CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 237/GT/2013

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

Date of Hearing: 01.07.2014
Date of Order: 06.04.2015

In the matter of

Revision of annual fixed charges for the period 1.4.2009 to 31.3.2014 based on actual capital expenditure incurred during the years 2009-10 to 2011-12 and projected capital expenditure during the years 2012-13 and 2013-14 in respect of Assam Gas Based Power Project (291 MW) of North Eastern Electric Power Corporation Limited.

And

In the matter of

North Eastern Electric Power Corporation Ltd, Shillong **…Petitioner**

Vs

1. Assam Power Distribution Company Ltd, Guwahati
2. Meghalaya Energy Corporation Ltd., Shillong
3. Tripura State Electricity Corporation Ltd, Agartala
4. Power and Electricity Department, Government of Mizoram, Aizawl
5. Electricity Department, Government of Manipur, Imphal
6. Department of Power, Government of Arunachal Pradesh, Itanagar
7. Department of Power, Government of Nagaland, Kohima
8. North Eastern Regional Power Committee, Shillong
9. North Eastern Regional Load Despatch Centre, Shillong **...Respondents**

Parties present:

Shri Bhaskar Goswami, NEEPCO
Shri Rana Bose, NEEPCO
Ms. Elizabeth Pyrbot, NEEPCO
Shri Manoj Kr Adhikary, APDCL
Shri K.Goswami, APDCL
Shri R.Kapoor, APDCL

ORDER

The present petition has been filed by the petitioner, NEEPCO for revision of annual fixed charges in respect of Assam Gas Based Power Project (291 MW) ('the generating station') for the period 2009-14 based on actual additional capital expenditure incurred during the years 2009-10, 2010-11 and 2011-12 and the revised projected capital expenditure for the years 2012-13 and 2013-14 in terms of the proviso to clause (1) of Regulation 6 of the Central Electricity Regulatory Commission (Terms and conditions of Tariff) Regulations, 2009 ('the 2009 Tariff Regulations').

2. Assam Gas Based Power Project (AGBPP) is a Combined Cycle Power generating station and comprises of six Gas Turbines each of 33.5 MW capacity and three Steam Turbine each of 30 MW capacity. The exhaust of each Gas Turbine is fed into a Waste Heat Recovery Boiler. The steam from two such boilers is used to run one Steam Turbine Generator set. Thus, there are three Combined Cycle Modules. The dates of commercial operation of the individual units of the generation station with corresponding unit capacities are as under:

Unit No.	Date of Commercial Operation	Capacity
GT-1	1.5.1995	33.5 MW
GT-2	1.5.1995	33.5 MW
GT-3	1.7.1995	33.5 MW
GT-4	1.8.1995	33.5 MW
GT-5	1.4.1997	33.5 MW
GT-6	1.4.1997	33.5 MW
ST-1	1.4.1999	30 MW
ST-2	1.4.1999	30 MW
ST-3	1.4.1999	30 MW
Generation Station	**1.4.1999**	**291 MW**

3. The tariff of the generating station for the period 2009-14 was determined by the Commission vide order dated 6.9.2011 in Petition No.295/2009 based on capital cost of ₹148103.44 lakh as on 1.4.2009. The annual fixed charges approved by the Commission vide order dated 6.9.2011 is as follows:

(₹in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	12834.17	12851.21	12898.41	12949.54	13013.78
Interest on Loan	1242.76	663.48	299.69	217.55	143.90
Depreciation	7704.56	7721.47	1484.85	1559.44	1661.19
Interest on Working Capital	1344.76	1359.61	1251.83	1280.98	1313.92
O&M Expenses	6663.90	7045.11	7446.69	7874.46	8325.51
Total Annual Fixed Charges	**29790.14**	**29640.88**	**23381.47**	**23881.97**	**24458.31**

4. Clause (1) of Regulation 6 of the 2009 Tariff Regulations empowers the Commission to carry out the exercise of truing up of the capital expenditure incurred during the tariff period and consequent revision of tariff during the next tariff period, that is, the tariff period 2014-19. The proviso to clause (1) of Regulation 6 permits the generating company to file a petition for truing up of the capital expenditure incurred during the tariff period. Clause (1) of Regulation 6 so far as relevant is reproduced here under:

"6. Truing up of Capital Expenditure and Tariff

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."

5. Accordingly, the present petition is maintainable under the proviso to clause (1) of Regulation 6 of the 2009 Tariff Regulations.

6. The petitioner has capitalized various expenditure incurred during the years 2009-10, 2010-11 and 2011-12 in the books of accounts and has projected to capitalize the expenditure of capital nature to be incurred during the years 2012-13 and 2013-14 respectively. Accordingly, the petitioner has revised the annual fixed charges of the generating station for the period of 2009-14. The annual fixed charges claimed by the petitioner vide affidavit dated 4.6.2013 are as under:

(₹in lakh)

	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Depreciation	7704.56	7704.76	1398.18	1406.74	1584.29
Interest on Loan	1242.80	643.06	222.19	82.64	68.88
Return on Equity	13710.40	14212.81	14226.98	14233.57	14531.42
Interest on Working Capital	1363.48	1387.68	1276.56	1302.21	1342.85
O&M Expenses	6663.90	7045.11	7446.69	7874.46	8325.51
Total Annual Fixed Charges	**30685.14**	**30993.42**	**24570.60**	**24899.62**	**25852.95**

7. The respondent no.1, APDCL has filed its reply and the petitioner has submitted its rejoinder to the same. Based on the submissions of the parties and the documents available on record, we proceed to revise the annual fixed charges of the generating station in the subsequent paragraphs.

Capital Cost as on 1.4.2009

8. In terms of Clause 2 of Regulation 7 of the 2009 Tariff Regulations, the Commission has considered the opening capital cost of ₹148103.44 lakh as on 1.4.2009 in order dated 6.9.2011 in Petition No. 295/2009. The same has been considered for revision of tariff of the generating station for the period 2009-14.

Additional Capital Expenditure

9. Clause (2) of Regulation 9 of the 2009 provides as under:

*"9. **Additional Capitalization**.*

(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:

(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-materialization of full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station.

(viii) Any un-discharged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date, after prudence check of the details of such deferred liability, total estimated cost of package, reason for such withholding of payment and release of such payments etc.

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

10. The break-up of the additional capital expenditure allowed vide order dated 6.9.2011 in Petition No. 295/2009 is as follows:

(₹ in lakh)

	Head of Works/ Equipment	2009-10	2010-11	2011-12	2012-13	2013-14	Total
		Projected Additional Capital Expenditure					
A	**Additional Capital Expenditure**						
1	Replacement of radiators of gas engines of GBS- Phase wise	0	500	1500	0	0	2000
2	Additional Inlet scrubber	0	300	0	0	0	300
3	Replacement of engine fuel gas filter system	0	200	0	0	0	200
4	Replacement of gas engines of GBS Phase wise	0	0	0	1200	2500	3700
5	Up gradation of MEGAC MACTUS control system of MHI make gas turbines -Phase wise	0	0	800	0	800	1600
6	Up gradation of Mark IV control systems of BHEL make gas turbines	0	0	0	400	0	400
	Grand Total	**0**	**1000**	**2300**	**1600**	**3300**	**8200**
	Additional Capitalization as per books of accounts	0	1000	2300	1600	3300	

11. The petitioner has claimed actual/projected additional capital expenditure as under:

(₹ in lakh)

	2009-10 (actual)	2010-11 (actual)	2011-12 (actual)	2012-13 (projected)	2013-14 (projected)	Total
Gross Claim	0.00	7.55	0.00	453.60	7814.00	8275.15
De-capitalization	0.00	0.00	0.00	226.80	3733.50	3960.30
Net Additional Capital Expenditure Claimed	0.00	7.55	0.00	226.80	4080.50	4314.85

12. The detailed break-up of the additional capital expenditure claimed by the petitioner vide affidavit dated 2.4.2014 on gross value basis is as under:

(₹ in lakh)

Sl No	Head of Works/ Equipment	2009-10	2010-11	2011-12	2012-13	2013-14	Total
		(Actual capital expenditure)			(Projected capital expenditure)		
A.	**Additional Capital Expenditure**						
1	Replacement of radiators of gas engines of GBS-Phase wise	0.00	0.00	0.00	0.00	802.00	802.00
2	Additional Inlet scrubber	0.00	0.00	0.00	0.00	112.00	112.00
3	Replacement of engine fuel gas filter system	0.00	0.00	0.00	0.00	235.00	235.00
4	Replacement of gas engines of GBS Phase wise	0.00	0.00	0.00	0.00	4238.00	4238.00
5	Up gradation of MEGAC MACTUS control system of MHI make gas turbines -Phase wise	0.00	0.00	0.00	0.00	2427.00	2427.00
6	Up gradation of Mark IV control systems of BHEL make gas turbines	0.00	0.00	0.00	414.00	0.00	414.00
B	**New Claims**						
7	03t Diesel Operated Forklift Truck,3.6 mtr Mast, Solid Tyres, Dual Drive Model ACEAE30D	0.00	7.55	0.00	0.00	0.00	7.55
8	Procurement and Commissioning of 220V DC Battery Bank	0.00	0.00	0.00	19.60	0.00	19.60
9	Replacement of existing relays by numerical distance protection relay	0.00	0.00	0.00	20.00	0.00	20.00
	Total New Claims	0.00	7.55	0.00	39.60	0.00	47.15
	Grand Total	**0.00**	**7.55**	**0.00**	**453.60**	**7814.00**	**8275.15**

13. It is observed from above that there is an increase of ₹75.15 lakh in the actual / projected additional capital expenditure claimed by the petitioner as against the additional capital expenditure allowed by order dated 6.9.2011 in Petition No. 295/2009. The reasons for the said variation in the claim as submitted by the petitioner are as under:

> *(i) New claims of ₹47.15 lakh (actual capitalization of ₹7.55 lakh for Forklift truck during 2010-11 and projected additional capital expenditure of ₹39.60 lakh), ₹19.60 lakh 220 DC Battery sets and ₹20.00 lakh for replacement of existing relays by Numerical distance protection Relay)*

(ii) Reduction in claim by ₹1386.00 lakh (₹1198.00 lakh for replacement of radiators of gas engines and ₹188.00 lakh for additional inlet scrubber).

(iii) Increase in the expenditure claimed by ₹1414.00 lakh i.e ₹35.00 lakh for replacement of engine fuel gas filter system, ₹538.00 lakh for replacement of gas engines of GBS-Phase-wise, ₹827.00 lakh for up-gradation control system of MHI of gas turbines and ₹14.00 lakh for up-gradation of IV control of BHEL make of gas turbines.

14. We proceed to examine the actual/projected additional capital expenditure claimed by the petitioner for 2009-14, on prudence check, based on the submissions of the parties and the documents available on records, in the subsequent paragraphs:

Actual additional capital expenditure – New Claims

15. The petitioner has claimed actual additional capital additional capital expenditure of ₹7.55 lakh during 2010-11 towards a new item namely “Diesel Operated Forklift Truck”. This item is in the nature of tools & tackles. Since capitalization of “tools and tackles” after the cut-off-date is not permissible in terms of the last proviso of Regulation 9(2) of the 2009 Tariff Regulations, the expenditure has not been allowed. Except for the above expenditure, the petitioner has not claimed any actual additional capital expenditure for the period 2009-12.

Projected additional capital expenditure for the period 2012-14

16. **Procurement and Commissioning of 220 V DC Battery Bank**: The petitioner has claimed projected additional capital expenditure of ₹19.60 lakh in 2012-13 towards the procurement and commissioning of 220 V DC Battery Bank. The petitioner vide affidavit dated 2.4.2014 has furnished the de-capitalized value as ₹8.43 lakh towards gross block of the old battery. In justification of the said claim, the petitioner has submitted that the old battery was commissioned during 1994-95 and had completed more than its normal useful life of 10-12 years. In view of the justification furnished by the petitioner, the additional capital

expenditure of ₹19.60 lakh has been allowed to be capitalized along with corresponding de-capitalization of ₹8.43 lakh for 2012-13. Accordingly, on net basis, the additional capital expenditure of ₹11.17 lakh (19.60 – 8.43) has been allowed during 2012-13 under Regulation 9(2)(vi) of the 2009 Tariff Regulations.

17. **Replacement of existing relays by numerical distance protection relay:** The petitioner has claimed projected additional capital expenditure of ₹20.00 lakh in 2012-13 towards replacement of existing relays by numerical distance protection relays. The petitioner vide affidavit dated 2.4.2014 has furnished the de-capitalized value as ₹3.75 lakh towards the gross block of old protection relay. In justification of the said claim, the petitioner has submitted that in compliance to the CEA (Technical standards of Connectivity to the Grid), Regulations, 2007, numerical distance protection relays are to be installed in 220 kV and above feeders. In view of the justification submitted by the petitioner, the additional capital expenditure of ₹20.00 lakh has been allowed to be capitalized along with the corresponding de-capitalization of ₹3.75 lakh. Accordingly, on net basis, the additional capital expenditure of ₹16.25 lakh (20.00 –3.75) has been allowed in 2012-13 under Regulation 9 (2) (vi) of the 2009 Tariff Regulations.

18. **Replacement of radiators of gas engines of GBS-Phase wise**: The petitioner has claimed projected additional capital expenditure of ₹802.00 lakh during 2013-14 as against the projected additional capital expenditure of ₹2000.00 lakh (₹500.00 lakh in 2010-11 and ₹1500.00 lakh in 2011-12) allowed vide order dated 6.9.2011 in Petition No. 295/2009. The petitioner vide affidavit dated 2.4.2014 has furnished the de-capitalization value as ₹401.00 lakh towards replacement of the said asset. In justification of the said claim, the petitioner

vide affidavit dated 2.4.2014 has submitted that though orders have been placed, all materials have not been received at site till the date of capitalization of these assets. In view of the justification furnished by the petitioner, the projected additional capital expenditure of ₹802.00 lakh along with the corresponding de-capitalization of ₹401.00 lakh, which works out to ₹401.00 lakh (₹802.00-401.00) on net basis, has been allowed during 2013-14 under Regulation 9(2)(vi) of the 2009 Tariff Regulations.

19. **Additional Inlet Scrubber**: The petitioner has claimed projected additional capital expenditure of ₹112.00 lakh in 2013-14 for additional Inlet Scrubber as against the projected additional capital expenditure of ₹300.00 lakh in 2010-11 allowed vide order dated 6.9.2011 in Petition No. 295/2009, thereby constituting a less claim of ₹188 lakh. In justification of the claim, the petitioner vide affidavit dated 2.4.2014 has submitted that though order has been placed, all material have not been received at site till the date of capitalization. The petitioner has not submitted the gross block of the old asset but has instead submitted vide affidavit dated 2.4.2014 that the details of de-capitalization and the accumulated depreciation will be submitted at the time of final truing-up. In consideration of the submissions, the projected additional capital expenditure of ₹112.00 lakh is allowed in 2013-14 under Regulation 9(2) (vi) of the 2009 Tariff Regulations. This is however, subject to adjustment of corresponding de-capitalization of the old asset at the time of truing up, based on information to be furnished by the petitioner.

Replacement of Engine fuel Gas filter system and Gas engines of GBS-Phase wise

20. The petitioner has claimed projected additional capital expenditure of ₹235.00 lakh in 2013-14 for Replacement of Engine Fuel Gas Filter system as against the projected

expenditure of ₹200.00 lakh allowed in order dated 6.9.2011 in Petition No. 259/2009. As regards the increase in expenditure of ₹35.00 lakh, the petitioner vide affidavit dated 2.4.2014 has submitted that on finalization of tenders, the rates have increased as against the estimated rates. The petitioner has further submitted that the details of de-capitalization and accumulated depreciation will be submitted along with the final truing up petition on finalization of accounts for the year 2013-14. In consideration of the submissions of the petitioner, the projected additional capital expenditure of ₹235.00 lakh has been allowed in 2013-14 under Regulation 9(2)(vi) of the 2009 Tariff Regulations. This is however, subject to adjustment of corresponding de-capitalization of the old asset at the time of final truing up. Accordingly, the petitioner is directed to furnish the decapitalization of Engine Gas Fuel Filter system at the time of truing-up in terms of Regulation 6 of the 2009 Tariff Regulations.

21. The petitioner has claimed projected additional capital expenditure of ₹4238.00 lakh towards cost of Gas Engines of GBS for 2013-14 as against the projected expenditure of ₹3700.00 lakh allowed by order dated 6.9.2011 in Petition No. 295/2009, thereby resulting in an increase of ₹538.00 lakh. In justification of the said claim, the petitioner vide affidavit dated 2.4.2014 has submitted that on finalization of tenders, the rates have increased as against the estimated rates. The petitioner has also furnished the de-capitalized value of the replaced asset as ₹2119.00. In view of the justification furnished by the petitioner, the projected additional capital expenditure of ₹4238.00 lakh along with corresponding de-capitalization of ₹2119.00 lakh has been considered. Accordingly, additional capital expenditure of ₹2119.00 lakh on net basis, has been allowed in 2013-14 under Regulation 9(2)(vi) of the 2009 Tariff Regulations.

Up-gradation of MEGAC MACTUS control system of MHI make Gas Turbines-Phase wise

22. The petitioner has claimed projected additional capital expenditure of ₹2427.00 lakh for up-gradation of MEGAC MACTUS control system of MHI make Gas Turbines in 2013-14 as against the expenditure of ₹1600.00 lakh (₹800.00 lakh each during 2011-12 & 2013-14) allowed by order dated 6.9.2011 in Petition No. 295/2009. As regards the increase in the expenditure by ₹827.00 lakh, the petitioner vide affidavit dated 2.4.2014 has submitted that the estimate of works was prepared based on an offer from MHI during the year 2003. However, at the time of execution of the work in 2013-14, the prices have been hiked and the total amount has increased from the estimated price. The petitioner has also submitted that this is a proprietary item and there is a gap of about 10 years between the projected estimation price and the price at the time of actual execution. Considering the fact that Gas Turbine control systems are fast changing technology and the prices would increase with advent of newer version of the control systems, the projected additional capital expenditure has been allowed. The petitioner has also furnished the de-capitalized value of replaced old asset as ₹1213.50.00 lakh. In view of this, the projected additional capital expenditure of ₹2427.00 lakh along with corresponding de-capitalization value of ₹1213.50 lakh has been considered. Accordingly, additional capital expenditure of ₹1213.50 lakh, on net basis, has been allowed in 2013-14 for up-gradation of MEGAC MACTUS control system of MHI make Gas Turbines under Regulation 9(2)(vi) of the 2009 Tariff Regulations.

Up-gradation of Mark IV control systems of BHEL make Gas Turbines

23. The petitioner has claimed projected additional capital expenditure of ₹414.00 lakh for Up-gradation of Mark-IV control systems of M/s BHEL make Gas Turbines in 2012-13 as against the expenditure of ₹400.00 lakh allowed by order dated 6.9.2011 in Petition No.

295/2009, thereby resulting in an increase of ₹14.00 lakh. In justification of the expenditure, the petitioner vide affidavit dated 2.4.2014 has submitted that the actual cost of procurement of materials, erection and commissioning has increased at the time of execution. The petitioner has also submitted that the increase in expenditure is very small and may be allowed considering the lead time of actual capitalization and projected estimation price. In view of the submissions, the projected additional capital expenditure of ₹414.00 lakh along with the corresponding de-capitalization value of ₹151.90 lakh has been considered. Accordingly, the additional capital expenditure of ₹262.10 lakh, on net basis, in 2012-13 towards up-gradation of MEGAC MACTUS control system of MHI make Gas Turbines has been allowed under Regulation 9(2)(vi) of the 2009 Tariff Regulations.

Reconciliation of actual additional capital expenditure with books of accounts

24. The petitioner has claimed additional capital expenditure as per books of accounts for the years 2009-10, 2010-11 & 2011-12 as under:

(₹ in lakh)

	2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)
Opening Gross Block as on 1st April of year (A)	151470.50	151484.69	151507.38
Closing Gross Block as on 31st March of year (B)	151484.69	151507.38	151520.77
Addition during the year C = (B-A) (as per books)	**14.19**	**22.69**	**13.39**
Exclusions (D)	14.19	15.13	13.39
Additional Capitalisation claimed on cash basis E = (C-D)	**0.00**	**7.56**	**0.00**

The actual additional capital expenditure claimed by the petitioner for tariff purpose has been reconciled with gross block of balance sheet. It is observed form the table above that actual additional capital expenditure claimed by the petitioner is at variance with the additional capital expenditure as per books of accounts due to exclusions of certain expenditure.

Exclusions

25. The summary of exclusions from books of accounts as claimed for the years 2009-10, 2010-11 and 2011-12, is as under:

(₹ in lakh)

Sl. No		2009-10	2010-11	2011-12
1	Not related to core activity	28.45	4.90	0.00
2	Minor Assets	15.46	11.34	13.39
3	De-Capitalization of the old assets without any replacement by the new assets	(-) 27.94	(-) 0.95	0.00
4	Transfer to other office/unit	(-) 1.78	0.00	0.00
5	Change of a/c Head	0.00	(-) 0.16	0.00
	Total exclusions	**14.19**	**15.13**	**13.39**

26. We consider the exclusions as under:

(a) Items not related to core activity: The petitioner has excluded amount of ₹28.45 lakh during 2009-10, ₹4.90 lakh during 2010-11 in respect of items like extension of VKV School, Construction of first floor on fire station building, supply and laying of underground service connection to ATM which are not related to core activity. The petitioner has submitted that these items/assets are minor in nature and has not been claimed for the purpose of tariff and hence do not form part of capital cost. In view of the justification, the exclusions of ₹28.45 lakh in 2009-10 and ₹4.90 lakh in 2010-11 are in order and have been allowed.

(b) **Minor Assets**: The petitioner has excluded amounts for ₹15.46 lakh during 2009-10, ₹11.34 lakh during 2010-11 and ₹13.39 lakh during 2011-12 in respect of assets like Samsung Refrigerator, Vacuum Cleaner, Bush/ Weed Cutter, Dry Cleaner, Furniture & Fixture, Audio Visual Equipment, Books & Manuals, Communication Equipment, Office

Equipment, EDP Equipment which are minor in nature. These assets/items have not been considered for the purpose of tariff and hence do not form part of capital cost. Accordingly, the exclusion of ₹15.46 in 2009-10, ₹11.34 lakh in 2010-11 and ₹13.39 lakh in 2011-12 are in order and has been allowed.

(c) De-capitalization of old assets without any replacement by new assets: The petitioner has sought the exclusion of (-)₹27.94 lakh during 2009-10 towards de-capitalization of School Buses & Ambulance, (-)₹0.95 lakh during 2010-11 towards de-capitalization of Analog Copier on the same becoming unserviceable. From the details of the de-capitalization furnished vide affidavit dated 2.4.2014, it is observed that the assets de-capitalized were part of the capital cost. In view of this, the exclusion of (-)₹27.94 lakh in 2009-10, (-)₹0.95 lakh in 2010-11 has not been allowed.

(d) Transfer to other office/unit: The petitioner has excluded de-capitalization of (-)₹1.78 lakh during 2009-10 for assets like laptop, desktop computer which were transferred from office equipment of the generating station to the IT department, Shillong. The Commission in its various orders while determining the tariff of other generating stations of the petitioner for the period 2009-14 including additional capitalization had decided that both positive and negative entries arising out of inter-unit transfers of temporary nature shall be ignored for the purposes of tariff. In line with the said decisions, the exclusion of the amount of (-)₹1.78 lakh on account of inter-unit transfer of equipment has been allowed.

(e) Change of Account Head: The petitioner has excluded the de-capitalization of (-) ₹0.16 lakh during 2010-11 for assets like AlokSign cover notice board (2 Nos.) which were transferred from office equipment to Minor assets. While changing the head of Account (i.e from one head to another), there is no effect on the assets side of the balance sheet and the net effect due to said change remains the same. Hence, exclusions in this respect have not been allowed.

27. Based on the above discussions, the details of the exclusions claimed *vis-à-vis* those allowed is summarized under:

(₹ in lakh)

	2009-10	2010-11	2011-12
Exclusion claimed(A)	14.19	15.13	13.39
Exclusion allowed(B)	42.13	16.24	13.39
Exclusion not allowed (A-B)	**(-) 27.94**	**(-) 1.11**	**0.00**

28. Accordingly, the actual / projected additional capital expenditure allowed for the period 2009-14 is summarized as under:

(₹ in lakh)

Sl. No	Head of Works/ Equipment	Additional Capital Expenditure					
		2009-10 (Actual)	**2010-11 (Actual)**	**2011-12 (Actual)**	**2012-13 (Projected)**	**2013-14 (Projected)**	**Total**
A.	**Additional Capital Expenditure**						
1	Replacement of radiators of gas engines of GBS- Phase wise	0.00	0.00	0.00	0.00	802.00	802.00
2	De-capitalization	0.00	0.00	0.00	0.00	401.00	401.00
3	Net Additional Capital Expenditure (1-2)	0.00	0.00	0.00	0.00	401.00	401.00
4	Additional Inlet scrubber	0.00	0.00	0.00	0.00	112.00	112.00
5	Replacement of engine fuel gas filter system	0.00	0.00	0.00	0.00	235.00	235.00
6	Replacement of gas engines of GBS Phase wise	0.00	0.00	0.00	0.00	4238.00	4238.00
7	De-capitalization	0.00	0.00	0.00	0.00	2119.00	2119.00
8	Net Additional Capital Expenditure (6-7)	0.00	0.00	0.00	0.00	2119.00	2119.00
9	Up gradation of MEGAC MACTUS control system of NHI make gas turbines -Phase wise	0.00	0.00	0.00	0.00	2427.00	2427.00

10	De-Capitalization	0.00	0.00	0.00	0.00	1213.50	1213.50
11	Net Additional Capital Expenditure (9-10)	0.00	0.00	0.00	0.00	1213.50	1213.50
12	Up gradation of Mark IV control systems of BHEL make gas turbines	0.00	0.00	0.00	414.00	0.00	414.00
13	De-capitalization	0.00	0.00	0.00	151.90	0.00	151.90
14	Net Additional Capital Expenditure (12-13)	0.00	0.00	0.00	262.10	0.00	262.10
15	**Sub Total (3+4+5+8+11+14)**	0.00	0.00	0.00	262.10	4080.50	4342.60
B.	**New Claims**						
16	03 T Diesel Operated Forklift Truck,3.6 mtr Mast, Solid Tyres, Dual Drive Model ACEAE30D	0.00	0.00		0.00	0.00	0.00
17	Procurement and Commissioning of 220V DC Battery Bank	0.00	0.00	0.00	19.60	0.00	19.60
18	De-Capitalization	0.00	0.00	0.00	8.43	0.00	8.43
19	Net Additional Capital Expenditure	0.00	0.00	0.00	11.17	0.00	11.17
20	Replacement of existing relays by numerical distance protection relay	0.00	0.00	0.00	20.00	0.00	20.00
21	De-Capitalization	0.00	0.00	0.00	3.75	0.00	3.75
22	Net Additional Capital Expenditure	0.00	0.00	0.00	16.25	0.00	16.25
23	Sub Total (19+22)	0.00	0.00	0.00	27.42	0.00	27.42
24	**Total**	0.00	0.00	0.00	289.52	4080.50	4370.02
25	**Exclusions not allowed**	(-)27.94	(-)1.11	0.00	0.00	0.00	29.05
	Net additional capital Expenditure allowed	**(-) 27.94**	**(-) 1.11**	**0.00**	**289.52**	**4080.50**	**4340.97**

Capital Cost for 2009-14

29. Based on the above discussions, the year-wise capital cost considered for the period 2009-14 is as under:

(₹ in lakh)

	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Opening Capital Cost	148103.44	148075.50	148074.39	148074.39	148363.91
Additional Capitalization allowed	(-) 27.94	(-) 1.11	0.00	289.52	4080.50
Closing Capital Cost	**148075.50**	**148074.39**	**148074.39**	**148363.91**	**152444.41**

Debt Equity Ratio

30. Regulation 12 of 2009 Tariff Regulations provides as under:

> *"(1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:*
>
>> *Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:*
>> *Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.*
>
> *Explanation.- The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the generating station or the transmission system.*
>
> *(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.*
>
> *(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation."*

31. The debt equity ratio considered in order dated 6.9.2011 in Petition No. 295/2009 was 50.43: 49.57 as on 31.3.2009 for the additional capital expenditure as admitted during 2009-14. In line with the above regulation, the debt equity ratio of 70:30 has been applied.

Return on Equity

32. Regulation 15 of the 2009 Tariff Regulations provides as under:-

> *"15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 12.*
>
> *(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% for thermal generating stations, transmission system and run of the river generating station, and 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage and shall be grossed up as per clause (3) of this Regulation:*

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

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

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

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

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

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

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

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

33. The Rate of Return on Equity considered by the petitioner is as follows:

Year	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**
		ACTUAL		**PROJECTED**	
Base Rate	15.5%	15.5%	15.5%	15.5%	15.5%
Applicable MAT Rate	15.00%	18.00%	18.50%	18.50%	18.50%
Surcharge	10%	7.50%	5%	5%	10%
Education cess	3%	3%	3%	3%	3%
Rate of ROE (pre-tax)	18.674%	19.358%	19.377%	19.377%	19.610%

34. In consideration of the above rates, Return on Equity has been computed as follows:

(₹ in lakh)

	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Gross Notional Equity	73419.71	73411.33	73411.00	73411.00	73497.86
Addition due to Additional Capitalisation	(-) 8.38	(-) 0.33	0.00	86.86	1224.15
Closing Equity	**73411.33**	**73411.00**	**73411.00**	**73497.86**	**74722.01**
Average Equity	**73415.52**	**73411.17**	**73411.00**	**73454.43**	**74109.93**

Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Tax rate (MAT)	16.995%	19.931%	20.008%	20.008%	20.961%
Rate of Return on Equity (Pre Tax)	18.674%	19.358%	19.377%	19.377%	19.610%
Return on Equity (Pre Tax)	**13709.30**	**14211.07**	**14224.76**	**14233.17**	**14533.29**

Interest on Loan

35. Regulation 16 of the 2009 Tariff Regulations provides as under:-

> *"16. (1) The loans arrived at in the manner indicated in Regulation 12 shall be considered as gross normative loan for calculation of interest on loan.*
>
> *(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.*
>
> *(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:*
>
> *(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.*
>
> *(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:*
>
> *Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:*
>
> *Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.*
>
> *(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.*
>
> *(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.*
>
> *(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.*
>
> *(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:*

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

36. The computation of interest on loan in tariff is based on the following:

(i) The opening gross normative loan as on 1.4.2009 has been arrived at in accordance with Regulation 16 of the 2009 Tariff Regulations.

(ii) The repayment for the respective years of the period 2009-14 has been considered equal to the depreciation allowed for that year.

(iii) The petitioner has claimed the average rate of interest @ 8.813% as on 1.4.2009 in respect of Syndicate loan. However, no document has been provided in support of the actual rate of interest. Thus, rate of interest of 7.94% prevailing as on 31.3.2009 as per documents available on record has been considered for working out the weighted average rate of interest for the years 2009-10 and 2010-11. However, considering the quantum of Syndicate Loan is very less as compared to the total loan portfolio, the impact on the weighted average rate of interest on loan is negligible.

(iv) Since the actual loan has been repaid in 2012-13, the weighted average rate of interest on loan for the year 2012-13 has been considered during 2013-14.

37. Based on the above, the interest on loan allowed the purpose of tariff for 2009-14 is as under:

(₹ in lakh)

	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Gross Notional Loan	74683.73	74664.17	74663.39	74663.39	74866.06
Cumulative Repayment of Loan upto previous year	56309.37	58917.90	61322.81	63727.74	66144.76
Net Opening Loan	18374.36	15746.27	13340.59	10935.65	8721.30
Addition due to Additional Capitalisation	(-) 19.56	(-) 0.78	0.00	202.66	2856.35
Repayment of Loan during the period	2608.53	2404.91	2404.93	2417.02	2,630.49
Net Closing Loan	15746.27	13340.59	10935.65	8721.30	8947.16
Average Loan	17060.31	14543.43	12138.12	9828.48	8834.23
Weighted Average Rate of Interest on Loan	8.558%	9.429%	9.783%	9.783%	9.783%
Interest on Loan	**1459.98**	**1371.30**	**1187.47**	**961.52**	**864.25**

Depreciation

38. Regulation 17 of the 2009 Tariff Regulations provides as under:-

*"17. **Depreciation** (1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.*

(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site;

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

(3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

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

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

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.

(6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis."

Calculation of Balance Useful life of Gas station for the purpose of recovery of depreciation

39. The details of the date of commercial operation of the different units (GTs & STs) of the generating station, the period of operation up to 31.3.2009 and 31.3.2014 (completion of R&M works) and the extended life after R&M of Gas Turbine and their Weighted average period of operation on above dates and weighted average life are as under:

Description	Capacity (MW)	COD	Elapsed Life up to 31.3.2009	Elapsed Life up to 31.3.2014	Useful life after extension of life by 10 years for GTs
GT-1	33.5	1-May-1995	13.92	18.92	28.92
GT-2	33.5	1-May-1995	13.92	18.92	28.92
GT-3	33.5	1-Jul-95	13.75	18.75	28.75
GT-4	33.5	1-Aug-95	13.67	18.67	28.67
GT-5	33.5	1-Apr-97	12.00	17.00	27.00
GT-6	33.5	1-Apr-97	12.00	17.00	27.00
ST-1	30	1-Apr-99	10.00	15.00	25.00
ST-2	30	1-Apr-99	10.00	15.00	25.00
ST-3	30	1-Apr-99	10.00	15.00	25.00
	291.0 (Total)		12.22 (Weighted Average)	17.22 (Weighted Average)	27.22 (Weighted Average)

40. The issue of life extension of Gas Turbines (*Jhanor Gandhar Gas Power Station of NTPC)* for 15 years was examined by the Appellate Tribunal for Electricity (the Tribunal) in Appeal No. 71/2012 (NTPC-v-CERC & ors) and the Tribunal by its judgment dated 25.10.2013 held as under:

> *"24. It is clear from the table given in the impugned order in paragraph 61 that, the useful life of Gas Turbine I, II & III at Gandhar after extension of life by 15 years has been considered as 32.08, 31.75 and 32.08 years respectively while the life of steam turbine has been taken as 25 years. Accordingly, the weighted average useful life of the gas based power station after extension of useful life of Gas Turbine has been computed as 29.59 years in the impugned order. Similarly in case of Kawas the useful life of the gas turbines IA, IB, 2A and 2B on life extension after R&M has been considered as 35.83, 35.67, 35.58 and 35.42 year respectively and for steam turbine as 25 years. Accordingly, for Kawas the weighted average life of the gas station has been computed as 29.59 years in the impugned order. This is against the intent of the Regulations for enhancing the useful life of the gas turbine to 25 years on Renovation after completing 15 years of useful life. No reason has been given by the Central Commission for enhancing the useful life of the gas turbines by 15 years after R&M over the elapsed life as on 1.4.2012 instead of 10 years as intended in its Tariff Regulations, 2009. We feel that the useful life of the Gas Turbines should have been extended by 10 years after completion of the Renovation of the Gas Turbines as per the Regulations. Accordingly, decided.*
>
> *25. Therefore, we decide to remand this matter back to the Central Commission with direction to re- determine the useful life of the plants after extension of life by 10 years for GTs after completion of Renovation and Modernization, instead of 15 years"*

41. As per the judgment of the Tribunal, the useful life of the Gas Turbines is required to be extended by 10 years after completion of R&M, instead of 15 years. In the present case, the weighted average of the elapsed life (period of operation of the gas station) as on 31.3.2009 works out to12.22 years. It is observed that R&M works are projected to be completed by 31.3.2014. Accordingly, the weighted average of the period of operation of the generating station works out to be 17.22 years as on 31.3.2014. In line with the observations of the Tribunal in the said judgment (as quoted above), the useful life of Gas Turbines shall be extended by 10 years and the useful life of Steam Turbine shall remain as 25 years from the date of commercial operation of the ST units. After extension of life of the GT by 10 years, the weighted average life of the generating station works out to be 27.22 years and the weighted average life of the generating station as on 31.3.2014 works out to be 17.22 years as detailed at para 39 above. Hence, the balance useful life of the generating station works out to be 10 years (with effect from 1.4.2014) and the same has been considered for the purpose of depreciation.

42. Since the elapsed life of the generating station up to 31.3.2009 is more than 12 years, the remaining depreciable value has been spread over the balance useful life of the assets from the year 2009-10 to 2013-14 vide proviso to Regulation 17 (4) of 2009 Tariff Regulations. Accordingly, depreciation has been calculated as under:

(₹ in lakh)

	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Opening Gross Block	148103.44	148075.50	148074.39	148074.39	148363.91
Additional Capitalization	(-) 27.94	(-)1.11	0.00	289.52	4080.50
Closing Gross Block	148075.50	148074.39	148074.39	148363.91	152444.41
Average Gross Block	148089.47	148074.95	148074.39	148219.15	150404.16
value of Gross block excluding Land	147939.30	147924.78	147924.22	148068.98	150253.99
Depreciable Value @90%	133145.37	133132.30	133131.80	133262.08	135228.59

Cumulative Depreciation (at the end of the period)	102397.58	104801.71	107206.64	109502.42	109386.68
Remaining Depreciable Value	33336.99	30734.72	28,330.09	26055.44	25726.17
Balance Useful life of the asset (years)	12.78	11.78	10.78	9.78	8.78
Depreciation for the period (spread over the remaining life)	**2608.53**	**2404.91**	**2404.93**	**2417.02**	**2630.49**

O&M Expenses

43. The following O & M Expenses as allowed in order dated 6.9.2011 in Petition No. 295/2009 is considered:

(₹in lakh)

2009-10	2010-11	2011-12	2012-13	2013-14
6663.90	7045.11	7446.69	7874.46	8325.51

Interest on Working Capital

44. In accordance with sub-clause (b) of clause (1) of Regulation 18 of the 2009 regulations, working capital in case of open cycle gas turbine shall cover**:**

(i) Fuel cost for one month corresponding to the normative annual plant availability factor, duly taking into account the mode of operation of the generating station on gas and liquid fuel;

(ii) xxxxxxx

(iii) Maintenance spares at 30% of operation and maintenance expenses specified in Regulation 19;

(iv) Receivables equivalent to two months of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;

(v) Operation and maintenance expenses for one month.

45. Based on the above, the fuel cost in the working capital is worked out as under:

(₹in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of Fuel for 1 month	1152.69	1152.69	1155.85	1152.69	1152.69

Maintenance Spares

46. The following maintenance spares as allowed in order dated 6.9.2011 in Petition No.295/2009 has been considered:

(₹in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	1999.17	2113.53	2234.01	2362.34	2497.65

Receivables

47. In terms of the provisions of the above regulations, receivables equivalent to two months of capacity charge and energy charge calculated on normative plant availability factor is as allowed as under:

(₹in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Variable Charges -2 months	2305.38	2305.38	2311.70	2305.38	2305.38
Fixed Charges - 2 months	4283.84	4387.38	4430.17	4471.21	4622.39
Receivables	**6589.22**	**6692.76**	**6741.87**	**6776.80**	**6927.78**

O&M Expenses (one month)

48. The following O&M expenses for one month as allowed in order dated 6.9.2011 in Petition No.295/2009 has been considered:

(₹in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
O & M expenses	555.33	587.09	620.56	656.21	693.79

48. In terms of Clauses (3) and (4) of Regulation 18 of the 2009 regulations, the SBI PLR as on 1.4.2009 was 12.25%. This has been considered by the petitioner. The same interest rate has been considered in the calculations, for the purpose of tariff.

50. Necessary computations in support of interest on working capital are appended below:

(₹in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Fuel Cost	1152.69	1152.69	1155.85	1152.69	1152.69
O & M expenses	555.33	587.09	620.56	656.21	693.79
Spares	1999.17	2113.53	2234.01	2362.34	2497.65

Receivables – 2 months	6589.22	6692.76	6741.87	6776.80	6927.78
Total Working Capital	10296.41	10546.08	10752.28	10947.83	11271.91
Interest Rate-SBI PLR	12.25%	12.25%	12.25%	12.25%	12.25%
Total Interest on Working Capital	**1261.31**	**1291.90**	**1317.15**	**1341.11**	**1380.81**

Annual Fixed Charges

51. The annual fixed charges approved for the generating station for the period from 1.4.2009 to 31.3.2014 is as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	13709.30	14211.07	14224.76	14233.17	14533.29
Interest on Loan	1459.98	1371.30	1187.47	961.52	864.25
Depreciation	2608.53	2404.91	2404.93	2417.02	2630.49
Interest on Working Capital	1261.31	1291.90	1317.15	1341.11	1380.81
O&M Expenses	6663.90	7045.11	7446.69	7874.46	8325.51
Total annual fixed charges	**25703.02**	**26324.28**	**26581.01**	**26827.28**	**27734.35**

52. The recovery of the annual fixed charges shall be subject to truing up, in terms of Regulation 6 of the 2009 Tariff Regulations.

53. The difference in the annual fixed charges determined by order dated 30.9.2011 and those determined by this order shall be adjusted in accordance with Regulation 6 (6) of the 2009 Tariff Regulations.

54. Petition No. 237/GT/2013 is disposed of in terms of the above.

Sd/-
(A. K. Singhal)
Member

Sd/-
(Gireesh B. Pradhan)
Chairperson