rep Schedule	Bullet Payment as on 09.03.2027
7	Bond XXXIX	
	Gross loan opening	330.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	330.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	330.00
	Average Loan	330.00
	Rate of Interest	9.40%
	Interest	31.02
	Rep Schedule	Bullet Payment as on 29.03.2027
8	Bond XL	
	Gross loan opening	900.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	900.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	900.00
	Average Loan	900.00
	Rate of Interest	9.30%
	Interest	83.70
	Rep Schedule	12 annual instalments from 28.06.2016
9	SBI	
	Gross loan opening	460.00



	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	460.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	460.00
	Average Loan	460.00
	Rate of Interest	10.45%
	Interest	48.07
	Rep Schedule	22 half yearly instalment from 31.08.2016
10	FC-Bond (Exchange Rate Rs.54.91)	
	Gross loan opening	841.77
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	841.77
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	841.77
	Average Loan	841.77
	Rate of Interest	3.88%
	Interest	32.62
	Rep Schedule	Bullet Payment as on 17.01.2023
	Total Loan	
	Gross loan opening	4935.95
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	4935.95
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	4935.95
	Average Loan	4935.95
	Rate of Interest	8.3261%
	Interest	410.97



(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN- Asset-II		
	Details of Loan	2013-14
1	Bond XLI	
	Gross loan opening	95.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	95.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	95.00
	Average Loan	95.00
	Rate of Interest	8.85%
	Interest	8.41
	Rep Schedule	12 annual instalments from 19.10.2016
2	Bond XXXIV	
	Gross loan opening	20.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	20.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	20.00
	Average Loan	20.00
	Rate of Interest	8.84%
	Interest	1.77
	Rep Schedule	12 annual instalments from 21.10.2014
3	Bond XXXV	
	Gross loan opening	4.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	4.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	4.00
	Average Loan	4.00
	Rate of Interest	9.64%
	Interest	0.39
	Rep Schedule	12 annual instalments from 31.05.2015.
4	Bond XXXVI	
	Gross loan opening	10.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	10.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	10.00
	Average Loan	10.00
	Rate of Interest	9.35%
	Interest	0.94



	Rep Schedule	15 annual instalments from 29.08.2016.
5	Bond XXXVII	
	Gross loan opening	24.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	24.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	24.00
	Average Loan	24.00
	Rate of Interest	9.25%
	Interest	2.22
	Rep Schedule	12 annual instalments from 26.12.2015.
6	Bond XXXVIII	
	Gross loan opening	6.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	6.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	6.00
	Average Loan	6.00
	Rate of Interest	9.25%
	Interest	0.56
	Rep Schedule	Bullet Payment as on 09.03.2027
7	Bond XXXIX	
	Gross loan opening	23.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	23.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	23.00
	Average Loan	23.00
	Rate of Interest	9.40%
	Interest	2.16
	Rep Schedule	Bullet Payment as on 29.03.2027
8	Bond XL	
	Gross loan opening	80.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	80.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	80.00
	Average Loan	80.00
	Rate of Interest	9.30%
	Interest	7.44
	Rep Schedule	12 annual instalments from 28.06.2016
9	Bond XLIII	
	Gross loan opening	145.08



	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	145.08
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	145.08
	Average Loan	145.08
	Rate of Interest	7.93%
	Interest	11.50
	Rep Schedule	12 annual instalments from 28.05.2017
10	Bond XLV	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	66.75
	Repayment during the year	0.00
	Net Loan-Closing	66.75
	Average Loan	33.38
	Rate of Interest	9.65%
	Interest	3.22
	Rep Schedule	12 annual instalments from 28.02.2018
11	SBI	
	Gross loan opening	30.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	30.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	30.00
	Average Loan	30.00
	Rate of Interest	10.05%
	Interest	3.02
	Rep Schedule	22 half yearly instalment from 31.08.2016
12	FC-Bond (Exchange Rate Rs.62.36)	
	Gross loan opening	200.18
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	200.18
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	200.18
	Average Loan	200.18
	Rate of Interest	3.88%
	Interest	7.76
	Rep Schedule	Bullet Payment as on 17.01.2023
	Total Loan	
	Gross loan opening	637.26
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	637.26
	Additions during the year	66.75



	Repayment during the year	0.00
	Net Loan-Closing	704.01
	Average Loan	670.63
	Rate of Interest	7.3618%
	Interest	49.37



(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN- Asset-III		
	Details of Loan	2013-14
1	Bond XLI	
	Gross loan opening	97.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	97.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	97.00
	Average Loan	97.00
	Rate of Interest	8.85%
	Interest	8.58
	Rep Schedule	12 annual instalments from 19.10.2016
2	Bond XXXIV	
	Gross loan opening	20.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	20.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	20.00
	Average Loan	20.00
	Rate of Interest	8.84%
	Interest	1.77
	Rep Schedule	12 annual instalments from 21.10.2014
3	Bond XXXV	
	Gross loan opening	4.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	4.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	4.00
	Average Loan	4.00
	Rate of Interest	9.64%
	Interest	0.39
	Rep Schedule	12 annual instalments from 31.05.2015.
4	Bond XXXVI	
	Gross loan opening	10.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	10.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	10.00
	Average Loan	10.00
	Rate of Interest	9.35%
	Interest	0.94



	Rep Schedule	15 annual instalments from 29.08.2016.
5	Bond XXXVII	
	Gross loan opening	24.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	24.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	24.00
	Average Loan	24.00
	Rate of Interest	9.25%
	Interest	2.22
	Rep Schedule	12 annual instalments from 26.12.2015.
6	Bond XXXVIII	
	Gross loan opening	6.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	6.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	6.00
	Average Loan	6.00
	Rate of Interest	9.25%
	Interest	0.56
	Rep Schedule	Bullet Payment as on 09.03.2027
7	Bond XXXIX	
	Gross loan opening	23.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	23.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	23.00
	Average Loan	23.00
	Rate of Interest	9.40%
	Interest	2.16
	Rep Schedule	Bullet Payment as on 29.03.2027
8	Bond XL	
	Gross loan opening	80.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	80.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	80.00
	Average Loan	80.00
	Rate of Interest	9.30%
	Interest	7.44
	Rep Schedule	12 annual instalments from 28.06.2016
9	SBI	
	Gross loan opening	30.00



	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	30.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	30.00
	Average Loan	30.00
	Rate of Interest	10.45%
	Interest	3.14
	Rep Schedule	22 half yearly instalment from 31.08.2016
10	SBI	
	Gross loan opening	57.36
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	57.36
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	57.36
	Average Loan	57.36
	Rate of Interest	10.05%
	Interest	5.76
	Rep Schedule	22 half yearly instalment from 31.08.2016
11	FC-Bond (Exchange Rate Rs.56.95)	
	Gross loan opening	199.89
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	199.89
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	199.89
	Average Loan	199.89
	Rate of Interest	3.875%
	Interest	7.75
	Rep Schedule	Bullet Payment as on 17.01.2023
	Total Loan	
	Gross loan opening	551.25
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	551.25
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	551.25
	Average Loan	551.25
	Rate of Interest	7.3824%
	Interest	40.70



(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN- Asset-IV		
	Details of Loan	2013-14
1	Bond XLI	
	Gross loan opening	97.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	97.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	97.00
	Average Loan	97.00
	Rate of Interest	8.85%
	Interest	8.58
	Rep Schedule	12 annual instalments from 19.10.2016
2	Bond XXXIV	
	Gross loan opening	20.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	20.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	20.00
	Average Loan	20.00
	Rate of Interest	8.84%
	Interest	1.77
	Rep Schedule	12 annual instalments from 21.10.2014
3	Bond XXXV	
	Gross loan opening	4.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	4.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	4.00
	Average Loan	4.00
	Rate of Interest	9.64%
	Interest	0.39
	Rep Schedule	12 annual instalments from 31.05.2015.
4	Bond XXXVI	
	Gross loan opening	10.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	10.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	10.00
	Average Loan	10.00
	Rate of Interest	9.35%
	Interest	0.94



	Rep Schedule	15 annual instalments from 29.08.2016.
5	Bond XXXVII	
	Gross loan opening	24.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	24.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	24.00
	Average Loan	24.00
	Rate of Interest	9.25%
	Interest	2.22
	Rep Schedule	12 annual instalments from 26.12.2015.
6	Bond XXXVIII	
	Gross loan opening	6.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	6.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	6.00
	Average Loan	6.00
	Rate of Interest	9.25%
	Interest	0.56
	Rep Schedule	Bullet Payment as on 09.03.2027
7	Bond XXXIX	
	Gross loan opening	23.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	23.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	23.00
	Average Loan	23.00
	Rate of Interest	9.40%
	Interest	2.16
	Rep Schedule	Bullet Payment as on 29.03.2027
8	Bond X	
	Gross loan opening	80.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	80.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	80.00
	Average Loan	80.00
	Rate of Interest	9.30%
	Interest	7.44
	Rep Schedule	12 annual instalments from 28.06.2016
9	SBI	
	Gross loan opening	30.00



	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	30.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	30.00
	Average Loan	30.00
	Rate of Interest	10.45%
	Interest	3.14
	Rep Schedule	22 half yearly instalment from 31.08.2016
10	SBI	
	Gross loan opening	18.86
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	18.86
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	18.86
	Average Loan	18.86
	Rate of Interest	10.05%
	Interest	1.90
	Rep Schedule	22 half yearly instalment from 31.08.2016
11	FC-Bond (Exchange Rate Rs.54.24)	
	Gross loan opening	200.15
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	200.15
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	200.15
	Average Loan	200.15
	Rate of Interest	3.875%
	Interest	7.76
	Rep Schedule	Bullet Payment as on 17.01.2023
	Total Loan	
	Gross loan opening	513.01
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	513.01
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	513.01
	Average Loan	513.01
	Rate of Interest	7.1805%
	Interest	36.84



(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN-Asset-VI		
	Details of Loan	2013-14
1	Bond XLI	
	Gross loan opening	555.84
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	555.84
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	555.84
	Average Loan	555.84
	Rate of Interest	8.85%
	Interest	49.19
	Rep Schedule	12 annual instalments from 19.10.2016
2	Bond XXXIV	
	Gross loan opening	400.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	400.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	400.00
	Average Loan	400.00
	Rate of Interest	8.84%
	Interest	35.36
	Rep Schedule	12 annual instalments from 21.10.2014
3	Bond XXXV	
	Gross loan opening	250.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	250.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	250.00
	Average Loan	250.00
	Rate of Interest	9.64%
	Interest	24.10
	Rep Schedule	12 annual instalments from 31.05.2015.
4	Bond XXXVI	
	Gross loan opening	350.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	350.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	350.00
	Average Loan	350.00
	Rate of Interest	9.35%
	Interest	32.73
	Rep Schedule	15 annual instalments



		from 29.08.2016.
5	Bond XXXVII	
	Gross loan opening	500.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	500.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	500.00
	Average Loan	500.00
	Rate of Interest	9.25%
	Interest	46.25
	Rep Schedule	12 annual instalments from 26.12.2015.
6	Bond XXXVIII	
	Gross loan opening	300.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	300.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	300.00
	Average Loan	300.00
	Rate of Interest	9.25%
	Interest	27.75
	Rep Schedule	Bullet Payment as on 09.03.2027
7	Bond XXXIX	
	Gross loan opening	500.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	500.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	500.00
	Average Loan	500.00
	Rate of Interest	9.40%
	Interest	47.00
	Rep Schedule	Bullet Payment as on 29.03.2027
8	Bond XL	
	Gross loan opening	400.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	400.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	400.00
	Average Loan	400.00
	Rate of Interest	9.30%
	Interest	37.20
	Rep Schedule	12 annual instalments from 28.06.2016
9	SBI	
	Gross loan opening	300.00
	Cumulative Repayment upto DOCO/previous year	0.00



	Net Loan-Opening	300.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	300.00
	Average Loan	300.00
	Rate of Interest	10.45%
	Interest	31.35
	Rep Schedule	22 half yearly instalment from 31.08.2016
10	IFC (IFC - A Loan)(31419-00) (Exchange Rate Rs.54.91)	
	Gross loan opening	582.05
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	582.05
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	582.05
	Average Loan	582.05
	Rate of Interest	3.345%
	Interest	19.47
	Rep Schedule	Bullet Payment as on 17.01.2023
11	FC-Bond (Exchange Rate Rs.54.91)	
	Gross loan opening	999.91
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	999.91
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	999.91
	Average Loan	999.91
	Rate of Interest	3.875%
	Interest	38.75
	Rep Schedule	Bullet Payment as on 17.01.2023
	Total Loan	
	Gross loan opening	5137.80
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	5137.80
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	5137.80
	Average Loan	5137.80
	Rate of Interest	7.5741%
	Interest	389.14



(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN- Asset-VII		
	Details of Loan	2013-14
1	Bond XLI	
	Gross loan opening	108.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	108.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	108.00
	Average Loan	108.00
	Rate of Interest	8.85%
	Interest	9.56
	Rep Schedule	12 annual instalments from 19.10.2016
2	Bond XXXIV	
	Gross loan opening	180.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	180.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	180.00
	Average Loan	180.00
	Rate of Interest	8.84%
	Interest	15.91
	Rep Schedule	12 annual instalments from 21.10.2014
3	Bond XXXV	
	Gross loan opening	60.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	60.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	60.00
	Average Loan	60.00
	Rate of Interest	9.64%
	Interest	5.78
	Rep Schedule	12 annual instalments from 31.05.2015.
4	Bond XXXVI	
	Gross loan opening	100.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	100.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	100.00
	Average Loan	100.00
	Rate of Interest	9.35%
	Interest	9.35



	Rep Schedule	15 annual instalments from 29.08.2016.
5	Bond XXXVII	
	Gross loan opening	150.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	150.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	150.00
	Average Loan	150.00
	Rate of Interest	9.25%
	Interest	13.88
	Rep Schedule	12 annual instalments from 26.12.2015.
6	Bond XXXVIII	
	Gross loan opening	50.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	50.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	50.00
	Average Loan	50.00
	Rate of Interest	9.25%
	Interest	4.63
	Rep Schedule	Bullet Payment as on 09.03.2027
7	Bond XXXIX	
	Gross loan opening	140.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	140.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	140.00
	Average Loan	140.00
	Rate of Interest	9.40%
	Interest	13.16
	Rep Schedule	Bullet Payment as on 29.03.2027
8	Bond XL	
	Gross loan opening	200.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	200.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	200.00
	Average Loan	200.00
	Rate of Interest	9.30%
	Interest	18.60
	Rep Schedule	12 annual instalments from 28.06.2016
9	SBI	
	Gross loan opening	200.00



	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	200.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	200.00
	Average Loan	200.00
	Rate of Interest	10.45%
	Interest	20.90
	Rep Schedule	22 half yearly instalment from 31.08.2016
10	SBI	
	Gross loan opening	186.94
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	186.94
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	186.94
	Average Loan	186.94
	Rate of Interest	10.05%
	Interest	18.79
	Rep Schedule	22 half yearly instalment from 31.08.2016
11	IFC (IFC - A Loan)(31419-00) (Exchange Rate Rs.56.95)	
	Gross loan opening	243.18
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	243.18
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	243.18
	Average Loan	243.18
	Rate of Interest	3.345%
	Interest	8.13
	Rep Schedule	Bullet Payment as on 17.01.2023
12	FC-Bond (Exchange Rate Rs.56.95)	
	Gross loan opening	600.25
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	600.25
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	600.25
	Average Loan	600.25
	Rate of Interest	3.875%
	Interest	23.26
	Rep Schedule	Bullet Payment as on 17.01.2023
	Total Loan	
	Gross loan opening	2218.37
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	2218.37



	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	2218.37
	Average Loan	2218.37
	Rate of Interest	7.3002%
	Interest	161.95



(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN- Asset-VIII		
	Details of Loan	2013-14
1	Bond XXXIV	
	Gross loan opening	5.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	5.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	5.00
	Average Loan	5.00
	Rate of Interest	8.84%
	Interest	0.44
	Rep Schedule	12 annual instalments from 21.10.2014
2	Bond XXXV	
	Gross loan opening	15.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	15.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	15.00
	Average Loan	15.00
	Rate of Interest	9.64%
	Interest	1.45
	Rep Schedule	12 annual instalments from 31.05.2015.
3	Bond XXXVI	
	Gross loan opening	9.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	9.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	9.00
	Average Loan	9.00
	Rate of Interest	9.35%
	Interest	0.84
	Rep Schedule	15 annual instalments from 29.08.2016.
4	Bond XXXVII	
	Gross loan opening	20.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	20.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	20.00
	Average Loan	20.00
	Rate of Interest	9.25%
	Interest	1.85



	Rep Schedule	12 annual instalments from 26.12.2015.
5	Bond XXXVIII	
	Gross loan opening	5.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	5.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	5.00
	Average Loan	5.00
	Rate of Interest	9.25%
	Interest	0.46
	Rep Schedule	Bullet Payment as on 09.03.2027
6	Bond XXXIX	
	Gross loan opening	20.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	20.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	20.00
	Average Loan	20.00
	Rate of Interest	9.40%
	Interest	1.88
	Rep Schedule	Bullet Payment as on 29.03.2027
7	SBI	
	Gross loan opening	10.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	10.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	10.00
	Average Loan	10.00
	Rate of Interest	10.45%
	Interest	1.05
	Rep Schedule	22 half yearly instalment from 31.08.2016
8	SBI	
	Gross loan opening	27.89
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	27.89
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	27.89
	Average Loan	27.89
	Rate of Interest	10.05%
	Interest	2.80
	Rep Schedule	22 half yearly instalment from 31.08.2016
9	IFC (IFC - A Loan)(31419-00) (Exchange Rate Rs.54.24)	



	Gross loan opening	131.80
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	131.80
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	131.80
	Average Loan	131.80
	Rate of Interest	3.345%
	Interest	4.41
	Rep Schedule	Bullet Payment as on 17.01.2023
10	FC-Bond (Exchange Rate Rs.54.24)	
	Gross loan opening	279.88
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	279.88
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	279.88
	Average Loan	279.88
	Rate of Interest	3.875%
	Interest	10.85
	Rep Schedule	Bullet Payment as on 17.01.2023
	Total Loan	
	Gross loan opening	523.57
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	523.57
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	523.57
	Average Loan	523.57
	Rate of Interest	4.9705%
	Interest	26.02



(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN-Asset-IX		
	Details of Loan	2013-14
1	Bond XXXIV	
	Gross loan opening	5.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	5.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	5.00
	Average Loan	5.00
	Rate of Interest	8.84%
	Interest	0.44
	Rep Schedule	12 annual instalments from 21.10.2014
2	Bond XXXV	
	Gross loan opening	15.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	15.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	15.00
	Average Loan	15.00
	Rate of Interest	9.64%
	Interest	1.45
	Rep Schedule	12 annual instalments from 31.05.2015.
3	Bond XXXVI	
	Gross loan opening	9.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	9.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	9.00
	Average Loan	9.00
	Rate of Interest	9.35%
	Interest	0.84
	Rep Schedule	15 annual instalments from 29.08.2016.
4	Bond XXXVII	
	Gross loan opening	20.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	20.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	20.00
	Average Loan	20.00
	Rate of Interest	9.25%
	Interest	1.85
	Rep Schedule	12 annual instalments



		from 26.12.2015.
5	Bond XXXVIII	
	Gross loan opening	5.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	5.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	5.00
	Average Loan	5.00
	Rate of Interest	9.25%
	Interest	0.46
	Rep Schedule	Bullet Payment as on 09.03.2027
6	Bond XXXIX	
	Gross loan opening	20.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	20.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	20.00
	Average Loan	20.00
	Rate of Interest	9.40%
	Interest	1.88
	Rep Schedule	Bullet Payment as on 29.03.2027
7	SBI	
	Gross loan opening	10.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	10.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	10.00
	Average Loan	10.00
	Rate of Interest	10.45%
	Interest	1.05
	Rep Schedule	22 half yearly instalment from 31.08.2016
8	SBI	
	Gross loan opening	70.63
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	70.63
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	70.63
	Average Loan	70.63
	Rate of Interest	10.05%
	Interest	7.10
	Rep Schedule	22 half yearly instalment from 31.08.2016
9	IFC (IFC - A Loan)(31419-00) (Exchange Rate Rs.56.95)	
	Gross loan opening	132.12



	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	132.12
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	132.12
	Average Loan	132.12
	Rate of Interest	3.345%
	Interest	4.42
	Rep Schedule	Bullet Payment as on 17.01.2023
10	FC-Bond (Exchange Rate Rs.56.95)	
	Gross loan opening	280.19
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	280.19
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	280.19
	Average Loan	280.19
	Rate of Interest	3.875%
	Interest	10.86
	Rep Schedule	Bullet Payment as on 17.01.2023
	Total Loan	
	Gross loan opening	566.95
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	566.95
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	566.95
	Average Loan	566.95
	Rate of Interest	5.3519%
	Interest	30.34

