

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO.414/TT/2014

Coram:

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

**Date of Hearing: 27.01.2016
Date of Order : 15.02.2016**

Truing up of transmission tariff of 2009-14 tariff period under Regulation-6 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and determination of tariff for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 of LILO of Alamathy-Siperumbudur 400 kV DC line at North Chennai TPS switchyard under transmission system associated with Chennai NTPC –TNEB JV TPS Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations' 1999.

And in the Matter of:

Power Grid Corporation of India Ltd,
SAUDAMINI, Plot No.-2, Sector-29,
Gurgaon-122001 (Haryana)

.....Petitioner

Versus

1. Karnataka Power Transmission Corporation Ltd.,
(KPTCL), Kaveri Bhavan, Bangalore – 560009
2. Transmission Corporation of Andhra Pradesh Ltd.
(APTRANSCO), Vidyut Soudha, Hyderabad- 500082
3. Kerala State Electricity Board, Thiruvananthapuram
Vaidyuthi Bhavanam, Pattom,
Thiruvananthapuram - 695 004
4. Tamil Nadu Generation and Distribution Corporation Ltd
(Formerly Tamilnadu Electricity Board -TNEB)
NPKRR Maaligai, 800, Anna Salai Chennai - 600 002



5. Electricity Department
Govt of Pondicherry, Pondicherry – 605001
6. Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL)
P&T Colony, Seethmmadhara Vishakhapatnam,
Andhra Pradesh
7. Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL)
SrinivasasaKalyanaMandapam Backside, Tiruchanoor Road,
Kesavayana Gunta, Tirupati-517 501,
Chittoor District, Andhra Pradesh
8. Central Power Distribution Company of Andhra Pradesh limited (APCPDCL)
Corporate Office, Mint Compound,
Hyderabad- 500 063, Andhra Pradesh
9. Northern Power Distribution Company of Andhra Pradesh Limited (APNPDCL)
Opp. NIT Petrol Pump Chaitanyapuri, Kazipet,
Warangal - 506 004 Andhra Pradesh
10. Bangalore Electricity Supply Company Ltd., (BESCOM),
Corporate Office, K.R.Circle Bangalore - 560 001 Karnataka
11. Gulbarga Electricity Supply Company Ltd., (GESCOM)
Station Main Road, Gulbarga, Karnataka
12. Hubli Electricity Supply Company Ltd., (HESCOM)
Navanagar, PI3 Road Hubli, Karnataka
13. MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle
Mangalore - 575 001, Karnataka
14. Chamundeswari Electricity Supply Corporation Ltd., (CESC)
927, L J Avenue Ground Floor,
New Kantharaj Urs Road Saraswatipuram,
Mysore – 570009, Karnataka
15. Electricity Department, Government of Goa,
Vidyut Bhawan, Panaji,
Near Mandvi Hotel,
Goa - 403 001

.....Respondent(s)

The following were present:

For Petitioner: Shri Rakesh Prasad, PGCIL
Shri Jasbir Singh, PGCIL
Shri Anshul Garg, PGCIL



Shri S.K. Venkatesan, PGCIL
Shri M.M. Mondal, PGCIL
Shri S.S. Raju, PGCIL
Shri S.C. Taneja, PGCIL
Smt. Sangeeta Edwards, PGCIL

For Respondents: Shri S. Vallinayagam, Advocate, TANGEDCO
Shri R. Katihraavan, TANGEDCO

ORDER

The petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as “the petitioner”) for revision of tariff under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”) based on truing up of capital expenditure for the period 1.4.2009 to 31.3.2014 and for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from 1.4.2014 to 31.3.2019 in respect of LILO of Alamathy-Siperumbudur 400 kV DC line at North Chennai TPS switchyard under transmission system associated with Chennai NTPC –TNEB JV TPS (hereinafter referred to as “the transmission assets”). .

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

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

a) The investment approval for project was accorded by the Board of Directors of the petitioner, vide letter dated 16.5.2008, at an estimated cost of ₹9026 lakh including Interest During Construction of ₹580 lakh (Based on 1st



Quarter, 2008 price level). Further, it was revised vide letter dated 11.3.2011 to an estimated cost of ₹15036 lakh including Interest During Construction of ₹1402 lakh (Based on 3rd Quarter, 2010 price level). The transmission assets were commissioned on 1.8.2011.

b) The annual transmissions charges for 2009-14 tariff periods for the transmission asset were determined vide order dated 24.6.2013 in Petition No. 73/TT/2011 based on admitted capital cost of ₹13333.99 lakh for the transmission asset and debt: equity as on 31.3.2009. The projected additional capital expenditure of ₹1339.94 lakh in 2011-12 for determination of tariff for 2009-14 tariff period. The details of capital cost are as shown below:-

(₹ in lakh)

Capital cost as admitted on 31.09.2009	Additional capital expenditure (During 2009-14)	Capital cost as on 31.03.2014
	2011-12	
13333.99	1339.94	14673.93

c) The annual fixed charges were determined vide order dated 24.06.2013 in Petition No. 73/TT/2013 based the above capital cost and estimated additional capital expenditure for the transmission assets during 2009-14 as given below:-

(₹ in lakh)

Particulars	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	493.29	775.36	775.36
Interest on Loan	569.85	839.71	770.02
Return on Equity	489.61	769.54	769.54
Interest on Working Capital	32.48	49.96	48.70
O & M Expenses	30.65	48.59	51.35
Total	1615.88	2483.17	2414.98



4. As per Regulation 6 of the 2009 Tariff Regulations, the Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up. Further, as per Regulation 15 of the 2009 Tariff Regulations, the petitioner is required to adjust the yearly impact of MAT rate in the truing up petition for 2009-14 tariff period.

5. The petitioner has served the petition to the respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003. No comments/objections have been received from the public in response to the notice in newspaper. TANGEDCO, Respondent No. 4, has filed the reply to the petitioner vide affidavit dated 15.5.2015 and 30.12.2015. The petitioner has filed rejoinder to TANGEDCO's reply vide affidavit dated 10.2.2016. The hearing in this matter was held on 20.1.2016. The petitioner was directed to submit the details in respect of the additional capital expenditure, undischarged liabilities, actual equity infused during 2009-14 and 2014-19 tariff periods and the LD amount realized from the contractors, which has been submitted by the petitioner through affidavit dated 4.2.2016.

6. The submissions made by TANGEDCO in affidavits dated 15.5.2015 and 30.12.2015 are similar and hence they are dealt together. TANGEDCO has submitted that the evacuation system for the first phase of Vallur JV TPS (2x500 MW) was approved in 22nd, 23rd and 24th Standing Committee meetings i.e. LILO of both the circuits of Alamathy-Sriperumbudur 400 kV D/C line at North Chennai TPS Switchyard (Vallur TPS). The original Investment Approval for the above scheme was accorded on



16.5.2008 for an estimated cost of ₹9026 lakh including Interest During Construction (IDC) of ₹580 lakh. Subsequently, the revised approval was accorded on 11.3.2011 for an estimated cost of ₹15036 lakh including IDC of ₹1402 lakh. Later, the capacity of the Vallur TPS has been enhanced from 2x500 MW to 3x500 MW. The supplementary scheme proposed by the petitioner is to cater to the power evacuation from 3x500 MW Vallur Thermal Power Station was approved in the 27th meeting of Standing Committee on Power System Planning for Southern Region and clarified in the 35th meeting of SCPSPSR as furnished below:

- a. Vallur TPS-Alamathy 400 kV D/C line (Retaining one 400 kV D/C line of original Vallur TPS transmission system from LILO point to Alamathy by suitably utilizing the LILO of Nellore-Sriperumbudur 400 kV D/C line at Alamathy.
- b. Vallur TPS-Melakottaiyur (Kalivanthapattu) 400 kV D/C line (Extending the second 400 kV D/C of original Vallur TPS transmission system from LILO point to Melakottaiyur (Kalivanthapattu) by suitably utilizing part of the LILO of Kolar-Sriperumbudur line at Melakottaiyur (Kalivanthapattu). As regards remaining part of the LILO of Kolar-Sriperumbudur line at Melakottaiyur (Kalivanthapattu) is concerned, the same shall be put to use to the extent possible)
- c. Thiruvalem-Chittoor 400 kV Quad line
- d. Finally, the Nellore-Sriperumbudur 400 kV D/C and the Kolar-Sriperumbudur 400 kV S/C lines connectivity would be restored.

7. TANGEDCO has further submitted that the original scheme of LILO of Alamathy-Sriperumbudur D/C line at Vallur TPS no longer exists. Hence, petitioner's claim is



erroneous and hence requested to direct the petitioner to file a fresh petition furnishing the details and expenditure incurred in respect of the modified asset. TANGEDCO has further requested to revisit the order dated 24.6.2013 in Petition No.73/TT/2011 and restrict IDC and IEDC awarded.

8. The petitioner has filed a rejoinder vide affidavit dated 10.2.2016, but has not properly addressed the issues raised by TANGEDCO.

9. We have considered the submissions made by the petitioner and TANGEDCO. The basic contention of TANGEDCO is that the instant asset is no longer exists and the petitioner should file a fresh a petition as per the modified scheme. The instant assets are executed as discussed and agreed in the 27th Standing Committee held on 28.3.2008. The Standing Committee has considered the modification, requirement and use of the instant transmission asset and approved the same. The petitioner has developed the system as approved in the Standing Committee. Further, the requirement and usefulness of the instant assets have already been decided in order dated 24.6.2013 in Petition No.73/TT/2011. We are of the view that the issues raised by TANGEDCO have already been decided in the said order and there is need to reopen the same.

10. TANGEDCO has submitted that the petitioner has claimed an excess capital cost and additional capitalization of ₹156.68 lakh in Petition No.73/TT/2011 due to which ₹58.24 lakh excess has been paid to the petitioner through POC charges during 2009-14 tariff period. The petitioner in its rejoinder has submitted that the variation in transmission charges claimed by the petitioner will be dealt with Regulation 6(6) of 2009



Tariff Regulations. We have considered the submissions of the petitioner and TANGEDCO. Excess tariff, if any granted, for computation of POC charges or otherwise shall be adjusted as provided under Regulation 6(6) of the 2009 Tariff Regulations. Other issues raised by TANGEDCO are dealt 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.

TRUING UP OF ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD:-

12. Regulation 6 of the 2009 Regulations provides as follows:-

“(1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up.

Provided that the generating company or the transmission licensee, as the case may be, may in its discretion make an application before the Commission one more time prior to 2013-14 for revision of tariff.

(2) The generating company or the transmission licensee, as the case may be, shall make an application, as per Appendix I to these regulations, for carrying out transmission up exercise in respect of the generating station a unit or block thereof or the transmission system or the transmission lines or sub-station thereof by 31.10.2014.

(3) The generating company or the transmission licensee, as the case may be, shall submit for the purpose of truing up, details of capital expenditure and additional capital expenditure incurred for the period from 1.4.2009 to 31.3.2014, duly audited and certified by the auditors.”

13. The petitioner has submitted the information as required under the 2009 Tariff Regulations for truing up of annual fixed charges for 2009-14 tariff period. The tariff for 2009-14 tariff period has been trued up in the subsequent paragraphs.

Capital Cost

14. 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.

xxx
xxx”

15. The capital cost of ₹13333.99 lakh was admitted by the Commission as on COD vide order dated 24.6.2013 in Petition No. 73/TT/2013. The time over-run of 12 months was condoned and the petitioner was directed to adjust the LD amount claimed by the petitioner from the contractor in the capital cost at the time of truing up.

16. The petitioner in the instant petition has submitted that the LD amount of ₹15.45 lakh has been adjusted against the capital cost of the asset. The petitioner has also mentioned that the cost admitted as on COD in the order dated 24.6.2013 in Petition No. 73/TT/2011 was based on audited expenditure upto 31.3.2011 and expenditure for



period 1.4.2011 to 31.7.2011 was not audited. Now, the cost upto COD has been audited, as submitted vide Auditor's Certificate dated 13.10.2013, accordingly the petitioner has claimed capital cost of ₹13314.67 lakh as on 1.8.2011 i.e. COD, in respect of the transmission asset for the purpose of tariff determination.

17. The petitioner has claimed the initial spares as ₹67.70 lakh for the transmission line. The admissible initial spares by considering the change in the actual additional capitalization will also undergo change. It has been observed that the initial spares claimed is within the admissible ceiling limit specified in 2009 Tariff Regulations and hence same has been allowed.

18. Accordingly, the capital cost of ₹13314.67 lakh as on COD has been considered as opening capital cost of the asset for determination of trued up tariff in accordance with Regulation 7 of the 2009 Tariff Regulations.

Additional Capital Expenditure

19. Regulation 6(1) of the 2009 Regulations provides that:-

“The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014”

20. The petitioner has submitted that it has actually incurred an additional capital expenditure of ₹1202.58 lakh during 2011-12, as depicted below:-

Particulars	Capital cost as admitted on COD	(₹ in lakh)	
		Additional capital expenditure (during 2009-14) 2011-12	Capital cost as on 31.3.2014
Approved vide Order dated 24.6.2013	13333.99	1339.94	14673.93
Amount claimed	13314.67	1202.58	14517.25



21. The petitioner has submitted, that the additional capital expenditure incurred during 2011-12 is on account of balance and retention payments towards transmission line and PLCC works and the same has been verified vide Auditor's Certificate dated 13.10.2013. The petitioner has claimed the admissibility of additional capital expenditure before the cut-off date under Regulation 9(1)(i) and that after the cut-off date under Regulation 9(2)(viii) of 2009 Tariff Regulations.

22. We have considered the submissions of the petitioner with regard to the actual capital expenditure during 2009-14. The above mentioned additional capital expenditure is towards balance and retention payments and the same has been certified by the Auditor vide certificate dated 23.8.2014. Further, the total capital expenditure during 2009-14 is within the limits of the total approved capital expenditure and the total cost as on 31.3.2014 is within the approved cost of the project. Thus, the same is allowed for the purpose of revision of tariff in accordance with Regulation 9(1)(i), Regulation 9(2)(viii) and Regulation 6 of the 2009 Tariff Regulations and the variation in transmission charges claimed by the petitioner shall be dealt with Regulation 6(6) of 2009 Tariff Regulations.

Debt: Equity

23. Regulation 12(1) 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:”

24. The debt: equity ratio admitted vide order dated 24.06.2013 in Petition No. 73/TT/2011 as on 31.3.2009 has been considered as on 1.4.2009 for determination of



tariff in accordance with the Regulation 12 of the 2009 Tariff Regulations. The petitioner was directed to confirm that actual equity corresponding to additional capital expenditure is not less than 30%. In response, the petitioner vide affidavit dated 4.2.2016, has submitted that the actual equity infused during 2011-12 is 19.12%.

25. The details of the debt: equity considered for the purpose of tariff for 2009-14 tariff period is as follows:-

(₹ in lakh)

Funding	Capital cost as on COD	(%)	Additional capital expenditure during 2011-12	(%)	Total Cost as on 31.3.2014	(%)
Debt	9320.27	70.00	972.72	80.88	10292.99	70.00
Equity	3994.40	30.00	229.86	19.12	4424.26	30.00
Total	13314.67	100.00	1202.58	100.00	14517.25	100.00

Return on Equity (“ROE”)

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

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

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

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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

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

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



27. The variation in the tax rate during the 2009-14 tariff period applicable to the petitioner as per the Finance Act of the relevant year for the purpose of grossing up of return on equity (ROE) has been furnished as follows:-

Year	MAT Rate claimed in the current petition (%)	Grossed up ROE (Base Rate/(1-t)) claimed in the current petition (%)
2009-10	16.995	18.674
2010-11	19.931	19.358
2011-12	20.008	19.377
2012-13	20.008	19.377
2013-14	20.961	19.61

28. The trued up ROE is as follows:-

(₹ in lakh)			
Return on Equity	2011-12 (pro-rata)	2012-13	2013-14
Approved vide Order dated 24.6.2013	489.61	769.54	769.54
Claimed by the petitioner	530.84	818.53	828.38
Allowed in this Order	530.84	818.53	828.40

The difference in the approved ROE and that allowed after truing up is on account of actual grossed up ROE based on actual MAT rate and increase due to actual additional capital expenditure.

Interest on Loan (“IoL”)

29. Regulation 16 of the 2009 Tariff Regulations provide the methodology for working out weighted average rate of IoL. The Commission in its earlier order dated 8.6.2011 in Petition No. 238/2010 has dealt with similar issue and held that:-

“...in case of floating rate of interest, any change in the rates of interest during the tariff period will be considered at the time of true up”.



30. The petitioner has submitted the weighted average rate of IoL, based on its actual loan portfolio and rate of interest. Accordingly, the IoL has been calculated based on actual interest rate submitted by the petitioner, in accordance with the Regulation 16 of the 2009 Tariff Regulations. The details of weighted average rate of interest are placed in Annexure-1. The IoL worked out is as follows:-

(₹ in lakh)

Interest on Loan	2011-12 (pro-rata)	2012-13	2013-14
Approved vide Order dated 24.6.2013	569.85	839.71	770.02
Claimed by the petitioner	571.10	844.96	775.87
Allowed in this Order	571.10	844.96	775.87

The difference in the approved IoL and that allowed after truing up is on account of change in the weighted average rate of interest which is computed based on actual loan portfolio and rate of interest.

Depreciation

31. The depreciation has been worked out as per the methodology provided in the Regulation 17 of the 2009 Tariff Regulations. The depreciation allowed is as follows:-

(₹ in lakh)

Depreciation	2011-12 (pro-rata)	2012-13	2013-14
Approved vide Order dated 24.6.2013	493.29	775.36	775.36
Claimed by the petitioner	490.33	767.48	767.48
Allowed in this Order	490.33	767.48	767.48

The difference in the approved depreciation and that allowed after truing up is on account of change in gross block during the 2009-14 tariff period.

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

32. Clause (g) of Regulation 19 of the 2009 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The normative O&M Expenses are not required to be trued up. Accordingly, the total allowable O&M Expenses for the instant



assets have been worked out based on norms of O&M Expenses and the details are as follows:-

(₹ in lakh)

O&M Expenses	2011-12 (pro-rata)	2012-13	2013-14
Approved vide Order dated 24.6.2013	30.65	48.59	51.35
Claimed by the petitioner	30.65	48.59	51.35
Allowed in this Order	30.65	48.59	51.35

Interest on Working Capital (“IWC”)

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

(₹ in lakh)

Interest on Working Capital	2011-12 (pro-rata)	2012-13	2013-14
Approved vide Order dated 24.6.2013	32.48	49.96	48.70
Claimed by the petitioner	33.27	50.89	49.84
Allowed in this Order	33.27	50.89	49.84

The difference in the approved IWC and that allowed after truing up is on account of change in the receivables during the 2009-14 tariff period.

APPROVED ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

34. The detailed computation of the various components of the trued up annual fixed charges for the instant transmission assets for the tariff period 2009-14 is summarised below:-

(₹ in lakh)

Particulars	2011-12 (pro-rata)	2012-13	2013-14
Depreciation			
Opening Gross Block	13314.67	14517.25	14517.25
Additional Capitalisation	1202.58	0.00	0.00
Closing Gross Block	14517.25	14517.25	14517.25
Average Gross Block	13915.96	14517.25	14517.25



Particulars	2011-12 (pro-rata)	2012-13	2013-14
Rate of Depreciation (%)	5.29	5.29	5.29
Depreciable Value	12524.36	13606.69	13065.53
Balance Useful life of the asset	35	34	33
Elapsed Life	0	1	2
Remaining Depreciable Value	12524.36	12575.20	11807.72
Depreciation during the year	490.33	767.48	767.48
Depreciation upto previous year	0.00	490.33	1257.81
Cumulative depreciation (incl. of AAD)	490.33	1257.81	2025.29
Interest on Loan			
Gross Normative Loan	9320.27	10292.99	10292.99
Cumulative Repayment upto Previous Year	0.00	490.33	1257.81
Net Loan-Opening	9320.27	9802.66	9035.18
Additions	972.72	0.00	0.00
Repayment during the year	490.33	767.48	767.48
Net Loan-Closing	9802.66	9035.18	8267.70
Average Loan	9561.47	9418.92	8651.44
Weighted Average Rate of Interest on Loan (%)	8.9594%	8.9709%	8.9681%
Interest on Loan	571.10	844.96	775.87
Return on Equity			
Opening Equity	3994.40	4224.26	4224.26
Additions	229.86	0.00	0.00
Closing Equity	4224.26	4224.26	4224.26
Average Equity	4109.33	4224.26	4224.26
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
MAT rate for the respective year	20.01%	20.01%	20.96%
Rate of Return on Equity	19.38%	19.38%	19.61%
Return on Equity	530.84	818.53	828.40
Interest on Working Capital			
O & M expenses	3.83	4.05	4.28
Maintenance Spares	6.90	7.29	7.70
Receivables	414.05	421.74	412.15
Total	424.77	433.08	424.13
Rate of Interest	11.75%	11.75%	11.75%
Interest on Working Capital	33.27	50.89	49.84
Annual Transmission Charges			
Depreciation	490.33	767.48	767.48
Interest on Loan	571.10	844.96	775.87
Return on Equity	530.84	818.53	828.40



Particulars	2011-12 (pro-rata)	2012-13	2013-14
Interest on Working Capital	33.27	50.89	49.84
O & M Expenses	30.65	48.59	51.35
Total	1656.19	2530.45	2472.93

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

35. The petitioner has claimed the tariff charges for 2014-19 tariff period as under:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	767.48	767.48	767.48	767.48	767.48
Interest on Loan	707.18	638.61	569.91	501.14	432.37
Return on Equity	828.38	828.38	828.38	828.38	828.38
Interest on Working Capital	55.57	54.08	52.59	51.09	49.60
O & M Expenses	46.36	47.94	49.51	51.15	52.85
Total	2404.97	2336.49	2267.87	2199.24	2130.68

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

(in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	3.86	3.99	4.12	4.26	4.40
Maintenance Spares	6.95	7.19	7.43	7.67	7.93
Receivables	400.83	389.42	377.98	366.54	355.12
Total Working Capital	411.65	400.60	389.53	378.48	367.45
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	55.57	54.08	52.59	51.09	49.61

Capital Cost

37. Clause (3) and (6) of Regulation 9 of 2014 Tariff Regulation provide as follows:-

“(3) The Capital cost of an existing project shall include the following:

- (a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;
- (b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and
- (c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15.”

“(6) The following shall be excluded or removed from the capital cost of the existing and new project:

- (a) The assets forming part of the project, but not in use; (b) Decapitalisation of Asset;”



38. The capital cost of ₹14517.25 lakh worked out as on 31.3.2014 has been considered as opening capital cost as on 1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations.

Additional Capital Expenditure

39. The petitioner has not claimed any additional capital expenditure during 2014-19 tariff period.

Debt: Equity

40. Clause (1) and (3) of Regulation 19 of the 2014 Tariff Regulations provide as under:-

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

“(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014, debt equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered.”

“(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as maybe 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.”

41. The debt: equity ratio considered is given below:-

(₹ in lakh)					
Funding	Capital cost as on 31.3.2014	(%)	Additional capital expenditure during 2014-19	Total Cost as on 31.3.2019	(%)
Debt	10292.99	70.00	0.00	10292.99	70.00
Equity	4424.26	30.00	0.00	4424.26	30.00
Total	14517.25	100.00	0.00	14517.25	100.00



Return on Equity (“ROE”)

42. Clause (1) and (2) of Regulations 24 and Clause (2) of Regulation 25 of the 2014

Tariff Regulations specify as under:-

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

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system”

“25. Tax on Return on Equity:

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

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

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

43. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during the 2013-14 has been considered for the purpose of ROE, which shall be trued up with actual tax rate in accordance with Clause (3) of Regulation 25 of the 2014 Tariff Regulations. The ROE has been worked out and allowed as follows:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	4224.26	4224.26	4224.26	4224.26	4224.26
Additions	-	-	-	-	-
Closing Equity	4224.26	4224.26	4224.26	4224.26	4224.26
Average Equity	4224.26	4224.26	4224.26	4224.26	4224.26
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity	828.40	828.40	828.40	828.40	828.40



Interest on Loan (“IoL”)

44. Clause 5 and Clause 6 of Regulation 26 of the 2014 Tariff Regulations provides that:-

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

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

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

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

45. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2014. The IoL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of weighted average rate of interest for 2014-19 tariff period are placed in Annexure 2. IoL has been worked out and allowed as follows:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	10292.99	10292.99	10292.99	10292.99	10292.99
Cumulative Repayments upto Previous Year	2025.29	2792.76	3560.24	4327.72	5095.20
Net Loan-Opening	8267.70	7500.22	6732.74	5965.27	5197.79
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	767.48	767.48	767.48	767.48	767.48
Net Loan-Closing	7500.22	6732.74	5965.27	5197.79	4430.31
Average Loan	7883.96	7116.48	6349.01	5581.53	4814.05
Weighted Average Rate of Interest on Loan (%)	8.9698%	8.9737%	8.9763%	8.9786%	8.9814%
Interest on Loan	707.18	638.61	569.91	501.14	432.37



Depreciation

46. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide that:-

"27. Depreciation:

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

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

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

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

47. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2014 and accumulated depreciation up to 31.3.2014. The detailed calculations for depreciation for the transmission asset are worked out and allowed as follows:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	14517.25	14517.25	14517.25	14517.25	14517.25
Additional Capitalisation	-	-	-	-	-
Closing Gross Block	14517.25	14517.25	14517.25	14517.25	14517.25
Average Gross Block	14517.25	14517.25	14517.25	14517.25	14517.25
Freehold Land (Av. Cost)	-	-	-	-	-
Rate of Depreciation (%)	5.29	5.29	5.29	5.29	5.29
Depreciable Value	13065.53	13065.53	13065.53	13065.53	13065.53
Balance useful life of the asset	32	31	30	29	28
Elapsed life	3	4	5	6	7
Remaining Depreciable Value	11040.24	10272.76	9505.28	8737.80	7970.32
Depreciation during the year	767.48	767.48	767.48	767.48	767.48
Depreciation upto previous year	2025.29	2792.76	3560.24	4327.72	5095.20
Cumulative depreciation (incl. of AAD)	2792.76	3560.24	4327.72	5095.20	5862.68



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

48. Clause 3(a) of Regulation 29 of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The total allowable O&M Expenses for the instant assets have been worked out and allowed are as follows:-

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission Line:					
D/C Twin/Triple conductor (km)	65.575	65.575	65.575	65.575	65.575
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
Total O&M Expenses (₹ lakh)	46.36	47.94	49.51	51.15	52.85

49. The petitioner has further submitted that the wage revision of the employees of the petitioner company is due during 2014-19 and actual impact of wage hike which will be effective from a future date has also not been factored in fixation of the normative O&M rate specified for the 2014-19 tariff period. The petitioner has also prayed that it will approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase. TANGEDCO has prayed to negate the request of the petitioner to approach the Commission for revision in norms for O&M expenses. We have considered the submission of the petitioner and the respondents and would like to clarify that any application filed by the petitioner for revision of O&M Expenses on account of wage revision will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations. The O&M Expenses are allowed for the instant transmission asset as per prevailing norms.



Interest on Working Capital (IWC)

50. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specifies as follows:

“28. Interest on Working Capital

- (c) (i) Receivables equivalent to two months of fixed cost;
(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and
(iii) Operation and maintenance expenses for one month”

“(5) ‘Bank Rate’ means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;”

51. The petitioner has submitted that it has computed interest on working capital for the tariff block 2014-19 considering the SBI Base Rate plus 350 basis points as on 1.4.2014. The rate of interest on working capital considered is 13.50%.

52. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points). The components of the working capital and interest thereon have been worked as follows:-

(₹ in lakh)

Interest on Working Capital	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	3.86	3.99	4.12	4.26	4.40
Maintenance Spares	6.95	7.19	7.43	7.67	7.93
Receivables	400.83	389.42	377.98	366.54	355.12
Total	411.65	400.60	389.53	378.48	367.45
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	55.57	54.08	52.59	51.09	49.61



ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

53. The transmission charges allowed for the instant transmission assets for the 2014-19 tariff period are summarised below:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	14517.25	14517.25	14517.25	14517.25	14517.25
Additional Capitalisation	-	-	-	-	-
Closing Gross Block	14517.25	14517.25	14517.25	14517.25	14517.25
Average Gross Block	14517.25	14517.25	14517.25	14517.25	14517.25
Freehold Land (Av. Cost)	-	-	-	-	-
Rate of Depreciation (%)	5.29	5.29	5.29	5.29	5.29
Depreciable Value	13065.53	13065.53	13065.53	13065.53	13065.53
Balance useful life of the asset	32	31	30	29	28
Elapsed life	3	4	5	6	7
Remaining Depreciable Value	11040.24	10272.76	9505.28	8737.80	7970.32
Depreciation during the year	767.48	767.48	767.48	767.48	767.48
Depreciation upto previous year	2025.29	2792.76	3560.24	4327.72	5095.20
Cumulative depreciation (incl. of AAD)	2792.76	3560.24	4327.72	5095.20	5862.68
Interest on Loan					
Gross Normative Loan	10292.99	10292.99	10292.99	10292.99	10292.99
Cumulative Repayment upto Previous Year	2025.29	2792.76	3560.24	4327.72	5095.20
Net Loan-Opening	8267.70	7500.22	6732.74	5965.27	5197.79
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	767.48	767.48	767.48	767.48	767.48
Net Loan-Closing	7500.22	6732.74	5965.27	5197.79	4430.31
Average Loan	7883.96	7116.48	6349.01	5581.53	4814.05
Weighted Average Rate of Interest on Loan (%)	8.9698	8.9737	8.9763	8.9786	8.9814
Interest on Loan	707.18	638.61	569.91	501.14	432.37
Return on Equity					
Opening Equity	4224.26	4224.26	4224.26	4224.26	4224.26
Additions	-	-	-	-	-
Closing Equity	4224.26	4224.26	4224.26	4224.26	4224.26
Average Equity	4224.26	4224.26	4224.26	4224.26	4224.26



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity (Base Rate)	15.500	15.500	15.500	15.500	15.500
MAT rate for the respective year	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity	19.610	19.610	19.610	19.610	19.610
Return on Equity	828.40	828.40	828.40	828.40	828.40
Interest on Working Capital					
O & M expenses	3.86	3.99	4.12	4.26	4.40
Maintenance Spares	6.95	7.19	7.43	7.67	7.93
Receivables	400.83	389.42	377.98	366.54	355.12
Total	411.65	400.60	389.53	378.48	367.45
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on working capital	55.57	54.08	52.59	51.09	49.61
Annual Transmission Charges					
Depreciation	767.48	767.48	767.48	767.48	767.48
Interest on Loan	707.18	638.61	569.91	501.14	432.37
Return on Equity	828.40	828.40	828.40	828.40	828.40
Interest on Working Capital	55.57	54.08	52.59	51.09	49.61
O & M Expenses	46.36	47.94	49.51	51.15	52.85
Total	2404.99	2336.51	2267.88	2199.26	2130.70

Deferred Tax Liability

54. The petitioner has sought recovery of deferred tax liability before 1.4.2009 from the beneficiaries or long term consumers/ DICs as and when materialized. The deferred tax liability shall be dealt as per Regulations 49 of the 2014 Tariff Regulations, as amended. Accordingly, the petitioner is entitled to recover the deferred tax liability upto 31.3.2009 whenever the same gets materialized directly from the beneficiaries or long term transmission customers /DICs.

Filing Fee and the Publication Expenses

55. 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 52 (1) of the 2014 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

56. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 52 (2) (b) of the 2014 Tariff Regulations for 2014-19 tariff period. The petitioner shall also be entitled for recovery of RLDC fee & charges in accordance with Regulations 52 (2) (a) of the 2014 Tariff Regulations for 2014-19 tariff period.

Service Tax

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

Sharing of Transmission Charges

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

59. This order disposes of Petition No.414/TT/2014.

Sd/-

(Dr. M.K. Iyer)
Member

Sd/-

(A.S. Bakshi)
Member



DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2009-14)

Particulars	Interst Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
				(Rs in lakh)
BOND XXVIII -DOCO DRAWL ON 01-AUG-2011-	9.33	525.00	0.00	525.00
BOND XXIX- DOCO DRAWL ON 01-AUG-2011-	9.20	1660.00	0.00	1660.00
BOND XXX-DOCO DRAWL ON 01-AUG- 2011-	8.80	2147.00	0.00	2147.00
BOND XXXI-DOCO DRAWL ON 01-AUG-2011-	8.90	1617.00	0.00	1617.00
BOND XXXIII- DOCO DRAWL ON 01-AUG-2011-	8.64	1250.00	0.00	1250.00
BOND-XXXIV-DOCO DRAWL ON 01-AUG-2011-	8.84	1454.00	0.00	1454.00
BOND-XXXV - DOCO DRAWL ON 01-AUG -2011-	9.64	69.00	0.00	69.00
BOND XXXVI-DOCO DRAWL ON 01-AUG-2011-	9.35	553.00	0.00	553.00
BOND XXXVII -ADDCAP FOR 2011-2012 ADDCAP FOR 2011-2012 loan 1-	9.25	0.00	572.72	572.72
BOND XXXVII-DOCO DRAWL ON 01-AUG-2011-	9.25	45.28	0.00	45.28
BOND XXXVIII -ADDCAP FOR 2011-2012 ADDCAP FOR 2011- 2012 loan 2-	9.25	0.00	400.00	400.00
Total		9320.28	972.72	10293.00

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

(₹ in lakh)

Particulars	2011-12	2012-13	2013-14
Gross Opening Loan	9320.28	10293.00	10293.00
Cumulative Repayments of Loans up to Previous Year	0.00	0.00	182.08
Net Loans Opening	9320.28	10293.00	10110.92
Add: Drawl(s) during the Year	972.72	0.00	0.00
Less: Repayments during the year	0.00	182.08	495.75



Particulars	2011-12	2012-13	2013-14
Net Closing Loan	10293.00	10110.92	9615.17
Average Net Loan	9806.64	10201.96	9863.06
Rate of Interest on Loan (%)*	8.9594	8.9709	8.9681
Interest on Loan	878.62	915.20	884.53

*Petitioner, in the tariff computation submitted with the petition, has considered rate of interest on loan upto two decimal points.



DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2014-19)

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
				(Rs in lakh)
BOND XXVIII -DOCO DRAWL ON 01-AUG-2011-	9.33	525.00	0.00	525.00
BOND XXIX- DOCO DRAWL ON 01-AUG-2011-	9.20	1660.00	0.00	1660.00
BOND XXX-DOCO DRAWL ON 01-AUG- 2011-	8.80	2147.00	0.00	2147.00
BOND XXXI-DOCO DRAWL ON 01-AUG-2011-	8.90	1617.00	0.00	1617.00
BOND XXXIII- DOCO DRAWL ON 01-AUG-2011-	8.64	1250.00	0.00	1250.00
BOND-XXXIV-DOCO DRAWL ON 01-AUG-2011-	8.84	1454.00	0.00	1454.00
BOND-XXXV - DOCO DRAWL ON 01-AUG -2011-	9.64	69.00	0.00	69.00
BOND XXXVI-DOCO DRAWL ON 01-AUG-2011-	9.35	553.00	0.00	553.00
BOND XXXVII -ADDCAP FOR 2011-2012 ADDCAP FOR 2011-2012 loan 1-	9.25	572.72	0.00	572.72
BOND XXXVII-DOCO DRAWL ON 01-AUG-2011-	9.25	45.28	0.00	45.28
BOND XXXVIII -ADDCAP FOR 2011-2012 ADDCAP FOR 2011- 2012 loan 2-	9.25	400.00	0.00	400.00
Total		10293.00	0.00	10293.00

WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING 2014-19 TARIFF PERIOD

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	10293.00	10293.00	10293.00	10293.00	10293.00
Cumulative Repayments of Loans up to Previous Year	677.83	1398.92	2177.26	2992.47	3807.68
Net Loans Opening	9615.17	8894.08	8115.74	7300.53	6485.32
Add: Drawl(s) during the Year	0.00	0.00	0.00	0.00	0.00



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Less: Repayments during the year	721.09	778.34	815.21	815.21	815.21
Net Closing Loan	8894.08	8115.74	7300.53	6485.32	5670.11
Average Net Loan	9254.63	8504.91	7708.14	6892.93	6077.72
Rate of Interest on Loan (%)*	8.9698	8.9737	8.9763	8.9786	8.9814
Interest on Loan	830.12	763.21	691.91	618.89	545.86

*Petitioner, in the tariff computation submitted with the petition, has considered rate of interest on loan upto two decimal points.

