

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 456/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: 07.10.2015**

**IN THE MATTER OF**

Revision of tariff for the period 2012-14 based on the capital expenditure including additional capital expenditure incurred during the financial years 2012-13 and 2013-14 in respect of Kopili Hydro Electric Project ( 4 x 50 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  
Dongtieh, 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
5. Shri M.K Adhikary, APDCL
6. Shri K. Goswami, APDCL

**ORDER**

The petitioner has filed this petition for revision of tariff for 2012-14 based on the capital expenditure including additional capital expenditure incurred during the financial years 2012-13 and 2013-14 in respect of Kopili Hydro Electric Project (4 x 50 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 units of the generating station is as under:

Units	Date of commercial operation
Unit-I	5.7.1988
Unit-II	22.6.1988
Unit-III	1.5.1997
Unit-IV	12.7.1997

3. The tariff of the generating station for the period 2009-14 was determined by the Commission vide order dated 30.9.2011 in Petition No.294/2009 based on capital cost of ₹26734.91 lakh as on 1.4.2009. Thereafter, by order dated 4.7.2014 in Petition No.238/GT/2013, the annual fixed charges of the generating station was revised based on the actual capital expenditure incurred during the financial years 2009-10 to 2011-12 and projected capital expenditure during the financial years 2012-13 and 2013-14. The annual fixed charges approved by the Commission vide order dated 4.7.2014 is as under:

	(₹in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	2465.36	2571.63	2592.15	2648.74	2851.12
Interest on Loan	155.11	92.17	66.02	35.52	27.10
Depreciation	1431.88	538.94	553.37	566.87	599.65
Interest on Working Capital	260.66	253.03	263.86	275.95	292.59
O & M Expenses	3522.42	3723.90	3936.91	4162.10	4400.17
<b>Total</b>	<b>7835.43</b>	<b>7179.67</b>	<b>7412.31</b>	<b>7689.18</b>	<b>8170.63</b>

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. The petitioner has filed this petition in terms of Regulation 6(1) of the 2009 Tariff Regulations and has claimed annual fixed charges for the year 2012-13 and 2013-14 as under:

	<i>(₹ in lakh)</i>	
	<b>2012-13</b>	<b>2013-14</b>
Return on Equity	2648.80	2814.75
Interest on Loan	36.06	8.96
Depreciation	561.77	566.52
Interest on Working Capital	275.86	290.76
O & M Expenses	4162.10	4400.17
<b>Total</b>	<b>7684.59</b>	<b>8081.16</b>

6. The petitioner has also filed additional information as sought for by the Commission and has served copies to the respondents. Reply in the matter has been filed by the respondent No.1, ASEB.

7. 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 orders dated 30.9.2011 and 4.7.2014 in Petition Nos. 294/2009 and 238/GT/2013 respectively. 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. The respondent has further submitted that only the lowest figures as approved vide order dated 4.7.2014 for the first four years and the present claim of ₹126.23 lakh for 2013-14 may be admitted.



8. The petitioner in its rejoinder affidavit dated 22.1.2015 has clarified that the additional capital expenditure claimed for 2009-13 are exactly same as those allowed vide order dated 4.7.2014 in Petition No. 238/GT/2013. It has also submitted that the additional capital expenditure for 2013-14 which is based on actual execution is much less in comparison to those allowed by the Commission based on projections. 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. In terms of the above regulations, the annual fixed charges for the period 2009-12 had been revised by order dated 4.7.2014 in Petition No.238/GT/2013 based on the actual capital expenditure for the said period and only the truing-up of expenditure for 2012-14 at the end of the tariff period is to be undertaken by this order. 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 2012-14 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 Commission vide its order dated 4.7.2014 in Petition No. 238/GT/2013 had approved the capital cost of ₹27638.24 lakh as on 31.3.2012. Accordingly, in terms of the above proviso, the capital cost of ₹27638.24 lakh as on 31.3.2012 has been considered as the opening capital cost as on 1.4.2012 for the purpose of revision of annual fixed charges for the period 2012-14.

### **Additional Capital Expenditure for 2012-14**

12. 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.

13. The actual additional capital expenditure for the period 2009-12 and projected additional capital expenditure for the period 2012-14 allowed vide order dated 4.7.2014 in Petition No.238/GT/2013 is as under:

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
<b>Actual</b>			<b>Projected</b>	
284.16	265.81	353.36	149.71	1213.56



14. The actual additional capital expenditure claimed for the years 2012-13 and 2013-14 is as under:

	(₹ in lakh)	
	2012-13	2013-14
<b>Additional capital expenditure as per books</b>		
Additions in books of accounts	383.84	138.81
De-capitalization as per books	299.56	12.59
<b>Net Additional capital expenditure as per books of accounts</b>	<b>84.28</b>	<b>126.22</b>
<b>Additional capital expenditure claimed under Regulation 9(2)(iv)</b>		
Expenditure on security of the power stations as well as officials engaged in maintenance and operation which in turn have contributed to the smooth and successful operation of the plant	6.53	7.16
Replacement of existing damaged/obsolete assets for smooth operation of the plant	180.04	59.14
<b>Sub-total</b>	<b>186.57</b>	<b>66.30</b>
De-capitalization of old assets replaced by new assets covered above,	(-) 36.86	0.00
De-capitalization of old assets without any replacement by new assets	0.00	(-) 12.59
<b>Sub-total</b>	<b>(-) 36.86</b>	<b>(-) 12.59</b>
<b>Additional capital expenditure claimed</b>	<b>149.71</b>	<b>53.71</b>
<b>Exclusion (Not claimed for tariff purpose)</b>		
Not related to core activity	0.00	0.80
Minor assets	4.58	7.67
Assets of the O&M nature	28.94	62.68
Assets of the nature of stocks and spares T&P	14.92	1.36
<b>Sub-total of exclusions</b>	<b>48.44</b>	<b>72.51</b>
<b>Additional capital expenditure (claim + Exclusions)</b>	<b>198.15</b>	<b>126.22</b>
<b>Difference with books of accounts</b>	<b>113.87</b>	<b>0.00</b>

15. Before proceeding, we notice the difference of ₹113.87 lakh between the additional capital expenditure as per books of accounts and the additional capital expenditure (including exclusions) claimed for the year 2012-13. This according to us, is on account of shifting of certain expenditure by the petitioner towards replacements made and the de-capitalization of amounts from 2012-13 relating to the period 2009-12 in Petition No.238/GT/2013. It is observed that Commission in its order dated 4.7.2014 had allowed the shifting of the expenditure after considering the justification





submitted by the petitioner. The reconciliation of the amount for (-) ₹113.87 lakh indicated by the petitioner is as under:

<i>(₹ in lakh)</i>	
Additions as per books during 2012-13 (a)	383.84
Additions+ exclusions claimed in instant petition for the year 2012-13 (b)	235.01
Additions for the year 2012-13 shifted to additions/exclusions of 2009-12 as per order dated 4.7.2014 (c)	148.82
Reconciliation of Additions	383.84= 235.01 +148.82 (a)=(b)+(c)
Deletions as per books of accounts during 2012-13 (d)	(-) 299.56
Deletions + exclusions claimed for the year 2012-13 (e)	(-) 36.86
Deletions for the year 2012-13 shifted to deletions/exclusions of 2009-12 as per Commission's order dated 4.7.2014 (f)	(-) 256.78
Reconciliation of deletions	unexplained gap of (-) 5.92 lakh i.e (-) 299.56- [( 36.86+(-)256.78)]
Net impact of shifting (c)-(d) against 113.87 lakh	107.96 (256.78-148.82)
Unexplained gap on overall basis	(-) 5.91 (107.96-113.87)

16. It is observed that the petitioner has indicated that the de-capitalization amount of (-)₹5.92 lakh pertains to the de-capitalization of Stator bars (59 nos) and during reconciliation has shifted the same to the year 2011-12 under exclusions i.e not to be considered for tariff purpose, on the ground that the corresponding addition has not been claimed in tariff. In other words, the de-capitalization is without replacement. However, considering the fact that this exclusion was not claimed in the truing-up petition (Petition No.238/GT/2013) and since the petitioner has not clarified as to how the Stator bars were de-capitalized without any replacement, the de-capitalization for the year 2012-13 shall be considered as (-)₹42.78 lakh after including the de-capitalization of (-)₹5.92 lakh relating to Stator bars, instead of (-)₹36.86 lakh.



17. 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.

### **2012-13**

18. 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	Remarks on admissibility
1	Boundary Wall for permanent colony	6.53	<b>Allowed</b> under Regulation 9(2)(iv) of the 2009 Tariff Regulations as the expenditure is considered necessary for the safety of the employees working in the generating station which in turn will ensure the successful operation of the generating station.
2	Replacement of damaged winding limb of Generator Transformer	111.30	<b>Allowed</b> under Regulation 9(2)(iv) of the 2009 Tariff Regulations as the GTs are 27 years old and accordingly the expenditure is considered necessary for efficient and successful operation of the plant.
3.	Replacement of Gate valves	10.82	<b>Allowed</b> under Regulation 9(2)(iv) of the 2009 Tariff Regulations as the expenditure on replacement of Gate valves, Cooler tube bundles and Runner cone were allowed by order dated 4.7.2014 on projected/actual basis, considering the acidic nature of the water and the damage of underwater parts and the problem faced in keeping the plant in operation.
4.	Replacement of Cooler Tube bundles	29.37	
5.	Replacement of Runner Cone	14.08	
6	Replacement of collector assembly	5.52	<b>Allowed</b> under Regulation 9(2)(iv) of the 2009 Tariff Regulations for efficient and successful operation of the plant as the expenditure is towards replacement of the



			equipment damaged due to prolonged use.
7	Lower bush housing of guide apparatus and Bushes for lower, middle and upper guide vanes	8.95	<b>Allowed</b> under Regulation 9(2)(iv) of the 2009 Tariff Regulations for efficient and successful operation of the plant as the expenditure as the expenditure is towards the replacement of worn out components
	<b>Total amount claimed</b>	<b>186.57</b>	
	<b>Total amount allowed</b>		<b>186.57</b>

### 2013-14

19. 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:

(₹ in lakh)

Sl. No.	Assets/Works	Actual additional capital expenditure incurred	Remarks on admissibility
1	Construction of Security barrack and a kitchen at kopili valve house.	7.16	<b>Allowed</b> under Regulation 9(2)(iv) of the 2009 Tariff Regulations as the expenditure is considered necessary for the benefit of the employees working at remote area of the generating station which in turn will facilitate the efficient and successful operation of the generating station.
2	Replacement of Trash racks	59.14	Allowed under Regulation 9(2)(iv) of the 2009 Tariff Regulations for efficient and successful operation of the plant as the expenditure is towards the replacement of trash racks damaged due to acidic nature of water and due to prolonged usage. Also, the replacement will ensure a perfect water conductor system.
	<b>Total amount claimed</b>	<b>66.30</b>	
	<b>Total amount allowed</b>		<b>66.30</b>



## **Deletions**

### **2012-13**

20. The petitioner has indicated an amount of (-)₹ 36.86 lakh for de-capitalization of old assets replaced. The de-capitalized assets include winding limb of Generator Transformer, valves, runner cones, cooler tubes, bushes for guide vanes, collector assemblies etc. These de-capitalized assets are not rendering any useful service in the operation of the plant.

21. 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"*

22. Accordingly, as stated in para 16 above, the de-capitalization of (-)₹42.78 lakh, for 2012-13 has been considered for the purpose of tariff.

### **2013-14**

23. The petitioner has indicated an amount of ₹12.59 lakh for de-capitalization of old assets replaced (old trash rack). As this de-capitalized asset does not render any useful service in the operation of the generating station, the de-capitalization for 2013-14 has been considered for the purpose of tariff.

### **Exclusions [2012-13 and 2013-14]**

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

24. The petitioner has incurred expenditure of ₹48.44 lakh in 2012-13 and ₹72.51 lakh in 2013-14 for acquiring minor assets, assets of O&M nature, spares etc.



However, as 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, 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 the positive entries under the head are in order and are allowed.

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

	(₹ in lakh)	
	<b>2012-13</b>	<b>2013-14</b>
Expenditure on security of the power stations as well as officials engaged in maintenance and operation which in turn have contributed to the smooth and successful operation of the plant	6.53	7.16
Replacement of existing damaged/obsolete assets for smooth operation of the plant	180.04	59.14
<b>Sub-total additions (a)</b>	<b>186.57</b>	<b>66.30</b>
De-capitalization of old assets replaced by new assets covered above (b)	(-) 42.78	(-)12.59
Un-discharged liabilities in additions (c)	0.00	0.00
Discharge of liabilities (d)	0.00	0.00
<b>Additional capital expenditure allowed for the purpose of tariff (e)=(a)+(b)-(c)+(d)</b>	<b>143.79</b>	<b>53.71</b>

#### Capital Cost for 2012-14

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

	(₹ in lakh)	
	<b>2012-13</b>	<b>2013-14</b>
Opening capital cost as on 1 <sup>st</sup> April of the financial year	27638.24	27782.03
Additional Capital Expenditure allowed	143.79	53.71
<b>Capital cost as on 31<sup>st</sup> March of the financial year</b>	<b>27782.03</b>	<b>27835.74</b>



## Debt-Equity Ratio

27. The petitioner has stated that the funding of additional capital expenditure has been made through internal resources and others. In line with Regulation 12 of the 2009 Tariff Regulations the debt equity ratio of 70:30 has been considered on the admitted additional capital expenditure and after adjustment of un-discharged liability.

## Return on Equity

28. 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)	
	<b>2012-13</b>	<b>2013-14</b>
Gross Notional Equity	13430.45	13473.59
Addition due to Additional Capital Expenditure	43.14	16.11
Closing Equity	13473.59	13489.70
Average Equity	13452.02	13481.64
Return on Equity (Base Rate )	15.750%	16.500%
Tax rate for the year (MAT)	20.008%	20.961%
Rate of Return on Equity	19.689%	20.876%
<b>Return on Equity</b>	<b>2648.57</b>	<b>2814.43</b>

## Interest on loan

29. 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 Regulation 16 of the 2009 Tariff 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 4.7.2014 in Petition No. 238/GT/2013 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.



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

	(₹ in lakh)	
	<b>2012-13</b>	<b>2013-14</b>
Gross Normative Loan	14207.79	14308.44
Cumulative Repayment upto previous year	13529.37	14096.11
Net Loan-Opening	678.42	212.33
Repayment during the year	566.74	249.93
Addition due to Additional capitalization	100.65	37.60
Net Loan-Closing	212.33	0.00
Average Loan	445.37	106.16
Weighted Average Rate of Interest on Loan	7.94%	7.94%
<b>Interest on Loan</b>	<b>35.36</b>	<b>8.43</b>

### Depreciation

31. In terms of Regulation 17 of the 2009 Tariff Regulations, the weighted average rate of depreciation of 5.328% 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)	
	<b>2012-13</b>	<b>2013-14</b>
Gross Block as on 31.3.2009	27638.24	27782.03
Additional capital expenditure	143.79	53.71
Closing gross block	27782.03	27835.74
Average gross block	27710.13	27808.88
Depreciable Value	24939.12	25027.99
Balance Useful life of the asset	20.28	19.28
Remaining Depreciable Value	11493.85	11037.53
<b>Depreciation</b>	<b>566.74</b>	<b>572.47</b>

32. The O&M expenses allowed vide order dated 4.7.2014 in Petition No. 238/GT/2013 has been considered as under:

	(₹ in lakh)	
	<b>2012-13</b>	<b>2013-14</b>
	4162.10	4400.17



## Interest on Working Capital

33. 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.*

34. 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 1<sup>st</sup> 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.

35. 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)*

2012-13	2013-14
1281.45	1347.73

- (b) **Maintenance Spares:** In terms of the provisions of the above regulations, maintenance spares @ 15% of O&M expense considered for the purpose of tariff, is as stated below:

*(₹ in lakh)*

2012-13	2013-14
624.32	660.03





(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)	
2012-13	2013-14
346.84	366.68

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)		
	2012-13	2013-14
Receivables	1281.45	1347.73
Maintenance Spares	624.32	660.03
O & M expenses	346.84	366.68
<b>Total</b>	<b>2252.61</b>	<b>2374.43</b>
Rate of interest	12.25%	12.25%
<b>Interest on Working Capital</b>	<b>275.94</b>	<b>290.87</b>

### Annual Fixed Charges

38. The annual fixed charges approved for the generating station for the period from 1.4.2012 to 31.3.2014 is as under:

(₹ in lakh)		
	2012-13	2013-14
Return on Equity	2648.57	2814.43
Interest on Loan	35.36	8.43
Depreciation	566.74	572.47
Interest on Working Capital	275.94	290.87
O & M Expenses	4162.10	4400.17
<b>Total</b>	<b>7688.72</b>	<b>8086.36</b>

39. The difference between the annual fixed charges recovered by the petitioner in terms of the order dated 4.7.2014 in Petition No. 238/GT/2013 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.456/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**

