CENTRAL ELECTRCITY REGULATORY COMMISSION NEW DELHI

Petition No. 523/GT/2014

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

Date of Hearing: 05.03.2015 Date of Order: 25.06.2015

In the matter of

Revision of annual fixed charges of SUGEN Power Plant (1147.5 MW) of Torrent Power Limited for the period from the date of commercial operation to 31.3.2014-Truing up of tariff determined by order dated 1.10.2014 in Petition No. 221/GT/2013

AND

In the matter of

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

...Petitioner

Vs

- Torrent Power Ltd (Ahmedabad Distribution)
 Electricity House, Lal Darwaja, Ahmedabad – 380001
- Torrent Power Ltd (Surat Distribution)
 Torrent House, Station Road, Surat – 395003
- 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 Apoorva Misra, Advocate, TPL Shri Janmali Manikala, Advocate, TPL Shri Asis Ghosh, TPL Shri Deepak Dalal, TPL Shri Vinod Khanna, TPL Shri Rishab Singh, Advocate, MPPMCL

ORDER

This petition has been filed by the petitioner, Torrent Power Ltd for revision of annual fixed charges in respect of SUGEN Power Plant (1147.5 MW) ('the generating station') from the date of commercial operation to 31.3.2014 in terms of Regulation 6(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 ('the 2009 Tariff Regulations').

2. The generating station consist of 3 Units/Blocks of 382.5 MW each modules having advance class gas turbine (Siemens make) along with associated Waste Heat Recovery Boilers (WHRB), generator with single shaft configuration. The actual dates of commercial operation of the different modules of the station are as under:

Units	COD
Block-I0	19.7.2009
Block-20	28.7.2009
Block-30	15.8.2009

3. Petition No.109/2009 was filed by the petitioner for approval of tariff of the generating station for the period from the date of commercial operation of Block 10 (first block) i.e from 19.7.2009 to 31.3.2014 and the Commission vide its order dated 11.1.2010 had approved the tariff for the generating station for the said period considering the capital cost of ₹96316.00 lakh as on 19.7.2009, ₹192256.00 lakh as on 28.7.2009 and ₹287706.34 lakh as on

15.8.2009. Thereafter, Petition No. 221/GT/2013 was filed by the petitioner for revision of tariff of the generating station for the period from COD to 31.3.2014 after truing-up in terms of the proviso to Regulation 6(1) of the 2009 Tariff Regulations and the Commission by order dated 1.10.2014 revised the annual fixed charges considering the capital cost of ₹96033.55 lakh as on 19.7.2009, ₹191708.83 lakh as on 28.7.2009 and ₹287040.93 lakh as on 15.8.2009. The annual fixed charges approved by the said order dated 1.10.2014 is as under:

						(₹	in lakh)
		2009-10				2012-13	
	19.7.2009 to 27.7.2009	28.7.2009 to 14.8.2009	15.8.2009 to 31.3.2010	2010-11	2011-12		2013-14
Return on Equity	5379.99	10739.91	16156.34	16918.31	17209.49	17392.29	17601.42
Interest on Loan	6897.58	13744.36	20190.65	19186.21	18386.71	19353.05	17392.92
Depreciation	4953.80	9889.12	14876.48	15056.45	15240.66	15027.68	15027.68
Interest on Working Capital	2988.52	5975.19	8955.76	8986.82	9066.93	9141.64	9165.92
O&M Expenses	10212.75	20425.50	30638.25	31108.73	32141.48	33174.23	34057.80
Total	30432.65	60774.08	90817.48	91256.51	92045.27	94088.88	93245.74

4. As stated, this petition has been filed by the petitioner for revision of tariff after truing-up exercise for the period from COD to 31.3.2014. The capital cost and annual fixed charges claimed in the petition is as shown below:

Capital Cost

	2009-10			2010-11	2011-12	2012-13	2013-14
	19.7.2009 to 27.7.2009	28.7.2009 to 14.8.2009	15.8.2009 to 31.3.2010				
Opening Capital Cost	95725.38	191067.05	285911.00	-	-	-	-
Add: Normative IDC over & above actual IDC	590.62	1188.95	1209.47	-	-	-	-
Opening Capital Cost	96316.00	192256.00	287120.47	290217.56	293375.20	299270.87	299297.31
Additional Capital Expenditure	0.00	0.00	3097.09	3157.64	5895.67	26.44	(-) 67.67
Total	96316.00	192256.00	290217.56	293375.20	299270.87	299297.31	299229.64
Un-discharged liabilities	0.00	0.00	(-) 330.43	(-) 192.62	0.00	0.00	(-) 354.51
Closing Capital Cost	96316.00	192256.00	289887.13	293182.58	299270.87	299297.31	298875.13

Annual Fixed Charges

(₹in lakh)

	2009-10		2010-11	2011-12	2012-13	2013-14	
	19.7.2009	28.7.2009	15.8.2009				
	to	to	to				
	27.7.2009	14.8.2009	31.3.2010				
Return on Equity	5395.81	10770.57	16162.56	16940.19	17225.55	17397.68	17595.24
Interest on Loan	6918.46	13784.53	20194.90	19193.30	18369.03	19281.67	17238.81
Depreciation	5016.80	10014.01	15027.25	15178.82	15408.41	15561.77	15549.60
Interest on	2990.60	5979.26	8959.12	8989.97	9070.40	9151.40	9173.45
Working Capital							
O&M Expenses	10212.75	20425.50	30638.25	31108.73	32141.48	33174.23	34057.80
Total	30534.42	60973.86	90982.08	91411.00	92214.87	94566.75	93614.90

5. The matter was heard on 5.3.2015 and the Commission after directing the petitioner to file certain additional information, reserved orders in the petition. The petitioner thereafter by affidavit dated 16.3.2015 has revised the claim for capital cost without any corresponding changes in the annual fixed charges. Accordingly, the capital cost claimed in the said affidavit has been considered for the purpose of revision of tariff in this order as under:

	2009-10		2010-11	2011-12	2012-13	2013-14	
	19.7.2009 to 27.7.2009	28.7.2009 to 14.8.2009	15.8.2009 to 31.3.2010				
Gross Block as on COD	-	-	285922.76	1	1	1	-
Less: Un-discharged liabilities	-	-	1704.50	-	-	-	-
Add: Normative IDC over & above actual IDC	-	-	1209.47	-	-	-	
Opening Capital Cost	96316.00	192256.00	285427.73	289887.13	292467.58	298961.59	299009.10
Additional Capital Expenditure	0.00	0.00	4459.40	2580.45	6494.01	47.51	(-) 138.72
Closing Capital Cost	96316.00	192256.00	289887.13	292467.58	298961.59	299009.10	298870.38
Average Capital Cost	96316.00	192256.00	287657.43	291177.36	295714.59	298975.35	298939.74

Capital cost up to COD

6. As against the admitted opening capital cost of ₹96033.55 lakh as on 19.7.2009 (Block-10), ₹191708.83 lakh as on 28.7.2009 (Block-20) and ₹287040.93 lakh as on 15.8.2009 (Block-30), the petitioner has claimed ₹96316.00 lakh, ₹192256.00 lakh and ₹285427.73 lakh as on 19.7.2009 for (Block-10), 28.7.2009 (Block-20) and 15.8.2009 (Block-30) respectively. The break-up of the capital cost claimed are as under:

	COD of Block	COD of Block	COD of Block
	10 (19.7.2009)	20 (28.7.2009)	30 (15.8.2009)
Capital Cost before IDC & FC	81735.64	162935.47	243394.70
Add: IDC (actual)	13410.79	26973.68	40842.99
Add: Financing Charges	578.95	1157.89	1685.07
Capital Cost before Normative IDC (on	95725.38	191067.05	* 285922.76
accrual basis)			
Less: Un-discharged liabilities	0.00	0.00	1704.50
Capital Cost before Normative IDC (on	95725.38	191067.05	284218.26
cash basis)			
Add: Normative IDC (over & above actual	590.62	1188.95	1209.47
IDC)			
Capital Cost claimed	96316.00	192256.00	285427.73

^{*} Auditor certified Gross Block.

- 7. Since there is no change in the capital cost claimed by the petitioner (in the above table) the break-up has been retained as claimed in the earlier petition filed by the petitioner in respect of this generating station in Petition Nos. 109/2009 and 221/GT/2013.
- 8. The petitioner has filed the additional information as directed by the Commission and has served copies of the same on the respondents. The respondent, MPPMCL has filed reply in the matter and the petitioner has filed its rejoinder to the same. Based on the submissions of the parties and the documents available on record, we proceed to revise the tariff of the generating station as stated in the subsequent paragraphs.

Capital cost

- 9. The admitted opening capital cost considered by the Commission is ₹287040.93 lakh as on 15.8.2009 as per order dated 1.10.2014 in Petition No.221/GT/2013. The petitioner vide affidavit dated 16.3.2015 has claimed opening capital cost duly audited amounting to ₹284218.26 lakh as on 15.8.2009, on cash basis. In addition, the petitioner has claimed ₹1209.47 lakh as Normative IDC in the opening capital cost. Thus, the total opening capital cost claimed as on COD (15.8.2009) is ₹285427.73 lakh. The opening capital cost considered by the petitioner is inclusive of Normative IDC of ₹1209.47 lakh.
- 10. As regard capital cost considered for the purpose of tariff, the various components of capital cost claimed by the petitioner have been considered and allowed as stated hereunder:

Interest During Construction

11. On scrutiny of the IDC calculations, it is noticed that the petitioner has adopted FIFO method of repayment of loan as against the average method of repayment adopted by the Commission in respect of other generating stations and confirmed by the Appellate Tribunal for Electricity. Further, as certified by auditor, IDC as on COD of Block 30 has increased from ₹40825.59 lakh (as claimed in Petition No.221/GT/2013) to ₹40842.99 lakh. Taking into account the increased IDC and considering the repayments of loan on average basis, the allowable IDC (at actuals) has been worked out as under:

	COD of Block	COD of Block	COD of Block 30	
	10 (19.7.2009)	20 (28.7.2009)	(15.8.2009)	
IDC (other than normative)	13365.57	26880.34	40692.00	

Financing charges

12. The petitioner in Petition No. 221/GT/2013 had claimed financing charges amounting to ₹1736.84 lakh as on COD of Block 30 (15.8.2009). However, as per auditor certificate, the financing charges as on COD of Block 30 is ₹1685.07 lakh only. Taking this revised amount into consideration, the allowable financing charges have been worked out as under:

(₹in lakh)

COD of Block 10	COD of Block 20	COD of Block 30
(19.7.2009)	(28.7.2009)	(15.8.2009)
561.69	1123.38	

Normative IDC (Over & above actual IDC)

- 13. The petitioner has claimed normative IDC amounting to ₹590.62 lakh, ₹1188.95 lakh and ₹1209.47 lakh as on COD of Block 10, Block 20 and Block 30, respectively. However, in line with clause (a) of Regulation 7 of the 2009 Tariff Regulations, (considering the quarterly debtequity position corresponding to actual cash expenditure) the admissible Normative IDC over and above the actual IDC works out to ₹304.46 lakh, ₹634.02 lakh and ₹1119.13 lakh as on COD of Block 10, Block 20 and Block 30, respectively. This has been considered for the purpose of tariff.
- 14. In order dated 1.10.2014 in Petition No. 221/GT/2013, the Commission had directed the petitioner to submit the accounting treatment of normative IDC as carried out in the books of accounts duly certified by Auditor at the time of truing-up of tariff of the generating station. In response, the petitioner vide affidavit dated 24.2.2015 has submitted as under:
 - "3. The Hon'ble Commission has directed the petitioner to state the accounting treatment of normative IDC.

In this regard, our submission is as below:

(A) Back ground of Normative Loan & IDC

The Tariff Regulation 2009 has put emphasis on the fact that the Project Financing is to be based on the norms of Debt-Equity ratio of 70:30. The Tariff Regulation 2009 also provides that Promoters would be free to have higher quantum of equity investments. The equity in excess of the norms should be treated as loans advanced at the weighted average rate of interest and for a weighted average tenor of the long term debt component of the project. The aspect is stated in Tariff Policy issued by the Minister of Power (MoP), Government of India.

- (B) The Provisions of normative IDC under Tariff Regulation, 2009.
- a) As per Clause 7 (1) (a) of the CERC Tariff Regulation 2009, ".. 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.
- (b) Accordingly, the IDC to project cost shall comprise of 2 components:
 - 1. <u>Actual interest on loan funds:</u> To be computed based on Loan fund deployed in the project upto 70% of the project cost. The IDC is capitalised as part of project cost;
 - 2. Normative /Notional Interest on actual equity in excess of 30% if the Project Cost;
- (C) Accounting of normative IDC:
- (i) Under Tariff Regulation, 2009, the normative interest has been granted to the petitioner as part of project cost in terms of Regulation 7 (1) (a). The allowability of Normative interest is to compensate the Petitioner for the interest on equity deployed in excess of above 30% of Project cost. This is because there is no ROE available during the construction period or the project execution period.
- (ii) Since the IDC herein is based on the Principle of Normative Loan, hence it is not accounted in the books of accounts under the principles of mercantile double entry system of book keeping."
- 15. The respondent MPPMCL, vide affidavit dated 25.3.2015, has submitted that the Commission had sought details of accounting treatment of normative IDC as carried out in books of accounts duly certified by Auditor.
- 16. The matter has been considered. The submission of the petitioner is not acceptable since the normative IDC allowed under the 2009 Tariff Regulations forms part of the capital cost and can be accounted as income in the financial statement i.e. Profit and Loss Account and Balance Sheet. Accordingly, we are inclined to hold that the petitioner should account for normative IDC in its Books of Account. We direct accordingly.

17. Based on the above discussions, the capital cost with respect to the dates of commercial operation of each Block of the generating station is allowed as under:

(₹in lakh)

	COD of Block	COD of Block	COD of Block
	10 (19.7.2009)	20 (28.7.2009)	30 (15.8.2009)
Capital Cost before IDC & FC	81735.64	162935.47	243394.70
Add: IDC (actual)	13365.57	26880.34	40692.00
Add: Financing Charges	561.69	1123.38	1685.07
Capital Cost before Normative	95662.90	190939.20	285771.77
IDC (on accrual basis)			
Less: Un-discharged liabilities	0.00	0.00	1704.50
Capital Cost before Normative	95662.90	190939.20	284067.27
IDC (on cash basis)			
Add: Normative IDC (over &	304.46	634.02	1119.13
above actual IDC)			
Capital Cost allowed for the	95967.37	191573.22	285186.40
purpose of tariff			

18. The interest on normative loan is to be treated as income in Financial Statement i.e. Profit and Loss Account and Balance Sheet by the petitioner as it forms part of capital cost for the purpose of allowing tariff.

Additional Capital Expenditure

19. The additional capital expenditure claimed by the petitioner and allowed by the Commission vide order dated 1.10.2014 in Petition No. 221/GT/2013 are as follows:

(₹in lakh)

	2009-10 Actual	2010-11 Actual	2011-12	Total
Additional Capital Expenditure claimed	3078.01	10172.64	0.00	13250.65
Additional Capital Expenditure allowed	2703.65	3157.64	6289.02	12150.31

20. The petitioner in Petition No.221/GT/2013 had claimed the additional capital expenditure of ₹3078.01 lakh in 2009-10 as against the expenditure of ₹3097.01 lakh as per books of accounts. The expenditure of ₹3097.01 lakh included the un-discharged liability of ₹393.36

- lakh. Accordingly, on cash basis the additional capital expenditure of ₹2703.65 lakh (3097.01-393.36) was allowed by the Commission.
- 21. The petitioner in Petition No.221/GT/2013 had not claimed any expenditure during 2011-12. However, the Commission vide order dated 1.10.2014 had allowed expenditure of ₹5895.66 lakh during 2011-12. In this regard, the observations of the Commission in order dated 1.10.2014 is extracted as under:
 - "22. The petitioner has claimed expenditure of ₹10172.64 lakh during 2010-11 as against the expenditure of ₹3157.64 lakh [₹3215.67 lakh (addition)-₹58.03 lakh (deduction)] as per books of accounts. The petitioner has submitted that out of the expenditure of ₹10172.64 lakh, the amount of ₹3215.67 lakh was capitalized during 2010-11 and the balance expenditure of ₹6957.00 lakh was in the Capital Work in Progress (CWIP) account which was capitalized during the 2011-12. In view of this, the claim of the petitioner for this expenditure during the year 2010-11 has not been allowed. However, the same is proposed to be allowed during the year 2011-12 as and when the same is actually capitalised by the petitioner. Accordingly, the actual additional capital expenditure of ₹3157.64 lakh has only been allowed during 2010-11.
 - 23. The petitioner had not claimed any additional capital expenditure during 2011-12. However the petitioner has capitalized an expenditure of ₹6610.66 lakh [(₹7049.73 lakh (addition)–₹439.07 lakh (deduction)] as per books of accounts. Since the capitalisation of the expenditure of ₹6610.66 lakh during 2011-12 forms part of the expenditure of ₹10172.64 lakh claimed for 2010-11, the same has been allowed after deduction of the cost towards EOH cost. Accordingly, additional capital expenditure of ₹5895.66 lakh (6610.66-715.00) for the year 2011-12 has been allowed."
- 22. The actual additional capital expenditure claimed by the petitioner vide affidavit dated 27.10.2014 in this petition is as under:

	2009-10	2010-11	2011-12	2012-13	2013-14	Total
Pipeline and associated systems with other works	0.00	0.00	1639.0	0.00	0.00	1639.00
Meters, IT communication system, security & surveillance system	121.24	0.00	1014.0	28.15	71.05	1234.44
Non-EPC Civil works including township & colony etc.	19.08	1693.04	2442.74	23.10	0.00	4177.96
Payment of un-discharged liabilities towards EPC.	2956.77	1215.64	0.00	0.00	0.00	4172.41
Misc. Civil work including boundary wall irrigation system, other enabling works.	0.00	0.00	1239.00	0.00	0.00	1239.00
Spares, site related cost for supervision (net)	0.00	307.00	715.00	0.00	0.00	1022.00
Total	3097.09	3215.68	7049.74	51.25	71.05	13484.81

23. 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. The petitioner vide affidavit dated 16.3.2015 has submitted the claim for additional capital expenditure after reconciliation with the books of accounts duly certified by auditor as under:

(₹in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14	Total
Pipeline and associated systems, Meters, switch gear IT communication system, security & surveillance system, electrical system and spares	1807.07	837.39	3664.72	5.70	(-) 62.54	6252.34
Expenditure for Land Development Work	523.65	-	-	-	-	523.65
Non-EPC Civil works including for township & colony etc.	451.45	1264.64	2347.20	20.74	0.00	4083.97
Payment of un-discharged liabilities towards EPC.	1374.07	137.81	192.62	21.07	0.00	1725.57
Misc. Civil work including boundary wall irrigation system, other enabling works.	303.22	340.61	289.47	0.00	(-) 76.18	857.12
Total	4459.40	2580.45	6494.01	47.51	(-) 138.72	13442.65

24. The petitioner has submitted that the certificate on Project Capital Cost (PCC), incurred up to COD was provisionally submitted by Auditor of the petitioner company in 2009. It has also submitted that the Audited certificates on Gross Block, CWIP, un-discharged liabilities as on COD and up to 31.3.2014 have been submitted by the Auditor of the petitioner company during February, 2015 – March, 2015 and copies of the same are part of the submissions. The value of gross block as on COD of the respective blocks are based on the expenditure incurred and un-discharged liabilities. The petitioner has further submitted that the Commission's order dated 1.10.2014 in Petition No.221/GT/2013 is on the consideration of additional capital expenditure incurred during COD till 31.3.2012. It has stated that as per the audited certificates, the project capital cost incurred as on COD and on subsequent dates are based on actual capital expenditure and the discharges of capital liabilities. Accordingly, the

petitioner has submitted that there are changes in capital cost incurred as on COD, due to which, the project capital cost incurred up to 31.3.2012 has decreased from ₹299191.24 lakh to ₹298961.59 lakh, with the reduction of ₹229.65 lakh.

25. The difference in the additional capital expenditure claimed by the petitioner vide affidavits dated 27.10.2014 and 16.3.2015 is on account of claim of additional capital expenditure on accrual basis and cash basis respectively. The opening gross block, closing gross block and the additional capital expenditure claimed on accrual and actual basis have been reconciled as detailed under:

						(₹in lakh)		
		2009-10		2010-11	2011-12	2012-13	2013-14	
	19.7.2009 to 27.7.2009	28.7.2009 to 14.8.2009	15.8.2009 to 31.3.2010					
Closing Gross Block (accrual basis)	-	-	289008.09	292165.73	298776.40	298802.84	298735.17	
Opening Gross Block (accrual basis)	-	-	285922.76	289008.09	292165.73	298776.40	298802.84	
Additional capital expenditure on accrual basis	-	-	3085.33	3157.64	6610.67	26.44	(-) 67.67	
Positive addition (accrual)	-	-	3093.06	3215.68	7049.74	51.25	71.05	
Deletion	-	-	(-) 7.73	(-) 58.04	(-) 439.07	(-) 24.81	(-)138.72	
Additional capital expenditure as per books of accounts			3085.33	3157.64	6610.67	26.44	(-) 67.67	
Less : EOH cost disallowed by Commission	-	-	-	715.00	-	-	-	
Less: Un-discharged Liabilities	-	-	-	-	309.28	-	71.05	
Additional capital expenditure on cash basis	-	-	3085.33	2442.64	6301.39	26.44	(-) 138.72	
Add: discharge of Liabilities	-	-	1374.07	137.81	192.62	21.07	0.00	
Net Additional capital expenditure claimed	-	-	4459.40	2580.45	6494.01	47.51	(-) 138.72	

26. It is observed from records that the additional capital expenditure during 2009-10 i.e. from COD (15.8.2009) to 31.3.2010 as per books was ₹1197.00 lakh which was considered in

Commission's order dated 1.10.2014 in Petition No.221/GT/2013. However, as per affidavit dated 16.3.2015 in this petition, the additional capital expenditure as per books of accounts from COD to 31.3.2010 is ₹3085.33 lakh. Thus, there is an increase of ₹1888.33 lakh in the additional capital expenditure from COD to 31.3.2010. It is also noticed in affidavit dated 16.3.2015 that there has been a discharge of ₹1374.07 lakh during 16.8.2009 to 31.3.2010 in the claim for additional capital expenditure. Accordingly, the additional capital expenditure claimed is considered as ₹4459.40 lakh (1197.00 +1888.33+1374.07). The petitioner has submitted details of the asset/work-wise capitalization of ₹4459.40 lakh which includes an amount of ₹1197.00 lakh as per books of accounts provisionally audited and considered in Commission's order dated 1.10.2014 plus the additional capital expenditure of ₹1888.33 lakh capitalized after COD to 31.3.2010 and the discharge of liability of ₹1374.07 lakh (which was remained as un-discharged liability in the capital cost as on 15.8.2009). The total additional capital expenditure of ₹3085.33 lakh (1197.00 + 1888.33) was considered in CWIP as on COD which form part of original project cost and capitalized within the cut-off date (31.3.2012) of the generating station. Accordingly, the total additional capitalisation of ₹4459.40 lakh (i.e. additional capital expenditure ₹3085.33 lakh and the discharge of liability of ₹1374.07 lakh) has been allowed.

27. The additional capital expenditure claimed during 2010-11 is ₹3215.68 lakh which has been revised to ₹2580.45 lakh vide affidavit dated 16.3.2015. It is observed that the additional capital expenditure claimed for 2010-11in Petition No.221/GT/2013 was ₹3215.67 lakh as per books of accounts and net of ₹3157.64 lakh after deduction of ₹58.03 lakh. The gross claim for additional capital expenditure in this petition as per books of accounts remains unchanged. The petitioner has claimed the additional capital expenditure of ₹2580.45 lakh (instead of

₹3215.68 lakh) after reconciliation. There is a reduction in the claim for additional capital expenditure from ₹3215.67 lakh to ₹2580.45 lakh (3215.67-58.03-715.00+137.81) due to (a) deletion of ₹58.03 lakh, (b) deduction of ₹715 lakh disallowed on EOH cost in order dated 1.10.2014 and (c) addition of discharge of liabilities of ₹137.81 lakh. The deletion of ₹58.03 lakh and ₹715.00 is in accordance with Commission's order dated 1.10.2014 in Petition No.221/GT/2014 and hence allowed. The discharge of liability of ₹137.81 lakh form part of the original project cost which has been capitalized within the cut-off date of the generating station and hence allowed.

28. The additional capital expenditure claimed during 2011-12 is ₹7049.74 lakh which has been revised to ₹6494.01 lakh vide affidavit dated 16.3.2015. It is observed that the additional capital expenditure claimed for 2011-12 in Petition No.221/GT/2014 was ₹7049.74 lakh as per books of accounts and net of ₹6610.67 lakh, after deduction of ₹439.07 lakh. The gross claim of additional capital expenditure as per books of accounts remains unchanged. The petitioner has claimed additional capital expenditure of ₹6494.01 lakh instead of ₹7049.74 lakh, after reconciliation. There is reduction in the claim of additional capital expenditure from ₹7049.74 lakh to ₹6494.01 lakh (7049.74-439.07-309.28+192.62) due to (a) deletion of ₹439.07 lakh, (b) deduction of un-discharged liability of ₹309.28 lakh and (c) addition of discharge of liabilities of ₹192.62 lakh. The deletion of ₹439.07 lakh is in accordance with Commission's order dated 1.10.2014 in Petition No.221/GT/2014 and hence allowed. Discharge of liability of ₹192.62 lakh form part of the original project cost which has been capitalized within the cut-off date of the generating station and hence allowed.

- 29. The petitioner has claimed amount of ₹51.25 lakh on accrual basis in 2012-13 in this petition which has been revised to ₹47.51 lakh, on cash basis. The net additional capital expenditure of ₹47.51 lakh includes additional capital expenditure of ₹51.25 lakh, decapitalization of ₹24.81 lakh and discharged of liabilities of ₹21.07 lakh (51.25-24.81-21.07 = 47.51). The additional capital expenditure of ₹51.25 lakh includes expenditure on buildings (₹23.10 lakh), transformer (₹5.70 lakh), furniture and fixtures (₹2.16 lakh), Office equipments (₹1.5 lakh) and vehicles (₹18.88 lakh). The expenditure in respect of furniture and fixtures and office equipments are in the nature of minor assets and hence not admissible. Further, there is no provision under Regulation 9 (2) of the 2009 Tariff Regulations for allowing additional capital expenditure on deferred works/ balance works. As the cut-off date of the generating station is 31.3.2012, these deferred works/ balance works have not been allowed during 2012-13. However, the balance payments/ un-discharged liabilities of ₹21.07 lakh have been allowed under Regulation 9 (2) (vii) of the 2009 Tariff Regulations. Moreover, the decapitalization of (-)₹24.81 lakh comprising office equipments and vehicles has been allowed during 2012-13. Accordingly, a net additional capital expenditure of (-)₹3.74 lakh (₹21.07 -₹24.81 lakh) has been allowed in 2012-13.
- 30. Similarly during 2013-14, the petitioner had claimed additional capital expenditure of ₹71.05 lakh on accrual basis, which was later revised to (-)₹138.72 lakh. This includes additional capital expenditure of ₹71.05 lakh comprising of transformers (₹30.14 lakh), Furniture and Fixtures (₹0.89 lakh), Office equipments (₹0.47 lakh) and Vehicles (₹39.55 lakh) and the de-capitalization of (-)₹138.72 lakh. It is observed that the expenditure of ₹71.05 lakh claimed has remained an un-discharged liabilities during 2013-14. The claim for additional capital expenditure for ₹71.05 lakh during 2013-14 is not admissible as there is no provision

under Regulation 9(2) of the 2009 Tariff Regulations for allowing additional capital expenditure on deferred works/ balance works after the cut-off date of the generating station. In view of this, the undischarged liability of ₹71.05 lakh has not been admitted, even though the same has been discharged after this period (2013-14).

31. Based on the above, the additional capital expenditure allowed for the period 2009-14 is summarised as under:

				(₹in lakh)
2009-10 (15.8.2009 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
4459.40	2580.45	6494.01	(-) 3.74	(-) 138.72

32. Accordingly, the capital cost allowed for the period 2009-14 is summarised as under:

(₹in lakh)

					(\ III Iakii		
_		2009-10	_	2010-11	2011-12	2012-13	2013-14
	19.7.2009 to 27.7.2009	28.7.2009 to 14.8.2009	15.8.2009 to 31.3.2010				
Opening Capital Cost	95967.37	191573.22	285186.40	289645.80	292226.25	298720.26	298716.52
Additional Capital Expenditure	0.00	0.00	4459.40	2580.45	6494.01	(-) 3.74	(-) 138.72
Closing Capital Cost	95967.37	191573.22	289645.80	292226.25	298720.26	298716.52	298577.80
Average Capital Cost	95967.37	191573.22	287416.10	290936.03	295473.26	298718.39	298647.16

Debt-Equity Ratio

33. Considering the details of assets and un-discharged liabilities as submitted at Form-9A & 9B and net loan position as on COD of Block 30 (15.8.2009), the debt-equity ratio as on COD of the generating station works out as 54.39:45.61, which is within the normative debt-equity ratio of 70:30. As such, the debt-equity ratio of 70:30 has been considered for the purpose of tariff.

Return on Equity

34. Return on equity has been worked out considering the base rate of 15.5% and applicable MAT rate for the respective years. Accordingly, return on equity has been computed as under:

(₹in lakh)

		2009-10		2010-11	2011-12	2012-13	2013-14
	19.7.2009 to	28.7.2009 to	15.8.2009 to				
	27.7.2009	14.8.2009	31.3.2010				
Normative Equity - Opening	28790.21	57471.97	85555.92	86893.74	87667.88	89616.08	89614.96
Addition due to Additional capital expenditure	0.00	0.00	1337.82	774.14	1948.20	(-) 1.12	(-) 41.62
Normative Equity – Closing	28790.21	57471.97	86893.74	87667.88	89616.08	89614.96	89573.34
Normative Equity – Average	28790.21	57471.97	86224.83	87280.81	88641.98	89615.52	89594.15
Base Rate for return on equity	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Applicable Tax Rate	16.995%	16.995%	16.995%	19.931%	20.008%	20.008%	20.961%
Rate of Return on Equity (Pre-tax)	18.674%	18.674%	18.674%	19.358%	19.377%	19.377%	19.610%
Return on Equity	5376.28	10732.32	16101.62	16895.82	17176.16	17364.80	17569.41

Interest on loan

- 35. In terms of Regulations 16 of the 2009 Tariff Regulations, interest on loan has been worked out as mentioned below:
 - (a) Gross normative loan corresponding to 70% of admissible capital cost has been worked out to ₹67177.16 lakh as on 19.7.2009, ₹134101.26 lakh as on 28.7.2009 and ₹199630.48 lakh as on 15.8.2009.
 - (b) Net loan (opening) as on 19.7.2009 has been considered as gross loan, cumulative repayment of loan being 'nil'.
 - (c) Depreciation allowed for the period has been considered as repayment. Further, repayments have been adjusted for de-capitalisation during the respective years with corresponding value of cumulative depreciation adjustments.

- (d) Weighted average rate of interest has been computed considering the details of the actual loan portfolio till 31.3.2014 as submitted by the petitioner.
- 36. Interest on loan has been computed as under:

(₹in lakh)

	19.7.2009 to 27.7.2009	28.7.2009 to 14.8.2009	15.8.2009 to 31.3.2010	2010-11	2011-12	2012-13	2013-14
Gross Normative	67177.16	134101.26	199630.48	202752.06	204558.38	209104.18	209101.57
Loan							
Cumulative Repayment	0.00	120.64	602.27	9795.12	24776.61	39939.66	55306.78
Net Normative Loan – Opening	67177.16	133980.62	199028.21	192956.94	179781.77	169164.52	153794.78
Addition due to Additional Capital Expenditure	0.00	0.00	3121.58	1806.32	4545.81	(-) 2.62	(-) 97.10
Repayment of Normative Loan	120.64	481.63	9192.98	14984.84	15211.01	15371.11	15366.97
Less: Adjustment to repayment on account of de-cap of assets	0.00	0.00	0.12	3.35	47.96	3.99	29.43
Net Repayment of Normative Loan	120.64	481.63	9192.85	14981.49	15163.05	15367.12	15337.54
Net Normative Loan – Closing	67056.52	133498.99	192956.94	179781.77	169164.52	153794.78	138360.14
Normative Loan – Average	67116.84	133739.80	195992.57	186369.35	174473.14	161479.65	146077.46
Weighted Average Rate of Interest on loan	10.0852%	10.1009%	10.1298%	10.1599%	10.3780%	12.0120%	11.8999%
Interest on Loan	6768.90	13508.96	19853.75	18935.02	18106.77	19396.92	17383.13

Depreciation

37. The cumulative depreciation as on COD of Block 10 i.e. 19.7.2009 during the period 2009-14 is "nil". The value of freehold land as on COD of Block 30 (15.8.2009) which was ₹1730.66 lakh has been increased to ₹2254.32 lakh on account of additional capital expenditure during 2009-10 and the same has been considered while arriving out the depreciable value. The petitioner has computed the weighted average rate of depreciation of 5.209% for the year 2009-10, 5.204% for the year 2010-11, 5.200% for the year 2011-13 and

5.199% for the year 2013-14 as in Form-11. However, considering the rates of depreciation as in Appendix-III of the 2009 Tariff Regulations, the weighted average rate of depreciation works out to 5.0980% for the period from COD to 31.03.2010, 5.1506% for the year 2010-11, 5.1480% for the year 2011-12, 5.1457% for the year 2012-13 and 5.1455% for the year 2013-14 which has been considered for the purpose of tariff. Further, proportionate adjustment has been made to cumulative depreciation on account of de-capitalisation considered for the purpose of tariff. The depreciation has been computed as under:

		2009-10					
	19.7.2009 to 27.7.2009	28.7.2009 to 14.8.2009	15.8.2009 to 31.3.2010	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	95967.37	191573.22	285186.40	289645.80	292226.25	298720.26	298716.52
Additional capital expenditure	0.00	0.00	4459.40	2580.45	6494.01	(-)3.74	(-)138.72
Closing Capital Cost	95967.37	191573.22	289645.80	292226.25	298720.26	298716.52	298577.80
Average Capital Cost	95967.37	191573.22	287416.10	290936.03	295473.26	298718.39	298647.16
Weighted Average Rate of Depreciation	5.0980%	5.0980%	5.0980%	5.1506%	5.1480%	5.1457%	5.1455%
Depreciable Value	84813.03	170858.31	256881.25	259813.54	263897.04	266817.66	266753.56
Remaining Depreciable Value	84813.03	170858.31	256278.98	250018.41	239120.43	226878.00	211446.77
Depreciation for the period (pro rata)	120.64	481.63	9192.98	14984.84	15211.01	15371.11	15366.97
Depreciation for the year	4892.45	9766.46	14652.56	14984.84	15211.01	15371.11	15366.97
Cumulative depreciation	120.64	602.27	9795.25	24779.96	39987.62	55310.77	70673.76
Less: Cumulative depreciation adjustment on account of decapitalization	0.00	0.00	0.12	3.35	47.96	3.99	29.43
Cumulative depreciation adjustment at the end	120.64	602.27	9795.12	24776.61	39939.66	55306.78	70644.33

Operation & Maintenance Expenses

38. The O&M expenses approved by the Commission vide order dated 11.1.2010 in Petition No.109/2009 in exercise of the "Power to relax" is as under:

				(₹in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14			
LTSA-LTMA	13178.71	19714.05	19759.95	19714.05	19714.05			
O&M Cost (other)	7302.753	11394.675	12381.525	13460.18	14343.75			
Total	20481.46	31108.73	32141.48	33174.23	34057.80			

39. However, the actual O&M expenditure incurred for the period 2009-13 as submitted by the petitioner in Petition No. 221/GT/2013 was as under:

				(₹.	in lakh)
	2009-10	2010-11	2011-12	2012-13	Total
LTSA/LTMA	12920	15483	15694	17371	61468
Other O&M	5659	9713	10492	8153	34017
Total	18579	25196	26186	25524	95485

- 40. While the petitioner had furnished the reasons for the actual O&M expenses being less than the normative O&M expenses allowed, the respondent MPPMCL had prayed for consideration of the actual O&M expenses. However, the Commission after considering the submissions of the parties, by order dated 1.10.2014 in Petition No. 221/GT/2013 had allowed the O&M expenses as considered in order dated 11.1.2010 based on the following reasons.
 - "40. We have considered the submissions of the parties. It is observed that the actual O&M expenses incurred are less than the normative O&M expenses allowed and the reasons for the same are as under:
 - (a) The long term service Agreement (LTSA) and the Long term Maintenance Agreement (LTMA) with the Original Equipment Manufacturer for Sugen project of the petitioner is for 12 years corresponding to Equivalent Operating Hours(EOH) of about 1,00,000 hours for each GT.
 - (b) The Commission had approved the normative O&M expense norm (in ₹/MW/Year) for LTSA/LTMA during 2009-14 based on the EOH of all the three Gas Turbines.
 - (c) Under LTSA/LTMA, periodic inspection such as Combustion, Hot Gas Path & Major Inspections is planned based on EOH. However, because of some loss of operating hours in this generating station for reasons such as reduction in availability of allocated domestic Gas, the unwillingness of beneficiaries to off-take capacity available on R-LNG and due to scheduled/unscheduled outages etc., the planned maintenance at the specified interval could not be undertaken. However, these inspections will be undertaken in subsequent period.



- (d) The high availability and efficiency of the machines were guaranteed by the OEM based on these routine maintenance/replacements of critical components of GTs and Combustion chambers. The Commission had also taken cognizance of this high availability and efficiency guaranteed by the OEM and raised the bar of target availability for earning incentive from 85% to 88%. The petitioner will have to pay the cost of LTSA/LTMA as it has transferred the risk of any failure of machine to OEM and obtained guaranteed availability and efficiency of GTs.
- 41. In consideration of the above factors 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 truing-up of the O&M expenses based on actuals, as prayed for by the respondent, MPPMCL. Further, due to 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 (as tabulated below) has been considered till the end of the tariff period i.e. upto 31.3.2014."
- 41. In the instant case, the Commission vide ROP dated 5.3.2015 had directed the petitioner to submit the actual O&M expenses incurred against the relaxed O&M expenses allowed to the generating station during the period 2009-14. In response, the petitioner, in addition to the reasons submitted in Petition No.221/GT/2013, has by affidavit dated 16.3.2015 submitted the reasons for less O&M expenses incurred during the period 2009-14 as detailed under:
 - "(a) That the O&M expenses-other than LTSA/LTMA allowed by the Commission are lower to the O&M Costs allowed as per the norms contained in Regulation 19(c) of the Tariff Regulations, 2009 and as such are not subject to Truing Up in terms of Regulation 6 of the Tariff Regulations 2009.
 - (a) The higher LTSA/LTMA costs were estimated only in respect of Gas turbines. For the rest of the Plant, no claim for higher costs was made. The petitioner further states that owing to lower operation due to non-availability of domestic gas, Sugen plant has not incurred major repairs and maintenance costs on the other equipments like HRSGs, steam turbines and generators during the above period. The remaining amount of O&M expenses would be incurred in the subsequent period for which no additional or special O&M allowance will be granted to the Petitioner.
 - (b) The Petitioner draws the attention of the Commission that the Tariff Regulations for 2014-19 allow for higher normative O&M charges for projects utilizing F-Class Gas Turbines. These normative O&M cost are similar to what has been granted to Sugen."

- 42. The respondent MPPMCL has submitted that the O&M expenses should be limited to actuals. It has also submitted that against the Commission's order dated 11.1.2010 in Appeal No.109/2010 granting relaxed O&M expenses, the respondent has filed appeal before the Appellate Tribunal for Electricity and the same is pending.
- 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 actuals, 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. This is however subject to the final decision of the Tribunal in the said appeal filed by the respondent MPPMCL.

Normative Annual Plant Availability Factor

44. The Normative Annual Plant Availability Factor of 85% as considered in order dated 1.10.2014 in Petition No. 221/GT/2013 has been considered for the purpose of tariff, which shall be the basis for recovery of full fixed charges. However, for the purpose of incentive the NAPAF shall be 88% as stated in the order dated 11.1.2010 in Petition No. 109/2009.

Interest on Working Capital

45. The fuel cost as considered in order dated 1.10.2014 in Petition No.221/GT/2013 has been considered for the purpose of tariff as under:

							(₹in lakh)
		2009-10			2011-12	2012-13	2013-14
	19.7.2009	28.7.2009	15.8.2009				
	to	to	to				
	27.7.2009	14.8.2009	31.3.2010				
Fuel Cost -	5136.37	10272.75	15409.12	15409.12	15451.34	15409.12	15409.12
1 month							

46. Maintenance spares as considered in the said order dated 1.10.2014 has been considered as under:

						(₹in lakh)
	19.7.2009	28.7.2009	15.8.2009	2010-11	2011-12	2012-13	2013-14
	to	to	to				
	27.7.2009	14.8.2009	31.3.2009				
Maintenance	3063.83	6127.65	9191.48	9332.62	9642.44	9952.27	10217.34
Spares (30% of							
O&M Expenses							
allowed above)							

47. The receivable component of working capital has been worked out as under, on the basis of two months of fixed and variable charges. For this purpose, the operational parameters and weighted average price of fuel as considered in the said order dated 1.10.2014 has been considered.

						(₹)	in lakh)
	19.7.2009	28.7.2009	15.8.2009	2010-11	2011-12	2012-13	2013-14
	to	to	to				
	27.7.2009	14.8.2009	31.3.2009				
Receivables -2 months	15311.89	30612.29	45849.76	45968.91	46185.20	46560.94	46409.81

48. The O&M expenses for one month as allowed in the said order dated 1.10.2014 is allowed as under.

						(₹in lakh)
		2009-10			2011-	2012-13	2013-14
	19.7.2009 to 27.7.2009	28.7.2009 to 14.8.2009	15.8.2009 to 31.3.2010	2010-11	12		
O&M expenses -1 month	851.06	1702.13	2553.19	2592.39	2678.46	2764.52	2838.15

49. SBI PLR of 12.25% has been considered in the computation for interest on working capital. Necessary computations in support of calculation of interest on working capital are given as under:

(₹in lakh) 2010-11 2011-12 2012-13 2009-10 2013-14 19.7.2009 28.7.2009 15.8.2009 to to to 27.7.2009 14.8.2009 31.3.2010 Fuel Cost - 1 15451.34 5136.37 10272.75 15409.12 15409.12 15409.12 15409.12 month Liquid Fuel Cost 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1/2 month Maintenance 3063.83 6127.65 9191.48 9332.62 9642.44 9952.27 10217.34 Spares @ 30% of O&M expenses O&M expenses -851.06 1702.13 2553.19 2592.39 2678.46 2764.52 2838.15 1 month Receivables – 2 15311.89 30612.29 45849.76 45968.91 46185.20 46560.94 46409.81 months **Total Working** 24363.15 48714.81 73003.54 73303.04 73957.44 74874.42 74686.84 Capital 12.25% SBI PLR as on 12.25% 12.25% 12.25% 12.25% 12.25% 12.25% 1.4.2009 Interest on 2984.49 5967.56 8942.93 8979.62 9059.79 9149.14 9172.12 **Working Capital**

Annual Fixed Charges

50. The annual fixed charges for the period 2009-14 in respect of the generating station are summarized as under:

(₹in lakh)

							(X III lakii)
	2009-10			2010-11	2011-12	2012-13	2013-14
	19.7.2009 to	28.7.2009 to	15.8.2009 to				
	27.7.2009	14.8.2009	31.3.2010				
Return on Equity	5376.28	10732.32	16101.62	16895.82	17176.16	17364.80	17569.41
Interest on Loan	6768.90	13508.96	19853.75	18935.02	18106.77	19396.92	17383.13
Depreciation	4892.45	9766.46	14652.56	14984.84	15211.01	15371.11	15366.97
Interest on Working Capital	2984.49	5967.56	8942.93	8979.62	9059.79	9149.14	9172.12
O&M Expenses	10212.75	20425.50	30638.25	31108.73	32141.48	33174.23	34057.80
Total	30234.86	60400.81	90189.12	90904.03	91695.20	94456.19	93549.43

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.

- 51. The difference in the annual fixed charges determined by order dated 1.10.2014 and those determined by this order shall be adjusted in accordance with Regulation 6 (6) of the 2009 Tariff Regulations.
- 52. Petition No 523/GT/2014 stands disposed of in terms of the above.

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