CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 220/GT/2013

with

Petition No. 132/GT/2014

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

Date of Hearing: 07.07.2015 Date of Order: 29.12.2015

Petition No. 220/GT/2013

In the matter of

Revision of tariff of Bhilai Expansion Power Project (2 x 250 MW) for the period from 21.10.2009 to 31.3.2014 after truing-up exercise based on the actual additional capital expenditure incurred for the years 2009-10 (21.10.2009 to 31.3.2010), 2010-11 and 2011-12 and projected additional capital expenditure for 2012-14.

And in the matter of

Petition No. 132/GT/2014

Revision of tariff of Bhilai Expansion Power Project (2 x 250 MW) for the period from 21.10.2009 to 31.3.2014 after truing-up exercise based on the actual additional capital expenditure incurred for the period from 2009-10 (21.10.2009 to 31.3.2010) to 2013-14.

And

In the matter of

NTPC-SAIL Power Company Ltd, New Delhi

.....Petitioner

Vs

- 1. DNH Power Distribution Corporation Ltd, (erstwhile Electricity Department, UT of Dadra & Nagar Haveli) First Floor, Vidhyut Bhavan, Opp Secretariat, Silvassa-396230
- 2. Electricity Department, UT of Daman & Diu, OIDC Building, Somnath, Nani Daman-396210
- Chhattisgarh State Power Distribution Company Ltd, Dangania, P.O. Sunder Nagar, Raipur-492013
- 4. Steel Authority of India Ltd (SAIL), Ispat Bhavan, Lodhi Road, New Delhi -110003

....Respondents



Parties present:

Shri M.G. Ramachandran, Advocate, NTPC-SAIL

Ms. Ranjitha Ramachandran, Advocate, NTPC-SAIL

Ms. Anushree Bardhan, Advocate, NTPC-SAIL

Ms. Swapna Seshadri, Advocate, DNHPDCL

Ms. Yogmaya Agnihotri, Advocate, CSPDCL

Shri Arvind Banerjee, CSPDCL

Shri Abhinav Jindal, NSPCL

Shri D. G. Salpekar, NSPCL

ORDER

Petition No. 220/GT/2013 has been filed by the petitioner for revision of the tariff determined by order dated 29.7.2010 in Petition No. 308/2009 in respect of Bhilai Expansion Power Project, Units I & II (2 x 250 MW) ('the generating station') for the period 2009-14, after truing-up exercise based on the actual additional capital expenditure incurred for the period 2009-12 and the projected additional capital expenditure for 2012-14 in accordance with the proviso to Regulation 6(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 ('the 2009 Tariff Regulations').

- 2. During the pendency of the above petition, the petitioner filed Petition No. 132/GT/2014 for revision of tariff in respect of the generating station for the period 2009-14 after truing-up in accordance with Regulation 6(1) of the 2009 Tariff Regulations, based on the actual additional capital expenditure incurred during the period 2009-14.
- 3. The petitioner is a joint venture company of NTPC Ltd and Steel Authority of India Ltd (SAIL) having equal equity participation in the ratio of 50:50. The petitioner has acquired certain captive power plants owned by SAIL, which includes the captive power plant at Bhilai with capacity of 74 MW (2x30 MW + 1 x 14 MW), which is expanded by addition of 2 units of 250 MW each. The power generated from the generating station will be consumed to the extent of 51% for captive requirements of SAIL and the balance power is to be supplied to the respondents 1 to 3 in terms of the Power Purchase Agreements entered into between them.
- 4. Out of total capacity of 500 MW, only 170 MW of power is utilized for the captive requirements of SAIL and the remaining 330 MW is to be supplied to beneficiaries as under:

		E	Bene	Capacity allocated (MW)		
UT	of	Dadra	&	Nagar	Haveli	135
(Respondent No.1)						
UT of Daman &Diu (Respondent No.2)					95	
CSEB (Respondent No.3)					100	
SAIL/BSP (Respondent No.4)					170	

5. The actual date of commercial operation of the units of the generating station are as under:

Units	Original schedule as per MoP / Gol	Actual date of commercial operation
Unit-I	February, 2008	22.4.2009
Unit-II	August, 2008	21.10.2009

6. Petition No.308/2009 was filed by the petitioner for approval of tariff for Unit-I (250 MW) for the period 22.4.2009 to 20.10.2009 and for Units-I and II (2x 250 MW) for the period from 21.10.2009 to 31.3.2014 in accordance with the provisions of the 2009 Tariff Regulations and the Commission by its order dated 29.7.2010 had approved the tariff for the said period. The capital cost and the annual fixed charges approved by the said order dated 29.7.2010 is as under:

Capital Cost

(₹in lakh)

	22.4.2009 to 20.10.2009	21.10.2009 to 31.3.2010	2010-11	2011-12	2012-13	2013-14
Opening capital cost	152209.70	224612.67	235277.79	250959.63	265572.67	265572.67
Add: Projected additional capital expenditure	0.00	10665.12	15681.85	14613.03	0.00	0.00
Closing capital cost	152209.70	235277.79	250959.63	265572.67	265572.67	265572.67
Average capital cost	152209.70	229945.23	243118.71	258266.15	265572.67	265572.67

Annual Fixed Charges

	200	9-10	2010-11	2011-12	2012-13	2013-14
	22.4.2009 to	21.10.2009				
	20.10.2009	to 31.3.2010				
Return on Equity	7982.13	12058.70	12749.54	13543.90	13927.07	13927.07
Interest on Loan	8717.70	13009.94	13764.27	13717.33	12931.51	11665.82
Depreciation	8302.35	12155.70	12852.09	13652.84	14039.09	14039.09
O&M Expenses	4635.45	8895.45	9436.95	10009.66	10618.66	11259.02
Interest on Working	1532.08	3199.54	3274.52	3344.15	3372.65	3382.15
Capital						
Cost of secondary fuel oil	337.03	984.86	984.86	987.55	984.86	984.86
Compensation Allowance	0.00	0.00	0.00	0.00	0.00	0.00
Total	31506.73	50304.19	53062.22	55255.43	55873.83	55258.00



- 7. Subsequently, the petitioner filed Petition No.151/MP/2012 and prayed for grant of extension of the cut-off date of the generating station from 31.3.2012 to 31.3.2013 for the purpose of additional capitalization, in exercise of the 'Power to relax' under Regulation 44 of the 2009 Tariff Regulations read with Regulation 111 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999. The Commission by order dated 4.7.2013 granted the relief as prayed for by the petitioner and extended the cut-off date of the generating station for additional capitalisation for a period of one year from 31.3.2012 to 31.3.2013.
- 8. 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."

9. The petitioner has claimed annual fixed charges vide affidavit dated 29.11.2012 in Petition No. 220/GT/2013 and by affidavit dated 30.6.2014 in Petition No.132/GT/2014. Thereafter, by affidavit dated 18.3.2015 in Petition No.132/GT/2014, the petitioner has revised the annual fixed charges and the same is considered in this order for the purpose of revision of tariff for this generating station. Accordingly, the capital cost and the annual fixed charges claimed by the petitioner are as under:

Capital Cost

(₹in lakh) 2010-11 2011-12 2009-10 2012-13 2013-14 (21.10.2009 to 31.3.2010) **Opening Capital Cost** 224012.74 224341.51 243503.03 268029.75 275030.98 Additional 328.77 19161.52 24526.72 7001.24 732.17 capital expenditure **Closing Capital Cost** 224341.51 243503.03 268029.75 275030.98 275763.15 **Average Capital Cost** 224177.13 233922.27 255766.39 271530.37 275397.07



Annual Fixed Charges

				(₹	in lakh)
	2009-10 (21.10.2009 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Depreciation	12049	12554	14318	13925	14124
Interest on Loan	12515	13407	14059	13527	12465
Return on Equity	12559	13585	14868	15784	19400
Interest on Working Capital	3200	3281	3395	3424	3516
O&M Expenses	8895	9437	10010	10619	11259
Cost of Secondary Fuel Oil	985	985	988	985	985
Compensation Allowance	0	0	0	0	0
Special Allowance	0	0	0	0	0
Total	50203	53248	57637	58264	61681 [*]

^{*} The said amount stand corrected as ₹61749 lakh as against ₹61681 lakh claimed by the petitioner.

10. Reply to the petition has been filed by the respondent Nos. 1 to 3 and the petitioner has filed its rejoinder to the said replies. The petitioner has also filed additional information in compliance with the directions of the Commission. We now proceed to examine the claim of the petitioner in the petitions above, on prudence check, based on the submissions of the parties and the documents available on records, as stated in the subsequent paragraphs.

Capital Cost

11. The last proviso to Regulation 7 of the 2009 Tariff Regulations, as amended on 21.6.2011, provides as under:

"Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding un-discharged liability, if any, as on 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff."

Capital Cost of Unit-I

12. The Commission by order dated 29.7.2010 had approved the capital cost of ₹152209.70 lakh as on 22.4.2009 i.e COD of Unit-I. I. The petitioner has not sought for any revision of tariff for the period from COD of Unit-I (22.4.2009) to COD of Unit-II (21.10.2009). Accordingly, the capital cost of ₹152209.70 lakh as determined by order dated 29.7.2010 in Petition No. 308/2009 has been considered as petitioner's claim as on COD of Unit-I which is worked out as under:

	(₹in lakh)
Gross Block as on COD of Unit-I as certified by Auditor	155079.39
Less: Un-discharged liabilities included in above	13869.69
Gross Block on cash basis	141209.70
Add: Advances towards Mohad Reservoir to Water	11000.00



Resources Department, State Govt. of Chhattisgarh	
Capital cost claimed as on COD of Unit-I	*152209.70

*includes IDC & FC of ₹15711.77 lakh

13. The auditor certified capital cost (on accrual basis) amounting to ₹152209.70 lakh as claimed by the petitioner includes IDC & FC of ₹15711.77 lakh. In terms of clause (a) of Regulation 7 of the 2009 Tariff Regulations, the Normative IDC (over and above actual IDC) considering the quarterly debt-equity position corresponding to actual cash expenditure is worked out as ₹265.60 lakh and the same is allowed for the purpose of tariff. Accordingly, the capital cost of ₹152475.30 lakh is approved as on COD of Unit-I for the purpose of tariff.

Capital cost as on COD of Unit-II

14. The Commission vide order dated 29.7.2010 in Petition No. 308/2009 had admitted the opening capital cost of ₹224612.67 lakh as on COD of Unit-II (21.10.2009). The petitioner in this petition has claimed the opening capital cost of ₹224012.74 lakh as on COD of Unit-II (21.10.2009. The petitioner vide affidavit 18.3.2015 has submitted that the opening capital cost admitted as on 21.10.2009 was ₹224612.67 lakh, which includes CWIP of ₹481.08 lakh as per order dated 29.7.2010. It has also submitted that an amount of ₹118.85 lakh was adjusted towards sale of infirm power as on the said COD date. Accordingly, the opening capital cost as on COD of Unit-II (21.10.2009) is worked out as under:

	(₹in lakh)
Admitted Capital cost as on COD of Unit-II by order	224612.67
dated 29.7.2010	
Less: Adjustment towards CWIP	481.08
Less: Adjustment of Infirm Power	118.85
Net Capital Cost as on COD of Unit-II	224012.74

15. The opening capital cost claim of ₹224012.74 lakh as on COD (21.10.2009) of the generating station has been reconciled with books of accounts duly certified by Auditors.

Actual Additional Capital Expenditure

16. 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 kilometres of the power station if, the generating company does not intend to meet such expenditure as part of its Corporate Social Responsibility."

Additional Capital Expenditure as on COD of Unit-II (21.10.2009)

17. The petitioner has claimed ₹71803.03 lakh as additional capital expenditure as on COD of Unit-II as under:

(₹.	in lakh)
Gross Block as on COD of Unit-II	232916.82
Less: Gross Block already considered for capitalization as on	155079.39
COD of Unit-I	
Gross Block addition as on COD of Unit-II	77837.43
Less: Un-discharged liabilities included in above	6034.39
Gross Block addition as on COD of Unit-II (on cash basis)	71803.04

18. The gross block addition as on COD of Unit-II (on accrual and on cash basis) includes IDC & FC of ₹11067.36 lakh. The entire additional capital expenditure as on COD of Unit-II has been allowed. The petitioner's claim for IDC & FC has been examined and after rectification of minor errors, the additional IDC & FC admissible as on the COD of Unit-II works out to ₹10883.40 lakh. Further, in terms of Clause (a) of Regulation 7 of 2009 Tariff Regulations the Normative IDC, over and above the actual IDC, considering the quarterly debt-equity position corresponding to actual cash expenditure is works out as ₹78.89 lakh and the same is allowed. Accordingly, the capital cost as on COD of Unit-II (21.10.2009) is worked out as ₹71697.97 lakh and the same is allowed.

Additional Capital Expenditure from COD of Unit-II (21.10.2009) till 31.3.2014

19. The projected additional capital expenditure claimed by the petitioner in Petition No. 308/2009 is as under:

					(₹in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14	Total
Additional Capital	10665.12	15681.85	14613.03	0.00	0.00	40960.00
Expenditure claimed						
Additional Capital	10665.12	15681.85	14613.03	0.00	0.00	40960.00
Expenditure allowed						



20. The details of the projected additional capital expenditure allowed by the Commission in order dated 29.7.2010 in Petition No. 308/2009 is as under:

(₹in lakh)

SI.	Package		Projected	Additional (Capital Expe		in iani,
No.		21.10.2009	2010-11	2011-12	2012-13	2013-14	Total
		to					
		31.3.2010					
1	Main plant package	7235.00	11005.00	0.00	0.00	0.00	18240.00
2	Switchyard	427.00	1100.00	0.00	0.00	0.00	1527.00
3	ATS-Power Grid	0.00	0.00	0.00	0.00	0.00	0.00
4	Coal Handling plant	0.00	901.00	0.00	0.00	0.00	901.00
5	MGR RITES	1607.00	200.00	0.00	0.00	0.00	1807.00
6	LOCO-DLW	31.00	0.00	906.00	0.00	0.00	937.00
7	Make-up-water	41.00	0.00	0.00	0.00	0.00	41.00
8	Ash Dyke	607.00	0.00	0.00	0.00	0.00	607.00
9	Land	0.00	0.00	1720.00	0.00	0.00	1720.00
11	Township	0.00	0.00	8187.00	0.00	0.00	8187.00
12	Other Packages	250.00	1789.00	3160.00	0.00	0.00	5199.00
13	Total Additional	10198.00	14995.00	13973	0.00	0.00	39166.00
	Capital Expenditure						
14	IDC	467.12	686.85	604.03	0.00	0.00	1758.00
	Grand Total	10665.12	15681.80	14613.0	0.00	0.00	40960.00

21. The actual additional capital expenditure claimed by the petitioner for the period from COD of the generating station (21.10.2009) to 31.3.2014 vide affidavit dated 27.6.2014 is as under:

						(₹in lakh)
	2009-10 (21.10.2009 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14	Total
Additional capital Expenditure	328.77	18909.83	23875.88	6795.59	732.00	50642.07
IDC	0.00	251.70	650.84	205.60	0.18	1108.30
Total Additional Capital Expenditure	328.77	19161.52	24526.72	7001.24	732.17	51750.40

22. The item-wise details of the actual additional capital expenditure claimed for the period 2009-14 is as under:

(₹in lakh)

SI. No.	Package	Actual Additional Capital Expenditure							
		21.10.2009 to 31.3.2010	2010-11	2011-12	2012-13	2013-14	Total		
1	Main Plant Package	326.09	11695.04	17246.77	744.81	0.00	30012.71		
2	Switchyard	0.00	2174.12	55.26	15.27	0.65	2245.28		
3	ATS-Power Grid	2.68	0.00	32.55	0.00	0.00	35.23		
4	Coal Handling plant	0.00	2746.48	1939.52	787.41	14.48	5487.89		
5	MGR	0.00	488.41	133.33	102.50	0.00	724.24		
6	LOCO-DLW	0.00	0.00	0.00	0.00	0.00	0.00		



7	Make-up-water	0.00	983.60	0.00	19.79	0.00	1003.39
8	Ash Dyke	0.00	0.00	0.00	30.26	0.00	30.26
9	Land	0.00	0.00	207.72	0.00	0.00	207.72
11	Township	0.00	0.00	3359.34	3930.27	478.13	7767.73
12	Other Packages	0.00	822.18	901.38	1165.28	238.73	3127.57
13	Total Additional	328.77	18909.83	23875.88	6795.6	731.99	50642.07
	Capital Expenditure						
14	IDC	0.00	251.69	650.84	205.64	0.18	1108.35
	Grand Total	328.77	19161.52	24526.72	7001.24	732.17	51750.35

- 23. As against the admitted additional capital expenditure of ₹40960.00 lakh (including IDC of ₹1758.00 lakh) for the period 2009-12 i.e. up to the cut-off date of the generating station allowed vide Order dated 29.7.2010 in Petition No. 308/2009, it is observed that the actual additional capital expenditure claimed by the petitioner for the period from COD of Unit-I (21.10.2009) to 31.3.2014 is ₹51750.35 lakh (including IDC of ₹1108.35 lakh). The major additional capital expenditure of ₹30012.70 lakh is towards the works of Main Plant Package.
- 24. The variation in the actual additional capital expenditure claimed claim as against the projected additional capital expenditures approved by order dated 29.7.2010 is mainly on account of (i) increase of ₹11772.70 lakh (30012.70-18240.00) towards Main plant package (ii) increase of ₹4586.91 lakh (5487.91-901.00) towards Coal Handling Plant (iii) increase of ₹716.28 lakh (2245.26-1527.00) for Switchyard and (iv) increase of ₹962.39 lakh (1003.39-41.00) for Make-up water system. There is a decrease of ₹6599.44 lakh in the claim towards Works / Package such as MGR, Loco, Ash dyke, land, Township and Other packages. In addition, there is a decrease in the IDC amount by ₹649.68 lakh (1758.00-1108.32).
- 25. As stated, the Commission by order dated 4.7.2013 in Petition No. 151/MP/2012 had allowed the extension of cut-off date from 31.3.2012 to 31.3.2013 for capitalization of the balance works /deferred works under the original scope of work which could not be completed by the petitioner. The petitioner has claimed expenditure of ₹732.10 lakh in 2013-14 i.e after the cut-off date. The petitioner was directed to clarify whether the said expenditure pertains to balance payments or in respect of deferred works. In response, the petitioner vide its affidavit dated 30.6.2015 has submitted that these works were part of the original project cost and are either



capital works under progress or liabilities to be discharged as on 31.3.2013 i.e. cut-off date. It has also submitted that the expenditure pertaining to these balance works are deferred payments.

26. The Commission in its order dated 29.7.2010 had allowed the projected additional capital expenditure of ₹18240.00 lakh in 2009-11 (₹7235.00 lakh in 2009-10 and ₹11005.00 lakh in 2010-11) towards Main Plant Package-BHEL deferred for execution. The petitioner has now claimed the actual additional capital expenditure of ₹30012.70 lakh in 2009-13 (₹326.09 lakh in 21.10.2009 to 31.3.2010, ₹11695.00 lakh in 2010-11, ₹17246.80 lakh in 2011-12 and ₹744.81 in 2012-13). The petitioner vide ROP dated 7.5.2015 was directed to furnish the reasons for such abnormal increase in the actual additional expenditure along with details of estimates (past and present) and scope of work on past and present estimates. In response, the petitioner vide affidavit dated 30.6.2015 has submitted the reasons as under:

"...that as per the principal petition no.308/2009 filed before the Hon'ble Commission vide affidavit dated 9.12.2009, which was the basis for the Hon'ble Commission's order dated 29.7.2010, the Petitioner had claimed the Tariff on a gross block of ₹2443.98 crore including an expenditure capitalized for BHEL Main Plant Package amounting to ₹1479.54 crore which included liabilities of ₹155.16 crore. The Petitioner had also indicated CWIP amounting to ₹3.97 crore and had projected additional capital expenditure of ₹182.40 crore beyond COD.

.....that along with the amounts identified for expenditure on the date of COD i.e. ₹182.40 crore, the Petitioner had in effect indicated an amount of ₹341.53 crore (projections amounting to ₹155.16 crore (liabilities to be discharged) + ₹3.97 crore (CWIP) + ₹182.40 crore (Additional Capitalization)) in the original tariff petition filed in 2009. Accordingly, the claim of the Petitioner of ₹300.13 crore is to be compared vis-a- vis ₹341.53 crore.

....that besides the above, there are liabilities amounting to ₹8.8 crore as on 31.3.2014 & extra claims of BHEL which is yet to be settled. The Petitioner craves liberty from the Hon'ble Commission to claim the same as and when the same is settled."

27. The respondents, DNHPDCL and UT of Daman & Diu in their replies have submitted that the petitioner has not incurred any of the additional capitalization as was projected and allowed by the Commission. It has also submitted that the petitioner has completely deviated from the amounts allowed by the Commission in order dated 29.7.2010 and has incurred capital expenditure at its will. The respondent has further submitted that even after obtaining the extension of one year (till 31.3.2013) for incurring certain additional capitalization, the petitioner has not adhered to the schedule and has capitalized works even in 2013-14 without claiming any additional capitalization in the original petition. The respondent has stated that in terms of the

scheme of the 2009 Tariff Regulations, the additional capital expenditure projected and allowed by the Commission in the original petition needs to be trued-up at the end of the tariff period and not that the generating companies can claim something in the true-up petition which had not been claimed in the original tariff petition. In this connection, the respondent has placed reliance on the judgment of the Appellate Tribunal for Electricity dated 17.4.2014 in Appeal No.245/2013 (NTPCv- CERC & ors) and has submitted that any additional capitalization which was allowed in the tariff order but not incurred by the generating company cannot be passed on in tariff. In response, the petitioner in its rejoinder has submitted that it has considered the capital cost based on the admitted capital cost as on 21.10.2009 and the actual capital expenditure incurred during the period 2009-14 and has furnished Form-9 indicating the year-wise actual capital expenditure incurred. The petitioner has clarified that all these Packages are covered in the original scope of work and are necessary for successful operation and commissioning of the plant and full justification for completing these works after COD has been furnished. It has also submitted that the respondents are trying to reopen the issues already settled by Commission's order dated 4.7.2013 extending the cut-off date. Accordingly, the petitioner has prayed that the contentions of the respondents are liable to be rejected.

28. We have examined the matter. The submission of the respondents that the principles laid down in the judgment of the Tribunal dated 17.4.2014 is applicable in the instant case, has been examined. In our considered view, the facts in the present case are different from the facts dealt with by the Tribunal in the case of Kawas generating station of NTPC. The issues before the Tribunal pertains to the disallowance of projected additional capital expenditure by the Commission and deferment of the same to the period 2014-19 as the same has not been actually incurred by NTPC during 2009-14. The Commission in its tariff order in respect of Kawas generating station of NTPC had disallowed the projected additional capital expenditure in respect of Gas Turbine Life Extension Package, Compressor washing system of Gas Turbine and C & I Control System of the Steam Turbines for 2012-14 and had deferred their capitalisation for the next tariff period 2014-19 as the same was not actually incurred by NTPC. The Tribunal while affirming the said order of the Commission had observed that the expenditure claimed by NTPC

could not be considered at the time of truing-up for the purpose of tariff determination merely based on projections. In the present case, the petitioner was allowed by order dated 29.7.2010 the projected additional capital expenditure for works deferred for execution and which were within the original scope of work over and above the actual cash expenditure as on COD after deduction of liabilities from the capital cost. Since some of the liabilities have been discharged in respect of these works deferred for execution during the tariff period 2009-14 and the petitioner has claimed the actual additional capital expenditure during the tariff period 2009-14, including these liabilities discharged. Accordingly, these liabilities which have been discharged by the petitioner are required to be considered along with actual additional capital expenditure incurred on the assets/ packages which are within the original project cost in respective years for the purpose of determination of tariff of the generating station. Since the projected additional capital expenditure allowed vide order dated 29.7.2010 is trued-up based on actual for tariff purpose, the submissions of the respondents that the principles of the judgment dated 17.4.2014 is applicable in the present case is not tenable. Accordingly, we proceed to examine the submissions of the petitioner for additional capitalisation as discussed under.

Main Plant Package-BHEL

29. The projected additional capital expenditure of ₹40960.00 lakh allowed vide order dated 29.7.2010, involves an expenditure of ₹18240.00 lakh during 2009-11 (i.e ₹7235.00 lakh in 2009-10 and ₹11005.00 lakh in 2010-11) towards Main Plant package deferred for execution. Against this, the petitioner in this truing-up petition has claimed the actual additional capital expenditure amounting to ₹30012.70 lakh during 2009-13 towards Main Plant package. As regards variation in the expenditure claimed by the petitioner, it is noticed that the capital cost claimed by the petitioner in Petition No.308/2009 for ₹244397.90 lakh as on 21.10.2009 includes an expenditure of ₹147954.00 lakh towards Main Plant Package, which in turn comprise of liabilities of ₹15516.00 lakh. However, the capital cost as on 21.10.2009 allowed by order dated 29.7.2010 is ₹224612.67 lakh is excluding liabilities of ₹199040.08 lakh, which in turn comprise of liabilities of ₹15516.00 lakh towards Main Plant package. As the additional capital expenditure incurred

includes discharge of the liabilities towards Main Plant package, the claim of the petitioner for capitalization of the expenditure for ₹326.09 lakh in 2009-10, ₹11695.00 lakh in 2010-11, ₹17246.80 lakh in 2011-12 and ₹744.81 lakh in 2012-13 is allowed under Regulation 9(1)(ii) of the 2009 Tariff Regulations.

Switchyard

30. The Commission in its order dated 29.7.2010 had allowed the projected additional capital expenditure of ₹1527.00 lakh (₹427.00 lakh in 2009-10 and ₹1100.00 lakh in 2010-11) for Switchyard. The petitioner has claimed the actual additional capital expenditure of ₹2174.13 lakh in 2010-11, ₹55.26 lakh in 2011-12, ₹15.27 lakh in 2012-13 and ₹0.65 lakh in 2013-14. The petitioner was directed to furnish the reasons for the increase in the actual additional expenditure as compared to the projected expenditure and in response, the petitioner vide affidavit dated 16.7.2013 has furnished the reasons as under:

"ICT was supplied in the year 2010-11 and accordingly, payments were made in 2010-11. In the year 2011-12 payment of ₹55.26 lakh towards Testing & Commissioning and release of withheld payments in respect of civil works were made. These are deferred works within the original scope of work which is completed within the cut-off-date. Hence, expenditure of ₹2174.1 28 lakh in 2010-11, ₹55.26 lakh in 2011-12, ₹15.27 lakh in 2012-13 may be allowed under Regulation 9(1)(i)(ii)(iii)."

31. Considering the fact that the actual additional capital expenditure of ₹0.65 lakh incurred during 2013-14 is towards balance payments made by the petitioner after the cut-off date of the generating station, the same is allowed under Regulation 9(2) (viii) of the 2009 Tariff Regulations.

ATS-Power-Grid

32. The petitioner has claimed additional capital expenditure of ₹2.68 lakh in 2009-10 and ₹32.55 lakh in 2011-12 towards ATS-Power-Grid. As the claim of the petitioner for ₹35.23 lakh is towards balance payment made within the cut-off date, the same is allowed.

Coal Handling Plant

33. The Commission vide order dated 29.7.2010 had allowed the projected additional capital expenditure of ₹901.00 lakh in 2010-11 for Coal Handling Plant (CHP). The petitioner in this petition has claimed the actual additional capital expenditure of ₹2746.50 lakh in 2010-11,

₹1939.52 lakh in 2011-12, ₹787.41 lakh in 2012-13 and ₹14.48 lakh in 2013-14 for Coal Handling Plant. The petitioner was directed to furnish the justification for the increase in the actual additional capital expenditure in case of Coal Handling Plant as against the projected additional capital expenditure allowed by order dated 29.7.2010. In response, the petitioner vide affidavit dated 30.6.2015 has submitted that it had earlier claimed tariff on a gross block of ₹244398.00 lakh including an expenditure capitalized for Coal Handling Plant for ₹14641.00 lakh which included liabilities of ₹1660.00 lakh. The petitioner has also submitted that in the projected additional capital expenditure of ₹901.00 lakh claimed for CHP beyond 31.3.2012 in Petition No.308/2009, it had inadvertently missed the projected additional capital expenditure of ₹2325.00 lakh in 2010-11 towards Stacker Reclaimer. Accordingly, it has submitted that the actual additional capital expenditure of ₹2325.00 lakh has been claimed in 2010-11. It has further submitted that the liabilities of ₹1660.00 lakh as on COD of the generating station were subsequently capitalized as and when discharged and Capital spares of CHP package for ₹602.00 lakh was also capitalized in 2011-12. Thus, the total additional capital expenditure on CHP works out to ₹5488.00 lakh (2325+602+901+1660). In consideration of the submissions of the petitioner and as the actual expenditure incurred pertains to the discharge of liabilities of ₹1660.00 lakh and the Capitalization of capital spares of ₹602.00 lakh, the increase in the actual additional capital expenditure of CHP for ₹5488.00 lakh as against the projected additional capital expenditure of ₹901.00 lakh is allowed. Accordingly, the actual additional capital expenditure of ₹2746.50 lakh in 2010-11, ₹1939.52 lakh in 2011-12, ₹787.41 lakh in 2012-13 is allowed under Regulation 9(1)(i)of the 2009 Tariff Regulations. As the expenditure towards Capital spares is within the ceiling norms specified under the 2009 Tariff Regulations, the same is allowed under Regulation 9(2)(iii). The actual additional capital expenditure of ₹14.48 lakh in 2013-14 pertains to balance payments made by the petitioner after the cut-off date of the generating station. In view of this, the said expenditure has been allowed under Regulation 9(2) (viii) of the 2009 Tariff Regulations.

MGR

34. The Commission in its order dated 29.7.2010 had allowed the projected additional capital expenditure of ₹1607.00 lakh in 2009-10 and ₹200.00 lakh in 2010-11 towards MGR. The petitioner has claimed the actual additional capital expenditure of ₹488.41 lakh in 2010-11, ₹133.33 lakh in 2011-12 and ₹102.50 lakh in 2012-13. Considering the fact that the actual additional capital expenditure incurred is less than the projected additional capital expenditure allowed vide order dated 29.7.2010, the total additional capital expenditure of ₹488.41 lakh in 2010-11, ₹133.33 lakh in 2011-12 and ₹102.50 lakh in 2012-13 is allowed under Regulation 9 (1) (ii) of the 2009 Tariff Regulations.

Loco-DLW

35. The Commission vide its order dated 29.7.2010 had allowed the projected additional capital expenditure of ₹937.00 lakh in 2009-10 and 2011-12 for Loco-DLW system. This petitioner has not capitalized any expenditure towards Loco-DLW system and hence the same is not considered.

Make-up Water

36. The Commission vide its order dated 29.7.2010 had allowed the projected additional capital expenditure of ₹41.00 lakh in 2009-10 for Make-up-water. The petitioner in the petition has claimed the actual additional capital expenditure of ₹983.60 lakh in 2010-11 and ₹19.79 lakh in 2012-13 for the said system. The petitioner was directed to furnish the reasons for the increase in the actual additional expenditure and the petitioner vide affidavit dated 30.6.2015 has submitted the details pertaining to capitalization of assets in respect of Makeup water Package as under:

SI. No.	Year	Description	Amount (₹ in lakh)
1	2010-11	Makeup Water Pipe laying under Railway Track by RITES. A shorter length of Pipe Line for Make Up Water System involving overhead railway crossing was envisaged as per the original scheme. However, during execution the route was found not implementable as it was fouling with BSP facilities, underground cables and pipes. Accordingly, rerouting of Raw water pipeline was required through underground route necessitating increased pipeline length.	271.00
2	2010-11	Diversion of Pipe Route of Raw Water This was carried out on the request of BSP as certain facilities of expansion project are coming near our Raw Water Pipeline.	14.00
3	2010-11	Mandatory Spares of Makeup Water Package capitalized during the year	144.00
4	2010-11	Payment in respect of balance works namely PG Test payment,	77.00

	Justification	1003.39 (506+ 497)
	Actual Expenditure filed in final True up in 2014	1003.00
	Expenditure projected in 2009 (incl. Liabilities)	497.00
	Liabilities to be discharged in Makeup Water package in Tariff Petition in 2009	456.00
	Additional Capitalization Projected in initial Tariff Petition in 2009	41.00
5	Total (Make up Water)	506.00
	completion of facilities payment, retention amount etc. after COD	

37. It is observed that out of an additional capitalization claim of ₹1003.39 lakh an amount of ₹456.00 lakh pertains to discharge of liabilities and an amount of ₹77.00 lakh towards balance payments. In addition, the expenditure of ₹271.00 lakh is on rerouting of makeup water pipeline necessitate due to site conditions and balance on spares within the cut-off date. As such, the various expenditure are admissible under Regulation 9 (1) (i), (ii) & (iii). The actual additional capital expenditure of ₹1003.39 lakh in 2010-11 and 2012-13 as claimed by the petitioner is allowed.

Ash Dyke

38. The Commission vide its order dated 29.7.2010 had allowed the projected additional capital expenditure of ₹607.00 lakh in 2009-10 for Ash Dyke. The petitioner has claimed actual additional capital expenditure of ₹30.26 lakh in 2012-13 and has stated that the said expenditure is towards balance work / deferred works under the original scope of the project. Since the expenditure claimed by the petitioner has already been approved by the Commission in order dated 29.7.2010 and pertains to balance payments, the actual additional capital expenditure of ₹30.26 lakh is allowed.

Land

39. The Commission vide its order dated 29.7.2010 had allowed the projected additional capital expenditure of ₹1720.00 lakh in 2011-12 for Land. The petitioner in the petition has claimed actual additional capital expenditure of ₹207.72 lakh in 2011-12 towards payment made for registration of the said land. As the actual expenditure incurred is towards the balance payment for land and since the expenditure claimed under this head has already been approved by the Commission by order dated 29.7.2010, the actual additional capital expenditure of ₹207.72 lakh is allowed.



Township

40. The Commission vide order dated 29.7.2010 had allowed the projected additional capital expenditure of ₹8187.00 lakh in 2011-12 for Township. The petitioner in the petition has claimed the actual additional capital expenditure of ₹3359.30 lakh in 2011-12, ₹3930.30 lakh in 2012-13 and ₹478.13 lakh in 2013-14. The petitioner was directed to furnish the reasons for the decrease in the actual additional capital expenditure in case of Township as against the projected additional capital expenditure allowed by order dated 29.7.2010. In response, the petitioner vide affidavit dated 16.7.2013 has submitted the reasons mainly as under:

"The work of residential buildings started in January, 2010 and other works not awarded. Progress in Residential package hampered due to termination and resumption of contract. STP package awarded in February, 2012 and STP collection tank in May, 2012. Progress in site development package hampered due to non availability of clearance from State Authority. Progress in NR building Package hampered due to rocky strata and change of location."

41. It is observed that these are deferred works within the original scope of work which have been completed within the cut-off-date of the generating station. In view of this, the expenditure of ₹3359.30 lakh in 2011-12 and ₹3930.30 lakh in 2012-13 is allowed under Regulation 9(1)(i)(ii) of the 2009 Tariff Regulations. However, the actual additional capital expenditure of ₹478.13 lakh in 2013-14 is towards balance payment in respect of these works which have been made after the cut-off date of the generating station. Hence, the said expenditure of ₹478.13 lakh in 2013-14 is allowed under Regulation 9(2) (viii) of the 2009 Tariff Regulations.

Other Packages

42. The Commission in its order dated 29.7.2010 had allowed the projected additional capital expenditure of ₹250.00 lakh in 2009-10, ₹1789.00 lakh in 2010-11, ₹3160.00 lakh in 2011-12 towards Other Packages. The petitioner in this petition has claimed the actual additional capital expenditure of ₹822.20 lakh in 2010-11, ₹901.38 lakh in 2011-12, ₹1165.30 lakh in 2012-13 and ₹238.731 lakh in 2013-14 towards Other Packages included within the original project cost. The petitioner was directed to furnish the reasons for the variation/decrease in the actual additional capital expenditure in respect of Other packages as against the projected additional capital

expenditure allowed by order dated 29.7.2010. In response, the petitioner vide its affidavit dated 16.7.2013 has submitted the reasons for the period 2009-12 mainly as under:

"Slow progress of work viz. construction of road, Award of CCTV etc. and some of the work like CCTV, construction of Misc. sheds, landscaping etc., not awarded (2009-10). Some of the work like CCTV & Balance Watch towers (Rs 8 crore) kept for contingency work (2010-11). Additional work was kept in the scope as per requirement of site. Payments were made only in respect of works actually completed (2011-12)."

- 43. It is observed that these are deferred works within the original scope of work which have been completed within the cut-off-date of the generating station. Hence, the actual additional capital expenditure of ₹822.20 lakh in 2010-11, ₹901.38 lakh in 2011-12 and ₹1165.30 lakh in 2012-13 is allowed under Regulation 9(1)(i)(ii) of the 2009 Tariff Regulations. The actual additional capital expenditure of ₹238.73 lakh in 2013-14 relate to the balance payment made by the petitioner after the cut-off date of the generating station. Hence, the same is allowed under Regulation 9(2) (viii) of the 2009 Tariff Regulations.
- 44. The petitioner has reconciled the actual additional capital expenditure with the books of accounts as under:

					(₹in	lakh)
	21.10.2009	31.3.2010	31.3.2011	31.3.2012	31.3.2013	31.3.2014
Gross Block	232916.82	233279.80	242902.40	259596.83	265534.27	266041.42
IEDC of 2010-11	-	-	251.70	-	-	-
provided in 2011-12						
Sub-total	232916.82	233279.80	243154.10	259595.83	265534.27	266041.42
Less: Capital	19904.08	19938.30	10653.89	2569.95	1506.16	1281.14
liabilities in above						
	213012.74	213341.50	232500.21	257026.88	264028.11	264760.28
Add: Industrial Water	11000.00	11000.00	11000.00	11000.00	11000.00	11000.00
Total	224012.74	224341.50	243500.21	268026.88	275028.11	275760.28
Addition as per Books	-	328.76	19158.71	24526.67	7001.24	732.17
of Accounts						
Addition as per	-	328.77	19161.52	24526.72	7001.23	732.17
Form-9						

45. From the reconciliation statement submitted above by the petitioner it is noticed that there is difference of ₹0.01 lakh in 2009-10, ₹2.81 lakh in 2010-11, ₹0.05 lakh in 2011-12 and ₹0.01 lakh in 2012-13. The petitioner has stated that these differences are on accounting of the rounding off the amounts. Though the difference of ₹0.01 lakh and ₹0.01 lakh is allowed as rounding off errors, the difference of ₹2.81 lakh in 2010-11and ₹0.05 lakh in 2011-12 is not considered as a

rounding off error. In view of this, the additional expenditure for 2010-11 and 2011-12 has been considered as per books of accounts for the purpose of tariff.

46. Based on the above discussions, the actual additional capital expenditure allowed from COD of Unit-II till 31.3.2014 is summarized as under:

(₹in lakh) **Package** Actual additional capital expenditure 2011-12 2013-14 21.10.2009 2010-11 2012-13 **Total** to 31.3.2010 Main plant package-326.09 11695.00 17246.80 744.81 30012.70 0.00 **BHEL** Switchyard- L&T 2174.10 15.27 2245.28 0.00 55.26 0.65 ATS-Power-Grid 2.68 0.00 32.55 0.00 0.00 35.23 Coal Handling plant-TRF 2746.50 787.41 0.00 1939.52 14.48 5487.91 MGR 0.00 488.41 133.33 102.50 0.00 724.24 LOCO-DLW 0.00 0.00 0.00 0.00 0.00 0.00 1003.39 Make-Up water 0.00 983.60 0.00 19.79 0.00 Ash Dyke 0.00 0.00 30.26 0.00 30.26 0.00 Land 0.00 0.00 207.72 0.00 0.00 207.72 Industrial water 0.00 0.00 0.00 0.00 0.00 0.00 3359.30 3930.30 478.13 7767.73 Township 0.00 0.00 Other Packages 822.20 901.38 1165.30 238.73 3127.61 0.00 Total Add Capital 328.77 18909.80 23875.90 6795.60 731.99 50642.06 Expenditure IDC 0.00 251.70 650.84 205.60 0.18 1108.32 **Total** 19161.52 24526.72 7001.23 732.17 51750.27 328.77 Less: Difference as per 2.81 0.05 books of accounts 24526.67 Net actual additional 328.77 19158.71 7001.23 732.17 51750.27 capital expenditure

47. Accordingly, the capital cost considered for the purpose of tariff from 21.10.2009 to 31.3.2014 is as under:

					(₹in lakh)	
	2009	9-10				
	20.10.2009 to 31.3.2010		2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	152475.30	224173.27	224502.03	243660.74	268187.41	275188.64
Add: Additional Capital Expenditure	0.00	328.77	19158.71	24526.67	7001.23	732.17
Closing Capital Cost	152475.30	224502.03	243660.74	268187.41	275188.64	275920.81
Average Capital Cost	152475.30	224337.65	234081.39	255924.08	271688.03	275554.73

48. The interest on normative loan is to be treated as income in the financial statements of the petitioner i.e. Profit and Loss A/c and Balance Sheet of the petitioner as the same forms part of capital cost for the purpose of tariff determination.



Debt-Equity Ratio

49. Considering the details of the cumulative cash expenditure as submitted in Form-14A of the petition along with net loan position as on COD of the units, the debt-equity ratio as on the COD of Unit-I works out to 77.57:22.43 and Unit-II works out to 71.33:28.67, which is beyond the debt equity ratio norm of 70:30 as specified under the 2009 Tariff Regulations. As such, for the purpose of allocation of capital cost to debt and equity, the debt-equity ratio of 77.57:22.43 (as on COD of Unit-I) and 71.33:28.67 (as on COD Unit-II) has been considered. Further, the debt-equity ratio as on 31.3.2010, 31.3.2011, 31.3.2012, 31.3.2013 and 31.3.2014 is within the debt equity ratio norm of 70:30 as specified under the 2009 Tariff Regulations. However, the debt-equity ratio of 70:30 has been considered in the admitted additional capital expenditure.

Return on Equity

- 50. Regulation 15 of the 2009 Tariff Regulations provides as under:
 - "15. **Return on Equity**. (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% to 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.

51. Return on equity has been worked out considering the base rate of 15.5% and the tax rate applicable to petitioner for respective years i.e. MAT for period upto 31.3.2013 and normal tax rate for 2013-14. Accordingly, return on equity worked out is as given under:

(₹in lakh)

						iarary
	200	9-10				
	22.4.2009 to 20.10.2009	21.10.2009 to 31.3.2010	2010-11	2011-12	2012-13	2013-14
Normative Equity - Opening	34197.25	64265.45	64364.08	70111.69	77469.69	79570.06
Addition due to additional capital expenditure	0.00	98.63	5747.61	7358.00	2100.37	219.65
Normative Equity – Closing	34197.25	64364.08	70111.69	77469.69	79570.06	79789.71
Normative Equity – Average	34197.25	64314.76	67237.88	73790.69	78519.87	79679.88
Base Rate for return on equity	15.500%	15.500%	15.500%	15.500%	15.500%	15.500%
Applicable Tax Rate	16.995%	16.995%	19.931%	20.008%	20.008%	33.990%
Rate of Return on Equity (Pre-tax)	18.674%	18.674%	19.358%	19.377%	19.377%	23.481%
Return on Equity	6385.99	12010.14	13015.91	14298.42	15214.80	18709.63

Interest on loan

- 52. In terms of Regulation 16 of the 2009 Tariff Regulations, interest on loan has been worked out as under:
 - i) The gross normative loan as on COD of Unit-I & Unit-II works out to ₹118278.06 lakh and ₹159907.82 lakh respectively.
 - ii) The net loan opening as on COD of Unit-I (22.4.2009) is same as the gross loan. Accordingly, the cumulative repayment of loan up to the previous year/period is 'nil'.
 - iii) Depreciation allowed has been considered as repayment of loan for the respective periods. Further, repayments of loan have been adjusted towards the de-capitalization considered during the period.
 - iv) Weighted Average Rate of Interest has been computed considering the details of actual loan portfolio till 31.3.2014 as submitted by the petitioner in the petition and after adjustment of the same with IDC capitalized in the additional capital expenditure.



9330.12

					(₹in lakh)	
	2009	9-10				
	22.4.2009 to 20.10.2009	21.10.2009 to 31.3.2010	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	118278.06	159907.82	160137.96	173549.05	190717.72	195618.58
Cumulative Repayment	0.00	3990.87	9207.51	21480.18	34888.64	49046.71
Net Normative Loan – Opening	118278.06	155916.95	150930.45	152068.87	155829.08	146571.88
Addition due to additional capital expenditure	0.00	230.14	13411.10	17168.67	4900.86	512.52
Repayment of Normative Loan	3990.87	5216.64	12272.67	13408.46	14158.06	14301.09
Net Normative Loan – Closing	114287.19	150930.45	152068.87	155829.08	146571.88	132783.31
Normative Loan – Average	116282.62	153423.70	151499.66	153948.97	151200.48	139677.59
Weighted Average Rate of Interest on Loan	8.0237%	8.4209%	8.9043%	8.9427%	9.0686%	9.2122%

13490.01

13767.20

13711.71

12867.41

Depreciation

Interest on Loan

54. The petitioner has claimed depreciation considering the weighted average rate of depreciation of 5.46%, 5.37%, 5.60% and 5.13% for the period from COD of Unit-I (22.4.2009) to COD of Unit-II (21.10.2009), COD of Unit-II (21.10.2009) to 31.3.2011, 2011-12 and 2012-14, respectively. However, considering the asset-wise rates as per Appendix-III of the 2009 Tariff Regulations, the weighted average rate of depreciation considered for the purpose of tariff works out to 5.2492%, 5.2392%, 5.2429%, 5.2392%, 5.2111% and 5.1899% for the period from COD of Unit-I to COD of Unit-II, COD of Unit-II to 31.3.2010, 2010-11, 2011-12, 2012-13 and 2013-14, respectively. The necessary calculations in support of depreciation are as under:

12919.66

					(*	₹in lakh)
	2009	9-10				
	22.4.2009 to 20.10.2009	21.10.2009 to 31.3.2010	2010-11	2011-12	2012-13	2013-14
Average Capital Cost	152475.30	224337.65	234081.39	255924.08	271688.03	275554.73
Weighted Average Rate of Depreciation	5.2492%	5.2392%	5.2429%	5.2392%	5.2111%	5.1899%
Depreciation Depreciable Value	137227.77	201903.89	210673.25	230331.67	244519.22	247999.25
Remaining	137227.77	197913.02	201465.74	208851.49	209630.58	198952.55

Depreciable Value						
Depreciation (pro rata)	3990.87	5216.64	12272.67	13408.46	14158.06	14301.09
Depreciation for the year (annualized)	8003.67	11753.54	12272.67	13408.46	14158.06	14301.09
Cumulative depreciation at the end	3990.87	9207.51	21480.18	34888.64	49046.71	63347.79

Normative Annual Plant Availability Factor (NAPAF)

55. The NAPAF of 85% as considered in order dated 29.7.2010 in Petition No. 308/2009 has been considered for the purpose of tariff.

O&M Expenses

56. O&M expenses as considered in order dated 29.7.2010 in Petition No. 308/2009 as stated below has been considered.

				<i>(</i> ₹in lakh)
20	09-10	2010-11	2011-12	2012-13	2013-14
22.4.2009 to 20.10.2009	21.10.2009 to 31.3.2010				
4635.45	8895.45	9436.95	10009.66	10618.66	11259.02

Interest on Working Capital

Fuel Component

57. The fuel component in the working capital as considered in order dated 29.7.2010 in Petition No. 308/2009 is considered as under:

				(₹.	in lakh)	
	2009	9-10	2010-11	2011-12	2012-13	2013-14
	22.4.2009 to 20.10.2009	21.10.2009 to 31.3.2010				
Cost of coal for 2 months	2952.43	7534.47	7534.47	7555.11	7534.47	7534.47
Cost of secondary fuel oil for 2 months	56.17	164.14	164.14	164.59	164.14	164.14

Maintenance Spares

58. The maintenance spares as considered in order dated 29.7.2010 in Petition No. 308/2009 is allowed as under:



					(₹in lakh)
2009-10		2010-11	2011-12	2012-13	2013-14
22.4.2009 to 20.10.2009	21.10.2009 to 31.3.2010				
908.32	1760.32	1867.54	1980.95	2101.55	2228.35

Receivables

59. Receivables have been worked out on the basis of two months of fixed and energy charges (based on primary fuel only) as under:

					(₹ in lakh)	
	2009-10		2010-11	2011-12	2012-13	2013-14
	22.4.2009 to 20.10.2009	21.10.2009 to 31.3.2010				
Variable Charges - for two months	2952.43	7534.47	7534.47	7555.11	7534.47	7534.47
Fixed Charges – for two months	5032.94	8291.98	8743.78	9304.52	9684.39	10272.39
Total	7985.37	15826.46	16278.25	16859.63	17218.86	17806.86

O&M Expenses for one month

60. The O&M expenses for one month as considered in order dated 29.7.2010 in Petition No. 308/2009 has been considered.

		(₹in lakh)					
2009-10		2010-11	2011-12	2012-13	2013-14		
22.4.2009 to 20.10.2009	21.10.2009 to 31.3.2010						
386.29	741.29	786.41	834.14	884.89	938.25		

61. Accordingly, SBI PLR of 12.25% has been considered for the purpose of calculating interest on working capital. The necessary computations in support of calculation of interest on working capital are as under:

					(₹in lakh)		
	2009-10		2010-11	2011-12	2012-13	2013-14	
	22.4.2009	21.10.2009					
	to	to					
	20.10.2009	31.3.2010					
Cost of Coal for 2 months	2952.43	7534.47	7534.47	7555.11	7534.47	7534.47	
Cost of Secondary Fuel	56.17	164.14	164.14	164.59	164.14	164.14	
Oil for 2 months							
Maintenance Spares	908.32	1760.32	1867.54	1980.95	2101.55	2258.35	
O&M expenses for 1	386.29	741.29	786.41	834.14	884.89	938.25	
month							
Receivables for 2 months	7985.37	15826.46	16278.25	16859.63	17218.86	17806.86	
Total Working Capital	12288.57	26026.68	26630.82	27394.43	27903.91	28672.08	
Rate of Interest	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%	
Interest on Working	1505.35	3188.27	3262.28	3355.82	3418.23	3512.33	
Capital							



Cost of secondary fuel oil

62. The cost of secondary fuel oil as considered in order dated 29.7.2010 in Petition No. 308/2009 has been considered as under:

					(₹in lakh)
2009-10		2010-11	2011-12	2012-13	2013-14
22.4.2009 to	21.10.2009				
20.10.2009	to 31.3.2010				
337.03	984.86	984.86	987.55	984.86	984.86

Annual Fixed Charges

63. Accordingly, the annual fixed charges in respect of the generating station for the period 2009 (22.4.2009) to 31.3.2014 is summarized as under:

					(₹ in i	lakh)
	2009-10		2010-11	2011-12	2012-13	2013-14
	22.4.2009 to	21.10.2009				
	20.10.2009	to 31.3.2010				
Depreciation	8003.67	11753.54	12272.67	13408.46	14158.06	14301.09
Interest on Loan	9330.12	12919.66	13490.01	13767.20	13711.71	12867.41
Return on Equity	6385.99	12010.14	13015.91	14298.42	15214.80	18709.63
Interest on Working	1505.35	3188.27	3262.28	3355.82	3418.23	3512.33
Capital						
O&M Expenses	4635.45	8895.45	9436.95	10009.66	10618.66	11259.02
Cost of Secondary Fuel	337.03	984.86	984.86	987.55	984.86	984.86
Oil						
Total	30197.62	49751.91	52462.67	55827.12	58106.32	61634.34

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

- 64. The Energy Charge Rate determined by order dated 29.7.2010 in Petition No.308/2009 shall remain unchanged.
- 65. The difference in the annual fixed charges determined by order dated 29.7.2010 and those determined by this order shall be adjusted in accordance with Regulation 6 (6) of the 2009 Tariff Regulations.
- 66. Petition Nos. 220/GT/2013 and 132/GT/2014 are disposed of in terms of the above.

-Sd/(A.S. Bakshi)
Member

-Sd/(A. K. Singhal)
Member

-Sd/(Gireesh B. Pradhan)
Chairperson

