CENTRAL ELECTRCITY REGULATORY COMMISSION
NEW DELHI

Petition No. 121/GT/2014

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

Date of Hearing: 13.01.2015
Date of Order: 30.10.2015

In the matter of

Revision of annual fixed charges of UNOSUGEN Power Plant (382.5 MW) of Torrent Power Limited for the period from the date of commercial operation (4.4.2013) to 31.3.2014-Truing up of tariff determined by order dated 6.12.2013 in Petition No. 175/GT/2013

AND

In the matter of

Torrent Power Ltd
Torrent House, Off Ashram Road,
Near Income Tax Circle,
Ahmedabad - 380009 …**Petitioner**

Vs

1. Torrent Power Ltd
(Ahmedabad Distribution)
Electricity House, Lal Darwaja,
Ahmedabad – 380001

2. Torrent Power Ltd
(Surat Distribution)
Torrent House, Station Road,
Surat – 395003

3. PTC India Ltd.
2nd floor, NBCC Tower,
Bhikhaji Cama Place,
New Delhi – 110066

4. Madhya Pradesh Power Management Co. Ltd.
Shakti Bhavan,
Vidyut Nagar, Jabalpur – 482008 …**Respondents**

Parties present

Shri A.K Ghosh, TPL
Shri R.S Negi , TPL

ORDER

This petition has been filed by the petitioner, Torrent Power Ltd (TPL) for revision of annual fixed charges of UNOSUGEN Power Plant (382.5 MW) ('the generating station') for the period from 4.4.2013 to 31.3.2014 after truing-up exercise based on Regulation 6(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 ("the 2009 Tariff Regulations").

2. TPL is a public limited company incorporated under Companies Act, 1956 and is carrying on the business of generation and distribution of electricity in the cities of Ahmedabad, Surat, Gandhinagar, Bhiwandi and Agra. The petitioner has set up the generating station at the premises where the SUGEN power plant (1147.5 MW) of the petitioner is located. The present generation capacity of the petitioner is around 2079.6 MW and one more project of 1200 MW is at an advanced stage of implementation. The petitioner has submitted that the project has been awarded Mega Power status by the Government of India vide its letter dated 29.7.2010.

3. The petitioner has entered into long term Power Purchase Agreement (PPA) with PTC India Ltd for sale of 35 MW of power from the generating station and PTC will sell the power on back-to-back basis to the respondent, MPPMCL, the beneficiary herein. Also, the petitioner will supply 278 MW of power to its licensed distribution divisions located in Ahmedabad, Gandhinagar and Surat under the long term PPAs to be approved by the Gujarat Electricity Regulatory Commission and the residual power is being sold by the petitioner through short

term bilateral contract/or through Power Exchange. The main fuel of the project comprises of a mix of domestic natural gas and Re-gasified Liquefied Natural Gas (R-LNG).

4. The Commission by order dated 6.12.2013 in Petition No. 175/GT/2013 had approved the annual fixed charges of the generating station, considering the capital cost of ₹160855.09 lakh as on 4.4.2013. The annual fixed charges and capital cost approved by order dated 6.12.2013 is as under:

Capital Cost

(₹ in lakh)

	4.4.2013 to 31.3.2014
Opening Capital Cost	160855.09
Add: Projected Additional Capital Expenditure	22399.85
Closing Capital Cost	183254.94
Average Capital Cost	172055.01

Annual Fixed Charges

(₹ in lakh)

	4.4.2013 to 31.3.2014
Return on Equity	10122.00
Interest on Loan	11798.81
Depreciation	8698.69
Interest on Working Capital	5258.58
O&M Expenses	11466.55
Total	**47344.63**

5. Clause (1) of Regulation 6 of the 2009 Tariff Regulations provides as under:

"6. Truing up of Capital Expenditure and Tariff

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

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

6. As stated, this petition has been filed by the petitioner for revision of tariff based on truing-up exercise for the period from 4.4.2013 to 31.3.2014. Accordingly, the capital cost and the annual fixed charges claimed by the petitioner are as under:

Capital Cost

(₹in lakh)

	2013-14 (4.4.2013 to 31.3.2014)
Opening Capital Cost	160855.09
Add: Additional capital expenditure	15035.28
Closing Capital Cost	**175890.37**
Average Capital Cost	**168372.73**

Annual Fixed Charges

(₹in lakh)

	2013-14 (4.4.2013 to 31.3.2014)
Return on Equity	9905.59
Interest on Loan	12048.03
Depreciation	8602.93
Interest on Working Capital	5257.41
O&M Expenses	11466.55
Total	**47280.51**

7. The matter was heard on 13.1.2015 and the Commission after directing the petitioner to file certain additional information had reserved orders in the petition. The petitioner has filed the additional information and has served copy on the respondents. None of the respondents have filed reply in the matter. Based on the submissions and the documents available on record, we proceed to revise the tariff of the generating station, on prudence check, after truing-up in terms of the 2009 Tariff Regulations as stated in the subsequent paragraphs.

Capital cost up to COD

8. As stated, the Commission vide order dated 6.12.2013 in Petition No. 175/GT/2013 had approved tariff of the generating station considering the capital cost of ₹160855.09 lakh as on

4.4.2013. The petitioner, in this petition has claimed the admitted capital cost of ₹160855.09 lakh as on COD as per detailed break-up as under:

(₹ in lakh)

Auditor certified capital cost as on COD (*inclusive of IDC of ₹11643.69 lakh and FC of ₹6889.74 lakh*)	**160362.15**
Add: Notional IDC	494.00
Less: IDC disallowed in Order dated 6.12.2013	1.06
Capital cost as on COD	**160855.09**

9. The petitioner was directed vide ROP dated 30.1.2015 to furnish the Auditor's certificate in respect of Gross Block and Un-discharged liabilities as on the COD of the generating station. In response, the petitioner vide its affidavit dated 30.3.2015 has furnished the Auditor certificate of the actual project cost for ₹160362.15 lakh as on 4.4.2013 (COD of the generating station). This includes receivables towards infirm power for ₹1776.00 lakh (duly certified by auditor) and is after excluding un-discharged liabilities of ₹17104.45 lakh. Accordingly, the Auditor certified capital cost on cash basis, as on COD of the generating station, works out to ₹158586.15 lakh and the same has been considered for the purpose of tariff.

10. In addition, the capital cost as on COD includes IDC of ₹11643.69 lakh and FC of ₹6889.74 lakh as against the IDC of ₹11957.18 lakh and FC of ₹6889.74 lakh submitted in Petition No. 175/GT/2013. In view of this, IDC to be disallowed as on COD works out to ₹3.49 lakh, as against IDC of ₹1.06 lakh disallowed in order dated 6.12.2013 in Petition No. 175/GT/2013.

11. The petitioner has claimed notional IDC of ₹494.00 lakh as on 4.4.2013 (COD). The provisions of the 2009 Tariff Regulations do not provide for capitalization of the same. However, in terms of clause (a) of Regulation 7(1) of the 2009 Tariff Regulations, the Normative IDC over and above the actual IDC has been worked out as ₹491.18 lakh, considering the quarterly debt-

equity position corresponding to actual cash expenditure. This has been allowed for the purpose of tariff.

12. It is observed that the petitioner vide affidavit dated 16.3.2015 in Petition No. 523/GT/2014, pertaining to tariff of SUGEN Power Project (another generating station of the petitioner) had submitted that the Auditor certified un-discharged liability of ₹472.02 lakh as on 31.3.2014, includes un-discharged liabilities of ₹112.76 lakh in respect of this generating station (UNOSUGEN) for the year 2013-14. The petitioner has also confirmed that the Auditor certified un-discharged liability in the instant petition does not include the liability of ₹112.76 lakh. Accordingly, the un-discharged liability of ₹112.76 lakh in respect of this generating station, which had been wrongly booked to SUGEN Power Plant of the petitioner, has been reduced from the admitted capital cost.

13. Based on the above, the admitted capital cost as on COD of the generating station is worked out as ₹158961.14 lakh and the same is considered for tariff.

Additional Capital Expenditure

14. Regulation 9 of the 2009 Tariff Regulations, as amended on 21.6.2011 and 31.12.2012 provides as under**:**

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

(i) Un-discharged 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;

(iii) 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, un-discharged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff.

(2) The capital expenditure incurred or projected to be incurred on the following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:

(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;

(ii) Change in law;

(iii) Deferred works relating to ash pond or ash handling system in the original scope of work;

(iv) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) including due to geological reasons after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation; and

(v) In case of transmission system any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system:

Provided that in respect sub-clauses (iv) and (v) above, any expenditure on acquiring the minor items or the assets like tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2009.

(vi) In case of gas/liquid fuel based open/ combined cycle thermal generating stations, any expenditure which has become necessary on renovation of gas turbines after 15 year of operation from its COD and the expenditure necessary due to obsolescence or non-availability of spares for successful and efficient operation of the stations.

Provided that any expenditure included in the R&M on consumables and cost of components and spares which is generally covered in the O&M expenses during the major overhaul of gas turbine shall be suitably deducted after due prudence from the R&M expenditure to be allowed.

(vii) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receipt system arising due to non-materialisation of full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station.

(viii) Any un-discharged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date, after prudence check of the details of such

deferred liability, total estimated cost of package, reason for such withholding of payment and release of such payments etc.

(ix) Expenditure on account of creation of infrastructure for supply of reliable power to rural households within a radius of five kilometers of the power station if, the generating company does not intend to meet such expenditure as part of its Corporate Social Responsibility."

15. The additional capital expenditure claimed by the petitioner and allowed by Commission's order dated 6.12.2013 in Petition No.175/GT/2013 for 2013-14 is as under:

(₹ in lakh)

	Claimed	**Allowed**
Payment of un-discharged liabilities toward EPC cost	17059.16	17059.16
Payment of un-discharged liabilities toward EOH cost	1970.0	0.00
Non-EPC works & Employee related liabilities	3761.74	3160.18
CSR Initiatives	182.00	182.00
Expected receivable from commissioning related activities	(-) 775.44	(-) 775.44
IDC, FC and FERV	2773.95	2773.95
Total	**24971.41**	**22399.85**

16. The petitioner vide affidavit dated 19.6.2014 has claimed actual additional capital expenditure from COD (4.4.2013) to 31.3.2014 in Form- 9 as under:

(₹in lakh)

	2013-14
Payment of un-discharged liabilities toward EPC cost	13051.66
Non-EPC works & Employee related liabilities	176.23
CSR Initiatives	2.14
Expected receivable from commission related activities	(-)782.17
IDC, FC and FERV	2586.36
Total	**15034.23**

17. The petitioner has submitted that the actual additional capital expenditure incurred are in accordance with Regulations 9(1)(i) and 9(1)(ii) of the 2009 Tariff Regulations and is covered within the original scope of work of the project. This expenditure represents the balance of works as well as un-discharged liabilities. The actual capital expenditure incurred during COD to 31.3.2014 is ₹15034.23 lakh and is based on certificate of Auditor and hence the same is as per books of accounts.

Reconciliation of the actual additional capital expenditure in 2013-14 with the books of accounts duly certified by the Auditor

18. The reconciliation of the actual capital expenditure for the period from COD (4.4.2013) to 31.3.2014 with the books of accounts is detailed as under:

(₹in lakh)

1	Actual expenditure as on COD (4.4.2013)	160362.14
2	Actual expenditure as on 31.3.2014	173069.99
3	Additional expenditure incurred based on certificates of Auditor (2-1)	12707.85
4	Add: FERV loss capitalized pertaining to period up to COD as per Regulation 40 of the 2009 Tariff Regulations.	2326.38
	Actual additional capital expenditure from 4.4.2013 to 31.3.2014	**15034.23**

19. As against the approved additional capital expenditure of ₹22399.85 lakh in order dated 6.12.2013, the actual additional capital expenditure claimed for the period from 4.4.2013 to 31.03.2014 is only ₹15034.23 lakh Thus, there is an unspent additional capital expenditure of ₹7365.62 lakh (22399.85-15034.23). The petitioner has submitted that it has pruned its unspent amount of ₹7365.62 lakh to ₹4974.94 lakh presently, based on the latest projection**.** The reasons for the decrease in the claim for additional capitalization are mainly due to the surrender of additional expenditure of ₹2390.68 lakh and shifting of additional expenditure of ₹4974.94 lakh to the next tariff period (2014-19).

20. It is noticed that the claim of the petitioner for actual capital expenditure of ₹160362.14 lakh as on COD and ₹173069.99 lakh as on 31.3.2014 includes receivables in respect of infirm power amounting to ₹2.40 lakh and ₹1776.00 lakh respectively. This has been reduced from the actual expenditure in order to work out the additional capital expenditure on cash basis.

21. As regards the FERV claim of petitioner for ₹2326.38 lakh, it is noticed that the petitioner has capitalised FERV amounting to ₹5660.44 lakh till 31.3.2014 (₹2326.38 lakh upto 4.4.2013

and ₹3334.06 lakh from COD (4.4.2013) to 31.3.2014) on accrual basis and the same are yet to be discharged as on 31.3.2014. In line with the consistent methodology adopted by the Commission FERV upto COD is only allowed as capital cost for the purpose of tariff. However, as the said amount is yet to be discharged, the capitalisation of FERV has not been allowed as additional capital expenditure from 4.4.2013 to 31.3.2014. However, the said amount will be considered for tariff as and when the same is discharged by the petitioner. Accordingly, the admissible additional capital expenditure is worked out as under:

(₹ in lakh)

	Actual Capital Cost (certified by auditor)	Infirm power (receivable)	Capital Expenditure (on cash basis)
As on 31.3.2014	173069.99	2.40	173067.59
Less: As on COD	160362.14	1776.00	158586.15
Additional Capital Expenditure	**12707.85**	**(-) 1773.60**	**14481.44**

22. Based on the above discussions, the capital cost approved for the period from 4.4.2013 to 31.3.2014 is as under:

(₹ in lakh)

	2013-14 (4.4.2013 to 31.3.2014)
Opening Capital Cost	158961.14
Add: Additional Capital Expenditure	14481.44
Closing Capital Cost	**173442.58**
Average Capital Cost	**166201.86**

Debt-Equity Ratio

23. The petitioner has considered the debt-equity ratio of 70:30 as on COD of the generating station and for the additional capital expenditure. The actual debt-equity ratio as on COD and 31.3.2014 works out to 66.52:33.48 and 68.75:31.25 respectively which are within the normative debt-equity ratio of 70:30. Accordingly, the debt-equity ratio of 70:30 has been considered in terms of Regulation 12 of the 2009 Tariff Regulations for the purpose of tariff.

Return on Equity

24. The petitioner has claimed the Return on Equity (ROE) of 19.610% [(15.50/(1-20.961%)] per annum on the normative equity after considering the base rate of 15.50%, in line with the first proviso to clause (2) of Regulation 15 of the 2009 Tariff Regulations and the tax rate of 20.961% (MAT rate for the annual year 2014-15). The same is in order and considered for the purpose of tariff. Accordingly, Return on Equity has been worked out as under:

(₹ in lakh)

	4.4.2013 to 31.3.2014
Normative Equity - Opening	47688.34
Addition due to Additional capital expenditure	4344.43
Normative Equity – Closing	52032.77
Normative Equity – Average	49860.56
Base Rate for return on equity	15.50%
Applicable Tax Rate	20.961%
Rate of Return on Equity (Pre-tax)	19.610%
Return on Equity	**9777.66**

Interest on loan

25. In terms of Regulations 16 of the 2009 Tariff Regulations**,** interest on loan has been worked out as mentioned below:

(a) The gross normative loan corresponding to 70% of admissible capital cost has been worked out to ₹111272.80 lakh as on COD.

(b) The net loan opening as on COD is same as gross loan as the cumulative repayment of loan up to the previous year/period is 'nil'.

(c) Depreciation allowed for the period has been considered as repayment.

(d) Average net loan is calculated as average of opening and closing.

(e) Weighted average rate of interest on loan has been calculated as shown below:

(i) Rate of interest considered in calculation in case of all loans is on annual rest basis.

(ii) Actual drawl as submitted by the petitioner has been considered.

26. Accordingly Interest on loan has been worked out and allowed as under:

(₹in lakh)

	4.4.2013 to 31.3.2014
Gross Opening Loan	111272.80
Cumulative Repayment of loan	0.00
Net Normative Loan – Opening	111272.80
Addition due to projected Additional Capital Expenditure	10137.01
Repayment of Normative Loan	8403.33
Net Normative Loan – Closing	113006.48
Normative Loan – Average	112139.64
Weighted Average Rate of Interest on loan	9.9481%
Interest on Loan	**11155.78**

Depreciation

27. The petitioner has calculated depreciation considering the weighted average rate of depreciation of 5.109%. However, the petitioner vide affidavit dated 30.3.2015 has revised the weighted average rate of depreciation to 5.098% and the same has been considered for the purpose of tariff. Accordingly, depreciation has been worked out as under:

(₹in lakh)

	4.4.2013 to 31.3.2014
Average capital cost	166201.86
Rate of depreciation	5.0980%
Depreciation (pro rata)	**8403.33**
Depreciation (annualized)	**8472.97**

Operation & Maintenance Expenses

28. The Commission in order dated 6.12.2013 in Petition No.175/GT/2013 had allowed the relaxed normative O&M expenses considering the additional cost to be incurred by the petitioner on LTSA/ LTMA cost with the OEM. Accordingly, the O&M expenses including LTSA/LTMA cost as approved by the Commission in the said order is as under:

"49. The Petitioner has estimated following O&M expenses for the generating station with F class gas turbines.

(₹in lakh)

Particulars	*2013-14*
LTSA/LTMA	*6685.30*
Other than LTSA/LTMA	*4781.25*
Total	*11466.55*

29. The petitioner vide affidavit dated 28.8.2014 has submitted the details of the actual O&M expenditure incurred during the year as under:

(₹in lakh)

Particulars	**2013-14**
LTSA/LTMA	6683.71
Other than LTSA/LTMA	419.46
Total	**7103.17**

30. The reason for the actual O&M expenditure incurred being less than the normative O&M allowed by the Commission, as submitted by the petitioner, is that since the commissioning of this generating station on 4.4.2013, the petitioner has been facing problem of fuel sourcing. It has therefore submitted that the maintenance schedule in terms of the LTSA/LTMA agreement is deferred as the same is linked to the running hours of machines. Accordingly, it has submitted that due to deferment of maintenance schedule, the O&M cost which were committed for the period 2013-14 have also been deferred.

31. The matter has been considered. It is observed that the similar issue of deferment of maintenance schedule due to shortage of fuel and less O&M expenses being incurred as against the normative O&M allowed was considered in Petition No. 523/GT/2014 (tariff of SUGEN CCCP of petitioner) and the Commission vide its order dated 25.6.2015 had observed as under:

> "*43. We have examined the matter. In consideration of the submissions of the petitioner and since the petitioner will have to incur the remaining amount in the subsequent period, we are of the view that it would not be prudent to undertake the revision of the O&M expenses based on actual, as prayed for by the respondent. It is also noticed, due*

to the deferment of some of the periodic inspections, the Repair & Maintenance works of the generating station have also been deferred on account of which the actual O&M expenses (other than LTSA/LTMA) incurred for the generating station are less than the normative O&M expenses allowed. Accordingly, the normative O&M (LTSA/LTMA+ Other O&M) expenses allowed by the Commission vide order dated 11.1.2010 in Petition No.109/2009 has been considered till the end of the tariff period i.e. up to 31.3.2014."

32. The decision of the Commission in the above matter is applied in the instant case of the petitioner. Accordingly, the normative O&M expenses allowed in order dated 6.12.2013 in Petition No.175/GT/2013 is allowed in this order, as under.

(₹in lakh)

	2013-14
LTSA-LTMA	6685.30
Other than LTSA/LTMA	4781.25
Total	**11466.55**

Normative Annual Plant Availability Factor

33. The Normative Annual Plant Availability Factor of 85% as considered in order dated 6.12.2013 in petition no. 175/GT/2013 has been considered for the purpose of tariff.

Interest on Working Capital

34. The components of working capital namely, Fuel cost, Liquid fuel cost, Maintenance spares, O&M expenses (1 month) as allowed in order dated 6.12.2013 in Petition No. 175/GT/2013, except for Receivables, shall remain unchanged and is considered in this order. Receivables equivalent to two months of capacity charge and energy charge has been worked out. The interest on working capital has been calculated based on rate of interest of 13.20% (SBI Base Rate of 9.70% plus 350 basis points, as on 1.4.2013). Interest on working capital has been worked out as under:

(₹ in lakh)

	4.4.2013 to 31.3.2014
Fuel Cost	9184.42
Liquid Fuel Cost	0.00
Maintenance spares	3439.97
Receivables	26051.07
O&M Expenses	955.55
Total working capital	**39631.00**
Rate of interest	13.2000%
Interest on working capital (annualized)	**5231.29**

Annual Fixed Charges

35. The annual fixed charges allowed for the period 2013-14 are summarized as under:

(₹in lakh)

	2013-14
Return on Equity	9777.66
Interest on Loan	11155.78
Depreciation	8472.97
Interest on Working Capital	5231.29
O&M Expenses	11466.55
Total	**46104.25**

Note: *(1) All figures are on annualized basis. (2) All the figures under each head have been rounded. The figure in total column in each year is also rounded. Because of rounding of each figure the total may not be arithmetic sum of individual items in columns.*

36. The difference in the annual fixed charges determined by order dated 6.12.2013 and those determined by this order shall be adjusted in accordance with Regulation 6 (6) of the 2009 Tariff Regulations.

37. Petition No 121/GT/2014 stands disposed of in terms of the above.

Sd/-	Sd/-	Sd/-
(A.S.Bakshi)	**(A. K. Singhal)**	**(Gireesh B. Pradhan)**
Member	**Member**	**Chairperson**