CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

<u>Petition No. 318/2010</u>

Coram:
Shri S. Jayaraman, Member
Shri M. Deena Dayalan, Member

Date of Hearing: 15.05.2012
Date of Order : 22.04.2013

In the matter of:

Determination of transmission tariff of 400 kV D/C transmission line from SUGEN to a point near Gandhar for LILO of one circuit of existing Gandhar - Dehgam 400 kV D/C line for the period from 1.4.2010 to 31.3.2014 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009

And

In the matter of:

Torrent Power Grid Limited ……**Petitioner**

Vs

1. Torrent Power Limited, Ahmedabad
2. Power Grid Corporation of India Ltd., New Delhi
3. Western Regional Power Committee, Mumbai
4. PTC India Ltd., New Delhi
5. M.P. Power Trading Company Ltd. Jabalpur
6. Gujarat Urja Vikas Nigam Ltd., Vadodara
7. Maharashtra State Electricity Distribution Co. Ltd., Mumbai
8. Chhattisgarh State Power Transmission Co. Ltd., Raipur
9. Electricity Department, Govt. of Goa, Panaji
10. Electricity Department, Administration of Dadra Nagar Haveli, Silvassa
11. Electricity Department, Administration of Daman & Diu, Daman

…..Respondents

The following were present:

1. Shri. Samir Shah, TPGL
2. Shri K.K. Shah, TPGL

ORDER

The petitioner, Torrent Power Grid Limited, is a joint venture between Torrent Power Limited and Power Grid Corporation of India Limited. The petitioner was granted transmission licence by the Commission vide order dated 16.5.2007 in Petition No. 97/2006 to transmit electricity and for that purpose to construct, maintain and operate the transmission system associated with evacuation of power from SUGEN power plant.

2. The petitioner commissioned 400KV loop in loop out (LILO) at SUGEN bus on one circuit of the 400 kV Gandhar (Jhanor) – Vapi Line of PGCIL (named as Phase-1) on 1.3.2009. The Commission approved tariff for the Phase I of the transmission system in Petition Nos. 275/2009 and 159/2009. The petitioner has commissioned 400 kV D/C line from SUGEN to the point near Gandhar and LILO of one circuit of the Gandhar (Jhanor)-Dehgam Line of PGCIL near Gandhar (named as Phase-II) on 26.3.2010**.** It has been submitted that the construction of remaining assets (named as Phase-III) is in progress.

3. The investment approval for the transmission system was accorded by the Board of Directors of the petitioner's company on 21.8.2007, at an estimated cost of ₹36400 lakh. However, while granting the transmission licence to the petitioner, the Commission approved only an amount of ₹35800 lakh for the whole project, vide its order dated 16.5.2007 in Petition No. 97/2006. Out of the approved cost, the cost of Phase-II is ₹11542 lakh.

4. The petitioner has filed the instant petition for determination of transmission tariff of Phase-II of the transmission system for the period

1.4.2010 to 31.3.2014 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff Regulations), 2009 (hereinafter referred to as “2009 Tariff Regulations”). The asset covered in the instant petition is as under:-

Name of the asset	Date of commercial operation
400 kV D/C line from SUGEN to the point near Gandhar and LILO on one circuit of the Gandhar (Jhanor)-Dehgam Line of PGCIL near Gandhar (hereinafter referred as “asset”)	1.4.2010

5. Details of the transmission charges claimed by the petitioner vide affidavit dated 23.9.2011 are as under:-

(₹ in lakh)

	2010-11	2011-12	2012-13	2013-14
Depreciation	428.35	457.23	467.78	467.78
Interest on Loan	586.12	599.36	563.49	511.50
Return on equity	424.51	453.19	463.67	463.67
Interest on Working Capital	32.67	34.30	34.15	33.23
O & M Expenses	53.47	56.54	59.76	63.15
Total	**1525.13**	**1600.62**	**1588.85**	**1539.33**

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

(₹ in lakh)

	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	8.02	8.48	8.96	9.47
O & M expenses	4.46	4.71	4.98	5.26
Receivables	254.19	266.77	264.81	256.55
Total	**266.67**	**279.96**	**278.75**	**271.28**
Rate of Interest	12.75%	12.75%	12.75%	12.75%
Interest	32.67	34.30	34.15	33.23

7. The provisional tariff in respect of the above mentioned asset from the actual date of commercial operation i.e. from 1.4.2010 to 31.3.2014, was approved by the Commission vide its order dated 8.12.2011. This was subject to adjustment as per Regulation 5 (4) of the 2009 Regulations.

8. Reply to the petition has been filed by Respondent No.5, Madhya Pradesh Power Management Company Limited (MPPMCL), vide affidavit dated 14.5.2012 and Gujarat Urja Vikas Nigam Limited (GUVNL), Respondent No. 6, vide affidavit dated 15.4.2011. The petitioner has filed its rejoinder to the reply filed by Respondent No.5. The objections of MPPMCL and GUVNL mainly pertain to time over-run, additional ROE and sharing of transmission charges which have been dealt with in the relevant paragraphs of this order.

9. In response to the public notice, objections have been filed by Consumer Protection & Action Committee (CP&AC) (hereinafter referred to as the 'objector') vide affidavit dated 8.1.2011. The petitioner vide affidavit dated 18.3.2011 has filed its response to the objections raised by objector. Most of the objections of the objector are in the nature of fact finding, which have been replied by the petitioner. The objections which have a bearing on the determination of tariff of the project and the response there to by the petitioner are discussed in the succeeding paragraphs.

(a) The objector has sought to know the likely benefits to the consumers of TPL, Ahmedabad and those located outside the State on commissioning of the project and the impact of the project on the tariff rates of electricity in TPL, Ahmedabad. The petitioner has submitted that the objective of this project is to evacuate power from TPL, SUGEN plant to its beneficiaries including TPL, Ahmedabad, which is one of the approved sources of power to TPL. Accordingly, TPL, Ahmedabad is liable to pay the appropriate transmission charges for the use of the line/network.

(b) The objector has objected to the terms of loan availed by the petitioner and disputed the reset mechanism for interest rate. The petitioner has clarified that best efforts were made to avail the best rate of interest available in the market. As regards the reset of interest rate, it has been submitted that it is the standard practice being followed by the lenders.

(c) The objector has alleged that the unit erection charges are higher by more than 15% and actual usage of the quantity of steel reinforcement has been inflated. The petitioner has refuted the allegations and has submitted that it has followed due process of tendering to award the bids for erection/commissioning of transmission lines and associated transmission works. The expenses incurred are being duly verified by the statutory auditors of the petitioner. The certificate issued by the auditors for the expenses incurred has been submitted as part of the petition for determination of tariff.

(d) The objector has submitted that though the project got approval of the Central Government on 25.8.2005, its execution has been delayed by five years. On account of delay in execution, extra expenditure has been incurred. The petitioner has denied the allegations and submitted that the implementation of the EHV transmission line mandates approval from the various Statutory Authorities in compliance to the provisions of the Act and the Regulations. The petitioner has also submitted that the project is expected to be completed within the approved project cost.

(e) The objector has submitted that the petitioner, TPGL and TPL are related companies and hence TPL should not be allowed to make profit by selling power to the petitioner. The petitioner has submitted that TPL utilizes the network created by the petitioner to evacuate power to the beneficiaries of SUGEN plant and does not sell any power to TPGL. The petitioner has submitted that the allegations leveled are totally baseless and devoid of any merit.

(f) The objector has submitted that the applicable taxes and duties should be borne by the companies that have got the work orders of the petitioner. In this regard, the petitioner has submitted that the taxes and duties are required to be paid by the petitioner to the State/ Central Government as per the applicable laws and which in turn are required to be recovered from its beneficiaries.

10. We have considered the objections of the objector and the reply of the petitioner. The objections of the objector have been duly met by the petitioner in its rejoinder. As regards the benefits of the project to the consumers of TPL, it is clarified that the Commission while approving the transmission licence has taken into account the utility of the transmission line for evacuation of power from the generating station to the distribution companies of TPL. The tariff of the transmission system has been determined strictly in accordance

with the 2009 Tariff Regulations after carrying out due prudence check of the expenditure incurred.

<u>Capital cost</u>

11. Regulation 7(1) of the 2009 Tariff Regulations provides as under:-

> "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."

12. The apportioned approved cost, capital cost as on the actual date of commercial operation and estimated additional capital expenditure projected to be incurred for the asset covered in the instant petition are as under:-

(₹ in lakh)

Apportioned approved cost	Expenditure incurred upto date of commercial operation	Projected additional capital expenditure		Total estimated completion cost
		Date of commercial operation to 31.3.2011	2011-2012	
11542.00	7747.81	694.32	399.46	8841.59

13. The petitioner has not claimed any initial spares for Phase-II of the transmission system.

14. The petitioner has claimed capital expenditure of ₹8841.59 lakh (including un-discharged liabilities of ₹1093.78 lakh) as on the date of commercial operation. Subsequently, the petitioner, vide its affidavit dated 22.9.2011 has confirmed that the amount of ₹1093.78 lakh towards un-discharged liabilities was unpaid as on the date of commissioning of Phase-II i.e. 1.4.2010 and also submitted auditor certificate dated 6.9.2011 along with revised tariff forms. Therefore, un-discharged liabilities of ₹1093.78 lakh and disallowed IDC & IEDC of ₹20.05 lakh have been excluded from the capital cost. Accordingly, capital cost of ₹7727.76 lakh as on the date of commercial operation has been considered to work out tariff.

Time over-run

15. The investment approval was accorded on 21.8. 2007, the actual work started only after the receipt of statutory approval under Section 164 of the Electricity Act, 2003 on 27.1.2009. Further, the petitioner has submitted that the delay in commissioning of the project is mainly on account of inadequate deployment of resources by the implementing agency and also partially due to revision in the scheme of implementation.

16. The petitioner, vide affidavit dated 29.11.2010, has submitted that the Letter of Award (LoA) was placed on 18.11.2008. The timeline for successful testing and commissioning of the transmission line was 15 months from the date of LoA, i.e. 1.3.2010. But, the asset has been put under commercial operation on 1.4.2010. Therefore there has been a delay of one month in commissioning of the asset. The petitioner has submitted that the delay is

because of the time taken for grant of approval under section 164 of the Electricity Act, 2003 (hereinafter referred to as “the Act”). It has been observed that the approval under Section 164 was sought on 6.6.2007 and the approval was granted on 28.1.2009. The petitioner has submitted that the work was initiated only after the receipt of approval under Section 164 of the Act.

17. We have considered the information submitted by the petitioner in its affidavit and in the main petition. It is observed that the tender for selecting the contractor for execution of the project was issued in May 2008. The LOA was issued to M/s. Association Transmission Structure Limited on 18.11.2008. In the said LOA, it has been indicated in paragraph 9.2 that the time of successful testing and commissioning of transmission line covered under the contract is 15 months from the date of LOA, i.e.1.3.2010. However, the project was declared under commercial operation on 1.4.2010, resulting in delay of one month. It is pertinent to mention that on the date of issue of LOA, the application of the petitioner for authorization under Section 164 of the Act was still pending with the Ministry of Power. It is noticed that LOA has been awarded on 18.11.2008 and there is no mention in the LOA that work will start after receipt of the sanction under Section 164 of the Act. The approval under Section 164 of the Act was received on 28.1.2009. In other words approval under Section 164 was accorded barely two months and 10 days of issue of LOA. The petitioner has not provided the details of the different stages of execution of the work, i.e. placing the order for equipments, starting the construction work for erection of tower, stringing of the lines, listing, charging

and commissioning, etc. However, after the approval under Section 164 of the Act was accorded, the petitioner had about one year and 20 days for erection of towers and other subsequent activities. Therefore, delay in getting the approval under Section 164 of the Act does not appear to have affected the project schedule. The delay may be attributable to other reasons which can be ascertained only if the detailed timelines given to the contractor for execution of the work and the actual milestones achieved against the stipulated timeline are furnished. However, the material available on record does not establish that the delay in approval under Section 164 of the Act has affected the project schedule. Therefore, the time over-run of one month in commissioning of Phase II is not condoned and accordingly the IDC and IEDC for one month have been disallowed.

18. The details of IDC and IEDC disallowed are as under:-

(₹ in lakh)

Detail of IDC and IEDC as per CA Certificate dated 7.7.2010		
	IDC	**IEDC**
Total IDC and IEDC Claimed up to COD	223.91	96.88
Detail of IDC and IEDC Disallowed for one month		
Total Disallowed IDC and IEDC (for 1 month)*	13.99	6.06

*IDC and IEDC have been deducted for one month proportionately.

19. The disallowed IDC and IEDC have been deducted proportionately from the cost of elements as on the date of commercial operation as shown overleaf:-

(₹ in lakh)

Capital expenditures as on 31.3.2009/DOCO	Cost as on DOCO	IDC and IEDC disallowed	Capital cost after deducting one month IDC and IEDC
	(a)	(b)	(c)= (a)-(b)
Lines on Fabricated steel operating at normal voltage higher than 66 kV	7726.74	19.99	7706.75
Vehicles	6.39	0.02	6.37
Office Furniture and Furnishing	8.20	0.02	8.18
Office Equipments	0.47	0.00	0.47
Communication Equipments	0.05	0.00	0.05
I T Equipments	5.96	0.02	5.94
Total	**7747.81**	**20.05**	**7727.76**

Additional capital expenditure

20. Regulation 9(1) of the 2009 Tariff Regulations provides as under:-

"(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) XXX
(iii) XXX
(iv) XXX
(v) XXX"

21. The 2009 Tariff Regulations further define cut-off date as follows:-

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

Therefore, the cut-off date for the above mentioned assets is 31.3.2013.

22. The petitioner has claimed projected additional capital expenditure of ₹694.32 lakh and ₹399.46 lakh for the year 2010-11 (date of commercial operation to 31.3.2011) and 2011-12 respectively under clause 9(1) of the 2009 Tariff Regulations on account of un-discharged liabilities. The petitioner's claim for projected additional capital expenditure falls within the cut-off date. Hence, the same has been considered for the purpose of tariff calculation.

Debt-equity ratio

23. Regulation 12(1) of the 2009 Tariff Regulations provides that-

> "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."

24. The petitioner has availed consolidated loan for approximately 70% of the entire project for all the phases of the project. On account of difficulty to segregate the debt portion for Phase-I, II and III of the project, the petitioner has considered normative debt: equity ratio of 70:30 to arrive at normative loan for the assets covered in Phase II in accordance with Regulation 12 of the 2009 Tariff Regulations. Accordingly, normative debt: equity ratio of 70:30 has been considered for the purpose of tariff calculation. However, petitioner is directed to submit the actual debt and equity deployed for each

phase on completion (i.e. end of Phase III) of whole project at the time of truing up or the completion of project whichever is earlier. In the event of change in debt: equity ratio of whole project, there may be a consequential impact on capital cost of Phase-II in respect of debt: equity and apportioning of IDC. The petitioner is directed to file revised petition if there is any change in funding pattern of Phase-II on this count, after the time of completion of project.

25. Details of debt: equity ratio of asset considered for the purpose of tariff calculations is as under:-

Capital cost as on 1.4.2010		
Amount (₹ in lakh)		**%**
Debt	5409.43	70.00
Equity	2318.33	30.00
Total	**7727.76**	**100.00**

26. Details of debt : equity ratio of asset as on 31.3.2014 is as follows:-

Capital Cost as on 31.3.2014		
Amount (₹ in lakh)		**%**
Debt	6175.08	70.00
Equity	2646.46	30.00
Total	**8821.54**	**100.00**

27. Details of projected additional capital expenditure claimed by the petitioner are as follows:-

	(₹ In lakh)	**%**
Particular	Normative	
	Add Cap for 2010-11	
Debt	486.02	70.00
Equity	208.30	30.00
Total	**694.32**	**100.00**
	Add Cap for 2011-12	
Debt	279.62	70.00
Equity	119.84	30.00
Total	**399.46**	**100.00**

Return on equity

28. Regulation 15 of the 2009 Tariff Regulations provides that,-

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

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

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

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

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

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

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

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

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

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

29. The petitioner has claimed additional return on equity of 0.5% for completion of project within the time frame, by counting the time schedule from the date of receipt of clearance under section 164, which was granted on 28.1.2009. Madhya Pradesh Power Management Company Limited, vide affidavit dated 14.5.2012 has submitted that the additional return on equity of 0.5% claimed by the petitioner may not be allowed as the delay in completion of the project was mainly on account of difficulties faced in execution of the work at the site. We have considered the submissions of the petitioner and the respondent. As per Appendix II to 2009 Tariff Regulations, the time schedule for granting additional return on equity is counted from the date of investment approval. Accordingly, counting 28 months from the date of investment approval on 21.8.2007, the scheduled date of commercial operation works out to 21.12.2009 whereas the asset has been put under commercial operation on 1.4.2010. Since the project has not been executed within the prescribed timeline in the Appendix II to 2009 Tariff Regulations the petitioner is not entitled for additional return on equity.

30. In view of the above, the following amount of equity has been considered for calculation of return of equity:-

(₹ in lakh)

Equity as on date of commercial operation	Notional equity due to ACE for the period 2010-11	Total equity considered for tariff calculations for the period 2010-11*	Notional equity due to ACE for the period 2011-12	Total equity considered for tariff calculation for the period 2011-12*	Notional equity due to ACE for the period 2012-14	Total equity considered for tariff calculation for the period 2012-14*
2318.33	208.30	2422.48	119.84	2586.54	0.00	2646.46

*Average equity during the period has been considered to work out the return on equity.

31. Accordingly, the following amount of return on equity has been allowed:-

(₹ in lakh)

Particulars	2010-11	2011-12	2012-13	2013-14
Opening Equity	2318.33	2526.62	2646.46	2646.46
Addition due to additional capital expenditure	208.30	119.84	0.00	0.00
Closing Equity	2526.62	2646.46	2646.46	2646.46
Average Equity	2422.48	2586.54	2646.46	2646.46
Return on Equity (Base Rate)	**15.50%**	**15.50%**	**15.50%**	**15.50%**
Tax rate for the year 2008-09	11.33%	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre-Tax)	**423.47**	**452.15**	**462.63**	**462.63**

Interest on loan

32. Regulation 16 of the 2009 Tariff Regulations provides that-

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

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

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

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

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

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

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

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

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

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

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

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

33. In the calculations, the interest on loan has been worked out as detailed below:-

(a) Gross amount of loan, repayment of instalments and rate of interest have been considered as per the petition.

(b) The repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that period.

(c) Notwithstanding moratorium period availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

(d) Weighted average rate of interest on actual loan is applied on the notional average loan during the year to arrive at the interest on loan.

(e) Bank of Baroda has sanctioned a term loan of ₹24400 lakh to the petitioner with floating rate of interest for all the phases of the project. Interest rate applicable for the consolidated loan is considered for the purpose of weighted average rate of interest on actual loan for respective phases. The petitioner has availed disbursement from 8.9.2010. The petitioner has submitted, vide affidavit dated 22.9.2011, the calculation of weighted average interest rate of 10.75% and 11.12% to be considered for 2010-11 and 2011-12 along with the proof of interest rate.

34. In the instant case, the actual interest rate is available beyond the DOCO i.e. for the year 2010-11, 2011-12. Therefore, rate of interest for a particular year has been considered to the extent of available details as per actual loan portfolio and last available rate is considered as base rate for balance period. The consideration of actual interest rate to the extent of its availability will reduce burden of interest on beneficiaries. The same will be reviewed at the time of truing up. Detailed calculation of the weighted average rate of interest has been given in Annexure to this order.

35. Details of the interest on loan worked on the above basis are given overleaf:-

(₹ in lakh)

Particulars	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	5409.43	5895.46	6175.08	6175.08
Cumulative Repayment upto Previous Year	0.00	427.29	883.46	1350.18
Net Loan-Opening	5409.43	5468.16	5291.61	4824.90
Addition due to additional capital expenditure	486.02	279.62	0.00	0.00
Repayment during the year	427.29	456.17	466.72	466.72
Net Loan-Closing	5468.16	5291.61	4824.90	4358.18
Average Loan	5438.80	5379.89	5058.26	4591.54
Weighted Average Rate of Interest on Loan	10.7500%	11.1151%	11.1151%	11.1151%
Interest	**584.67**	**597.98**	**562.23**	**510.35**

Depreciation

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

> "17. (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.
> xxxx
> xxxx
>
> (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."

37. The asset covered in the instant petition was put under commercial operation on 1.4.2010 and accordingly will complete 12 years beyond 2013-14 and thus depreciation for the tariff period has been calculated annually based on Straight Line Method and at the rates specified in Appendix-III.

38. Details of the depreciation worked out are as under:-

(₹ in lakh)

Particulars	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Opening Gross Block	7727.76	8422.08	8821.54	8821.54
Addition during 2009-14 due to projected additional capital expenditure	694.32	399.46	0.00	0.00
Closing Gross Block	8422.08	8821.54	8821.54	8821.54
Average Gross Block	**8074.92**	**8621.81**	**8821.54**	8821.54
Rate of Depreciation	5.2916%	5.2909%	5.2906%	5.2906%
Depreciable Value	7267.43	7759.63	7939.39	7939.39
Remaining Depreciable Value	7267.43	7332.34	7055.92	6589.21
Depreciation	**427.29**	**456.17**	**466.72**	**466.72**

Operation & Maintenance Expenses

39**.** Regulation 19(g) of the 2009 Tariff Regulations specifies the following norms for O&M expenses for assets covered in this petition:-

(₹ in lakh)

Element	2010-11	2011-12	2012-13	2013-14
400 kV D/C (twin conductor) transmission line (₹ lakh per km)	0.663	0.701	0.741	0.783

40. The allowable O&M expenses for the asset covered in the petition are as under:-

(₹ in lakh)

Element	2010-11	2011-12	2012-13	2013-14
&80.652 km, 400 kV D/C (twin conductor) Transmission Line	53.47	56.54	59.76	63.15
Total O&M expenses	**53.47**	**56.54**	**59.76**	**63.15**

Interest on Working Capital

41. The components of the working capital and the interest thereon are discussed hereunder:-

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

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

(iii) O & M expenses: Regulation 18(1)(c)(iii) of the 2009 Tariff Regulations provides for operation and maintenance expenses for one month as a component of working capital. O&M expenses for one month has been considered in the working capital.

(iv) Rate of interest on working capital: The petitioner has considered the short term prime lending rate of State Bank of India as on 1.4.2009 i.e. 12.25% considering date of commercial operation 26.3.2010, under Regulation 18(3) of the 2009 Tariff Regulations. However, Regulation 3(12)(c) of the 2009 Tariff Regulations provides as under:-

> "3(12)(c) in relation to the transmission system, the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful charging and trial operation:
> provided that the date shall be the first day of a calendar month and transmission charge for the element shall be payable and its availability shall be accounted for, from that date.
> Provided further that in case an element of the transmission system is ready for regular service but is prevented from providing such service for reasons not attributable to the transmission licensee, its suppliers or contractors, the Commission may approve the date of commercial operation prior to the element coming into regular service."

42. Accordingly, the date of commercial operation of the asset considered for the purpose of calculation of annual charges is 1.4.2010. As per the 2009 Tariff Regulations the rate of interest on working capital @ 11.75%, based on SBI PLR as on 1.4.2010 has been considered.

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

(₹ in lakh)

Particulars	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Maintenance Spares	8.02	8.48	8.96	9.47
O & M expenses	4.46	4.71	4.98	5.26
Receivables	253.36	265.94	264.00	255.77
Total	265.83	279.13	277.94	270.51
Rate of Interest	**31.24**	**32.80**	**32.66**	**31.78**

TRANSMISSION CHARGES

44. The transmission charges being allowed for the transmission assets are summarized overleaf:-

(₹ in lakh)

Particulars	2010-11	2011-12	2012-13	2013-14
Depreciation	427.29	456.17	466.72	466.72
Interest on Loan	584.67	597.98	562.23	510.35
Return on Equity	423.47	452.15	462.63	462.63
Interest on Working Capital	31.24	32.80	32.66	31.78
O & M Expenses	53.47	56.54	59.76	63.15
Total	**1520.14**	**1595.64**	**1583.99**	**1534.63**

FILING FEE AND THE PUBLICATION EXPENSES:-

45. 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 beneficiary on *pro-rata* basis.

LICENCE FEE

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

SHARING OF TRANSMISSION CHARGES

47. The Commission while granting the provisional tariff for the subject transmission line, vide order dated 8.12.2011 had directed that the provisional transmission charges shall be recovered on monthly basis in accordance with Regulations 23 and shared by the beneficiaries in accordance with Regulation 33 of 2009 Tariff Regulations upto 30.6.2011 and with effect from 1.7.2011,

the billing, collection and distribution of the transmission charges shall be governed by the provisions of Central Electricity Regulatory Commission (sharing of inter-State transmission charges and losses) Regulations, 2010 and Removal of difficulty order issued thereunder. The petitioner had filed Review Petition No. 8/RP/2012 praying that it should be exempted from the pooling of the transmission charges under the Regulation 23 of 2009 Tariff Regulation and sharing regulations, since the cost of the transmission charges would be entirely borne by the SUGEN beneficiaries and not by the constituents of the Western Region. The Commission in its order dated 23.8.2012 had rejected the prayer of the petitioner for review of the provisional tariff order and observed that the issue regarding sharing of the transmission charges would be considered at the time of issuing the order for final tariff.

48. After issuance of the provisional tariff order, the petitioner in its letter dated 27.12.2011 addressed to the Secretary of the Commission has submitted that the transmission charges of TPGL would be borne by the SUGEN beneficiaries only and not by all the constituents of the Western Region. In this connection, the petitioner has referred to its submission in Petition No. 275/2009 and the reply of MPPTCL in Petition no. 275/2009. In its reply to the petition, MPPTCL has not recorded any objection regarding the sharing of transmission charges of the transmission system by the Western Region beneficiaries. GUVNL in its reply dated 18.6.2012 has submitted that the transmission tariff of the transmission should be borne by M/s Torrent

Power Limited, Ahmedabad both under the pre-PoC regime as well as the post-PoC regime.

49. We have considered the submission of the petitioner and the objections of the respondents. The petitioner has not made any specific prayer regarding the sharing of transmission charges of the transmission system in the main petition. However, in para 2.2 of the petition, the petitioner has submitted that the transmission system will connect SUGEN Power Project to Western Region and will be utilised to transfer power to its beneficiaries of Ahmedabad and outside the State. Therefore, by its own submission, the transmission system will be used by beneficiaries of the Western Region in addition to the SUGEN beneficiaries. Since, the transmission assets form part of the inter-State Transmission System for which transmission licence has been granted by the Commission, the transmission charges of the transmission assets of the petitioner being a part of the ISTS shall be shared in accordance with Regulation 23 of the 2009 Tariff Regulations up to 30.6.2011. With effect from 1.7.2011, the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010 came into force. As per Regulation 2(2) of the Sharing Regulations, the regulations are applicable to all designated ISTS customers, inter-State licensees, etc. Since the petitioner is an inter-State transmission licensee, the sharing of transmission charges and losses of the petitioner shall be governed by the provisions of the Sharing Regulations.

50. This order disposes of Petition No. 318/TT/2010.

sd/-	sd/-
(M. Deena Dayalan) **Member**	**(S. Jayaraman)** **Member**

Annexure

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹ in lakh)

	Details of Loan	**2010-2011**	**2011-2012**	**2012-2013**	**2013-14**
1	**Bank of Baroda**				
	Gross loan opening	5423.47	5909.49	6189.11	6189.11
	Cumulative Repayment upto DATE OF COMMERCIAL OPERATION/previous year	0.00	0.00	258.22	774.65
	Net Loan-Opening	5423.47	5909.49	5930.89	5414.46
	Additions during the year	486.03	279.62	0.00	0.00
	Repayment during the year	0.00	258.22	516.44	516.44
	Net Loan-Closing	5909.49	5930.89	5414.46	4898.02
	Average Loan	5666.48	5920.19	5672.67	5156.24
	Rate of Interest	**10.7500%**	**11.1151%**	**11.1151%**	**11.1151%**
	Interest	609.15	658.03	630.52	573.12