

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 458/GT/2014

Coram:

Shri Gireesh B. Pradhan, Chairperson

Shri A. K. Singhal, Member

Shri A. S. Bakshi, Member

DATE OF HEARING: 16.07.2015

DATE OF ORDER: 28.09.2015

IN THE MATTER OF

Revision of tariff for the period 2009-14 based on truing-up of the capital expenditure including additional capital expenditure incurred during the period 2009-14 in respect of Doyang Hydro Electric Project (75 MW) of North Eastern Electric Power Corporation Limited.

AND

IN THE MATTER OF

North Eastern Electric Power Corporation Ltd
Brookland Compound
Lower New Colony
Shillong-793 003

.....Petitioner

Vs

1. Assam Power Distribution Company Ltd.
"Bijulee Bhawan", Paltanbazar
Guwahati-781 001

2. Meghalaya Energy Corporation Ltd.
Meter Factory Area, Short Round Road
Integrated Office Complex
Shillong-793 001

3. Tripura State Electricity Corporation Ltd.
Bidyut Bhavan, North Banamalipur
Agartala-799 001

4. Power and Electricity Department
Govt. of Mizoram
P&E Office Complex, Electric Veng,
Aizwal-796 001



5. Electricity Department
Govt. of Manipur, Keishampat
Imphal-795 001

6. Department of Power
Govt. of Arunachal Pradesh
Vidyut Bhawan
Itanagar-791 111

7. Department of Power
Govt. of Nagaland
Kohima-797 001

8. North Eastern Regional Power Committee
Meghalaya State Housing Finance Co-operative
Society Ltd. Building
Nongrim Hills
Shillong-793 003

9. North Eastern Regional Load Despatch Centre
Dongtiah, Lower Nongrah
Lapalang
Shillong-793 006

.....Respondents

Parties present:

1. Shri. Rana Bose, NEEPCO
2. Shri. Paresh Ch. Barman, NEEPCO
3. Ms. Elizabeth Pyrbot, NEEPCO
4. Shri Devapriya Choudhary, NEEPCO
6. Shri K. Goswami, APDCL

ORDER

The petitioner has filed this petition for revision of tariff for 2009-14 based on true-up of the capital expenditure including additional capital expenditure incurred during the period 2009-14 in respect of Doyang Hydro Electric Project (3 x 25MW) (hereinafter referred to as “the generating station”) of North Eastern Electric Power Corporation Ltd in terms of Regulation 6(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”).



2. The generating station comprises of three units of 25 MW each and the date of commercial operation of the units, corresponding to its capacity is as under:

	Date of commercial operation (COD)
Unit-I	29.6.2000
Unit-II	5.7.2000
Unit-III /Generating station	8.7.2000

3. The tariff of the generating station for the period 2004-09 (revised) and 2009-14 was determined by the Commission in order dated 24.12.2012 in Petition No.63/2010 considering the capital cost of ₹64858.58 lakh as on 31.3.2009 as the opening capital cost as on 1.4.2009. The annual fixed charges approved by the Commission vide order dated 24.12.2012 is as under:

	<i>(₹in lakh)</i>				
	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	1965.26	2361.07	2773.65	3185.37	3584.17
Interest on Loan	23.74	0.00	0.00	0.00	0.00
Depreciation	3718.89	3722.81	3745.41	3784.55	1068.33
Interest on Working Capital	244.50	259.52	276.18	293.60	253.79
O & M Expenses	2509.67	2653.22	2804.98	2965.42	3135.04
Total	8462.06	8996.62	9600.22	10228.94	8041.32

4. 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."



5. As stated, the petitioner has filed this petition for revision of tariff based on trueing-up in terms of Regulation 6(1) of the 2009 Tariff Regulations. Accordingly, the annual fixed charges claimed by the petitioner for the period 2009-14 are as under:

	<i>(₹ in lakh)</i>				
	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	1987.88	2474.75	2900.29	3312.94	3749.56
Interest on Loan	5.32	0.00	0.00	0.00	0.00
Depreciation	3719.35	3719.81	3721.52	3726.74	1003.79
Interest on Working Capital	244.60	261.83	278.32	295.06	255.89
O & M Expenses	2509.67	2653.22	2804.98	2965.42	3135.04
Total	8466.82	9109.61	9705.11	10300.16	8144.28

6. Reply to the petition has been filed by the respondent No.1, APDCL. The petition was heard on 7.4.2015 and the Commission vide Record of the proceedings held on 7.4.2015 directed the petitioner to file certain additional information. In response, the petitioner vide affidavit dated 3.6.2015 has filed the information with copy to the respondents. Thereafter, the matter was heard on 16.7.2015 and the Commission reserved its orders in the petition

7. The respondent No.1, APDCL in its reply affidavit dated 6.1.2015 has submitted that the items and year-wise expenditure claimed by the petitioner are completely different from those approved in order dated 24.12.2012 in Petition No. 63/2010. It has also submitted that the petitioner should have approached the Commission on this count as per proviso to Regulation 6 (1) of the 2009 Tariff Regulations prior to 2013-14. Accordingly, the respondent has submitted that any upward claim over and above the additional capital expenditure already approved by the Commission is not admissible.



8. The petitioner in its rejoinder affidavit dated 24.2.2015 has clarified that projection of the capital expenditure to be incurred during the period 2009-14 was claimed in Petition No. 63/2010 based on the estimation work/planning in accordance with Regulation 9(2) of the 2009 Tariff Regulations. It has also submitted that during actual execution, works & values thereof may vary with that of the projections based on actual requirements/site conditions as well as applicable rates /prices for such works. It has further clarified that the present petition for truing-up has been filed in terms of Regulation 6(1) of the 2009 Tariff Regulations based on actual execution and accounting thereof and neither the provisions of Regulation 9 (2) nor Regulation 6(1) to 6(3) of the 2009 Tariff Regulations limits and/ or restricts the additional capital expenditure claimed in the truing-up petition upto the extent of the projected additional capital expenditure allowed by the Commission's order dated 24.12.2012. Accordingly, it has submitted that the petitioner is entitled for recovery for such expenditure actually incurred during the said period subject to prudence check by the Commission.

9. We have examined the matter. The 2009 Tariff Regulations envisages determination of tariff based on the projected capital expenditure as on the cut-off date and projected additional capital expenditure during the tariff period. One mid-term truing-up and final truing-up of the capital expenditure, with suitable provision for payment of interest on the excess recovery or shortfall in recovery, has been provided to balance the interest of the generating companies as well as the beneficiaries. In terms of the proviso to Regulation 6(1) of the 2009 Tariff Regulations, the generating company has the discretion to approach the Commission one more time for truing up during the tariff period. In terms of Regulation 6 (1), the Commission shall carry out truing-up exercise along with the tariff petition filed for the next period with respect to



the capital expenditure including additional capital expenditure incurred upto 31.3.2014 as admitted by the Commission after prudence check at the time of truing-up. The petitioner instead of approaching for a mid-term truing-up has opted for truing-up of expenditure at the end of the tariff period. With the provision for truing-up and the adjustment of excess recovery or shortfall as a result of such truing up at SBI PLR rate, the concerns of the respondent, APDCL are duly taken care of. Thus, the objection of the respondent is disposed of as above. We now proceed to revise the tariff of the generating station for the period 2009-14 based on the submissions of the parties in the subsequent paragraphs.

Capital Cost as on 1.4.2009

10. The last proviso of Clause (2) of Regulation 7 of the 2009 Regulations provides as under:

“Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 and the additional capital expenditure 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.”

11. The petitioner has claimed the capital cost of Rs 64858.58 lakh as on 1.4.2009 by inclusion of un-discharged liabilities. It is noticed that the Commission vide order dated 24.12.2012 in Petition No.63/2010 had approved the capital cost of ₹63609.99 lakh as on 1.4.2009, after adjustment of un-discharged liabilities of ₹1248.59 lakh (i.e 64858.58-1248.59). Accordingly, the capital cost of ₹63609.99 lakh as on 1.4.2009 has been considered for the purpose of tariff.

Additional Capital Expenditure for 2009-14

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



“9. Additional Capitalisation

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

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

(ii) Change in law;

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

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

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

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

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

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

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

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



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

13. The actual additional capital expenditure claimed by the petitioner for 2009-14 is as under:

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
15.64	0.00	58.50	186.22	3.41

14. The reconciliation of the actual additional capital expenditure claimed for the purpose of tariff with the actual additional capital expenditure as per books of accounts for the period 2009-14 is as under

(₹ in lakh)						
		Actual Additional Capital Expenditure				
		2009-10	2010-11	2011-12	2012-13	2013-14
A.	Net Additional Capital Expenditure as per books	23.52	204.20	71.61	126.48	38.19
1	Additional Capital Expenditure under Regulation 9(2)					
(a)	Addition claimed for tariff					
(i)	Expenditure for arranging security for the Power Station & officials, for acquiring new assets and for replacement of existing damaged/obsolete assets for smooth operation of the Plant –Regulation 9(2)(iv)	15.64	0.00	58.50	186.23	3.42
	Total 1(a)	15.64	0.00	58.50	186.23	3.42
(b)	Deletions					
(i)	De-capitalization of the old assets replaced by the new assets covered under 1(a)(ii) above	0.00	0.00	0.00	(-) 65.16	0.00
(ii)	De-capitalization of the old assets without any replacement by new assets	0.00	0.00	0.00	(-) 0.82	0.00
	Total de-capitalization 1(b) = (i+ii)	0.00	0.00	0.00	(-) 65.98	0.00
(c)	Additional Capital Expenditure claimed [Total 1 (c) = 1(a) + 1 (b)]	15.64	0.00	58.50	120.25	3.42



2	Exclusions (not to be claimed for tariff)					
(a)	Additions (under exclusion category)					
(i)	Not related to core activity	1.20	201.25	0.00	0.00	0.00
(ii)	Minor assets	13.09	2.95	13.02	7.89	6.86
(iii)	Assets of O&M nature	0.00	0.00	0.00	0.00	27.91
	Total 2 (a)= (i+ii+iii)	14.29	204.20	13.10	7.89	34.77
(b)	Deletions not claimed for tariff					
(i)	De-capitalization of the old assets replaced by the new assets covered under 2 (a) above	(-) 3.90	0.00	0.00	0.00	0.00
(ii)	Transfer to other office/unit	0.00	0.00	0.00	(-) 1.66	0.00
(iii)	Excess provision written back	(-) 2.51	0.00	0.00	(-) 1.66	0.00
	Total 2 (b)= (i+ii+iii)	(-) 6.41	0.00	0.00	(-)1.66	0.00
	Total Exclusion [Total 2 = 2(a) + 2(b)]	7.88	204.20	13.10	6.23	34.77
3	Net Additional Capitalization for the period (1 + 2)	23.52	204.20	71.61	126.48	38.19
	Difference with books of accounts (3-A)	0.00	0.00	0.00	0.00	0.00

15. After examining the asset-wise details and justification for additional capital expenditure claimed by the petitioner under various categories, the reply of the respondent, APDCL and by applying prudence check, the admissibility of additional capitalization is discussed in the subsequent paragraphs.

2009-14

16. No claim for additional capital expenditure has been made for the year 2010-11. The details of the asset/work, the actual additional capital expenditure claimed against the work/asset along with the reasons for admissibility of the actual additional capital expenditure for 2009-14 (except 2010-11) in terms of 2009 Tariff Regulations is as under:



(₹ in lakh)			
Sl. No.	Assets/Works	Actual Expenditure Claimed	Reasons on Admissibility
2009-10			
1	Diesel Generator Power House Building	15.64	Considering the fact that the asset is necessary for meeting the auxiliary power requirements for black start, the expenditure is allowed under Regulation 9 (2) (iv) of the 2009 Tariff Regulations
2011-12			
1	2.5MVA 132/33KV Transformer	58.50	Allowed under Regulation 9(2)(iv) of the 2009 Tariff Regulations since the asset had already been allowed in order dated 24.12.2012 in Petition no. 63/2010
2012-13			
1	Digital Regulation Panel/DVR for Unit-I;II&III incl. Erection & Commissioning Charges	186.23	Allowed under Regulation 9(2)(iv) of the 2009 Tariff Regulations since the asset had already been allowed in order dated 24.12.2012 in Petition no. 63/2010
2013-14			
1	Construction of Fencing wall at Assam Rifle Camp	3.42	Allowed under Regulation 9(2)(iv) of the 2009 Tariff Regulations as the expenditure is considered necessary for the safety and benefit of the employees working in remote areas of the generating station and in turn will facilitate the efficient and successful operation of the plant.

Deletions

17. The petitioner has indicated no deletions for the period 2009-14. However, the petitioner has furnished the gross value of the old works/assets i.e. temporary building and DVR as (-) ₹0.82 lakh and (-) ₹65.16 lakh respectively for de-capitalization in the year 2012-13. Accordingly, deletion of (-) ₹65.16 lakh against the capitalization of the new DVR and (-) ₹0.82 lakh against the dismantling of temporary building (non-residential) has been considered for the purpose of tariff during 2012-13 as the old



works/assets do not render any useful service in the operation of the generating station. Accordingly, the deletions considered for the purpose of tariff are as under:

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
0.00	0.00	0.00	(-) 65.98	0.00

Exclusions

Exclusions in additions (Expenditure incurred, capitalized but not claimed for the purpose of tariff)

18. The petitioner has incurred expenditure for acquiring minor assets, assets of the O&M nature, spares, assets not allowed in earlier petition, assets for Staff welfare, assets not related to core activity etc. However, as the expenditure incurred towards procurement of minor assets, assets of O&M nature, etc after the cut-off date is not permissible in terms of the 2009 Tariff Regulations, the petitioner has not claimed the said expenditure for the purpose of tariff. Accordingly, the petitioner has considered these additions under exclusion category. As such, the exclusions of positive entries under the head are in order and are allowed for the purpose of tariff as under:

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
14.29	204.20	13.11	7.89	34.77

Exclusions in deletions (de-capitalized in books but not to be considered for tariff purpose)

19. The petitioner has de-capitalized following amounts in books of accounts pertaining to de-capitalization of old assets without replacement by new assets, transfer to other units and excess provision written back as under:

(₹ in lakh)					
	2009-10	2010-11	2011-12	2012-13	2013-14
De-capitalization of the old assets replaced by new assets covered under 2(a)	(-) 3.90	0.00	0.00	0.00	0.00
De-capitalization of the old assets without any replacement	0.00	0.00	0.00	0.00	0.00



by new assets					
Transfer to other office/unit	0.00	0.00	0.00	(-)1.66	0.00
Excess provision written back	(-) 2.51	0.00	0.00	0.00	0.00
Total exclusions claimed	(-) 6.41	0.00	0.00	(-)1.66	0.00

20. As regards exclusion of (-) ₹3.90 lakh against the de-capitalization of old assets during 2009-10 with replacement by new assets, it is observed that the assets have been de-capitalized under the head 'Main frame computer'. These are minor assets and since capitalization of minor assets under this head are not allowed for the purpose of tariff, the exclusion/ignoring of this entry is allowed for the purpose of tariff.

21. As regards exclusion of (-) ₹2.51 lakh against the de-capitalization of excess provision made for firefighting equipment during 2009-10, the same is allowed since all provisions have been deducted as un-discharged liabilities from the capital cost as on 31.3.2009.

22. The petitioner has sought exclusion on account of transfer of assets to other offices/plants. In view of the fact that these assets are transferred permanently to other offices/plants and do not render any useful service in the operation of the generating station (from which transferred), the exclusion/ignoring of negative entries is not allowed. In other words, the de-capitalization would be considered for the purpose of tariff.

23. Based on the above discussions, the de-capitalization allowed to be excluded /ignored for the purpose of tariff is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
De-capitalization of the old assets replaced by new assets covered under 2(a)	(-) 3.90	0.00	0.00	0.00	0.00
De-capitalization of the old assets without any replacement	0.00	0.00	0.00	0.00	0.00



by new assets					
Transfer to other office/unit	0.00	0.00	0.00	(-)1.66	0.00
Excess provision written back	(-) 2.51	0.00	0.00	0.00	0.00
De-capitalization exclusions allowed for the purpose of tariff	(-) 6.41	0.00	0.00	(-)1.66	0.00
De-capitalization exclusions not allowed for the purpose of tariff	0.00	0.00	0.00	(-)1.66	0.00

24. The exclusions allowed for the purpose of tariff are as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Exclusions in additions	14.29	204.20	13.11	7.89	34.77
Exclusions in deletions	(-) 6.41	0.00	0.00	0.00	0.00
Total exclusions allowed	7.88	204.20	13.11	7.89	34.77

25. Based on the above discussions, the additional capital expenditure allowed for the purpose of tariff is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Additional capital expenditure allowed (a)	15.64	0.00	58.50	186.23	3.42
Deletions considered (b)	0.00	0.00	0.00	(-) 65.98	0.00
De-capitalization exclusion not allowed for the purpose of tariff (c)	0.00	0.00	0.00	(-) 1.66	0.00
Additional Capital Expenditure allowed (d) = (a)+(b)+(c)	15.64	0.00	58.50	118.59	3.42

Capital Cost for 2009-14

26. Accordingly, the capital cost considered for the purpose of the tariff is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	63609.99	63625.63	63625.63	63684.13	63802.72
Additional Capitalization	15.64	0.00	58.50	118.59	3.42
Closing Capital Cost	63625.63	63625.63	63684.13	68802.72	63806.14

Debt-Equity Ratio

27. The petitioner has submitted that the funding of the additional capital expenditure has been made through internal resources and others. Though the petitioner has considered a different debt-equity ratio as on 31.3.2009 (in the petition), the debt-equity ratio of 48.51: 51.49 as allowed in order dated 24.12.2012 in Petition No.63/2010 has been considered. In terms of Regulation 12 of the 2009 Tariff Regulations, the debt-equity ratio of 70:30 has been considered on the admitted additional capital expenditure after adjustment of un-discharged liability.

Return on Equity

28. The petitioner has considered the rate of Return on Equity as under:

	2009-10	2010-11	2011-12	2012-13	2013-14
Base Rate	4.980%	5.980%	7.000%	7.990%	8.930%
Applicable Tax Rate #	16.995%	19.931%	20.008%	20.008%	20.961%
Rate of ROE (pre-tax)	6.000%	7.469%	8.751%	9.988%	11.298%

(# Impact of Education cess and surcharge has been considered)

29. The 2009 Tariff Regulations provides for a pre-tax rate of return on equity @ 17.481%. However, the petitioner has claimed the rate of return on equity based on the financial package approved by the Government of India. On this issue, the Commission in order dated 24.12.2012 in Petition No.63/2010 had decided as under:

“28.Considering the fact that the petitioner and the Government of India has volunteered to forego some portion of the prescribed Return on Equity to reduce the impact of tariff burden on the beneficiaries, we adopt the ROE as per approved financial package, for the purpose of determination of tariff for the generating station for the period 2004-09 and 2009-14 respectively. Thus, the reduction in tariff on account of reduced ROE is at the instance of the generating company.”

30. In this background, the return on equity has been computed as under:



	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional Equity	32754.38	32759.07	32759.07	32776.62	32812.20
Addition due to Additional Capital Expenditure	4.69	0.00	17.55	35.58	1.03
Closing Equity	32759.07	32759.07	32776.62	32812.20	32813.23
Average Equity	32756.73	32759.07	32767.85	32794.41	32812.71
Return on Equity (Base Rate)	4.980%	5.980%	7.00%	7.990%*	8.930%
Tax rate for the year (MAT)	16.995%	19.931%	20.008%	20.008%	20.961%
Rate of Return on Equity	6.00%	7.469%	8.751%	9.988%	11.298%
Return on Equity	1965.40	2446.78	2867.51	3275.51	3707.18

Interest on loan

31. Interest on loan has been computed considering the following:

- The opening gross normative loan as on 1.4.2009 has been arrived at in accordance with the provisions of Regulation 16 of the 2009 Tariff Regulations.
- The weighted average rate of interest has been worked out on the basis of the actual loan portfolio of respective year applicable to the project.
- The repayment for the year of the tariff period 2009-14 has been considered equal to the depreciation allowed for that year.
- The interest on loan has been calculated on the normative average loan of the year by applying the weighted average rate of interest.

32. The petitioner has submitted that the interest rate applicable to the respective loan on year on year basis has been considered with the actual interest rate. Accordingly, interest on loan after considering the actual interest rate has been worked out as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	30855.61	30866.56	30866.56	30907.51	30990.52
Cumulative Repayment	30380.87	30866.56	30866.56	30907.51	30990.52
Net Loan-Opening	474.74	0.00	0.00	0.00	0.00
Repayment during the year	485.69	0.00	40.95	83.01	2.39
Additional Capitalization	10.95	0.00	40.95	83.01	2.39



Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Loan	237.37	0.00	0.00	0.00	0.00
Weighted Average Rate of Interest	10.000%	0.00	0.00	0.00	0.00
Interest on Loan	23.74	0.00	0.00	0.00	0.00

Depreciation

33. In terms of Regulation 17 of the 2009 Tariff Regulations, the weighted average rate of depreciation has been considered for the calculation of depreciation.

Accordingly, depreciation has been worked out as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Gross Block	63609.99	63625.63	63625.63	63684.13	63802.72
Additional capital expenditure during the period	15.64	0.00	58.50	118.59	3.42
Closing gross block	63625.63	63625.63	63684.13	63802.72	63806.14
Average gross block	63617.81	63625.63	63654.88	63743.43	63804.43
Rate of Depreciation	5.846%	5.846%	5.846%	5.844%	5.844%
Balance useful life	26.3	25.3	24.3	23.3	22.3
Depreciable Value	54773.83	54780.87	54807.19	54886.88	54941.79
Remaining Depreciable Value	37105.98	33393.67	29700.18	26058.36	22421.04
Depreciation	3719.35	3719.81	3721.52	3726.69	1005.88

Operation & Maintenance Expenses

34. The O&M expenses allowed vide order dated 24.12.2012 in Petition No. 63/2010 has been considered as under:

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
2509.67	2653.22	2804.98	2965.42	3135.04

Interest on Working Capital

35. In accordance with sub-clause (c) of clause (1) of Regulation 18 of the 2009 regulations, working capital in case of hydro generating stations shall cover:

- (i) *Receivables equivalent to two months of fixed cost;*



(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 19;

(iii) Operation and maintenance expenses for one month.

36. 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.

37. 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
Maintenance Spares	376.45	397.98	420.75	444.81	470.26
O & M expenses	209.14	221.10	233.75	247.12	261.25
Receivables	1410.45	1513.51	1611.94	1710.32	1350.52
Total	1996.04	2132.59	2266.44	2402.25	2082.03
Interest on Working Capital @ 12.25%	244.51	261.24	277.64	294.28	255.05

Annual Fixed Charges

38. The annual fixed charges approved for the generating station for the period 2009-14 is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	1965.40	2446.78	2867.51	3275.51	3707.18
Interest on Loan	23.74	0.00	0.00	0.00	0.00
Depreciation	3719.35	3719.81	3721.52	3726.69	1005.88
Interest on Working Capital	244.51	261.24	277.64	294.28	255.05
O & M Expenses	2509.67	2653.22	2804.98	2965.42	3135.04
Total	8462.68	9081.04	9671.65	10261.90	8103.15

39. The difference between the annual fixed charges recovered by the petitioner in terms of the order dated 24.12.2012 in Petition No. 63/2010 and the annual fixed

charges determined by this order shall be adjusted in terms of Regulation 6(6) of the 2009 Tariff Regulations.

40. Petition No.458/GT/2014 is disposed of in terms of the above.

-Sd/-
(A.S. Bakshi)
Member

-Sd/-
(A.K.Singhal)
Member

-Sd/-
(Gireesh B. Pradhan)
Chairperson

