

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 296/TT/2013

Coram:

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

**Date of Hearing : 17.03.2015
Date of Order : 15.10.2015**

In the matter of:

Approval of transmission tariff for Asset-1: Aurangabad-Aurangabad (MSETCL) 400 kV D/C (Quad) line and shifting of 400 kV D/C Akola-Aurangabad (MSETCL) line to Aurangabad along with associated bays at both ends, Asset-2: 400/220 kV 315 MVA ICT-I along with associated bays at Aurangabad Sub-station and Asset-3: 400/220 kV 315 MVA ICT-II along with associated bays at Aurangabad Sub-station under Transmission System associated with MUNDRA UMPP in Western 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. Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Rampur,
Jabalpur-482 008
2. Maharashtra State Electricity Distribution Company Limited,
5th Floor, Prakashgad,
Bandra (East), Mumbai-400 051
3. Gujarat Urja Vikas Nigam Limited,
Sardar Patel Vidyut Bhawan,
Race Course Road, Vadodara-390 007



4. Electricity Department, Government of Goa,
Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa-403 001
5. Electricity Department,
Administration of Daman and Diu,
Daman-396 210
6. Electricity Department,
Administration of Dadra Nagar Haveli,
U.T., Silvassa-396 230
7. Chhattisgarh State Electricity Board,
P.O. Sunder Nagar, Dangania, Raipur,
Chhattisgarh-492 013
8. Madhya Pradesh Audyogik Kendra
Vikas Nigam (Indore) Limited,
3/54, Press Complex, Agra-Bombay Road,
Indore -452 008
9. Punjab State Electricity Board,
220 kV Sub-station, Ablowal,
Patiala-147 001
10. Haryana Power Purchase Centre,
IInd Floor, Shakti Bhawan, Sector-6,
Panchkula (Haryana)-134 109
11. Rajasthan Power Procurement Centre,
Vidyut Bhawan, Janpath,
Jaipur
12. Ajmer Vidyut Vitran Nigam Limited,
400 kV GSS Building, Ajmer Road,
Heerapura, Jaipur
13. Jodhpur Vidyut Vitran Nigam Limited,
400 kV GSS Building, Ajmer Road,
Heerapura, Jaipur
14. Jaipur Vidyut Vitran Nigam Limited,
400 kV GSS Building, Ajmer Road,
Heerapura, Jaipur
15. Costal Gujarat Power Limited,
(A Tata Power Company),
Tata Power Backbay Receiving Station,
148, Lt. Gen. J Bhonsle Marg,
Nariman Point, Mumbai-400 021

.....Respondents



For petitioner : Shri Mohd. Mohsin, PGCIL
Shri Rakesh Prasad, PGCIL

For respondent : None

ORDER

This petition has been filed by Power Grid Corporation of India Limited (PGCIL) for approval of the transmission charges of Asset-1: Aurangabad-Aurangabad (MSETCL) 400 kV D/C (Quad) line and shifting of 400 kV D/C Akola-Aurangabad (MSETCL) line to Aurangabad along with associated bays at both ends, Asset-2: 400/220 kV 315 MVA ICT-I along with associated bays at Aurangabad Sub-station and Asset-3: 400/220 kV 315 MVA ICT-II along with associated bays at Aurangabad Sub-station under Transmission System associated with MUNDRA UMPP in Western Region from the date of commercial operation to 31.3.2014 for tariff block 2009-14 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 (hereinafter referred to as the "2009 Tariff Regulations").

2. The Investment Approval (IA) of the project was accorded by the Board of Directors of PGCIL vide memorandum ref. C/CP/Mundra dated 15.10.2008 at an estimated cost of ₹482412 lakh including IDC of ₹44686 lakh (based on 1st quarter, 2008 price level). The project was scheduled to be commissioned within 48 months from the date of IA by 14.10.2012 i.e. 1.11.2012. The scope of project broadly includes the following:-

Part (A): Transmission System of MUNDRA (4000 MW) UMPP:

Transmission Lines:

a) Mundra-Limdi 400 kV D/C (Triple snowbird): 301 km



- b) Mundra-Bachchau-Ranchodpura 400 kV D/C (Triple snowbird): 388 km
- c) Mundra-Jetpur 400 kV D/C (Triple snowbird): 328 km

Part (B): Regional System Strengthening in WR for Mundra UMPP:

Transmission Lines:

- a) Gandhar-Navsari 400 kV D/C: 134 km
- b) Navsari-Mumbai (New location) 400 kV D/C : 204 km
- c) LILO of both circuits of Kawas-Navsari 220 kV D/C at Navsari : 50 km
- d) Wardha-Aurangabad 400 kV D/C (Quad) along with 40% Fixed Series Compensation with provision to upgrade the line to 1200 kV S/C at a later date : 400 km
- a) Aurangabad-Aurangabad (MSETCL) 400 kV D/C (Quad) Line : 30 km

Sub-stations:

- a) Establishment of new 400/220 kV, 2x315 MVA sub-stations at Bachchau
- b) Establishment of new 400/220 kV, 2x315 MVA GIS sub-stations at Navsari
- c) Establishment of new 400 kV GIS switching station at Mumbai (New location)
- d) Establishment of 765/400 kV, 3x1500 MVA sub-station at Wardha
- e) 765 kV line bays for operation of Seoni-Wardha 2xS/C lines at 765 kV level
- f) Establishment of 400/220 kV, 2x315 MVA sub-station at Aurangabad

3. The details of the assets commissioned in the instant petition are as given below:-

S. No.	Particulars	Asset
1	Asset-1	Aurangabad-Aurangabad (MSETCL) 400 kV D/C Quad line and shifting of Akola-Aurangabad



		(MSETCL) line to Aurangabad (PG) with bays
2	Asset-2	400/220 kV 315 MVA ICT-I at Aurangabad with Bays
3	Asset-3	400/220 kV 315 MVA ICT-II at Aurangabad with Bays

4. The provisional tariff was granted for the instant assets vide order dated 16.12.2013 under Regulation 5(4) of the 2009 Tariff Regulations subject to adjustment as provided under Regulation 5(3) of the 2009 Tariff Regulations.

5. This order has been issued after considering the petitioner's affidavits dated 9.4.2014, 4.7.2014, 12.3.2015 and 18.8.2015.

6. The petitioner initially claimed the transmission tariff for the instant assets as per the anticipated CODs of the respective assets. However, the petitioner vide affidavit dated 4.7.2014 submitted that the instant assets have been put under commercial operation w.e.f. 1.2.2014 and also submitted Auditors' certificates for capital costs along with tariff forms. However, the petitioner submitted that the Asset-1 has been split into two parts being Asset-1(A): shifting of Akola-Aurangabad (MSETCL) line to Aurangabad (PG) along with bays and Asset-1(B) Aurangabad-Aurangabad (MSETCL) D/C portion. Asset-1(A) was put under commercial operation on 1.2.2014 and Asset-1(B) was commissioned during April, 2014 and accordingly tariff for the Asset-1(B) is claimed under the 2014 Tariff Regulations in Petition No. 185/TT/2014.

7. The petitioner, in the original petition submitted details of approved apportioned cost for Asset-1, Asset-2 and Asset-3 as ₹15217.39 lakh, ₹3521.82 lakh and ₹2321.27 lakh respectively. However, as the petitioner submitted vide affidavit dated 18.8.2015 that the Asset-1 was split into two assets i.e. Asset-1(A)



and Asset-1(B), the revised apportioned approved cost for Asset-1(A) was also submitted by the petitioner to be at ₹13066.99 lakh, but as per Form-6 submitted along with affidavit dated 18.8.2015 for Asset-1(A), the apportioned approved cost is ₹15217.39 lakh. There is discrepancy in the information submitted by the petitioner, we have considered the apportioned approved cost of ₹13067 lakh in the case of Asset-1(A) for the purpose of determining the tariff in the instant petition.

8. The transmission charges claimed by the petitioner are as under:-

(₹ in lakh)

Particulars	Asset-1(A)	Asset-2	Asset-3
	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Depreciation	114.12	17.98	12.98
Interest on Loan	70.21	4.46	3.24
Return on Equity	180.98	20.41	14.85
Interest on working capital	9.76	2.79	2.53
O & M Expenses	28.50	33.82	33.82
Total	403.57	79.46	67.42

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

(₹ in lakh)

Particulars	Asset-1(A)	Asset-2	Asset-3
	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Maintenance Spares	25.65	30.44	30.44
O & M Expenses	14.25	16.91	16.91
Receivables	403.57	79.46	67.42
Total	443.47	126.81	114.77
Rate of Interest	13.20%	13.20%	13.20%
Interest	9.76	2.79	2.53

10. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the



Electricity Act. Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No. 1 and Maharashtra State Electricity Distribution Company Limited (MSEDCL), Respondent No. 2 have filed replies vide affidavits dated 2.12.2013 and 4.1.2014 respectively. MPPMCL has raised certain objections regarding grant of provisional tariff and these issues have already been dealt in the Commission's order dated 16.12.2013 wherein provisional tariff was granted for the instant assets and as such the issues raised by MPPML are not discussed in this order. MSEDCL has raised other issues like cost over-run, RoE, rate of interest, on interest on loan, service tax, filing fee and the publication expenses and license fee etc. The petitioner has filed rejoinder to the reply of MSEDCL vide affidavit dated 9.4.2014. The objections raised by the respondents and the clarifications given by the petitioner are addressed in the relevant paragraphs of this order.

11. Having heard the representatives of the parties and perused the material on record we proceed to dispose of the petition.

Capital Cost

12. 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.

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

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

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

13. The Commission observed in the “Record of Proceedings” of the hearing on 17.3.2015 that after grant of final tariff in the matter, the petitioner would be required to file a true up petition based on the actual expenditure incurred as on 31.3.2014. As the audited cost of expenditure incurred upto 31.3.2014 is available in the instant case, the petitioner was directed to submit Auditors’ certificate as per audited books of account upto 31.3.2014 along with tariff forms so that final tariff upto 31.3.2014 and tariff for period of 2009-14 could be allowed in one order so as to speed up the process of issuing orders. The Commission had further directed the petitioner to adopt a similar approach in all such petitions. The Commission had also directed the petitioner to submit certain other information in respect of un-discharged liabilities and Interest During Construction (IDC). However, no details of the un-discharged liabilities have been provided and further information submitted in support of IDC computation is inadequate to determine the amount of interest capitalised in respect of foreign loans. It is further observed that the information submitted is not adequate for the purpose of determination of transmission tariff as per the true up provisions of the 2009 Tariff Regulations.



14. In view of above, we have no option but to proceed with the determination of the final tariff in the instant petition. However, the petitioner is directed to submit the following information along with the true-up petition together with apportioned approved cost as per Investment approval or Revised Cost Estimates (RCE) duly certified by the competent authority:-

- 1) Details of element wise (i.e. Land, building and civil work, TL and sub-station etc.) and year wise actual expenditure incurred up to 31.3.2014 along with element wise details of un-discharged liability as on COD and at the end of each Financial year duly certified by the auditors.
- 2) Year wise and loan wise computation of the IDC in support of ₹830.77 lakh, ₹102.92 lakh and ₹73.59 lakh as claimed for Asset-1 (A), Asset-2 and Asset-3 respectively vide auditor's certificate along with the soft copy in excel format with links and details of year wise/loan wise discharge of IDC on cash basis.
- 3) Details of date of drawl, date of infusion of loan in the project and in case of variation, if any, in the date of drawl and date of infusion of the loan, details of interest amount accrued and paid along with treatment of the same. Details of utilisation of the loan amount during the gap between drawl and infusion dates. In the case of IBRD-V loan, interest rates applicable from date of drawl to COD along with exchange rate as on the date of payment of interest.

15. The petitioner has submitted the capital cost incurred upto COD and capital cost projected to be incurred for the financial year 2013-14 as per the actual date of commercial operation, vide Auditors' certificate dated 30.4.2015, in the instant petition. However, in the absence of complete and adequate information we are constrained to assume that the information regarding capital cost as on COD and additional capital expenditure incurred or to be incurred as contained in the Auditors' certificate is on cash basis. The details of apportioned approved cost, cost as on date of commercial operation (COD), additional capital expenditure during 2013-14 and estimated completion cost considered for the purpose of determination of tariff are as overleaf:-



Particulars	Approved apportioned cost	Expenditure as on COD	(₹ in lakh)	
			Additional capital expenditure 2013-14	Estimated completion cost
Asset-1(A)	13067.00	18164.48	586.07	18750.55
Asset-2	3521.82	2055.49	51.97	2107.46
Asset-3	2321.27	1495.72	37.16	1532.88

Cost Over-run

16. MSEDCL submitted that there are huge variations in actual expenditure when compared to original estimates and submitted that the same may be allowed after prudence check. The estimated completion cost of Asset-2 and Asset-3 upto 31.3.2014 is within the apportioned approved cost and there is no cost over-run in the case of Asset-2 and Asset-3. However, in the case of Asset-1(A) the estimated completion cost of ₹18750.55 lakh upto 31.3.2014 exceeds the approved apportioned cost of ₹13067 lakh. Accordingly, for the purpose of tariff determination, the capital cost of Asset-1(A) has been restricted to apportioned approved cost. This approach has been upheld by the Appellate Tribunal for Electricity in its order dated 28.11.2013 in Appeal No. 165 of 2012, and subsequently the Commission, vide its order dated 18.2.2014 in Petition No. 216/TT/2012, has considered the apportioned approved cost of individual asset for restricting the capital expenditure due to cost over-run for the purpose of tariff determination. The same approach has been adopted in the present case and capital expenditure has been restricted to apportioned approved cost in respect of Asset-1(A). However, the capital cost in the case of Asset-1(A) shall be reviewed at the time of truing-up, subject to the petitioner filing the RCE, justification for cost over-run.



Time Over-run

17. The commissioning schedule of the project is 48 months from the date of IA i.e. 15.10.2008. Hence, the assets were to be commissioned by 14.10.2012 i.e. 1.11.2012. The details of commissioning of assets and their date of commercial operation are as under:-

Asset	Scheduled commissioning	COD	Delay
Asset-1(A)	1.11.2012	1.2.2014	15 months
Asset-2			
Asset-3			

18. There is a delay of 15 months in commissioning of the instant assets. The petitioner has submitted in the petition that in the 31st Meeting of Standing Committee on Power System Planning in Western Region held on 27.12.2010, termination of Akola-Aurangabad (MSETCL) 400 kV D/C line at Aurangabad (PG) instead of at Aurangabad (MSETCL) was agreed by the constituents of WR because of non-availability of space at Aurangabad (MSETCL). The bays available at Aurangabad (MSETCL) were to be used for Aurangabad (PG)-Aurangabad (MSETCL) 400 kV D/C (quad) line. Further, in order to reduce ROW issues, multi-circuit tower was agreed to carry both Akola-Aurangabad (PG) 400 kV D/C Twin Moose line and Aurangabad (PG)-Aurangabad (MSETCL) 400 kV Quad D/C line. This change in the scope led to the time over-run. The petitioner has also submitted that RoW issues in more than 14 locations, one court case (civil suit) for location no. 18/0, one writ petition at Aurangabad bench of Mumbai High Court for location no. 27/4 against the order of Collector, Aurangabad and severe drought conditions from January to May 2013 at Aurangabad caused considerable delay in construction work leading to time over-run of 15 months.



19. Letter of award (LOA) for Asset-1 was issued on 26.12.2011 and a combined LoA was issued for Asset-2 and Asset-3 on 3.10.2011 and the completion dates were 25.11.2013 and 2.8.2013 respectively as against the scheduled commissioning date of 1.11.2012. As there was substantial delay in issue of LoA, the petitioner was directed to submit documentary evidence to substantiate 15 months delay in commissioning of the instant assets.

20. The petitioner has submitted vide affidavits dated 4.7.2014 and 18.8.2015 that changes made in the scope of work as agreed by the constituents in the 31st Meeting of Standing Committee on Power system Planning in WR held on 27.12.2010, RoW problems, court case and severe drought conditions were the reasons for time over-run. The petitioner has submitted documents to establish that the scope of 400 kV D/C (quad) Aurangabad (MSETCL)-Aurangabad (PG) was deleted from the supply and erection package of 400 kV D/C (Quad) Wardha-Aurangabad (upgradeable to 1200 kV S/C) line under Mundra Transmission system. Subsequently, the 400 kV D/C (Quad) Aurangabad (MSETCL)-Aurangabad (PG) line was clubbed with 400 kV D/C (twin) Akola (MSETCL)-Aurangabad (PG) line on multi circuit tower due to constraints at bays at Aurangabad (MSETCL) and the package was awarded to M/S Jyoti Power Corporation Pvt. Ltd on 23.3.2012 and the completion schedule as per L2 September, 2013.

21. We have considered the submissions made by the petitioner. It has been observed that there was severe drought from November, 2012 to May, 2013, during which construction work was not allowed on account of shortage of drinking water. Work could not be performed for 4 months (May, 2013 to August,



2013) due to Court Case by M/s Salasar Housing. Further, work could not be performed for 2 months due to Writ Petition at Aurangabad bench of Hon'ble High Court of Mumbai against the orders of Collector, Aurangabad. Work also could not be executed for 8 months (June, 2013 to January, 2014) due to resistance and hindrance by the farmers in the construction work. We are of the opinion that delay of 6 months on account of Court case, 7 months on account of severe drought and 8 months on account of hindrance by the farmers was beyond the control of the petitioner and therefore the total delay of 15 months in commissioning of the instant assets is condoned.

Treatment of IDC & IEDC

22. The petitioner vide RoP for the hearing dated 17.3.2015 was directed to submit the detailed computation of the actual IDC on cash basis along with editable soft copy of computation in Excel format, as the same were not filed with the petition. However, as per the Auditors' certificate dated 30.4.2015 submitted by the petitioner, an amount of ₹830.77 lakh, ₹102.92 lakh and ₹73.59 lakh on account of IDC for Asset-1(A), Asset-2 and Asset-3 respectively has been capitalised. The petitioner submitted the computation of IDC without the soft copy in Excel format and has not submitted the computation of IDC discharged in 2014-15 and computation of IDC on foreign loans. In view of non availability and non submission of complete and adequate information by the petitioner, the revised claim of ₹717.34 lakh, ₹101.84 lakh and ₹72.80 lakh in respect of Asset-1(A), Asset-2 and Asset-3 respectively for IDC on cash basis, as submitted vide affidavit dated 18.8.2015 has been considered in the instant petition. However, the petitioner is directed to submit all relevant information as discussed and



directed at para-14 at the time of truing-up subject to prudence check and for the consideration by the Commission.

23. Similarly, the petitioner vide affidavit dated 18.8.2015 submitted the claim for amount of ₹236.40 lakh, ₹25.60 lakh and ₹17.92 lakh on account of Incidental Expenditure during Construction (IEDC) in respect of Asset-1(A), Asset-2 and Asset-3 respectively. However, the petitioner has not submitted detailed computations/supporting documents for admissible IEDC. In the absence of non submission of detailed computation/supporting documents of IEDC by the petitioner, the IEDC claim of ₹236.40 lakh, ₹25.60 lakh and ₹17.92 lakh on account of Incidental Expenditure during Construction (IEDC) in respect of Asset-1(A), Asset-2 and Asset-3 respectively has been considered for the purpose of tariff calculation in the instant petition. The petitioner is warned and once again directed to submit all relevant information at the time of truing-up subject to prudence check and for the consideration by the Commission.

24. Regulation 9 of the 2009 Tariff Regulations provides for the treatment of un-discharged 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 have considered the amount of IDC/IEDC in the instant petition as discussed at paras 22 and 23. The petitioner is directed to submit the amount of IDC/IEDC paid and specific to the transmission asset considered in this petition upto date of commercial operation and year wise balance IDC/IEDC discharged after date of commercial operation. IDC/IEDC allowed will be reviewed at the time of truing-up on submission of adequate and proper information by the petitioner.



Initial Spares

25. The petitioner has claimed the cost of the initial spares of ₹138.32 lakh and ₹20.37 lakh pertaining to sub-station for Asset-1(A) and Asset-2 respectively. The petitioner has not claimed initial spares for Asset-3. The cut-off date of the instant assets falls beyond tariff block 2009-14, as such the allowable initial spares have been considered on the basis of capital cost upto 31.3.2014. The initials spares claimed by the petitioner are within the ceiling limit specified in Regulation 8 of 2009 Tariff Regulations and hence same are allowed. We would like to clarify that as the capital cost has been restricted due to cost over-run and disallowance of IDC, the admissible initial spares has been proportionately reduced. The admissible initial spares will be reviewed at the time of truing up.

Capital cost on COD

26. The details of capital cost as on the date of commercial operation, after taking into capitalization of IDC, IEDC and cost of initial spares considered for the purpose of the determination of transmission tariff are as under:-

(₹ in lakh)

Particulars	Asset-1(A)		
	Capital cost as on COD as per auditors' certificate dated 30.4.2015	Admissible capital cost considered after adjusting IDC on cash basis	Capital cost restricted due to cost over-run
Freehold land	5264.76	5264.76	3811.11
Leasehold land	-	-	-
Building and Civil works	597.77	590.67	427.58
Transmission Line	9455.97	9365.82	6779.84
Sub-Station Equipments	2801.60	2785.74	2016.57
PLCC	44.38	44.06	31.90
Total capital cost	18164.48	18051.05	13067.00



(₹ in lakh)

Particulars	Asset-2	
	Capital cost as on COD as per auditors' certificate dated 30.4.2015	Admissible capital cost considered after adjusting IDC on cash basis
Freehold land	-	-
Leasehold land	-	-
Building and Civil works	104.94	104.86
Transmission Line	-	-
Sub-Station Equipments	1940.70	1939.70
PLCC	9.85	9.84
Total capital cost	2055.49	2054.41

(₹ in lakh)

Particulars	Asset-3	
	Capital cost as on COD as per auditors' certificate dated 30.4.2015	Admissible capital cost considered after adjusting IDC on cash basis
Freehold land	-	-
Leasehold land	-	-
Building and Civil works	104.94	104.86
Transmission Line	-	-
Sub-Station Equipments	1380.93	1380.23
PLCC	9.85	9.84
Total capital cost	1495.72	1494.93

Projected Additional Capital Expenditure

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

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

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



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

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

29. Therefore, the cut-off date for the instant assets is 31.3.2017 i.e. in the tariff block 2014-19.

30. The admissibility of additional capital expenditure incurred after the date of commercial operation is to be dealt in accordance with the provisions of Regulation 9 (1) of the 2009 Tariff Regulations. The petitioner has submitted that the add-cap is towards Balance and Retention Payments and the details of additional capital expenditure claimed from COD to 31.3.2014 by the petitioner are as follows:-

Particulars	(₹ in lakh)		
	Asset-1(A)	Asset-2	Asset-3
Freehold land	-	-	-
Leasehold land	-	-	-
Building and Civil works	76.70	13.72	13.72
Transmission Line	310.28	-	-
Sub-Station Equipments	197.93	37.99	23.18
PLCC	1.16	0.26	0.26
Total capital cost	586.07	51.97	37.16

31. We have considered the submissions made by the petitioner. The additional capital expenditure incurred and projected to be incurred for the transmission assets from the date of commercial operation to 31.3.2014 is on account of Balance/Retention payments. However, the additional capital expenditure claimed by the petitioner in the case of Asset-1(A) has not been considered due to cost over-run as discussed at para-16. The additional capital expenditure claimed by the petitioner in the case of Asset-2 and Asset-3 is within



the cut-off date and accordingly it is allowed in terms of Regulation 9 (1) (i) of the 2009 Tariff Regulations. The projected additional capital expenditure along with IDC discharged after COD (as IDC has been considered on cash basis upto COD only, as discussed at para-22) shall be reviewed at the time of truing-up on submission of the actual additional capital expenditure and details of IDC.

Capital cost as on 31.3.2014

32. The details of capital cost as on 31.3.2014 after considering admitted cost as on COD and admissible capital expenditure is as under:-

(₹ in lakh)			
Particulars	Asset-1(A)		
	As on COD	Add-cap	As on 31.3.2014
Freehold Land	3811.11	-	3811.11
Leasehold Land	-	-	-
Building & Other Civil Works	427.58	-	427.58
Transmission Line	6779.84	-	6779.84
Sub-Station Equipments	2016.57	-	2016.57
PLCC	31.90	-	31.90
Total	13067.00	-	13067.00
Particulars	Asset-2		
	As on COD	Add-cap	As on 31.3.2014
Freehold Land	-	-	-
Leasehold Land	-	-	-
Building & Other Civil Works	104.86	13.72	118.58
Transmission Line	-	-	-
Sub-Station Equipments	1939.70	37.99	1977.69
PLCC	9.84	0.26	10.10
Total	2054.41	51.97	2106.38
Particulars	Asset-3		
	As on COD	Add-cap	As on 31.3.2014
Freehold Land	-	-	-
Leasehold Land	-	-	-
Building & Other Civil Works	104.86	13.72	118.58
Transmission Line	-	-	-
Sub-Station Equipments	1380.23	23.18	1403.41
PLCC	9.84	0.26	10.10
Total	1494.93	37.16	1532.09

Debt- Equity Ratio

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



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

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

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

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

34. The petitioner has claimed debt: equity ratio of 70: 30 for capital cost as on COD and additional capital expenditure and the same is allowed. The details are as under:-

Particulars	Asset-1(A)			
	Amount (₹ in lakh)			% age
	Capital cost as on COD	Add-cap	Capital cost as on 31.3.2014	
Debt	9146.90	-	9146.90	70.00
Equity	3920.10	-	3920.10	30.00
Total	13067.00	-	13067.00	100.00
Particulars	Asset-2			
	Amount (₹ in lakh)			% age
	Capital cost as on COD	Add-cap	Capital cost as on 31.3.2014	
Debt	1438.08	36.38	1474.46	70.00
Equity	616.32	15.59	631.91	30.00
Total	2054.41	51.97	2106.38	100.00
Particulars	Asset-3			
	Amount (₹ in lakh)			% age
	Capital cost as on COD	Add-cap	Capital cost as on 31.3.2014	



Debt	1046.45	26.01	1072.46	70.00
Equity	448.48	11.15	459.63	30.00
Total	1494.93	37.16	1532.09	100.00

Return on Equity

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

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

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

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

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

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

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

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

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

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

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



36. The petitioner has submitted that it may be allowed 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 under Regulation 15(5) of the 2009 Tariff Regulations. MSEDCL has submitted that Return on Equity may be allowed in such a way that it avoids unnecessary burden on the beneficiaries and ultimately on end consumers. We would like to clarify that the petitioner is allowed to recover the shortfall or refund the excess Annual Transmission Charges under Regulation 15(5) of the 2009 Tariff Regulations. Accordingly, RoE has been computed @ 19.610% p.a on average equity as per Regulation 15(5) of the 2009 Tariff Regulations.

37. The details of return on equity allowed are as under:-

Particulars	(₹ in lakh)		
	Asset-1(A) 2013-14 (pro-rata)	Asset-2 2013-14 (pro-rata)	Asset-3 2013-14 (pro-rata)
Opening Equity	3930.09	616.32	448.48
Addition due to Additional Capitalization	-	15.59	11.15
Closing Equity	3920.09	631.91	459.63
Average Equity	3920.09	624.12	454.05
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.960%	20.960%	20.960%
Rate of Return on Equity (Pre Tax)	19.610%	19.610%	19.610%
Return on Equity (Pre Tax)	128.12	20.40	14.84

Interest on Loan

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

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

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



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

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

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

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

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

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

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

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

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

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

39. In keeping with the provisions of Regulation 16 of the 2009 Tariff Regulations, the petitioner’s entitlement to interest on loan has been calculated on the following basis:-

(a) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition;



- (b) The repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that period;
- (c) Notwithstanding moratorium period availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed;
- (d) 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; and
- (e) As per Regulation 16(5) only actual loans have been considered for computation of weighted average rate of interest.

40. MSEDCL submitted that the Commission needs to conduct prudence check on loans availed by the petitioner and the average interest rate considered for calculation of interest on long term basis. The petitioner in the case of IBRD-V loan has considered interest rate @ 1.76% as on 1.2.2014, whereas as per documents submitted by the petitioner rate of interest applicable on 1.2.2014 is 1.61%. Accordingly, the interest on loan for the year 2013-14 has been calculated on the basis of prevailing rate available as on the date of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing up.

41. Detailed calculations in support of the weighted average rates of interest have been given at Annexure-1 to Annexure-3.

42. Based on the above, interest on loan has been calculated as given herein after:-



Particulars	(₹ in lakh)		
	Asset-1(A) 2013-14 (pro-rata)	Asset-2 2013-14 (pro-rata)	Asset-3 2013-14 (pro-rata)
Gross Normative Loan	9146.90	1438.08	1046.45
Cumulative Repayment upto Previous Yr	-	-	-
Net Loan-Opening	9146.90	1438.08	1046.45
Addition due to Additional Capitalisation	-	36.38	26.01
Repayment during the year	80.13	17.96	12.98
Net Loan-Closing	9066.78	1456.50	1059.49
Average Loan	9106.84	1447.29	1052.57
Weighted Avg. Rate of Interest on Loan	3.1552%	1.6985%	1.6970%
Interest	47.89	4.10	2.98

Depreciation

43. Regulation 17 of the 2009 Tariff Regulations provides as follows:-

“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.”

44. The petitioner has claimed actual depreciation as a component of Annual Fixed Charges. The instant transmission assets were put under commercial operation during 1.2.2014. Accordingly, the instant assets 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, as per details hereunder:-

Particulars	(₹ in lakh)		
	Asset-1(A) 2013-14 (pro-rata)	Asset-2 2013-14 (pro-rata)	Asset-3 2013-14 (pro-rata)
Opening Gross Block	13067.00	2054.41	1494.93
Additional Capital Expenditure	-	51.97	37.16
Closing Gross Block	13067.00	2106.38	1532.09
Average Gross Block	13067.00	2080.39	1513.51
Rate of Depreciation	3.6791%	5.1809%	5.1437%
Depreciable Value	8330.30	1872.35	1362.16
Remaining Depreciable Value	8330.30	1872.35	1362.16
Depreciation	80.13	17.96	12.98

Operation & Maintenance Expenses (O&M Expenses)

45. The norms for O&M Expenses for the transmission system based on the type of sub-station and the transmission line are specified in clause (g) of Regulation 19 of the 2009 Tariff Regulations. The norms for assets covered in the instant petition are as follows:-

Element	2009-10	2010-11	2011-12	2012-13	2013-14
D/C twin conductor T/L (₹ 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
220 kV and below bay (₹ lakh/bay)	36.68	38.78	41.00	43.34	45.82



46. The details of elements covered in the instant petition and their date of commercial operation are as under:-

S. No.	Assets	COD	Length (in km)/no. of bays
	Asset-1:		
	Transmission Lines:		
1.	400 kV D/C twin conductor, Aurangabad (MSETCL)-Aurangabad T/L	1.2.2014	1.438
2.	400 kV D/C twin conductor, Aurangabad (MSETCL)-Aurangabad T/L		49.716
	Bays:		
1.	400 kV Akola bay-1 at Aurangabad Sub-station	1.2.2014	1
2.	400 kV Akola bay-2 at Aurangabad Sub-station		1
	Asset-2:		
	Bay:		
1.	400 kV ICT-1 bay at Aurangabad Sub-station	1.2.2014	1
2	220 kV ICT-1 bay at Aurangabad Sub-station		1
3	220 kV Line-1 bay at Aurangabad Sub-station		1
4	220 kV Line-2 bay at Aurangabad Sub-station		1
	Asset-3		
	Bay:		
1.	400 kV ICT-2 bay at Aurangabad Sub-station	1.2.2014	1
2	220 kV ICT-2 bay at Aurangabad Sub-station		1

47. Accordingly, the details of O&M Expenses considered for the purpose of tariff calculations in the instant petition are as below:-

Element	(₹ in lakh) 2013-14 (pro-rata)
Asset-1(A)	
51.154 (1.438+49.716) km, 400 kV D/C twin conductor T/L	6.68
2 nos. 400 kV bays	21.82
Asset-2	
1 no. 400 kV bay	10.91
3 nos. 220 kV bays	22.91
Asset-3	



1 no. 400 kV bay	10.91
3 nos. 220 kV bays	22.91

48. The petitioner has submitted that O & M Expenses for the period 2009-14 were arrived at on the basis of normalized actual O & M Expenses during the period 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking has also been considered while calculating the O & M Expenses for the tariff period 2009-14. The petitioner has further submitted that it may approach the Commission for additional manpower cost on account of wage revision (if any) during the tariff block 2009-14 for claiming in the tariff.

49. 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

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



(i) Receivables

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

(ii) Maintenance Spares

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

(iii) O & M Expenses

Regulation 18(1) (c) (iii) of the 2009 Tariff Regulations provides for O&M Expenses for one month to be included in the working capital. The petitioner has claimed O&M expenses for 1 month of the respective year. This has been considered in the working capital.

(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 shall be equal to State Bank of India Base Rate @ 13.20% (Base rate of 9.70% as on 1.4.2013 and 350 basis points) for asset. The interest on working capital for the assets covered in the petition has been worked out accordingly.



51. Necessary computations in support of interest on working capital are given hereunder:-

Particulars	(₹ in lakh)		
	Asset-1(A) 2013-14 (pro-rata)	Asset-2 2013-14 (pro-rata)	Asset-3 2013-14 (pro-rata)
Maintenance Spares	25.65	30.44	30.44
O & M Expenses	14.25	16.91	16.91
Receivables	291.94	79.06	67.13
Total	331.84	126.41	114.48
Rate of Interest	13.20%	13.20%	13.20%
Interest	7.30	2.78	2.52

Transmission Charges

52. The transmission charges allowed for the instant assets are as below:-

Particulars	(₹ in lakh)		
	Asset-1(A) 2013-14 (pro-rata)	Asset-2 2013-14 (pro-rata)	Asset-3 2013-14 (pro-rata)
Depreciation	80.13	17.96	12.98
Interest on Loan	47.89	4.45	3.24
Return on Equity	128.12	20.40	14.84
Interest on Working Capital	7.30	2.79	2.52
O & M Expenses	28.50	33.82	33.82
Total	291.94	79.43	67.40

Filing Fee and the Publication Expenses

53. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. MSEDCL submitted that the issue of filing fee has been taken up with the Commission against its order dated 20.08.2010 in Petition No. 70/2010 and as such the claim should not be considered by the Commission. The petitioner has clarified that reimbursement of expenditure has been claimed in terms of Regulation 42 of the 2009 Tariff Regulations as amended vide third Amendment dated 31.12.2012 to the 2009 Tariff Regulations. The petitioner shall be entitled for reimbursement of the filing fees and publication



expenses in connection with the present petition, directly from the beneficiaries on *pro-rata* basis in accordance with Regulation 42 of the 2009 Tariff Regulations.

Licence Fee

54. The petitioner has submitted that in O&M norms for tariff block 2009-14, the cost associated with license fees had not been captured and the license fee may be allowed to be recovered separately from the respondents. MSEDCL have submitted that the Commission may pass such orders in respect to petitioner's request for reimbursement for licence fee, as it thinks just and proper to avoid unnecessary burden on beneficiaries and ultimately on end consumers. The petitioner has clarified that the licence fee has been a new component of cost to the transmission licence under O&M stage of the project and has become incidental to the petitioner only from 2008-09. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A (1)(b) of the 2009 Tariff Regulations.

Service Tax

55. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. MSEDCL has submitted that as the petitioner itself submitted that service tax on transmission has been put in the negative list it will be too early to make any comment on such an issue. The petitioner clarified that service tax on transmission has been put on negative list w.e.f. 1.4.2012 and therefore the transmission charges, is exclusive of service tax and shall be born and additionally paid by the respondents. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.



Sharing of Transmission Charges

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

57. This order disposes of Petition No. 296/TT/2013.

sd/-
(A.S. Bakshi)
Member

sd/-
(A.K. Singhal)
Member

sd/-
(Gireesh B. Pradhan)
Chairperson



Annexure-1

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN		
	Details of Loan	2013-14
1	Bond XXXVII	
	Gross loan opening	178.10
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	178.10
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	178.10
	Average Loan	178.10
	Rate of Interest	9.25%
	Interest	16.47
	Rep Schedule	12 Annual Instalments w.e.f. 26.12.2015
2	IBRD Loan @ Rs 63.12/\$	
	Gross loan opening	10315.07
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	10315.07
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	10315.07
	Average Loan	10315.07
	Rate of Interest	1.61%
	Interest	166.07
	Rep Schedule	49 Half yearly payments w.e.f. 15.1.2015
3	Bond XXXVI	
	Gross loan opening	1244.54
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1244.54
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1244.54
	Average Loan	1244.54
	Rate of Interest	9.35%
	Interest	116.36
	Rep Schedule	12 Annual instalments from 29.8.2016
4	Bond XL	
	Gross loan opening	977.43
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	977.43
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	977.43
	Average Loan	977.43
	Rate of Interest	9.30%



	Interest	90.90
	Rep Schedule	12 Annual instalments from 28.6.2016
5	Bond XLIV	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	410.25
	Repayment during the year	0.00
	Net Loan-Closing	410.25
	Average Loan	205.13
	Rate of Interest	8.70%
	Interest	17.85
	Rep Schedule	3 instalments on 15.7.2018, 15.7.2023, 15.7.2028
	Total Loan	
	Gross loan opening	12715.14
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	12715.14
	Additions during the year	410.25
	Repayment during the year	0.00
	Net Loan-Closing	13125.39
	Average Loan	12920.27
	Weighted Average Rate of Interest	3.1552%
	Interest	407.66



Annexure-2

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN		
	Details of Loan	2013-14
1	IBRD Loan @ Rs 63.12/\$	
	Gross loan opening	1439.14
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1439.14
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1439.14
	Average Loan	1439.14
	Rate of Interest	1.61%
	Interest	23.17
	Rep Schedule	49 Half yearly payments w.e.f. 15.1.2015
2	Bond XLIV	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	36.38
	Repayment during the year	0.00
	Net Loan-Closing	36.38
	Average Loan	18.19
	Rate of Interest	8.70%
	Interest	1.58
	Rep Schedule	3 instalments on 15.7.2018, 15.7.2023, 15.7.2028
	Total Loan	
	Gross loan opening	1439.14
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1439.14
	Additions during the year	36.38
	Repayment during the year	0.00
	Net Loan-Closing	1475.52
	Average Loan	1457.33
	Weighted Average Rate of Interest	1.6985%
	Interest	24.75



Annexure-3

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN		
	Details of Loan	2013-14
1	IBRD Loan @ Rs 63.12/\$	
	Gross loan opening	1047.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1047.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1047.00
	Average Loan	1047.00
	Rate of Interest	1.61%
	Interest	16.86
	Rep Schedule	49 Half yearly payments w.e.f. 15.1.2015
2	Bond XLIV	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	26.01
	Repayment during the year	0.00
	Net Loan-Closing	26.01
	Average Loan	13.01
	Rate of Interest	8.70%
	Interest	1.13
	Rep Schedule	3 instalments on 15.7.2018, 15.7.2023, 15.7.2028
	Total Loan	
	Gross loan opening	1047.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1047.00
	Additions during the year	26.01
	Repayment during the year	0.00
	Net Loan-Closing	1073.01
	Average Loan	1060.01
	Weighted Average Rate of Interest	1.6970%
	Interest	17.99

