

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 444/TT/2014

Coram:

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

Date of Hearing : 21.12.2015

Date of Order : 18.02.2016

In the matter of:

Truing up of transmission tariff for 2009-14 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, and determination of transmission tariff for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for LILO of Vemagiri-Gajuwaka 400 kV D/C Line at Simhadri-II TPS under transmission system associated with Simhadri-II generation project in Southern Region under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

And in the matter of:

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

.....**Petitioner**

Versus

1. Karnataka Power Transmission Corporation Ltd.
(KPTCL), Kaveri Bhavan, Bangalore- 560 009
2. Transmission Corporation of Andhra Pradesh Ltd.
(APTRANSCO), Vidyut Soudha, Hyderabad- 500082
3. Kerala State Electricity Board (KSEB)
Vaidyuthi Bhavanam, Pattom,
Thiruvananthapuram- 695 004
4. Tamil Nadu Generation and Distribution Corporation Ltd. [formerly Tamil Nadu State Electricity Board (TNEB)]
NPKRR Maaligai, 800, Anna Salai,
Chennai- 600 002



5. Electricity Department
Govt. Of Pondicherry,
Pondicherry- 605 001
6. Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL)
P&T Colony, Seethammadhara, Vishakhapatnam
7. Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL)
Tiruchanoor Road, Tirupati-517 501
8. Central Power Distribution Company of Andhra Pradesh
Mint Compound,
Hyderabad- 500 063
9. Northern Power Distribution Company of Andhra Pradesh
Chaitanyapuri, Kazipet
Warangal- 506 004
10. Bangalore Electricity Supply Company Ltd.
K. R. Circle
Bangalore- 560 001
11. Gulbarga Electricity Supply Company Ltd.
Station Main Road, Gulbarga
12. Hubli Electricity Supply Company Ltd.
Navanagar, P B Road
Hubli
13. MESCOM Corporate Office
Paradigm Plaza, AB Shetty Circle
Mangalore- 575 001
14. Chamundeswari Electricity Supply Corporation Ltd.
New Kantharaj Urs Road, Saraswatipuram,
Mysore-570 009
15. Electricity Department
Government of Goa,
Vidyuti Bhawan, Goa- 403001

.....**Respondents**



The following were present:

For Petitioner: Shri Anshul Garg, PGCIL
 Shri Angaru Naresh Kumar, PGCIL
 Shri Jasbir Singh, PGCIL
 Shri S.K. Venkatesan, PGCIL
 Shri M.M. Mondal, PGCIL
 Shri Sashi Bhushan, PGCIL
 Shri J. Mazumdar, PGCIL
 Shri R. Prasad, PGCIL
 Shri Sunil Kumar, PGCIL
 Shri S.S. Raju, PGCIL

For Respondent: Shri S. Vallinayagam, Advocate, TANGEDCO

ORDER

The present petition has been preferred by Power Grid Corporation of India Ltd. ('the petitioner'), a transmission licensee, for truing up of capital expenditure and tariff for LILO of Vemagiri-Gajuwaka 400 kV D/C Line at Simhadri-II TPS under transmission system associated with Simhadri-II generation project in Southern Region (hereinafter referred as "transmission asset") under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations") based on actual expenditure for the period from date of COD i.e., 1.8.2011 to 31.3.2014, and for determination of tariff under the 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.



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

3. 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 Electricity Act, 2003 ("the Act"). No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. The hearing in this matter was held on 21.12.2015. Reply has been filed by Tamil Nadu Generation and Distribution Company Ltd. (TANGEDCO), Respondent No. 4, i.e., vide affidavit dated 18.12.2015. The concerns expressed by respondents are being addressed in the respective paras of this order. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

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

- a. The administrative approval and expenditure sanction for the transmission project was accorded by Board of Directors of the petitioner company vide Memorandum Ref: C/CP/SIMHADRI-II dated 14.1.2010 at an estimated cost of ₹3841 lakh, which included IDC of ₹156 lakh (based on 3rd quarter 2009 price level). The asset was put under commercial operation w.e.f 1.8.2011.
- b. The tariff for the period from 1.8.2011 to 31.3.2014 was initially allowed vide order dated 27.9.2011 in Petition No. 58/2011 by considering the gross block of ₹3101.48 lakh as on COD and the same was subsequently



revised vide order dated 22.7.2014 in compliance of the Judgment of the Appellate Tribunal for Electricity dated 2.9.2013 in Appeal No. 46 of 2013.

c. In order dated 27.9.2011, the time over-run of three months in commissioning of the instant asset was disallowed. Further, the petitioner's prayer for additional ROE of 0.5% was also rejected. The petitioner filed an Appeal No. 46 of 2013 before the Hon'ble Appellate Tribunal for Electricity (APTEL) against the order dated 27.9.2011. APTEL in Judgment dated 2.9.2013 in Appeal No. 46 of 2013 allowed the additional RoE of 0.5% for commissioning the instant assets within the timeline specified in the 2009 Tariff Regulations. In the light of APTEL's judgement, the tariff for the 2009-14 tariff period was revised vide order dated 22.7.2014.

d. The tariff allowed vide order dated 22.7.2014 for the tariff period 2009-14 is as under:-

(₹ in lakh)

Particulars	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	111.91	171.48	171.48
Interest on Loan	126.89	182.05	166.96
Return on Equity	114.38	175.25	175.25
Interest on Working Capital	7.27	10.90	10.62
O & M Expenses	4.45	7.06	7.46
Total	364.90	546.74	531.77

e. The Commission, in its order dated 27.9.2011 and 22.7.2014 in Petition No. 58/2011, has determined the tariff based on admitted capital cost of ₹3101.48 lakh as on 1.8.2011. Further, additional capital expenditure of ₹136.00 lakh during 2011-12 was approved on account of balance and



retention payment towards transmission line and PLCC equipments incurred within the cut-off date under Clause 1 of Regulation 9 of the 2009 Tariff Regulations.

- f. The MAT rate applicable as on 2008-09 was considered to arrive at rate of return on equity for the tariff period 2009-14, which is required to be adjusted as per the actual MAT rate applicable for the respective year at the time of truing up of tariff for 2009-14 tariff period.

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

5. Clause (3) of the Regulation 6 of the 2009 Tariff Regulations provides as under:-

“(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”.

6. 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

7. Regulation 7 of the 2009 Tariff Regulations specifies 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.”

8. The petitioner in its petition has submitted the apportioned approved cost, actual expenditure incurred as on the date of commercial operation and additional capital expenditure incurred/projected to be incurred for the assets. The petitioner has also submitted the Auditor's Certificate dated 30.10.2014 towards completion cost as on actual COD, viz., 1.8.2011. The petitioner has claimed actual capital cost of ₹2816.15 lakh as on COD after deducting the excess initial spares of ₹5.26 lakh from the actual capital cost as given in Auditor's Certificate. In addition to this, the petitioner has claimed additional capitalisation of ₹285.42 lakh and ₹63.60 lakh for 2011-12 and 2012-13, respectively, on account of balance and retention payment towards transmission



line and PLCC works under Clause 1 of Regulation 9 of the 2009 Tariff Regulations.

9. The petitioner was directed vide letter dated 18.12.2015 to provide IDC and IEDC incurred on cash basis as on COD. The petitioner, vide its affidavit dated 30.12.2015, has submitted that the true up petition has been filed based on the expenditure approved vide order dated 27.9.2011. The expenditure upto COD and the additional capitalization after COD has been revised as per actual expenditure incurred including IDC and IEDC. Therefore, the petitioner has requested to approve the tariff as claimed in the petition. Further, it is submitted that actual expenditure upto COD has decreased as compared to the estimated expenditure as on COD in order dated 27.9.2011.

10. In accordance with the Auditor's Certificate dated 30.10.2014, the actual capital cost as on COD, viz., 1.8.2011, is ₹2821.41 lakh including initial spares of ₹29.00 lakh. The actual completion cost for the transmission asset as given in Auditor's Certificate dated 30.10.2014 is as shown in the table below:-

(₹ in lakh)

Particulars	Expenditure upto COD claimed	Additional capitalization claimed		Total capital cost claimed as on 31.3.2014
		2011-12	2012-13	
Transmission Line	2777.19	271.53	63.60	3112.31
PLCC	44.22	13.90	0.00	58.11
Total	2821.41	285.42	63.60	3170.43

Note: The above cost is including initial spares of ₹29.00 lakh

Initial Spares

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



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

12. The petitioner has submitted Auditor Certificate dated 30.10.2014 wherein the actual cost of transmission is ₹3112.31 lakh as on cut-off date keeping the amount of initial spares as ₹29.00 lakh.

13. Further, the petitioner has claimed the allowable initial spares of ₹23.74 lakh, considering the ceiling norm of 0.75% on the total completion cost of ₹3170.43 lakh. Accordingly, the petitioner has claimed the capital cost of ₹2816.15 lakh as on COD, viz., 1.8.2011 after deducting the excess initial spares of ₹5.26 lakh (i.e., ₹29.00 lakh - ₹23.74).

14. The initial spares have been worked out as per ceiling norms specified in Regulation 8 of the 2009 Tariff Regulations. The details of initial spares claimed by the petitioner and allowed are shown in table below:-

Particulars	Auditor's Certificate dated 30.10.2014		Initial spares		
	Project Cost pertaining to transmission line as on cut-off date	Initial Spares	Ceiling limit (%)	Admissible as per Ceiling limit	Excess Initial Spares
Approved in order dated 27.9.2011	3168.91	29.00	0.75%	23.90	5.10
Petitioner's Claim	3170.43*	29.00	0.75%	23.74	5.26
As worked out	3112.31	29.00	0.75%	23.30	5.70

* The petitioner has considered the total cost of transmission line (₹3112.31 lakh) and PLCC (₹58.11 lakh).

15. Accordingly, the capital cost of ₹2815.71 lakh (excluding excess initial spares of ₹5.70 lakh) as on the actual COD 1.8.2011 has been considered for the purpose of truing up of tariff of 2009-14 tariff period.



Additional Capital Expenditure

16. The petitioner has claimed additional capitalisation of ₹285.42 lakh and ₹63.60 lakh for 2011-12 and 2012-13, respectively, on account of balance and retention payment towards transmission line and PLCC works under Clause 1 of Regulation 9 of the 2009 Tariff Regulations. Further, the petitioner has also submitted the Auditor's Certificate in support of the actual additional capital expenditure incurred during 2009-14. In this regard, the petitioner was directed vide letter dated 18.12.2015 to provide the nature/works against which the payment was withheld along with details of contracts. Further, the petitioner was asked to confirm whether all the balance/retention payments for assets under this petition have been claimed, or some payments are still to be claimed. The petitioner in response vide its affidavit dated 30.12.2015 submitted that all the balance/retention payments as per book of accounts for the asset covered in the instant petition has been claimed. The petitioner also submitted the break-up of agency-wise balance and retention payments.

17. Clause 1 of Regulation 9 of the 2009 Tariff Regulations provides as follows:-

“(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:

Provided that the details of works included in the original scope of work along with estimates of expenditure, undischarged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff.”



18. The Commission vide order dated 27.9.2011 in Petition No. 58/2011 had approved the additional capital expenditure of ₹136.00 lakh proposed during 2011-12 on account of balance and retention payment towards transmission line and PLCC equipments incurred within the cut-off date under Clause 1 of Regulation 9 of the 2009 Tariff Regulations.

19. The petitioner was directed vide letter dated 18.12.2015 to provide the justification towards increase in the additional capital expenditure during 2009-14 period when compared to the additional capital expenditure approved vide order dated 27.09.2011. Further, during the hearing held on 21.12.2015, the petitioner was directed to submit the reasons for increase in additional capital expenditure during 2011-12 and 2012-13. In response, the petitioner vide affidavit dated 30.12.2015 has submitted that the additional capitalization approved in order dated 27.9.2011 in Petition No. 58/2011 was based on unaudited figures of 2010-11, 2011-12, 2012-13 and 2013-14. However, the additional capital expenditure claimed in the instant petition is as per the actuals and is within the overall cost, as on 31.3.2014, allowed vide order dated 27.9.2011. The estimated completion cost approved in order dated 27.9.2011 is ₹3243.00 lakh, whereas, the same is ₹3170.43 lakh as per Auditor's Certificate dated 30.10.2014. Accordingly, the petitioner has requested to allow the actual additional capitalization as claimed in the petition.

20. TANGEDCO has submitted that the additional capital expenditure claimed by the petitioner for 2011-12 is higher to the extent of ₹149.42 lakh as compared to the admitted additional capital expenditure of ₹136.00 lakh allowed in order



dated 27.9.2011 in Petition No. 58/2011. In addition, the petitioner has claimed additional capital expenditure of ₹63.60 lakh for 2012-13. Further, the transmission system is put into commercial operation w.e.f. 1.8.2011 and accordingly, the cut-off date is 31.3.2014. The petitioner has not projected the undischarged liabilities to be incurred during 2012-13 in its Petition No. 58/2011. Moreover, the petitioner has not furnished the reasons for increase in the admitted capital cost for 2011-12. Further, the petitioner has not furnished the details like the nature of work to which the discharge of liabilities relates to and the year of execution of work and whether it actually relates to the instant transmission system. Hence, in absence of such details, the additional capital expenditure claimed by the petitioner for 2011-12 and 2012-13 is unjustified and is liable to be disallowed.

21. The petitioner in response vide its affidavit dated 1.1.2016 submitted that the add-cap approved in the order dated 27.9.2011 in Petition No. 58/2011 was based on unaudited figures of 2010-11, 2011-12, 2012-13 and 2013-14. However, in the instant petition, the actual expenditure is within the overall cost as on 31.3.2014 admitted by the Commission in its order dated 27.9.2011. The estimated completion cost approved in order dated 27.9.2011 is ₹3243.00 lakh, whereas the same is ₹3170.43 lakh as per Auditor's Certificate dated 30.10.2014. Accordingly, the petitioner requested to allow the additional capital expenditure claimed in the instant petition. Further, the petitioner has submitted that the additional capitalization for 2011-12 and 2012-13 is claimed on account of balance and retention payment towards undischarged liabilities under Clause 1(i) of Regulation 9 of the 2009 Tariff Regulations.



22. The total capital cost of the transmission asset including additional capitalisation incurred during 2011-12 and 2012-13 works out to ₹3164.73 lakh, which is within the approved cost of ₹3841.00 lakh. The total capital cost including additional capitalisation is lower than the approved capital cost including additional capitalisation. Accordingly, the additional capitalisation claimed by the petitioner is allowed. The summary of capital cost including additional capitalization is shown in table below:-

(₹ in lakh)

Cost as per Investment Approval dated 14.1.2010 is ₹ 3841.00 lakh						
Particulars	Admitted capital cost as on actual COD 1.8.2011	Additional capitalization			Total additional capitalisation	Total capital cost including additional capitalisation
		2011-12	2012-13	2013-14		
Approved in order dated 27.9.2011	3101.48 [#]	136.00	0.00	0.00	136.00	3237.48
Approved in this Order considering Actual figures as per Auditor's Certificate dated 30.10.2014	2815.71 [*]	285.42	63.60	0.00	349.02	3164.73

Note:

- capital cost as on 1.8.2011 after deducting excess initial spares of ₹5.10 lakh

* - capital cost as on actual COD 1.8.2011 after deducting excess initial spares of ₹5.70 lakh.

Debt: Equity

23. 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.”

24. The petitioner was directed vide letter dated 18.12.2015 to submit an undertaking on affidavit that actual equity infused as on 1.8.2011 and the additional capitalisation during 2011-12 is not less than 30% for the instant transmission asset. In response, the petitioner vide affidavit dated 30.12.2015 has submitted that actual loans deployed for funding the additional capitalization is 70% and 94.18% for 2011-12 and 2012-13 respectively. Accordingly, equity deployment is 30% for 2011-12 and 5.82% for 2012-13.

25. We have considered the approved capital cost as on COD for the tariff period from 1.8.2011 to 31.3.2014. The details of the debt:equity in respect of the asset as on the date of COD and 31.3.2014 is shown in table below:-



Funding	Amount (₹ in lakh)	(%)
Debt	1971.00	70.00
Equity	844.71	30.00
Total	2815.71	100.00

26. Debt: equity ratio is allowed in accordance with Clause 2 of Regulation 12 of the 2009 Tariff Regulations for additional capitalization. The overall debt equity as on 31.3.2014 including additional capitalization is as under:-

Funding	Amount (in ₹ lakh)	(%)
Debt	2230.69	70.49
Equity	934.04	29.51
Total	3164.73	100.00

Interest on Loan (IOL)

27. Regulation 16 of the 2009 Tariff Regulations provides the methodology for working out weighted average rate of interest on loan. The Commission in its earlier order dated 8.6.2011 in Petition No. 238/2010 has 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”.

28. The petitioner has submitted the weighted average rate of interest on loan based on its actual loan portfolio and rate of interest.

29. We have considered the submissions of the petitioner and accordingly calculated the IOL based on actual interest rate submitted by the petitioner, in accordance with Regulation 16 of the 2009 Tariff Regulations. The details of weighted average rate of interest are placed at Annexure-1 and the IOL has been worked out and allowed as follows:-.

Particulars	(₹ in lakh)		
	2011-12 (pro-rata)	2012-13	2013-14



Approved vide order dated 27.9.2011 and 22.7.2014	126.89	182.05	166.96
As claimed by the petitioner	120.24	180.19	167.97
Allowed after trued up	120.22	180.16	167.94

30. The IOL allowed in the instant order during 2011-12 and 2012-13 is less than the IOL allowed vide order dated 27.9.2011 and 22.7.2014 due to lower capital cost as on actual COD (1.8.2011). In 2013-14, IOL allowed in the instant order is more than the IOL approved earlier due to actual additional capitalization of ₹63.60 lakh in debt: equity ratio of 94.18:5.82 in 2012-13. However, the Commission in its earlier Order had approved the debt:equity ratio of 70:30 for tariff period 2009-14.

Return on Equity (“ROE”)

31. Clause (3), (4) and (5) of the Regulation 15 of the 2009 Tariff Regulations provide that:-

“(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 year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations.”

32. The petitioner has submitted that MAT rate of 11.330% applicable for 2008-09 was considered in the order dated 13.8.2012. However, for truing up purpose, the computation of RoE for the tariff period 2009-14 has been done on the basis of actual MAT rate applicable during 2009-14. The petitioner has submitted the variation in the MAT rate during 2009-14 as per the Finance Act of the relevant year for the purpose of grossing up of ROE, as below:-

Particulars	MAT Rate	Grossed up RoE (Base rate/(1-t))
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 %	19.610%

33. In the light of APTEL’s Judgment dated 2.9.2013 in Appeal No. 46 of 2013, additional ROE of 0.5% is allowed in order dated 22.7.2014. The ROE trued up is shown in the table below:-

Particulars	(₹ in lakh)		
	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 27.9.2011 and 22.7.2014	114.38	175.25	175.25
As claimed by the petitioner	118.37	186.48	189.10
Allowed after trued up	118.35	186.46	189.08

34. The return on equity allowed in the instant order is more than the return on equity allowed vide order dated 22.7.2014 due to increase in equity on account of



additional capitalisation and increase in the applicable MAT rate for the purpose of grossing up of base rate of return on equity.

Depreciation

35. Clause (42) of Regulation 3 of the 2009 Tariff Regulations defines useful life as follows:-

“**useful life**’ in relation to a unit of a generating station and transmission system from the COD shall mean the following, namely:-

.....	
(c) AC and DC sub-station	25 years
(d) Hydro generating station	35 years
(e) Transmission line	35 years”

36. Further, Clause (4) of Regulation 17 of the 2009 Tariff Regulations provides as follows:-

"17. Depreciation:

...
(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.”

37. The depreciation for the 2009-14 tariff period was worked out in accordance with Regulation 17 of the 2009 Tariff Regulations.

38. As per Regulations 3 (42) and 17 (4) of the 2009 Tariff Regulations, useful life for transmission line is 35 years. For the purpose of calculation, the life of PLCC has been considered as 25 years. In the present case, weighted average value of asset as on COD (1.8.2011) has been considered to work out the weighted average life of the transmission system as 35 years.



39. The depreciation for the tariff period 2009-14 has been worked out in accordance with Regulation 17 of the 2009 Tariff Regulations based on admitted capital expenditure and additional capitalisation as under:-

(₹ in lakh)			
Particulars	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 27.9.2011 and 22.7.2014	111.91	171.48	171.48
As claimed by the petitioner	104.51	166.05	167.73
Allowed after trued up	104.49	166.03	167.71

40. The depreciation allowed in the instant order is at variance with the depreciation allowed vide order dated 27.9.2011 and 22.7.2014 due to variation in additional capitalisation for 2009-14 and lower capital cost as on COD (1.8.2011).

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

41. The petitioner has computed O&M Expenses for the assets mentioned in the petition in accordance with the O&M norms for 400 kV D/C twin conductor transmission line of 10.65 km specified in Regulation 19(g) of the 2009 Tariff Regulations.

42. The Commission in order dated 27.9.2011 in Petition No. 58/2011 had observed that the above transmission line includes D/C portion of 1.65 km and multi-circuit portion of 4.5 km. The O&M Expenses for 4.5 km multi-circuit portion was worked out @ 1.50 times of norms for single circuit (twin conductor) for two D/C line. Thereafter, in order dated 22.7.2014 in Petition No. 58/2011, O&M Expenses for 4.5 km of 400 kV D/C twin conductor multi-circuit T/L was worked



out @ 1.75 times of norms for double circuit (twin conductor). Accordingly, the O&M Expenses have been worked out as given below:-

Particulars		(₹ in lakh)		
		2011-12	2012-13	2013-14
Actual line length (km)	400 kV D/C (Twin conductor)	1.65	1.65	1.65
	400 kV D/C twin conductor multi-circuit T/L	4.50	4.50	4.50
Norms as per Regulation	Double Circuit (Twin & Triple Conductor) (₹ lakh/km)	0.701	0.741	0.783
	Multi-circuit T/L (₹ lakh/km)	1.227	1.297	1.370
O & M Expenses		4.45 (Pro-rata)	7.06	7.46

43. The O&M Expenses worked out for tariff period 2009-14 are same as that approved in the tariff order dated 22.7.2014 in Petition No. 58/2011. Accordingly, the O&M Expenses claimed by the petitioner, allowed and trued up are same and are as follows:-

		(₹ in lakh)		
Particulars	2011-12 (pro-rata)	2012-13	2013-14	
Approved vide order dated 22.7.2014	4.45	7.06	7.46	
As claimed by the petitioner	4.98	7.89	8.34	
Allowed after trued up	4.45	7.06	7.46	

Interest on working capital (“IWC”)

44. Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Tariff Regulations provides the components of the working capital for the transmission system and clause (3) of Regulation 18 of the 2009 Tariff Regulations provides for the rate of interest of working capital.



45. The petitioner has submitted that the rate of interest on working capital has been considered as 11.75% as per Clause (3) of Regulation 18 of the 2009 Tariff Regulations and the components of working capital are also considered in accordance with Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Regulations.

46. In orders dated 27.9.2011 and 22.7.2014 in Petition No. 58/2011 rate of interest on working capital of 11.75% was approved. In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, rate of interest on working capital shall be on normative basis and in case of transmission assets declared under commercial operation between the period 1.7.2010 to 31.3.2014 shall be equal to SBI Base Rate plus 350 basis points as on 1.7.2010 or as on 1st April of the year in which the generating station or a unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later. State Bank of India Base Rate on 1.4.2011 was 8.25%. Therefore, interest rate of 11.75% has been considered to work out the interest on working capital in the instant case.

47. The IWC trued up is as under:-

(₹ in lakh)			
	2011-12 (pro-rata)	2012-13	2013-14
Interest on Working Capital			
Maintenance Spares	0.67	1.06	1.12
O & M Expenses	0.37	0.59	0.62
Receivables	59.10	91.78	90.50
Total	60.13	93.43	92.24
Rate of Interest	11.75%	11.75%	11.75%
Interest	7.07	10.98	10.84



48. The IWC claimed by the petitioner, allowed and trued up are as shown in the table below:-

(₹ in lakh)			
Particulars	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 27.9.2011 and 22.7.2014	7.27	10.90	10.62
As claimed by the petitioner	7.09	11.02	10.88
Allowed after trued up	7.07	10.98	10.84

49. The variation in IWC is on account of variation in receivables due to variation in RoE and depreciation on account of capital cost as well as additional capital expenditure and variation in ROE on account of applicable MAT rate during the 2009-14 tariff period.

ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

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

(₹ in lakh)			
Particulars	2011-12 (pro-rata)	2012-13	2013-14
Gross Block			
Opening Gross Block	2815.71	3101.13	3164.73
Additional Capitalization	285.42	63.60	0.00
Closing Gross block	3101.13	3164.73	3164.73
Average Gross block	2958.42	3132.93	3164.73
Depreciation			
Rate of Depreciation (%)	5.298	5.299	5.299
Depreciable Value	2662.58	2819.64	2848.26



Particulars	2011-12 (pro-rata)	2012-13	2013-14
Elapsed Life of the assets at beginning of the year	0	1	2
Weighted Balance Useful life of the assets	35	34	33
Remaining Depreciable Value	2662.58	2715.14	2577.73
Depreciation	104.49	166.03	167.71
Interest on Loan			
Gross Normative Loan	1971.00	2170.79	2230.69
Cumulative Repayment upto Previous Year	0.00	104.49	270.52
Net Loan-Opening	1971.00	2066.30	1960.17
Additions	199.79	59.90	0.00
Repayment during the year	104.49	166.03	167.71
Net Loan-Closing	2066.30	1960.17	1792.46
Average Loan	2018.65	2013.23	1876.31
Weighted Average Rate of Interest on Loan (%)	8.9330	8.9489	8.9506
Interest	120.22	180.16	167.94
Return on Equity			
Opening Equity	844.71	930.34	934.04
Additions	85.63	3.70	0.00
Closing Equity	930.34	934.04	934.04
Average Equity	887.53	932.19	934.04
Return on Equity (Base Rate) (%)	16.00	16.00	16.00
MAT rate for the respective year (%)	20.008	20.008	20.961
Rate of Return on Equity (Pre Tax) (%)	20.002	20.002	20.243
Return on Equity (Pre Tax)	118.35	186.46	189.08
Interest on Working Capital			
Maintenance Spares	0.67	1.06	1.12
O & M Expenses	0.37	0.59	0.62
Receivables	59.10	91.78	90.50
Total	60.13	93.43	92.24
Interest	7.07	10.98	10.84
Annual Transmission Charges			
Depreciation	104.49	166.03	167.71



Particulars	2011-12 (pro-rata)	2012-13	2013-14
Interest on Loan	120.22	180.16	167.94
Return on Equity	118.35	186.46	189.08
Interest on Working Capital	7.07	10.98	10.84
O & M Expenses	4.45	7.06	7.46
Total	354.58	550.68	543.02

DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19

51. The petitioner has claimed the transmission charges as under:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	167.73	167.73	167.73	167.73	167.73
Interest on Loan	153.04	138.12	123.14	108.13	93.12
Return on Equity	189.10	189.10	189.10	189.10	189.10
Interest on Working Capital	12.15	11.82	11.49	11.16	10.83
O & M Expenses	7.53	7.79	8.04	8.31	8.58
Total	529.55	514.56	499.50	484.43	469.36

52. 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
Maintenance Spares	1.13	1.17	1.21	1.25	1.29
O & M Expenses	0.63	0.65	0.67	0.69	0.72
Receivables	88.26	85.76	83.25	80.74	78.23
Total	90.02	87.58	85.13	82.68	80.24
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	12.15	11.82	11.49	11.16	10.83

Capital Cost

53. Clause (1) and (3) of Regulation 9 of the 2014 Tariff Regulations provide as follows:-

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



“ (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.”

54. The petitioner has claimed capital expenditure of ₹3165.17 lakh as on 31.3.2014. Further, the petitioner has not projected any additional capital expenditure during the tariff period 2014-19.

55. The trued up capital cost of ₹ 3164.73 lakh as on 1.4.2014 is considered for the purpose of tariff for tariff period 2014-19.

Additional Capital Expenditure

56. The petitioner has not claimed any additional expenditure for the tariff period 2014-19. Accordingly, no additional capital expenditure has been considered for the tariff period 2014-19.

Debt: Equity Ratio

57. Clause 3 and 4 of Regulation 19 of the 2014 Tariff Regulations provide as under:-

“(3) In case of the generating station and the transmission 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.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2014, the Commission shall approve the debt:equity ratio based on actual information provided by the generating company or the transmission licensee as the case may be.”



58. The admitted debt:equity ratio of 70.49:29.51 after true-up for the tariff period ending 31.3.2014 has been considered as opening debt:equity ratio as on 1.4.2014. The details of the debt:equity as on 1.4.2014 considered for the purpose of tariff for the 2014-19 tariff period is as follows:-

Funding	Amount (in ₹ lakh)	(%)
Debt	2230.69	70.49
Equity	934.04	29.51
Total	3164.73	100.00

Interest on Loan (“IOL”)

59. Clause (5) & (6) of Regulation 26 of the 2014 Tariff Regulations are reproduced as under:-

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

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

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

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

60. The weighted average rate of IOL has been considered on the basis of rate prevailing as on 1.4.2014.

61. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of weighted average rate of interest are



placed at **Annexure – 2** and the IOL has been worked out and allowed as follows:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross loan opening	2230.69	2230.69	2230.69	2230.69	2230.69
Cumulative Repayment upto COD/previous year	438.23	605.94	773.65	941.36	1109.07
Net Loan-Opening	1792.46	1624.75	1457.04	1289.33	1121.62
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	167.71	167.71	167.71	167.71	167.71
Net Loan-Closing	1624.75	1457.04	1289.33	1121.62	953.92
Average Loan	1708.60	1540.90	1373.19	1205.48	1037.77
Rate of Interest (%)	8.9554	8.9624	8.9659	8.9686	8.9719
Interest	153.01	138.10	123.12	108.11	93.11

Return on Equity (“ROE”)

62. Clause (1) and (2) of Regulation 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.”

63. The petitioner has computed ROE at the rate of 20.243% after grossing up the ROE with MAT rate as per the above Regulation. The petitioner has further



submitted that the grossed up ROE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.

64. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/adjustable after completion of income tax assessment of the financial year. In this regard, TANGEDCO has submitted that the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Acts by the concerned generating company or the transmission licensee, as the case may be, as provided under Regulation 25(1) of the 2014 Tariff Regulations. TANGEDCO has further submitted that the petitioner cannot claim the difference in tax from the beneficiaries and is entitled for grossing up of ROE only on the actual tax paid during the respective financial year. Hence, in accordance with the 2014 Tariff Regulations, the difference in tax should not be billed separately from the beneficiaries unless there is any amendment in the provisions in Income Tax Act providing retrospective effect. The petitioner, in response has submitted that the petitioner is liable to pay income tax at MAT rate, the ROE has been calculated @ 19.610% after grossing up the ROE with MAT rate of 20.961% as provided under Regulations 25(2)(1) of the 2014 Tariff Regulations. As per Clause 25(3) of the 2014 Tariff Regulations, the grossed up



rate of ROE at the end of every financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT Authorities for the tariff period 2014-19 on actual actual gross income of any financial year. Any under recovery or over recovery of grossed up rate on ROE after truing up shall be recovered or refunded to beneficiaries on a year to year basis. Further, adjustment in any tax demand including interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable/ adjustable during/after completion of income assessment of the financial year.

65. We have considered the submissions made by TANGEDCO and petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of allowing return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the ROE has been worked for the 2014-19 tariff period and the details are as follows:-



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	934.04	934.04	934.04	934.04	934.04
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Equity	934.04	934.04	934.04	934.04	934.04
Average Equity	934.04	934.04	934.04	934.04	934.04
Return on Equity (Base Rate)(%)	16.00	16.00	16.00	16.00	16.00
MAT rate for the year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	20.243	20.243	20.243	20.243	20.243
Return on Equity (Pre Tax)	189.08	189.08	189.08	189.08	189.08

Depreciation

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

"27. Depreciation:

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

...

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

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

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

67. The petitioner has claimed depreciation considering capital expenditure of ₹3165.17 lakh as on 31.3.2014. However, the capital cost approved after true up for tariff period 2009-14 is ₹3164.73 lakh as on 31.3.2014.



68. Depreciation is allowed as provided under Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation allowed are given hereunder:-

(₹ in lakh)					
Details of Depreciation	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block	3164.73	3164.73	3164.73	3164.73	3164.73
Additions during the year due to projected additional capitalization	0.00	0.00	0.00	0.00	0.00
Closing Gross block	3164.73	3164.73	3164.73	3164.73	3164.73
Rate of Depreciation (%)	5.299	5.299	5.299	5.299	5.299
Depreciable Value	2848.26	2848.26	2848.26	2848.26	2848.26
Elapsed Life of the assets at beginning of the year	3	4	5	6	7
Weighted Balance Useful life of the assets	32	31	30	29	28
Remaining Depreciable Value	2410.02	2242.32	2074.61	1906.90	1739.19
Depreciation	167.71	167.71	167.71	167.71	167.71

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

69. The petitioner has computed normative O&M Expenses as per sub clause (a) of clause (3) of Regulation 29 of the 2014 Tariff Regulations. The petitioner’s entitlement to O&M Expenses has been worked out as given hereunder:-

Particulars		(₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19
Actual line length (km)	400 kV D/C (Twin conductor)	1.65	1.65	1.65	1.65	1.65
	400 kV D/C twin conductor multi-circuit T/L	4.50	4.50	4.50	4.50	4.50
Norms as per Regulation	Double Circuit (Twin & Triple Conductor) (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
	Multi-circuit T/L (₹ lakh/km)	1.240	1.282	1.324	1.368	1.413
Total (₹ in lakh)		6.75	6.98	7.20	7.44	7.69



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

71. TANGEDCO submitted that O&M expenses should be allowed as per the 2014 Tariff Regulations and the petitioner's prayer for revision in O&M expenses due to wage revision should not be entertained as the 2014 Tariff Regulations 2014 do not provide the same. In this regard, petitioner has submitted that O&M Expense have been claimed in accordance with norms specified in the 2014 Tariff Regulations. The wage revision is due by 1.1.2017 and accordingly the petitioner would approach the Commission for suitable revision in the norms for O&M expenses for claiming the impact of wage hike.

72. Further, TANGEDCO has submitted that while determining the norms for the 2014 Tariff Regulations, the submissions made by all the stakeholders were considered and accordingly notified the norms in respect of O&M expenses. The norms specified by the Commission are in accordance with the guidance issued by the Central Electricity Authority and other authorities. Further, the Commission in its statement of reasons for the 2014 Tariff Regulations has briefly discussed



the issues raised by the utilities. Hence, there should not be any further increase in O&M Expenses, which are already on the higher side. TANGEDCO has further submitted that there cannot be any petition for relaxation of the norms determined by the Commission. The petitioner in response has submitted that the norms for O&M expenditure for transmission system as specified under Regulation 29(3)(a) of the 2014 Tariff Regulations has been approved by the Commission after considering (i) normalized actual O&M expenses of the petitioner on its various projects in various regions during 2008-13. Further, scheme of wage revision is binding on the petitioner as it is CPSU. However, the actual impact of wage hike (due w.e.f 1.1.2017) has not been factored in fixation of the normative O&M rates for tariff period 2014-19. In accordance with the Regulation 19(f)(ii) of the 2014 Tariff Regulations, norms for O&M expenses for 2009-10 were derived considering the impact of wage hike of the employees under PSUs. Accordingly, the petitioner has made the prayer for approaching the Commission for suitable revision in the norms of O&M expenditure for claiming the impact of wage hike, if any, during period 2014-19.

73. We have considered the submissions made by TANGEDCO and the petitioner. The O&M expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards impact of wage revision, we would like to clarify that any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.



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

(₹ in lakh)

Particulars	Year				
	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses allowed	6.75	6.98	7.20	7.44	7.69

Interest on Working Capital (“IWC”)

75. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specify 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;”

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

77. 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 interest on working capital as determined is shown in the table below:-



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	1.01	1.05	1.08	1.12	1.15
O & M expenses	0.56	0.58	0.60	0.62	0.64
Receivables	88.11	85.61	83.09	80.58	78.06
Total	89.68	87.23	84.77	82.31	79.85
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	12.11	11.78	11.44	11.11	10.78

Annual Transmission Charges

78. The Annual Transmission Charges allowed for the transmission asset is given hereunder:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	167.71	167.71	167.71	167.71	167.71
Interest on Loan	153.01	138.10	123.12	108.11	93.11
Return on Equity	189.08	189.08	189.08	189.08	189.08
Interest on Working Capital	12.11	11.78	11.44	11.11	10.78
O&M Expenses	6.75	6.98	7.20	7.44	7.69
Total	528.65	513.64	498.55	483.46	468.36

79. The detailed computation of various components of annual fixed charges for the tariff period 2014-19 is summarized below:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Block					
Opening Gross Block	3164.73	3164.73	3164.73	3164.73	3164.73
Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	3164.73	3164.73	3164.73	3164.73	3164.73
Average Gross Block	3164.73	3164.73	3164.73	3164.73	3164.73
Depreciation					
Rate of Depreciation	5.299	5.299	5.299	5.299	5.299
Depreciable Value	2848.26	2848.26	2848.26	2848.26	2848.26



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Elapsed Life of the assets at beginning of the year	3	4	5	6	7
Weighted Balance Useful life of the assets	32	31	30	29	28
Remaining Depreciable Value	2410.02	2242.32	2074.61	1906.90	1739.19
Depreciation	167.71	167.71	167.71	167.71	167.71
Interest on Loan					
Gross Normative Loan	2230.69	2230.69	2230.69	2230.69	2230.69
Cumulative Repayment upto Previous Year	438.23	605.94	773.65	941.36	1109.07
Net Loan-Opening	1792.46	1624.75	1457.04	1289.33	1121.62
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	167.71	167.71	167.71	167.71	167.71
Net Loan-Closing	1624.75	1457.04	1289.33	1121.62	953.92
Average Loan	1708.60	1540.90	1373.19	1205.48	1037.77
Weighted Average Rate of Interest on Loan (%)	8.9554	8.9624	8.9659	8.9686	8.9719
Interest	153.01	138.10	123.12	108.11	93.11
Return on Equity					
Opening Equity	934.04	934.04	934.04	934.04	934.04
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	934.04	934.04	934.04	934.04	934.04
Average Equity	934.04	934.04	934.04	934.04	934.04
Return on Equity (Base Rate) (%)	16.00	16.00	16.00	16.00	16.00
MAT Rate for the year 2013-14 (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	20.243	20.243	20.243	20.243	20.243
Return on Equity (Pre Tax)	189.08	189.08	189.08	189.08	189.08
Interest on Working Capital					
Maintenance Spares	1.01	1.05	1.08	1.12	1.15
O & M expenses	0.56	0.58	0.60	0.62	0.64
Receivables	88.11	85.61	83.09	80.58	78.06
Total	89.68	87.23	84.77	82.31	79.85
Interest	12.11	11.78	11.44	11.11	10.78



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Transmission Charges					
Depreciation	167.71	167.71	167.71	167.71	167.71
Interest on Loan	153.01	138.10	123.12	108.11	93.11
Return on Equity	189.08	189.08	189.08	189.08	189.08
Interest on Working Capital	12.11	11.78	11.44	11.11	10.78
O & M Expenses	6.75	6.98	7.20	7.44	7.69
Total	528.65	513.64	498.55	483.46	468.36

Filing Fee and Publication Expenses

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

Licence Fee and RLDC Fees and Charges

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

Service Tax

82. The petitioner has sought to recover service tax on transmission charges separately from the respondents, if at any time service tax on transmission is withdrawn from negative list in future. In this regard, TANGEDCO submitted that



the petitioner's claim to collect the taxes if any paid directly from the beneficiaries is not reasonable. The petitioner in response submitted that as already submitted, the service tax is to be paid by the respondents only in case the same is paid by the petitioner. We are of the view that the petitioner's prayer is premature.

Deferred Tax Liability

83. 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 under Regulation 49 of the 2014 Tariff Regulations. 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 materializes, directly from the beneficiaries or long term transmission customers /DICs. In this regard, TANGEDCO requested the Commission to disallow the claim of the petitioner for recovering the deferred tax liability prior to 1.4.2009 from the beneficiaries as the claim is unreasonable. We have observed that the actual COD of the asset is 1.8.2011 and, therefore, the petitioner's claim for recovery of deferred tax liability pertaining to period before 1.4.2009 is not applicable.

Sharing of Transmission Charges

84. 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.

85. This order disposes of Petition No. 444/TT/2014.

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

Sd/-
(A.S. Bakshi)
Member



DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.8.2011	Additions during the tariff period	Total
Bond XXXIII - DOCO - Drawal on 1-Aug-2011	8.64	250.00	0.00	250.00
Bond XXXII - DOCO - Drawal on 1-Aug-2011	8.84	200.00	0.00	200.00
Bond XXXIV - DOCO - Drawal on 1-Aug-2011	8.84	1174.00	0.00	1174.00
Bond XXXV - DOCO - Drawal on 1-Aug-2011	9.64	95.00	0.00	95.00
Bond XXXVI - DOCO - Drawal on 1-Aug-2011	9.35	222.00	0.00	222.00
Bond XXXVII - Addcap for 2011-12 Addcap Loan	9.25	0.00	199.79	199.79
Bond XXXVII - Addcap for 2012-13 Addcap Loan	9.25	0.00	28.90	28.90
Bond XXXVII - DOCO- Drawal on 1-Aug-2011	9.25	30.31	0.00	30.31
Bond XLI - Addcap for 2012-13 Addcap Loan	8.85	0.00	31.00	31.00
Total		1971.31	259.69	2231.00

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

(₹ in lakh)

	2011-12	2012-13	2013-14
Gross Opening Loan	1971.31	2171.10	2231.00
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00
Net Loans Opening	1971.31	2171.10	2231.00
Add: Drawal(s) during the year	199.79	59.90	0.00
Less: Repayment(s) of Loan during the year	0.00	0.00	16.67
Net Closing Loan	2171.10	2231.00	2214.33
Average Net Loan	2071.21	2201.05	2222.67
Interest on Loan	185.02	196.97	198.94
Rate of Interest on Loan (%)	8.9330	8.9489	8.9506



DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
Bond XXXIII - DOCO - Drawal on 1-Aug-2011	8.64	250.00	0.00	250.00
Bond XXXII - DOCO - Drawal on 1-Aug-2011	8.84	200.00	0.00	200.00
Bond XXXIV - DOCO - Drawal on 1-Aug-2011	8.84	1174.00	0.00	1174.00
Bond XXXV - DOCO - Drawal on 1-Aug-2011	9.64	95.00	0.00	95.00
Bond XXXVI - DOCO - Drawal on 1-Aug-2011	9.35	222.00	0.00	222.00
Bond XXXVII - Addcap for 2011-12 Addcap Loan	9.25	199.79	0.00	199.79
Bond XXXVII - Addcap for 2012-13 Addcap Loan	9.25	28.90	0.00	28.90
Bond XXXVII - DOCO- Drawal on 1-Aug-2011	9.25	30.31	0.00	30.31
Bond XLI - Addcap for 2012-13 Addcap Loan	8.85	31.00	0.00	31.00
Total		2231.00	0.00	2231.00

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

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	2231.00	2231.00	2231.00	2231.00	2231.00
Cumulative Repayments of Loans upto Previous Year	16.67	152.00	316.84	499.06	681.28
Net Loans Opening	2214.33	2079.00	1914.16	1731.94	1549.72
Add: Drawal(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	135.33	164.84	182.22	182.22	182.22
Net Closing Loan	2079.00	1914.16	1731.94	1549.72	1367.50
Average Net Loan	2146.67	1996.58	1823.05	1640.83	1458.61
Interest on Loan	192.24	178.94	163.45	147.16	130.86
Rate of Interest on Loan (%)	8.9554	8.9624	8.9659	8.9686	8.9719

