# CENTRAL ELECTRICITY REGULATORY COMMISSION

#### **NEW DELHI**

### Coram:

Shri Gireesh B. Pradhan, Chairperson Shri V.S. Verma, Member Shri M. Deena Dayalan, Member Shri A.K. Singhal, Member

 Date of Hearing:
 21.11.2013

 Date of Order
 :
 17.02.2014

### Petition No. 46/TT/2013

#### In the matter of

Approval 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 of Transmission Tariff for Nellore – Gooty 400 kV D/C (quad) line under ATS of Krishnapatanam UMPP Part-A in Southern Region for tariff block 2009-14 period

### And in the matter of:

Power Grid Corporation of India Limited

Petitioner

Vs

- 1. Karnataka Power Transmission Corporation Ltd (KPTCL) Kaveri Bhawan, Bangalore – 560009
- Transmission Corporation of Andhra Pradesh Ltd (APTRANSCO), Vidyut Soudha, Hyderabad – 500 082
- Kerala State Electricity Board Vyduthi Bhacanam, Pattam, Thiruvanathapuram – 695004
- Tamilnadu Electricity Board NPKRR Maaligai, 800, Anna Salai, Chennai – 600002

- Electricity Department, Government of Goa Vidyuti Bhawan, Panaji Goa-403001
- 6. Electricity Department, Government of Puduchery Puduchery 605001
- Eastern Power Distribution Company of Andhra Pradesh Limited(APEPDCL) APEPDCL, P& T Colony Seethammdhaea, Visakhapatanam Andhra Pradesh
- Southern Power Distribution Company of Andhra Pradesh Limited Srinivasasa Kalyana Mandapam Backside, Tiruchanoor Road, Kesavayana Gunta, Tirupati-517 501 Chittoor District, Andhra Pradesh
- Central Power Distribution Company of Andhra Pradesh Limited(APCPDCL) Corporate office, Mint Compound Hyderabad-500063 Andhra Pradesh
- 10. North Power Distribution Company of Andhra Pradesh Limited Opp. NIT Petrol Pump, Chaitanayapuri, Kazipet Warangal-506 004 Andhra Pradesh
- 11. Bangalore Electricity Supply Company Limited (BESCOM) Corporate Office, K.R. circle Banglore-560 001 Karnataka
- 12. Gulbarga Electricity Supply Company Limited (GESCOM) Station Main Road, Gulbarga Karnataka
- Hubli Electricity Supply Company Limited (HESCOM) Navanagar, PB Road Hubli, Karnataka
- 14. Mescom Corporate Office
   Paradigm plaza,
   AB Shetty circle Manglore-575 001
   Karnataka
- Chamundeswari Electricity Supply Corporation Ltd. 927, LJ Avenue, Ground Floor, New Kanthraj Urs Road, Saraswati Puram, Mysore - 570009 Karnataka

Respondents

For Petitioner:

: Shri S.S. Raju, PGCIL Shri B.K. Sahoo, PGCIL Shri Mohd. Mohsin, PGCIL

For Respondents:

: None

#### ORDER

This petition has been filed by Power Grid Corporation of India Limited (PGCIL) for determination of transmission tariff for Nellore – Gooty 400 kV D/C (quad) transmission line under ATS of Krishnapattanam UMPP Part-A in Southern Region for tariff block 2009-14, in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations").

2. The investment approval for the transmission project was accorded by the Board of Directors of the petitioner company vide Memorandum No. C/CP/Krishnapatnam UMPP Part-A, dated 15.12.2010, at an estimated cost of `77921 lakh, including Interest During Construction (IDC) of `4900 lakh (based on 3<sup>rd</sup> Quarter, 2010 price level).The original scope of works covered under "ATS of Krishnapatnam UMPP Part-A" was as follows:-

(i) Krishnapattam UMPP - Nellore 400 kV D/C quad transmission line– 32 Km

- (ii) Krishnapattam UMPP Gooty 400 kV D/C quad transmission line 316 Km
- (iii) Bay extension at 400/220 kV Nellore and Gooty

3. The scope of work was revised in the 33<sup>rd</sup> meeting of Standing Committee on Power System Planning of Southern Region. The revised scope of work is as follows:-

- (i) 400 kV D/C quad Nellore Gooty transmission line 289 Km
- (ii) Bay extension at 400 kV Nellore PS and Gooty sub-station

4. Consequent to revision of scope of work, the revised cost estimate for the transmission line was approved by the Board of Directors of the petitioner company vide its letter dated 14.1.2014. As per this letter, the estimated cost of the transmission line is `66119 lakh, including IDC of `3941 lakh, based on April 2013 price level.

5. As per the investment approval dated 15.12.2010, the project was scheduled to be commissioned within 32 months from the date of investment approval, i.e. by August 2013. The Asset has been commissioned on 1.4.2013.

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

	(` in lakh)
Particulars	2013-14
Depreciation	3353.73
Interest on Loan	3997.60
Return on Equity	3446.37
Interest on Working Capital	275.35
O & M Expenses	601.13
Total	11674.18

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

(`in lakh)

Particulars	2013-14
Maintenance Spares	90.17
O & M Expenses	50.09
Receivables	1945.70
Total	2085.96
Rate of Interest	13.20%
Interest	275.35

8. 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. The reply to the petition has been filed by TANGEDCO, Respondent No. 4.

9. We have heard the representatives of the parties present at the hearing and have perused the material available on record. We proceed to dispose of the petition. While doing so, the submissions of the respondent shall be duly considered.

## Capital Cost

10. Regulation 7 of the 2009 Tariff Regulations provides as under:-

### "(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."

11. The petitioner has, vide affidavit dated 25.7.2013, submitted capital cost as on actual date of commercial operation, and estimated additional capital expenditure projected to be incurred for the asset covered in the petition, based on the audited statement of accounts up to 31.3.2013, as per details given hereunder:-

				(`in lakh)
Approved Revised Capital Cost	Actual Cost on Date of Commercial	•	Additional xpenditure	Estimated Completion
	Operation	2013-14	2014-15	Cost
66119.00	61766.00	3800.00	553.00	66119.00

### Treatment of initial Spares

12. The petitioner has claimed initial spares for both transmission line and substation. Though additional capital expenditure claimed for the transmission line for the year 2014-15 falls beyond current tariff period, it is within the cut-off date. TANGEDCO has submitted, vide affidavit dated 22.4.2013, that the cost of initial spares should be restricted as per norms specified in the 2009 Tariff Regulations. The petitioner's claim for initial spares has been reduced proportionately, considering additional capitalization only up to 31.3.2014. The initial spares being allowed thus fall within the ceiling limit specified under the 2009 Tariff Regulations. The initial spares shall be reviewed at the time of truing up, on submission of actual capital cost certified by the Auditor, and then in the next tariff period, considering additional capital expenditure for the year 2014-2015.

### Projected additional capital expenditure

13. Clause (1) of Regulation 9 of the tariff regulations provides as under:- "Additional Capitalisation: (1) The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- (i) Undischarged liabilities;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital Spares within the original scope of work, subject to the provisions of Regulation 8;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in Law:"
- 14. Regulation 3(11) of the 2009 Tariff Regulations defines "cut-off" date as under:

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

15. After taking into account the date of commercial operation of the transmission

line, cut-off date arrived at is 31.3.2016.

16. The projected additional capital expenditure claimed during 2013-14 and

2014-15 by the petitioner is within the cut-off date and is mainly on account of

balance payments. Additional capital expenditure for 2014-15 falls beyond tariff

block 2009-14. Accordingly, the projected additional capital expenditure for the year

2013-14 has been considered for the purpose of computation of tariff in the present

petition.

### Debt- equity ratio

17. Regulation 12 of the 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."

18. Details of debt-equity ratio in respect of the asset as on the date of

commercial operation is as follows:-

		(`in lakh)	
As on date of commercial operation i.e. 1.4.2013			
Amount %			
Debt	43236.20	70.00	
Equity	18529.80	30.00	
Total	61766.00	100.00	

19. Details of debt-equity considered in respect of the asset as on 31.3.2014 is as follows:-

		(`in lakh)	
	As on 31.3.2014		
Amount %			
Debt	45896.20	70.00	
Equity	19669.80	30.00	
Total	65566.00	100.00	

#### Return on equity

20. 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".

21. The petitioner has submitted that the instant asset has been commissioned within the qualifying time schedule of 32 months stipulated in Appendix II of the 2009 Tariff Regulations and hence qualifies for additional return on equity of 0.5%

as provided in Regulation 15. Accordingly, the petitioner has prayed for additional return on equity of 0.5%. TANGEDCO has submitted that the original approval was for two lines, viz. Krishnapatnam UMPP- Nellore and Krishnapatnam UMPP- Gooty 400 kV D/C quad lines whereas the revised scheme is for a single line of Nellore-Gooty 400 kV D/C quad line. There is reduction in the line length from 348 Kms. to 289 Kms. TANGEDCO has requested that the claim of the petitioner for additional return on equity should be seen in the light of the reduction in the scope of the work after revision of the scheme. We would like to clarify that Appendix II to the 2009 Tariff Regulations does not specify line length for claiming additional return on equity. As the transmission line has been commissioned within the stipulated timeline of 32 months, the petitioner's claim for additional return on equity allowed for the year 2013-14 is given hereunder:-

(`in lakh)

Return on Equity	2013-14
	(0700.00
Opening Equity	18529.80
Addition due to additional capital expenditure	1140.00
Closing Equity	19669.80
Average Equity	19099.80
Return on Equity (Base Rate)	16.00%
Tax rate for the year 2008-09 (MAT)	11.33%
Rate of Return on Equity (Pre Tax)	18.044%
Return on Equity (Pre Tax)	3446.37

22. The petitioner's request to allow to recover the shortfall or refund the excess Annual Fixed charges, 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 shall be taken care in terms of Regulation 15(5) of the 2009 Tariff Regulations.

### Interest on loan

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

"16. **Interest on Ioan 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."

24. In keeping with the provisions of Regulation 16, 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 onloan have been considered as per the petition.

(b) The repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that period.

(c) Weighted average rate of interest on actual average loan worked out as per (a) above is applied on the notional average loan during the year to arrive at the interest on loan.

25. Detailed calculations in support of the weighted average rate of interest have been given in Annexure to this order.

26. Based on the above, interest on loan has been calculated as given hereunder:-

(` in lakh)

Particulars	2013-14
Gross Normative Loan	43236.20
Cumulative Repayment upto previous year	0.00
Net Loan-Opening	43236.20
Addition due to additional capital expenditure	2660.00
Repayment during the year	3353.73
Net Loan-Closing	42542.47
Average Loan	42889.33
Weighted Average Rate of Interest on Loan	9.3207%
Interest	3997.60

### **Depreciation**

27. Regulation 17 of the 2009 Tariff Regulations provides as under:-

"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."

28. The petitioner has claimed actual depreciation. In our calculations,

depreciation has been calculated in accordance with clause (4) of Regulation 17

extracted above.

29. The transmission asset was put under commercial operation on 1.4.2013. Accordingly, this asset will complete 12 years beyond 2013-14 and hence depreciation has been calculated annually, based on Straight Line Method at the

rates specified in Appendix-III to the 2009 Tariff Regulations, as per details given hereunder:-

	(`in lakh)
Particulars	2013-14
Opening Gross Block	61766.00
Addition due to projected additional capital expenditure	3800.00
Closing Gross Block	65566.00
Average Gross Block	63666.00
Rate of Depreciation	5.2677%
Depreciable Value	57299.40
Remaining Depreciable Value	57299.40
Depreciation	3353.73

### **Operation & maintenance expenses**

30. Clause (g) of Regulation 19 of the 2009 Tariff Regulations prescribes the norms for operation and maintenance expenses for the transmission system based on the type of sub-station and the transmission line. The petitioner is allowed O & M expenses of `601.126 lakh during 2013-14 in accordance with the norms specified under the 2009 Tariff Regulations.

31. The petitioner has stated that O&M expenditure for 2009-14 tariff block had been arrived on the basis of normalized actual O&M expenses of the petitioner during the year 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking was also considered while calculating the O&M charges for tariff period 2009-14. The petitioner has submitted that it would approach the Commission for suitable revision in the norms for O&M expenditure in case the impact of wage hike w.e.f 1.1.2007 is more than 50%.

32. While specifying the norms for Operation and Maintenance Expenses, the Commission has in the 2009 Tariff Regulations already factored 50% on account of pay revision of the employees of PSUs after extensive consultation with the stakeholders. At this stage, there does not seem to be any justification for deviating from the norms. However, in case the petitioner separately approaches the Commission by making an appropriate application, the same shall be dealt with in accordance with law.

### Interest on working capital

33. 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 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 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 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. The petitioner has claimed O&M expenses for 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 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 as on 1<sup>st</sup> April of the year of commercial operation% plus 350 bps. SBI base rate as on 1.4.2013 was 9.70%. Accordingly, interest rate of 13.20% has been considered and interest on working capital has been worked out accordingly.

34. Necessary computations in support of interest on working capital are appended hereunder:-

	(`in lakh)
Particulars	2013-14
Maintenance Spares	90.17
O & M Expenses	50.09
Receivables	1945.70
Total	2085.96
Rate of Interest	13.20%
Interest	275.35

# Transmission charges

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

	(` in lakh)
Particulars	2013-14
Depreciation	3353.73
Interest on Loan	3997.60
Return on Equity	3446.37
Interest on Working Capital	275.35
O & M Expenses	601.13
Total	11674.18

36. The Commission by its order dated 18.3.2013 had approved provisional tariff for the transmission line. The provisional tariff shall be adjusted in the light of the transmission charges now approved.

37. The transmission charges allowed are subject to truing up in accordance with the 2009 Tariff Regulations.

## Filing fee and publication expenses

38. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. In accordance with the Commission's order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee directly from the beneficiaries on *pro-rata* basis. The petitioner shall also be entitled for reimbursement of the publication expenses in connection with the present petition, directly from the beneficiaries on *pro-rata* basis.

## Licence fee

39. The petitioner has submitted that in O&M norms for tariff block 2009-14 the cost associated with licence fees had not been captured and the licence fee may be allowed to be recovered separately from the respondents.

40. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42 A (1) (b) of the 2009 Tariff Regulations.

### Service tax

41. 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. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

### Sharing of transmission charges

42. 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.

## 43. This order disposes of Petition Nos. 46/TT/2013.

Sd/-	Sd/-	Sd/-	Sd/-
(A. K Singhal)	(M. Deena Dayalan)	(V. S. Verma)	(Gireesh B. Pradhan)
Member	Member	Member	Chairperson

### CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR KRISHNAPATTAM – GOOTY TRANSMISSION LINE

	Details of Loan	(` in lakh) 2013-14
1	Bond XXVIII	2013-14
	Gross loan opening	480.00
	Cumulative Repayment upto DOCO/previous year	40.00
	Net Loan-Opening	440.00
	Additions during the year	0.00
	Repayment during the year	40.00
	Net Loan-Closing	400.00
	Average Loan	420.00
	Rate of Interest	9.33%
	Interest	39.19
	Rep Schedule	12 annual installments from 15.12.2012
2	Bond XXIX	
-	Gross loan opening	535.00
	Cumulative Repayment upto DOCO/previous year	44.58
	Net Loan-Opening	490.42
	Additions during the year	0.00
	Repayment during the year	44.58
	Net Loan-Closing	445.83
	Average Loan	468.13
	Rate of Interest	9.20%
	Interest	43.07
	Rep Schedule	12 annual installments from 12.03.2013
3	Bond XXXVII	
-	Gross loan opening	4670.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	4670.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	4670.00
	Average Loan	4670.00
	Rate of Interest	9.25%
	Interest	431.98
	Rep Schedule	12 annual installments from 26.12.2015
4	Bond XXXII	
	Gross loan opening	655.00
	Cumulative Repayment upto DOCO/previous year	0.00

Net Loan-Opening	655.00
Additions during the year	0.00
Repayment during the year	54.58
Net Loan-Closing	600.42
Average Loan	627.71
Rate of Interest	8.84%
Interest	55.49
Rep Schedule	12 annual installments from 29.03.2014
5 Bond XXXIX	
Gross loan opening	6650.00
Cumulative Repayment upto	0.00
DOCO/previous year	
Net Loan-Opening	6650.00
Additions during the year	0.00
Repayment during the year	0.00
Net Loan-Closing	6650.00
Average Loan	6650.00
Rate of Interest	9.40%
Interest	625.10
Rep Schedule	Bullet Payment on 29.03.2027
6 Bond XXXVI	
Gross loan opening	1425.00
Cumulative Repayment upto	0.00
DOCO/previous year	
Net Loan-Opening	1425.00
Additions during the year	0.00
Repayment during the year	0.00
Net Loan-Closing	1425.00
Average Loan	1425.00
Rate of Interest	9.35%
Interest	133.24
Rep Schedule	15 annual installments from 29.08.2016
7 Bond XXXIII	
Gross loan opening	3.00
Cumulative Repayment upto	0.00
DOCO/previous year	
Net Loan-Opening	3.00
Additions during the year	0.00
Repayment during the year	0.00
Net Loan-Closing	3.00
Average Loan	3.00
Rate of Interest	8.64%
Interest	0.26
Rep Schedule	12 annual installments from 08.07.2014
8 Bond XXXIV	
Gross loan opening	3720.00
Cumulative Repayment upto	0.00
DOCO/previous year	
Net Loan-Opening	3720.00
Additions during the year	0.00
Repayment during the year	0.00

Average Loan Rate of Interest Interest Rep Schedule Bond XXXV Gross Ioan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Repa	3720.00         8.84%         328.85         12 annual installments from 21.10.2014         280.00         0.00         280.00         0.00         280.00         0.00         280.00         0.00         280.00         0.00         280.00         0.00         280.00         280.00         280.00         280.00         280.00         280.00         12 annual installments from 31.05.2015
nterest Rep Schedule Bond XXXV Gross Ioan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XLI	328.85 12 annual installments from 21.10.2014 280.00 0.00 280.00 280.00 0.00 0.00 280.00 280.00 0.00 280.00 280.00 280.00 280.00 280.00 280.00 280.00 280.00
Rep Schedule         Bond XXXV         Bross loan opening         Cumulative Repayment upto         DOCO/previous year         Net Loan-Opening         Additions during the year         Repayment during the year         Net Loan-Closing         Average Loan         Rate of Interest         nterest         Rep Schedule         Bond XLI	12 annual installments from 21.10.2014 280.00 0.00 280.00 280.00 0.00 280.00 280.00 280.00 280.00 280.00 280.00 280.00 280.00 280.00
Bond XXXV Bross loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XLI	280.00 0.00 280.00 0.00 0.00 280.00 280.00 280.00 9.64% 26.99
Bond XXXV Bross loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XLI	0.00 280.00 0.00 0.00 280.00 280.00 280.00 9.64% 26.99
Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XLI	0.00 280.00 0.00 0.00 280.00 280.00 280.00 9.64% 26.99
DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Ate of Interest Rep Schedule Bond XLI	280.00 0.00 0.00 280.00 280.00 280.00 9.64% 26.99
Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XLI	0.00 0.00 280.00 280.00 9.64% 26.99
Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XLI	0.00 0.00 280.00 280.00 9.64% 26.99
Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XLI	0.00 0.00 280.00 280.00 9.64% 26.99
Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XLI	280.00 280.00 9.64% 26.99
Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XLI	280.00 9.64% 26.99
Average Loan Rate of Interest Interest Rep Schedule <b>Bond XLI</b>	9.64% 26.99
Rate of Interest nterest Rep Schedule <b>Bond XLI</b>	9.64% 26.99
nterest Rep Schedule <b>Bond XLI</b>	
Rep Schedule Bond XLI	
Sond XLI	
	6318.20
Cumulative Repayment upto	0.00
OOCO/previous year	
Vet Loan-Opening	6318.20
	0.00
· ·	0.00
	6318.20
	6318.20
	8.85%
	559.16
	12 annual installments from 19.10.2016
SBI	
Gross loan opening	4500.00
	0.00
	4500.00
	0.00
	0.00
	4500.00
	4500.00
	10.45%
	470.25
	22 annual installments from 31.08.2016
	14000.00
	0.00
	14000.00
	0.00
<u> </u>	0.00
	14000.00
Average Loan	14000.00
Rate of Interest	9.30%
	Aross loan opening     Cumulative Repayment upto     OCO/previous year     let Loan-Opening     ditions during the year     Repayment during the year     let Loan-Closing     Average Loan     Rate of Interest     terest     Rep Schedule     Gond XL     Gross loan opening     Cumulative Repayment upto     OCO/previous year     let Loan-Opening     ditions during the year     let Loan-Opening     ditions during the year

Rep Schedule	12 annual installments from 28.06.2016
Total Loan	
Gross loan opening	43236.20
Cumulative Repayment upto DOCO/previous year	84.58
Net Loan-Opening	43151.62
Additions during the year	0.00
Repayment during the year	139.17
Net Loan-Closing	43012.45
Average Loan	43082.03
Rate of Interest	9.3207%
Interest	4015.57