

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 455/GT/2014

Coram:

Shri Gireesh B. Pradhan, Chairperson

Shri A. K. Singhal, Member

Shri A. S. Bakshi, Member

DATE OF HEARING: 03.02.2015

DATE OF ORDER: 18.09.2015

IN THE MATTER OF

Revision of tariff for the period 2009-14 with respect to capital expenditure including additional capital expenditure incurred during the financial years 2009-10 to 2013-14 in respect of Kopili Hydro Electric Project Stage-II (1 x 25 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:

Shri Rana Bose, NEEPCO
Shri Paresh Ch. Barman, NEEPCO

ORDER

The petitioner has filed this petition for revision of tariff for 2009-14 with respect to capital expenditure including additional capital expenditure incurred during the financial years 2009-10 to 2013-14 in respect of Kopili Hydro Electric Project Stage-II (1 x 25 MW) (hereinafter referred to as “the generating station”) of North Eastern Electric Power Corporation Ltd after truing-up exercise 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 date of commercial operation of the generating station is 26.7.2004. The tariff of the generating station for the period 2009-14 was determined by the Commission in order dated 23.1.2012 in Petition No.298/2009. The annual fixed charges approved by the Commission vide order dated 23.1.2012 is as under:



(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	428.92	436.52	451.58	459.05	459.05
Interest on Loan	215.58	193.32	178.17	154.18	122.02
Depreciation	378.50	385.21	398.50	405.09	405.09
Interest on Working Capital	33.38	33.90	34.90	35.47	35.61
O & M Expenses	241.00	254.79	269.36	284.77	301.06
Total	1297.37	1303.75	1332.50	1338.56	1322.83

3. 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."

4. The petitioner has filed this petition in terms of Regulation 6(1) of the 2009 Tariff Regulations and has claimed the revised annual fixed charges for 2009-14 as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	458.16	488.07	501.67	510.90	542.88
Interest on Loan	215.56	197.64	178.89	148.21	117.47
Depreciation	378.48	388.92	399.37	400.26	401.15
Interest on Working Capital	33.99	35.14	35.98	36.32	37.18
O & M Expenses	241.00	254.79	269.36	284.77	301.06
Total	1327.19	1364.56	1385.27	1380.46	1399.74

5. Reply to the petition has been filed by the respondent No.1, ASEB.

6. The respondent No.1, ASEB in its reply affidavit dated 26.1.2015 has submitted that the items and year-wise expenditure claimed by the petitioner are completely different from those approved by the Commission in order dated 23.1.2012 in Petition No. 298/2009. 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.

7. The petitioner in its rejoinder affidavit dated 28.1.2015 has clarified that 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 23.1.2012. The petitioner has stated that the additional capital expenditure has been incurred during the said period based on the actual execution of the works and accounting thereof. 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.

8. 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, ASEB 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

9. 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.”

10. The Commission vide its order dated 23.1.2012 in Petition No. 298/2009 had approved the capital cost of ₹8178.43 lakh as on 31.3.2009, after taking into account the additional capital expenditure for the period 2006-09. Accordingly, in terms of the above proviso, the capital cost of ₹8178.43 lakh has been considered as the opening capital cost as on 1.4.2009.

Additional Capital Expenditure for 2009-14

11. Regulation 9 of the 2009 regulations provides as under:

“9. Additional Capitalization (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;

(iv) 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 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.

12. The petitioner has claimed following actual additional capital expenditure for the years 2012-13 and 2013-14 as under:

	<i>(₹ in lakh)</i>				
	2009-10	2010-11	2011-12	2012-13	2013-14
Additional capital expenditure as per books of accounts					
Additions in books certified by Auditor	0.00	479.22	20.87	38.49	0.20
De-capitalization as per books of accounts duly certified by Auditor	0.00	0.00	0.00	0.00	(-)0.11
Net Additional capital expenditure as per books	0.00	479.22	20.87	38.49	0.09



Additional capital expenditure claimed under Regulation 9(2)(iv)					
Replacement of existing damaged/obsolete assets for smooth operation of the plant	0.00	0.00	0.00	0.00	0.20
New assets installed for efficient operation of the plant (without de-capitalisation)	0.00	451.52	0.00	38.49	0.00
Sub-total of additions claimed	0.00	451.52	0.00	38.49	0.20
De-capitalization of old assets replaced by new assets covered above	0.00	0.00	0.00	0.00	(-)0.11
Sub-total of de-capitalization	0.00	0.00	0.00	0.00	(-)0.11
Additional capital expenditure claimed	0.00	451.52	0.00	38.49	0.09
Exclusion (Not claimed for tariff)					
Minor assets	0.00	0.00	0.07	0.00	0.00
Assets of the nature of stocks and spares T&P	0.00	27.70	20.80	0.00	0.00
Sub-total of Exclusions	0.00	27.70	20.80	0.00	0.00
Additional capital expenditure (claimed + exclusions as per books)	0.00	479.22	20.87	38.49	0.09

13. The Commission vide ROP of the proceedings held on 3.2.2015 directed the petitioner to seek the approval of the Board of Directors to the Revised Cost Estimate submitted to the Central Government and place same on record. The petitioner was also directed to submit the circular/ notification regarding the delegation of financial powers being followed by the petitioner corporation.

14. In response, the petitioner vide affidavit dated 24.3.2015 has clarified that the commissioning cost of the project was within the administrative approval and no further Revised Cost Estimate (RCE) for the generating station is pending with the Central Government. The petitioner has submitted the document titled "Delegation of Powers" (DOP) as approved by the Board of Directors and has stated that the additional capital expenditure for the period 2009-14 has been incurred within the delegated powers as approved by the Board of Directors of the Petitioner Company.



The petitioner has also submitted the list indicating the assets/works claimed during the period 2009-14, the amount capitalized and the approving authority along with reference of the DOP clause.

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, ASEB and by applying prudence check, the admissibility of additional capitalization is discussed in the subsequent paragraphs.

2010-11

16. The actual additional capital expenditure claimed by the petitioner under Regulation 9(2)(iv) of the 2009 Tariff Regulations is as under:

(₹ in lakh)			
Sl. No.	Assets/Works	Actual additional capital expenditure claimed	Justification submitted by the petitioner
1	Free Hold Land	451.52	To increase the capacity of Kopili Reservoir from EL. 719.30m to EL.722.00m, land acquisition made from Meghalaya Govt. to get the additional energy of 78MUs.
	Total	451.52	

17. The Commission vide ROP of the proceedings held on 3.2.2015 directed the petitioner to furnish the following information in respect of acquisition of free hold land:

“(i) Copy of the Court's order/documents/correspondences/clearances from local authorities, if any, with regard to the procurement of land during the year 2010-11 for enhancement of reservoir capacity. Also, the exact date from which the generating station had started with increased capacity of reservoir shall be furnished along with the clarification as to whether the increased design energy has been factored into the computation of energy charge rate as per the provisions of the 2009 Tariff Regulations.

“(ii) Whether the revision of Design Energy has been approved by CEA. If yes, the copy of the CEA approval shall be submitted.”

18. In response, the petitioner vide affidavit dated 23.3.2015 has submitted as under:

“(a) The expenditure relates to capitalization of land measuring 18,31,900 square meter (approx) valued ₹451.52 lakh between elevation of EL 2410 in the Saphal village of Jaintia hill district, payments for which was made to the landowners in the months of



Aug'99 and Oct'01. The aforesaid amount was lying under the head "Advance towards land" in the books of Kopili-II since its COD, which has been capitalized during the financial year 2010-11 under the head "Freehold land". However, while the landowners received the aforesaid compensation under protest, they continued with their demand for enhancement of rates demanding for more compensation. Under the circumstances, works for raising Kopili FRL utilizing the additionally acquired land, which will add to generation capacity, could not be materialized till date. So, the question of factoring the enhanced energy into computation of energy charge rate as per provision of the Tariff Regulations, 2009 does not arise.

(a) As recorded above, no such enhanced generation could be possible till date and so referring the matter to CEA does not arise at present."

19. From the clarification furnished above, it is not clear as to whether land has been acquired by the petitioner or in case the same has been acquired, the reason as to why the works for raising Kopili FRL could not materialize till date. In case the land has not been acquired, the efforts undertaken by the petitioner with the Govt. of Meghalaya for acquisition of the said land have also not been furnished by the petitioner. Moreover, the petitioner has not indicated as to whether any petition or appeal has been filed and/or is pending before any statutory authorities in respect of the acquisition of the additional land and/or compensation. In the absence of any clarification on the above and since the benefits of increased generation is yet to be passed on to the beneficiaries of the generating station, we are not inclined to allow the capitalization of the said amount of ₹451.52 lakh for the purpose of tariff. Accordingly, the said amount is not allowed to be capitalized.

2012-13

20. The details of the assets/works, the actual additional capital expenditure claimed against the works/assets along with the reasons for admissibility of the actual additional capital expenditure in terms of 2009 Tariff Regulations is as under:

<i>(₹ in lakh)</i>			
Sl. No.	Assets/Works	Actual Expenditure claimed	Remarks for admissibility of the expenditure
1	6000 LPH Transformer Oil filtration machine	36.03	Allowed under Regulation 9(2)(iv) of the 2009 Tariff Regulations as the projected expenditure was already



			allowed for 2010-11 vide Commission order dated 23.1.2012 in Petition No. 298/2009 since the same is considered necessary for efficient and successful operation of the plant.
2	Construction of Civil and structural works of power house, Pen Stock & Steel liner, DT, Gate etc package-II, Stage-II escalation	0.77	Allowed under Regulation 9 (2) (iv) of the 2009 Tariff Regulations as it relates to the capitalisation of balance payment made towards project construction activities within the original scope of work.
3	Pilot operated pressure reducing valve	1.69	The petitioner has submitted that due to acidic nature of cooling water, carbon steel valves fails frequently and require replacement. It is however noticed that the de-capitalised value of the replaced valve has not been furnished under deletions. Hence the capitalisation is not allowed.
	Total amount claimed	38.49	
	Total amount allowed		36.80

2013-14

(₹ in lakh)

Sl. No	Assets/Works	Actual Expenditure claimed	Remarks for admissibility of the expenditure
1	88 mm dia. Gate Valve	0.20	Replacement of this item is allowed under Regulation 9(2)(iv) of the 2009 Tariff Regulations considering the operational difficulties faced by the plant due to acidic nature of water. Also, the de-capitalized value of the replaced valve has been furnished by the petitioner under deletions.
	Total amount claimed	0.20	
	Total amount allowed		0.20

Deletions

21. The year-wise expenditure de-capitalized by the petitioner on account of replacement of old assets is as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
De-capitalization of old assets replaced by new assets	0.00	0.00	0.00	0.00	(-) 0.11



22. As regards 'Assets not in use', proviso to Regulation 7(1) of the 2009 Tariff Regulations provides as under:

"Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost"

23. Accordingly, the de-capitalization of the damaged valves amounting to (-) ₹0.11 lakh, replaced during the year 2013-14 has been considered for the purpose of tariff.

Exclusions

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

24. The following year-wise expenditure has been incurred by the petitioner on purchase of minor assets, assets of O&M nature, Tools and tackles etc. during the period 2009-14:

<i>(₹ in lakh)</i>				
2009-10	2010-11	2011-12	2012-13	2013-14
0.00	27.70	20.80	0.00	0.00

25. The expenditure incurred towards procurement/replacement of minor assets, assets of O&M nature, Tools and tackles after the cut-off date is not permissible for the purpose of tariff in terms of the 2009 Tariff Regulations. Accordingly, the petitioner has considered these additions under exclusion category. As such, the exclusions of the positive entries under the head are in order and are allowed.

26. Based on above deliberations, the additional capital expenditure considered/ allowed for the purpose of tariff is as under:

<i>(₹ in lakh)</i>					
	2009-10	2010-11	2011-12	2012-13	2013-14
Additions allowed for the purpose of tariff (a)	0.00	0.00	0.00	36.80	0.20
Deletions considered for the purpose of tariff (b)	0.00	0.00	0.00	0.00	(-) 0.11
Un-discharged liability included in additional capital expenditure above (c)	0.00	0.00	0.00	0.00	0.00



Discharge of liability(d)	0.00	0.00	0.00	0.00	0.00
Additional capital expenditure allowed (e)=(a)+(b)-(c)+(d)	0.00	0.00	0.00	36.80	0.09

Capital Cost for 2009-14

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

	(₹ in lakh)				
	2009-10	2010-11	2012-13	2012-13	2013-14
Opening Capital Cost	8178.43	8178.43	8178.43	8178.43	8215.23
Additional Capital Expenditure allowed	0.00	0.00	0.00	36.80	0.09
Capital Cost as on 31st March of the year	8178.43	8178.43	8178.43	8215.23	8215.32

Debt Equity Ratio

28. The petitioner in his submission stated that the funding of the additional capital expenditure has been made through internal resources or others. Accordingly, in terms of Regulation 12 of the 2009 Tariff Regulations and the methodology adopted, the debt equity ratio of 70:30 has been considered for the purpose of tariff and the same has been applied on the additional capital expenditure admitted after adjustment of the un-discharged liability.

	Debt	Equity	Total	Debt	Equity	Total
Capital Cost as on 31.3.2009	5724.90	2453.53	8178.43	70.00%	30.00%	100.00%
Additional Capitalisation during 2009-10	-	-	-	70.00%	30.00%	100.00%
Capital Cost as on 31.3.2010	5724.90	2453.53	8178.43	70.00%	30.00%	100.00%
Additional Capitalisation during 2010-11	-	-	-	70.00%	30.00%	100.00%
Capital Cost as on 31.3.2011	5724.90	2453.53	8178.43	70.00%	30.00%	100.00%
Additional Capitalisation during 2011-12	-	-	-	70.00%	30.00%	100.00%
Capital Cost as on 31.3.2012	5724.90	2453.53	8178.43	70.00%	30.00%	100.00%
Additional Capitalisation during 2012-13	25.76	11.04	36.80	70.00%	30.00%	100.00%
Capital Cost as on 31.3.2013	5750.66	2464.57	8215.23	70.00%	30.00%	100.00%
Additional Capitalisation during 2013-14	0.06	0.03	0.09	70.00%	30.00%	100.00%
Capital Cost as on 31.3.2014	5750.72	2464.60	8215.32	70.00%	30.00%	100.00%



Return on Equity

29. In accordance with Regulation 15(3) and 15(4) of the 2009 Tariff Regulations 2009, the petitioner has claimed MAT rate as applicable to the petitioner company for the period 2009-14. This has been considered and accordingly the return on equity has been worked out as under:

	(₹in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional Equity	2453.53	2453.53	2453.53	2453.53	2464.57
Addition due to Additional Capital Expenditure	0.00	0.00	0.00	11.04	0.03
Closing Equity	2453.53	2453.53	2453.53	2464.57	2464.59
Average Equity	2453.53	2453.53	2453.53	2459.05	2464.58
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.750%	16.500%
Tax rate for the year (MAT)	16.995%	19.931%	20.008%	20.008%	20.961%
Rate of Return on Equity	18.674%	19.358%	19.377%	19.689%	20.876%
Return on Equity	458.16	474.96	475.42	484.17	514.50

Interest on loan

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

- (a) The opening gross normative loan as on 1.4.2009 has been arrived at in accordance with the provisions of the above regulations.
- (b) The repayment of loan for the respective years of the period 2009-14 has been considered equal to the depreciation allowed for that year.
- (c) The Commission vide order dated 23.1.2012 in Petition No. 298/2009 had allowed the weighted average rate of Interest of 7.940% for 2009-14. The same has been claimed by the petitioner and allowed for calculation of interest on loan.

31. Based on the above, interest on loan for the purpose of tariff is worked out as under:

	(₹in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	5724.90	5724.90	5724.90	5724.90	5750.66
Cumulative Repayment upto Previous year	2820.85	3199.33	3577.81	3956.28	4335.61
Net Loan-Opening	2904.04	2525.57	2147.09	1768.62	1415.05
Repayment during the year	378.48	378.48	378.48	379.33	380.18



Addition due to Additional Capitalization (2009-14)	0.00	0.00	0.00	25.76	0.06
Net Loan-Closing	2525.57	2147.09	1768.62	1415.05	1034.93
Average Loan	2714.81	2336.33	1957.85	1591.83	1224.99
Weighted Average Rate of Interest on Loan	7.940%	7.940%	7.940%	7.940%	7.940%
Interest on Loan	215.56	185.50	155.45	126.39	97.26

Depreciation

32. In terms of Regulation 17 of the 2009 Tariff Regulations, the weighted average rate of depreciation of 4.628% has been calculated and the same has been considered for the calculation of depreciation. The amount of cumulative depreciation allowed in tariff against these de-capitalized assets has been calculated on *pro rata* basis and the same has been adjusted from the cumulative depreciation of the year of de-capitalization. Accordingly, depreciation has been worked out as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block as on 31.3.2009	8178.43	8178.43	8178.43	8178.43	8215.23
Additional capital expenditure during 2009-14	0.00	0.00	0.00	36.80	0.09
Closing gross block	8178.43	8178.43	8178.43	8215.23	8215.32
Average gross block	8178.43	8178.43	8178.43	8196.83	8215.27
Rate of Depreciation	4.628%	4.628%	4.628%	4.628%	4.628%
Depreciable Value	7360.58	7360.58	7360.58	7377.14	7393.74
Balance Useful life of the asset	30.3	29.3	28.3	27.3	26.3
Remaining Depreciable Value	4562.25	4183.77	3805.29	3443.38	3080.65
Depreciation	378.48	378.48	378.48	379.33	380.18

33. The O&M expenses allowed vide order dated 23.1.2012 in Petition No. 298/2009 has been considered as under:

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
241.00	254.79	269.36	284.77	301.06



Interest on Working Capital

34. 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.*

35. Clauses (3) and (4) of Regulation 18 of the 2009 regulations, the rate of interest on working capital shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1.4.2009 or on 1st April of the year in which the generating station or a unit thereof is declared under commercial operation, whichever is later. Interest on working capital shall be payable on normative basis notwithstanding that the generating company has not taken working capital loan from any outside agency.

36. Working capital has been calculated considering the following elements:

- (a) **Receivables:** In terms of the provisions of the above regulations, receivables equivalent to two months of fixed cost, considered for the purpose of tariff, is as under:

(₹ in lakh)

2009-10	2010-11	2011-12	2012-13	2013-14
221.20	221.35	218.87	218.26	221.46

- (b) **Maintenance Spares:** In terms of the provisions of the above regulations, maintenance spares considered for the purpose of tariff, is as stated below:

(₹ in lakh)

2009-10	2010-11	2011-12	2012-13	2013-14
36.15	38.22	40.40	42.72	45.16



(c) **O&M Expenses:** In terms of the provisions of the above regulations Operation and maintenance expenses for one month considered for the purpose of tariff, is as under:

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
20.08	21.23	22.45	23.73	25.09

37. 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.

38. 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	36.15	38.22	40.40	42.72	45.16
O & M expenses	20.08	21.23	22.45	23.73	25.09
Receivables	221.20	221.35	218.87	218.26	221.46
Total	277.43	280.81	281.72	284.70	291.70
Rate of interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest on Working Capital	33.99	34.40	34.51	34.88	35.73

Annual Fixed Charges

39. 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	458.16	474.96	475.42	484.17	514.50
Interest on Loan	215.56	185.50	155.45	126.39	97.26
Depreciation	378.48	378.48	378.48	379.33	380.18
Interest on Working Capital	33.99	34.40	34.51	34.88	35.73
O & M Expenses	241.00	254.79	269.36	284.77	301.06
Total	1327.18	1328.13	1313.22	1309.54	1328.74

40. The difference between the annual fixed charges recovered by the petitioner in terms of the order dated 23.1.2012 in Petition No.298/2009 and the annual fixed



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

Design Energy

41. The design energy of 86.30 MUs as allowed in respect of the generating station in order dated order dated 23.1.2012 in Petition No.298/2009 shall be considered.

42. Petition No. 455/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

