

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 121/2010**

**Coram: Dr. Pramod Deo, Chairperson  
Shri S.Jayaraman, Member  
Shri V.S.Verma, Member  
Shri M.Deena Dayalan, Member**

**DATE OF HEARING: 10.2.2011**

**DATE OF ORDER: 30.11.2011**

**In the matter of**

Approval of tariff of Rangit Hydroelectric Project (3x 20 MW) for the period from 1.4.2009 to 31.3.2014.

**And in the matter of**

NHPC Ltd, Faridabad  
Vs

**...Petitioner**

1. West Bengal State Electricity Distribution Company Ltd, Kolkata
2. Damodar Valley Corporation, Kolkata
3. Jharkhand State Electricity Board, Ranchi
4. Bihar State Electricity Board, Patna
5. Department of Power, Govt. of Sikkim, Gangtok

**...Respondents**

**The following were present**

1. Shri Prashant Kaul, NHPC
2. Shri S.K. Meena, NHPC
3. Shri A.Singh, NHPC
4. Shri S.Balaji, NHPC
5. Shri R.B.Sharma, Advocate, BSEB

**ORDER**

This petition has been filed by the petitioner, NHPC Ltd, for approval of tariff of Rangit Hydroelectric Project (3x 20 MW) (hereinafter referred to as “the generating station”) for the period from 1.4.2009 to 31.3.2014, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, (hereinafter referred to as “the 2009 regulations”).



2. The generating station was declared under commercial operation on 15.2.2000. The tariff for the generating station for the period from 1.4.2004 to 31.3.2009 was approved by the Commission vide its order dated 9.5.2006 in Petition No.175/2004 and was revised by order dated 5.2.2007 in Review Petition No. 49/2006 (in Petition No.175/2004). Subsequently, the Commission by order dated 12.10.2009 in Petition No.40/2009 revised the annual fixed charges for the generating station after considering the impact on account of additional capitalization/de-capitalization during the years 2004-05 and 2005-06. Thereafter, by order dated 3.9.2010 in Petition No.176/2009, the Commission revised the annual fixed charges for the generating station after considering the impact on account of additional capitalization/de-capitalization during the years 2006-07, 2007-08 and 2008-09 with the admitted capital cost as under:

	<i>(₹ in lakh)</i>		
	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Opening Capital cost as on 1 <sup>st</sup> April of the financial year	49221.28	49203.39	49238.65
Additional capital expenditure for the financial year	(-) 17.89	35.27	112.23
Capital cost as on 31 <sup>st</sup> March of the financial year	<b>49203.39</b>	<b>49238.65</b>	<b>49350.88</b>

3. The annual fixed charges approved by the Commission vide order dated 3.9.2010 is as under:

	<i>(₹ in lakh)</i>				
	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Depreciation	1155.06	1155.84	1155.85	918.20	920.33
Interest on Loan	622.74	202.53	73.99	0.00	0.00
Return on Equity	2616.05	2617.44	2617.46	2617.82	2620.92
Advance against Depreciation	1892.58	0.00	393.58	0.00	0.00
Interest on Working Capital	194.25	158.76	168.29	161.24	166.83
O & M Expenses	839.19	872.76	907.67	943.98	981.73
<b>Total</b>	<b>7319.87</b>	<b>5007.32</b>	<b>5316.83</b>	<b>4641.25</b>	<b>4689.81</b>

4. The annual fixed charges claimed by the petitioner for 2009-14 is as stated overleaf:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	3505.07	3513.79	3519.57	3523.29	3526.37
Interest on Loan	11.19	18.84	23.19	25.49	27.21
Depreciation	2514.13	2522.04	2527.29	882.52	884.78
Interest on Working Capital	291.93	301.95	312.32	288.79	300.18
O & M Expenses	3323.46	3513.56	3714.54	3927.01	4151.63
<b>Total</b>	<b>9645.77</b>	<b>9870.19</b>	<b>10096.91</b>	<b>8647.10</b>	<b>8890.17</b>

5. Reply to the petition has been filed by the fourth respondent, BSEB.

## **CAPITAL COST**

### **(A) Capital Cost as on 1.4.2009**

6. The last proviso to Regulation 7 of the 2009 regulations, amended on 21.6.2011 shall be is as under:

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

7. The Commission vide its order dated 3.9.2010 in Petition No.176/2009 had approved the capital cost of ₹49350.88 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 ₹49350.88 lakh as on 31.3.2009, has been considered as the opening capital cost as on 1.4.2009, in respect of the generating station for the period 2009-14.

### **Additional Capital Expenditure for 2009-14 (projected)**

8. Regulation 9 (2) (iv) of the 2009 regulations provides as under:

*”9 (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) xxxxxxxx*

*(ii) xxxxxxxx*

*(iii) xxxxxxxx*

*(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.. "*

9. The additional capital expenditure (projected) for 2009-14 claimed by the petitioner is as under:

	<i>(₹ in lakh)</i>				
	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Regulation 9(2)(iv)	189.00	143.00	102.00	68.00	65.00
Deletion	6.80	13.70	24.90	12.40	10.50
<b>Total Additional capital expenditure claimed</b>	<b>182.20</b>	<b>129.30</b>	<b>77.10</b>	<b>55.60</b>	<b>54.50</b>

10. The petitioner has claimed an amount of ₹189.00 lakh, ₹143.00 lakh, ₹102.00 lakh, ₹68.00 lakh and ₹65.00 lakh during the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively, under this Regulation 9(2)(iv). The claim includes assets like road, buildings, auxiliary & ancillary system, street lighting, construction equipments, water supply sewerages, computers, security communication system, hospital equipments, lab & meter testing equipments, dam – hydraulic work, vehicles and some other assets.

11. The learned counsel for the respondent, BSEB has submitted that in terms of Regulation 9(2)(iv) of the 2009 regulations the claim for additional capitalization could only be permitted when the expenditure has been incurred on account of damage caused by natural calamities including geological reasons and also for additional work necessary for successful and efficient operation of the plant. The petitioner should claim the above expenses only under Regulation 10 of the 2009 regulations for which an application for approval of detailed project report by the Commission was required to be made. Moreover, the items were in the category of R&M/O&M and hence the additional capitalization prayed for should not be permitted. In response, the petitioner has submitted that the claim made has not

been made for extension of the useful life of the project and hence Regulation 10 was not applicable. However, the claim has been made under Regulation 9(2) of the 2009 regulations for successful and efficient operation of the generating station.

12. We find that Regulation 9(2)(iv) of the 2009 regulations permit the capitalization of expenditure due to any additional work which has become necessary for successful and efficient plant operation, in addition to the expenditure which has become necessary on account of damage caused by natural calamities etc. In view of this, the submission of the learned counsel for the respondent, BSEB that the petitioner should have claimed the expenses under Regulation 10 of the 2009 regulations is not tenable.

13. The justification for additional capital expenditure for the assets/items claimed by the petitioner for 2009-14 and the reply submissions of the respondent, has been examined and the findings based on prudence check, is as under:

(₹ in lakh)			
Year	Assets	Amount	Findings
2009-10	Computer, Purchase of different types of illuminations, fittings, mobile power unit, high mast tower etc.,	25.00	<b>Not allowed</b> since these assets are in the nature of minor asset.
	Laboratory and meter testing equipment	9.00	<b>Not allowed</b> since the same is in the nature of tools and tackles and hence minor asset.
	Miscellaneous capital items	10.00	<b>Not allowed</b> since details of the assets have not been provided by the petitioner.
	Assets not included in the above viz., Buildings, Construction of new alternate Road to Dam Complex, Auxiliary & Ancillary System, Construction Equipments like different type of pumps, Water Supply and sewerages,	<b>145.00</b>	<b>Allowed</b> under <b>Regulation 9(2)(iv)]</b> as the expenditure is in respect of items/assets which are necessary for successful and efficient operation of the generating station.

	Interior communication equipments (security), hospital equipments, safety measure equipments.		
<b>2010-11</b>	Computer, Purchase of different types of illuminations, fittings, mobile power unit, high mast tower, Interior communication equipments (security)	58.00	<b>Not allowed</b> since these assets are in the nature of minor asset.
	Laboratory and meter testing equipment	7.00	<b>Not allowed</b> since the same is in the nature of tools and tackles and hence minor asset.
	Miscellaneous capital items	5.00	<b>Not allowed</b> since details of the assets have not been provided by the petitioner.
	Assets not included in the above viz., Buildings, Dam Hydraulic work, vehicles, Water Supply and sewerages, safety measure equipments.	73.00	<b>Allowed</b> in terms of <b>Regulation 9(2)(iv)]</b> as the expenditure is in respect of items/assets which are necessary for successful and efficient operation of the generating station.
<b>2011-12</b>	Computer, Purchase of different types of illuminations, fittings, mobile power unit, high mast tower etc.,	34.00	<b>Not allowed</b> since these assets are in the nature of minor asset.
	Laboratory and meter testing equipment	12.00	<b>Not allowed</b> since the same is in the nature of tools and tackles and hence minor asset.
	Miscellaneous capital items	5.00	<b>Not allowed</b> since details of the assets have not been provided by the petitioner.
	Assets not included in the above, viz., Construction Equipments like different type of pumps, vehicles, buildings and safety measure equipments.	<b>51.00</b>	<b>Allowed</b> under Regulation <b>9(2)(iv)]</b> as the expenditure is in respect of items/assets which are necessary to increase the efficiency of the generating station.
<b>2012-13</b>	Computer, Purchase of different types of illuminations, fittings, mobile power unit, high mast tower etc.,	30.00	<b>Not allowed</b> since these assets are in the nature of minor asset.
	Miscellaneous capital items	5.00	<b>Not allowed</b> since details of the assets have not been provided by the petitioner.
	Laboratory and meter testing equipment	5.00	<b>Not allowed</b> since the same is in the nature of tools and tackles and hence minor asset.
	Assets not included in the above viz., Buildings, Dam Hydraulic work, Construction Equipments like different type of pumps, and safety measure equipments	<b>28.00</b>	<b>Allowed</b> under Regulation <b>9(2)(iv)]</b> as the expenditure is in respect of items/assets which are necessary to increase the efficiency of the generating station.

<b>2013-14</b>	Computer, Purchase of different types of illuminations, fittings, mobile power unit, high mast tower etc.,	18.00	<b>Not allowed</b> since these assets are in the nature of minor asset.
	Miscellaneous capital items	5.00	<b>Not allowed</b> since details of the assets have not been provided by the petitioner.
	Laboratory and meter testing equipment	10.00	<b>Not allowed</b> since the same is in the nature of tools and tackles and hence minor asset.
	Assets not included in the above viz., Buildings, Construction Equipments like different type of pumps, and safety measure equipments	<b>32.00</b>	<b>Allowed</b> under Regulation <b>9(2)(iv)]</b> as the expenditure is in respect of items/assets which are necessary to increase the efficiency of the generating station.

14. In respect of the expenditure on assets related to security which has been allowed as above, the petitioner is directed to submit supporting documents like the recommendation/guidelines of the Ministry of Home Affairs (MHA)/Intelligence agency of the State, at the time of truing-up.

15. Based on prudence check, the following amounts have been allowed to be capitalized for the period 2009-14, under Regulation 9(2)(iv) :

	<i>(₹ in lakh)</i>				
	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Regulation 9(2)(iv)	145.00	73.00	51.00	28.00	32.00

16. In addition to the capitalization under the above category, the petitioner has de-capitalized an amount of ₹6.80 lakh, ₹13.70 lakh, ₹24.90 lakh, ₹12.40 lakh and ₹10.50 lakh during the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively, in respect of gross value of original assets which were not in use, in terms of the proviso to Regulation 7(1) of the 2009 regulations, which provides that “the assets forming part of the project, but not in use shall be taken out of the capital cost.”

17. It is observed that some of the assets which are proposed for de-capitalization by the petitioner are linked to assets which are proposed to be

replaced by new assets. After prudence check, the claim for some of these assets is not considered. In view of this, the gross value of these original assets which have been proposed to be taken out of service are taken out of deletion, for the respective years as stated hereunder:

(a) **2010-11:** Purchase of different types of illuminations, fittings, mobile power unit, high mast tower etc. amounting to ₹18.00 lakh has been disallowed. The gross value for these original assets, amounting to ₹2.00 lakh claimed in deletion by the petitioner, has not been considered.

(b) **2011-12:** Replacement of computers amounting to ₹18.00 lakh, Laboratory & meter testing equipments amounting to Rs.12.00 lakh and purchase of different types of illuminations, fittings, mobile power unit, high mast tower etc. amounting to ₹16.00 lakh have been disallowed. The gross value for these original assets, amounting to ₹3.00 lakh, ₹5.00 lakh and ₹1.50 lakh respectively, claimed as deletion by the petitioner, has not been considered.

(c) **2012-13:** Replacement of computers amounting to ₹15.00 lakh, Laboratory & meter testing equipments amounting to ₹5.00 lakh and purchase of different types of illuminations, fittings, mobile power unit, high mast tower etc. amounting to ₹15.00 lakh, has been disallowed. The gross value for these original assets amounting to ₹3.00 lakh, ₹5.00 lakh and ₹1.00 lakh respectively, claimed as deletion by the petitioner, has not been considered.

(d) **2013-14:** Replacement of computers amounting to ₹10.00 lakh and purchase of different types of illuminations, fittings, mobile power unit, high mast tower etc. amounting to ₹8.00 lakh, has been disallowed. The gross value for these original assets, amounting to ₹4.00 lakh and ₹1.50 lakh respectively, claimed in deletion by the petitioner, has not been considered.

18. Based on the above, amounts of ₹6.80 lakh, ₹11.70 lakh, ₹15.40 lakh and ₹3.40 lakh for the years 2010-11, 2011-12, 2012-13 and 2013-14 respectively, has been allowed as deletions.



19. As regards some new replaced assets, gross value of the original asset has not been deducted during the respective years of the claim. These assets are as under:

<i>(₹ in lakh)</i>			
<b>Asset</b>	<b>Value of Replacement</b>	<b>Gross Value of old assets</b>	<b>Year of replacement</b>
Auxiliary and Ancillary System	10.00	0.67	2009-10
<b>Total</b>	<b>10.00</b>	<b>0.67</b>	<b>2009-10</b>

20. The gross value of assets amounting to ₹0.67 lakh, not proposed to be deducted by the petitioner during the year in which the asset is replaced, has been considered as 'assumed deletions' for the year 2009-10 for the purpose of tariff. Accordingly, the adjustments made and the total amounts allowed as deletions is as under:

<i>(₹ in lakh)</i>					
	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Deletions claimed	6.80	13.70	24.90	12.40	10.50
<b>Less:</b> Deletions disallowed	0.00	2.00	9.50	9.00	5.50
Deletions allowed against claim	6.80	11.70	15.40	3.40	5.00
<b>Add:</b> Assumed Deletions	0.67	0.00	0.00	0.00	0.00
<b>Total Deletions allowed</b>	<b>7.47</b>	<b>11.70</b>	<b>15.40</b>	<b>3.40</b>	<b>5.00</b>

#### **Un-discharged/discharged liabilities**

21. There are no un-discharged/discharged liabilities for the period 2009-14

#### **Additional capital expenditure**

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

<i>(₹ in lakh)</i>					
	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Regulation 9(2)(iv)	145.00	73.00	51.00	28.00	32.00
Deletions	7.47	11.70	15.40	3.40	5.00
<b>Total additional capitalization allowed</b>	<b>137.53</b>	<b>61.30</b>	<b>35.60</b>	<b>24.60</b>	<b>27.00</b>

### Capital Cost for 2009-14

23. As stated, the Commission had considered the capital cost of ₹49350.88 lakh as on 31.3.2009 in Petition No.176/2009. The same has been considered as the opening capital cost as on 1.4.2009 for the purpose of tariff for the period 2009-14. Based on this, the capital cost approved for the period 2009-14 is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	49350.88	49488.41	49549.71	49585.31	49609.91
Additional Capitalization allowed	137.53	61.30	35.60	24.60	27.00
<b>Capital Cost as on 31<sup>st</sup> March of the financial year</b>	49488.41	49549.71	49585.31	49609.91	49636.91

### Debt-Equity Ratio

24. Regulation 12 of the 2009 regulations provides that:

*“(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 utilised 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 modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.*

25. The debt-equity ratio of 62:38 as on 31.3.2009 was considered vide order dated 3.9.2010 in Petition No.176/2009. However, in line with the provisions of

the above regulation, the debt-equity ratio of 70:30 has been applied on the admitted additional capital expenditure for the period 2009-14.

### **Return on Equity**

26. Regulation 15 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011 provides as under:

*“(1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.*

*(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation.*

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

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

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

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

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

*Where “t” is the applicable tax rate in accordance with clause (3) of this regulation.*

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

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

27. The petitioner has considered the rate of Return on Equity @ 18.674%, based on the prevailing MAT rate (Basic rate of 15%+10% surcharge+3% education Cess = 16.995%) for 2009-10.

28. In this order, Return on equity has been worked out @17.481% per annum on the normative equity, after accounting for the additional capital expenditure,

considering the base rate of 15.5% and MAT rate of 11.33%. Return on equity has been worked out as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional Equity	18737.70	18778.96	18797.35	18808.03	18815.41
Addition due to Additional capitalization	41.26	18.39	10.68	7.38	8.10
Closing Equity	18778.96	18797.35	18808.03	18815.41	18823.51
Average Equity	18758.33	18788.15	18802.69	18811.72	18819.46
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Min Alt. Tax rate for the year 2008-09	11.330%	11.330%	11.330%	11.330%	11.330%
Rate of Return on Equity	17.481%	17.481%	17.481%	17.481%	17.481%
<b>Return on Equity</b>	<b>3279.06</b>	<b>3284.27</b>	<b>3286.81</b>	<b>3288.39</b>	<b>3289.74</b>

29. The petitioner's prayer for grossing up the base rate of Return on Equity based on the tax rates viz, MAT, surcharge, any other cess, charges, levies etc as per the relevant Finance Act, will be guided by the provisions of Regulation 15 as extracted above.

### Interest on loan

30. Regulation 16 of the 2009 regulations provides as under:

*"(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

31. The normative loan of the generating station has already been repaid. Also, the normative loan on account of the admitted additional capital expenditure during the respective years of the tariff period have also been considered to be fully paid, as the admitted depreciation is more than the amount of normative loan during these years. As such, the Interest on loan during the period 2009-14 is 'Nil'. The computations are as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative loan	30613.18	30709.45	30752.36	30777.28	30794.50
Cumulative Repayment upto Previous Year	30625.71	30721.98	30764.89	30789.81	30807.03
Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
Repayment during the year	96.27	42.91	24.92	17.22	18.90
Additions due to Additional Capitalisation	96.27	42.91	24.92	17.22	18.90
Net Loan-closing	0.00	0.00	0.00	0.00	0.00
Average Loan	0.00	0.00	0.00	0.00	0.00
Weighted Average Rate of Interest on loan	-	-	-	-	-
<b>Interest on Loan</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

### Depreciation

32. Regulation 17 of the 2009 regulations provides that:

“(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 including Advance against Depreciation] as admitted by the Commission upto 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”.*

33. The date of commercial operation of the generating station is 15.2.2000 and the generating station would complete 12 years of operation as on 15.2.2012. By order dated 3.9.2010 in Petition No.176/2009, the remaining depreciable value has already been spread over the balance useful life of the generating station during the period 2004-09, since the loan was fully repaid during the year 2007-08 itself. In line with this, the remaining depreciable value has been spread over the balance useful life of the asset for 2009-14. The land under reservoir amounting to ₹41.23 lakh as on 31.3.2009 has also been considered for calculation of depreciation. Assets amounting to ₹7.47 lakh, ₹11.70 lakh, ₹15.40 lakh, ₹3.40 lakh and ₹5.00 lakh have been de-capitalized during 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively. 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	49350.88	49488.41	49549.71	49585.31	49609.91
Additional capital expenditure during 2009-14	137.53	61.30	35.60	24.60	27.00
Closing gross block	49488.41	49549.71	49585.31	49609.91	49636.91
Average gross block	49419.65	49519.06	49567.51	49597.61	49623.41
Rate of Depreciation	5.0834%	5.0834%	5.0834%	5.0834%	5.0834%
Depreciable value @ 90%	44208.79	44298.26	44341.87	44368.96	44392.18
Balance useful life of the asset	25.9	24.9	23.9	22.9	21.9
Remaining Depreciable value	27531.50	26559.51	25539.72	24503.13	23456.48
<b>Depreciation</b>	<b>1064.13</b>	<b>1067.84</b>	<b>1069.85</b>	<b>1071.31</b>	<b>1072.43</b>

### O&M Expenses

34. Sub-clause (1) of Clause (f) of Regulation 19 of the 2009 regulations provides for normative operation and maintenance expenses for hydro generating stations as under:

(i) Operation and maintenance expenses, for the existing generating stations which have been in operation for 5 years or more in the base year of 2007-08, shall be derived on the basis of actual operation and maintenance expenses for the years 2003-04 to 2007-08, based on the audited balance sheets, excluding abnormal operation and maintenance expenses, if any, after prudence check by the Commission.

(ii) The normalised operation and maintenance expenses after prudence check, for the years 2003-04 to 2007-08, shall be escalated at the rate of 5.17% to arrive at the normalized operation and maintenance expenses at the 2007-08 price level respectively and then averaged to arrive at normalized average operation and maintenance expenses for the 2003-04 to 2007-08 at 2007-08 price level. The average normalized operation and maintenance expenses at 2007-08 price level shall be escalated at the rate of 5.72% to arrive at the operation and maintenance expenses for year 2009-10:

Provided that operation and maintenance expenses for the year 2009-10 shall be further rationalized considering 50% increase in employee cost on account of pay revision of the employees of the Public Sector Undertakings to arrive at the permissible operation and maintenance expenses for the year 2009- 10.

(iii) The operation and maintenance expenses for the year 2009-10 shall be escalated further at the rate of 5.72% per annum to arrive at permissible operation and maintenance expenses for the subsequent years of the tariff period.

(iv) xxxxx

(v) xxxxx

35. The year-wise break-up of actual O&M expenses for the years 2003-04 to 2007-08 furnished by the petitioner, based on which O&M Expenses for the period 2009-10 to 2013-14 have been claimed are as under:

<i>(₹ in lakh)</i>						
Sl. No.	Items	2003-04	2004-05	2005-06	2006-07	2007-08
(A)	<b>Breakup of O&amp;M expenses</b>					
1	Consumption of Stores and Spares	13.40	11.76	315.27	165.15	20.42
2	Repair and Maintenance	333.33	355.52	341.22	1210.84	(-) 418.31
3	Insurance	249.26	248.84	248.33	248.30	248.75
4	Security	2.45	6.55	0.25	1.17	3.10
5	Administrative Expenses	41.99	69.63	67.92	76.19	79.56
6	Employee Cost	782.59	941.94	1062.11	1123.66	1468.07
7	loss of store					
8	Provisions	36.00	25.00	-	72.48	83.00
9	Corporate office expenses allocation	144.53	127.00	29.55	14.32	15.55
10	Others (Specify items)	172.94	223.15	96.57	67.03	110.72
<b>11</b>	<b>Total (1 to 10)</b>	<b>1776.50</b>	<b>2009.40</b>	<b>2161.21</b>	<b>2979.13</b>	<b>1610.86</b>
12	Revenue/ Recoveries, if any	49.85	40.94	13.11	23.43	24.15
<b>13</b>	<b>Net O&amp;M Expenses</b>	<b>1726.65</b>	<b>1968.46</b>	<b>2148.10</b>	<b>2955.70</b>	<b>1586.71</b>

36. The respondent, BSEB while has pointing out that the O&M expenses have not been calculated as per the provisions of Regulation 19(f) of the 2009 regulations has submitted that the abnormal O&M expenses (in some of its claim in Form-15B of the petition) have not been excluded from the actual O&M expenses for the years 2003-04 to 2007-08. Accordingly, the respondent has prayed that the abnormal O&M expenses may be excluded after prudence check by the Commission. The submissions of the respondent as regards abnormal expenses have been considered and the claims of the petitioner under O&M expenses are allowed after prudence check, as stated in the succeeding paragraphs.



### Consumption of Stores & Spares

37. The expenditure incurred by the petitioner under the heads “Consumption of Stores & Spares” during the years 2003-04 to 2007-08 is as under:

*(₹ in lakh)*

	2003-04	2004-05	2005-06	2006-07	2007-08
Consumption of Stores & Spares	13.40	11.76	315.27	165.15	20.42

38. It is noticed that the expenditure on consumption of Stores and Spares during the years 2005-06 is higher in comparison to the expenditure for the previous years. The petitioner has submitted that the higher expenditure on consumption of Stores and Spares during 2005-06 was on account of the change in accounting policy in capital spares under which the Generating Plant and Machinery (GPM) spares which had been charged to capital account for three years prior to 2005-06, have been transferred to revenue accounts and hence, the expenditure for 2005-06 may be considered. The submission of the petitioner is found justified and hence we allow the amount claimed for 2005-06. We also observe that the expenditure for other years is reasonable. In view of this, O & M expense under Consumption of Stores and Spares has been allowed as claimed, for normalization.

### Repair and Maintenance

39. The expenditure incurred by the petitioner under the head “Repair and Maintenance” of the generating station during the period 2003-08 is as under:

*(₹ in lakh)*

	2003-04	2004-05	2005-06	2006-07	2007-08
Repair and Maintenance	333.33	355.52	341.22	1210.84	(-) 418.31

40. The repair & maintenance expenses during the year 2006-07 are higher than 20% from the expenses for the previous years. This variation is on account of inundation of the power house during the said year. The major variations are on account of Special Repairs of Generating Plant and Machinery (GPM) and for other

special works. The petitioner has also claimed ₹894.39 lakh on insurance on these assets. This claim has been settled during 2007-08. In view of this, the net expenses for 2006-07 works out to ₹ 316.45 lakh (₹1210.84- ₹ 894.39 lakh) and the same has been allowed for 2006-07. Also, the expenditure of ₹ 418.31 lakh during 2007-08 is in respect of prior adjustment of insurance claimed due to inundation of power house during 2006-07. Hence, the net expense during 2007-08 works out to ₹476.08 lakh (₹894.39-₹418.31 lakh), which constitute an increase of more than 20% then the previous year i.e 2006-07. In view of this, the expenses for 2007-08 have been restricted to an increase of 20% of the previous year, which works out to Rs 379.74 lakh and the same has been allowed. Based on the above, the expenditure on 'Repair and Maintenance' for 2003-08 allowed for calculation of O&M for the period 2009-14, is as under:

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Repair & Maintenance	333.33	355.52	341.22	316.45	379.74

#### **Insurance**

41. Expenditure on insurance coverage as submitted by the petitioner as under is allowed, since the claim is at 0.5% of the gross block.

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Insurance	249.26	248.84	248.33	248.30	248.75

#### **Security**

42. Expenditure on security claimed by the petitioner is as under:

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Security Expenses (Other than Salary & wages)	2.45	6.55	0.25	1.17	3.10

43. Expenses on security during the years 2004-05, 2006-07 and 2007-08 have increased by more than 20% of the expenses for the previous years. This is on account of payments made for private security and for charges towards

ammunition provided to CISF. Hence, keeping in view the security environment of the generating station, the expenditure during 2005-06 has been allowed. The expense for other years is considered reasonable. In view of this, the security expenses as claimed have been allowed.

### **Administrative expenses**

44. The details of administrative expenses incurred and claimed are as under:

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Rent	2.91	3.38	26.85	28.95	28.04
Electricity Charges	-	0.21	1.12	-	-
Travel and Conveyance	21.65	22.05	21.46	27.77	32.24
Communication Expenses	14.51	16.40	13.45	16.25	16.33
Advertising	2.77	0.76	4.43	3.03	2.74
Foundation laying and inauguration	-	-	-	-	-
Donation	-	-	-	-	-
Entertainment	0.16	1.84	0.61	0.19	0.21
Filing Fees	-	25.00	-	-	-
<b>Total</b>	<b>41.99</b>	<b>69.63</b>	<b>67.92</b>	<b>76.19</b>	<b>79.56</b>

#### **(a) Rent**

45. There is significant increase in the expenses towards rent during 2005-06 i.e from ₹3.38 lakh in 2004-05 to ₹26.85 lakh during 2005-06. This is on account of hiring of more vehicles and grounding of departmental vehicles, as the cost of operation of departmental vehicles had increased and also on re-classification of account (i.e implementation of new Head of Account w.e.f. 1.4.2005 and re-allocation of transport expenses) under the head 'Rent'-Hiring of vehicles, which was earlier booked under the head 'Staff Welfare Expenses' under Employees Remuneration & benefits. In view of this, the amount incurred is allowed.

#### **(b) Electricity**

46. There is significant increase of Electricity expenses during 2005-06. The charges during 2004-05 are higher on account of booking of electricity charges of Corporate Office (CO) under the project head. The increase during 2005-06 in on

account of booking of electricity charges as charged by the beneficiaries for supplies made by them for Administration, Regional office, Corporate office etc. This was earlier being adjusted to the supplies made by the petitioner to the beneficiaries. Accordingly, the electricity charges incurred by the petitioner have been allowed.

**(c) Entertainment expenses**

47. Entertainment expenses during 2004-05 have increased by more than 20% in comparison to the expenses for 2003-04. This is on account of Cable TV charges booked under the head, "Entertainment". Accordingly, the charges claimed have been allowed.

48. There is no significant variation in the expenses under other heads. Hence, the expenses claimed have been allowed.

49. Filing fee expenses has been excluded for the purpose of normalization.

50. Based on the above, the administrative expenses allowed are as under:

	<i>(₹ in lakh)</i>				
	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>
Rent	2.91	3.38	26.85	28.95	28.04
Electricity Charges	-	0.21	1.12	-	-
Travel & Conveyance	21.65	22.05	21.46	27.77	32.24
Communication Expenses	14.51	16.40	13.45	16.25	16.33
Advertising	2.77	0.76	2.53	3.03	2.74
Foundation Laying and Inauguration	-	-	-	-	-
Donation	-	-	-	-	-
Entertainment	0.16	1.84	0.61	0.19	0.21
Filing Fee					
<b>Total</b>	<b>41.99</b>	<b>44.63</b>	<b>66.01</b>	<b>76.19</b>	<b>79.56</b>

**Employees cost**

51. The petitioner has claimed project specific expenses under employee cost as follows:

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
<b>Total Employee Cost</b>	782.59	941.94	1062.11	1123.66	1468.07

52. The petitioner has submitted that provisions towards revision/arrears of pay were made during 2006-07 and 2007-08 in the employee cost and the same may be treated in terms of the 2009 regulations. The provisions made on account of pay revision of employees' during 2006-07 and 2007-08 under this head have not been considered, since revision on account of pay has been dealt with separately under the 2009 regulations.

53. The salaries, wages & allowances of Corporate office/Regional office are dealt with separately in the subsequent paragraphs. Excluding these expenses, the project specific employee cost is discussed as under:

- (a) *It is noticed that Productivity Linked Incentives have been included in the employee cost. The same has not been considered, as the incentives are required to be paid out from the organizational profits and the beneficiaries cannot be burdened on this count. Similarly, the cost incurred on VRS or ex-gratia of employees is also required to be borne by the petitioner.*
- (b) *The employee cost in Corporate office expenses and Regional office expenses also include expenses which are similar in nature and hence, the same has been rationalized on similar lines and allowed after rationalization.*
- (c) *The proportional employee cost in the total Corporate and Regional office expenses has been considered for Salary, Wages and Allowances of Corporate office (CO) and Regional office (RO) as per information submitted by the petitioner and the balance expenses for Corporate and Regional office has been considered in Corporate Office and Regional office expenses allocation.*

54. Thus, the employees cost allowed after normalization is as under:

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Total employees cost allowed (CO+RO)	869.63	920.76	1007.96	1015.89	1039.15

### **Corporate Office expenses**

55. The petitioner has submitted that the as per its policy, the Corporate Office expenses allocated to the running generating stations are taken @ 1% of sale of energy for the year excluding taxes and duties and in case of construction

projects @ 5% of the project expenditure during the year. The year-wise details of total Corporate Office expenses incurred and its apportionment to the running generating stations, construction projects and other activities of the petitioner and proportionate corporate expenses charged to the generating station are as under:

(₹ in lakh)						
Sl. No	Items	2003-04	2004-05	2005-06	2006-07	2007-08
(A)	Breakup of Corporate Expenses (Aggregate at Company level)					
1	Employee Expenses					
a	Salary, Wages, Allowances and Benefits	5730.96	6664.58	8946.98	8229.27	10379.71
b	Staff Welfare Expenses	818.54	841.32	1112.04	1415.42	1533.02
c	Productivity linked Incentive	0.35	0.00	440.48	447.66	459.56
d	Expenditure on VRS	0.00	56.96	7.48	78.69	36.86
e	Ex-gratia	86.69	88.94	6.34	0.00	2.22
	<b>Sub-total</b>	<b>6637.00</b>	<b>7652.00</b>	<b>10513.00</b>	<b>10171.00</b>	<b>12411.37</b>
2	Administrative Expenses					
a	Repair & Maintenance	355.55	340.93	332.96	331.75	472.43
b	Training and Recruitment	285.30	470.69	281.66	259.97	428.62
c	Communication	166.65	181.02	290.23	182.99	173.21
d	Travelling & Conveyance	541.18	552.85	536.42	563.46	672.43
e	Rent	71.42	91.47	37.11	50.21	10.78
f	Others	1263.47	1214.19	1304.71	1316.58	1562.28
	<b>Sub-Total (Administrative Expenses)</b>	<b>2683.57</b>	<b>2851.15</b>	<b>2783.09</b>	<b>2704.96</b>	<b>3319.75</b>
3	Security	29.07	38.24	38.22	45.01	70.97
4	Donation	0.00	0.00	0.00	0.00	0.00
5	provision	0.00	0.00	6.41	6.89	0.76
6	Others	680.62	551.26	738.79	661.98	713.05
	Total (1 to 6)	10029.8	11092.45	14079.83	13589.88	16515.9
8	Less: Recoveries	433.51	459.26	469.43	601.46	472.87
9	Net Corporate Expenses (Aggregate)	9596.29	10633.19	13610.40	12988.42	16043.03
(B)	Allocation of Corporate Expenses to various Functional Activities					
1	O&M	1392.91	1575.52	1644.49	1801.33	2171.50
2	Contract & Consultancy	104.44	63.42	68.53	202.78	187.74
3	Construction	8098.94	8994.25	11897.38	10984.31	13683.79
	<b>Total</b>	<b>9596.29</b>	<b>10633.19</b>	<b>13610.4</b>	<b>12988.42</b>	<b>16043.03</b>
(C)	Allocation of Corporate Expenses relating to functional activity of Power Generation to various generating stations					
1	LOKTAK	44.60	44.27	49.97	64.85	58.88
2	BAIRASIUL	51.53	47.54	55.40	66.54	59.02
3	SALAL - I	206.40	225.51	227.02	210.98	203.92
4	CHAMERA-I	247.19	259.08	297.52	261.06	268.64
5	TANAKPUR	54.50	54.10	53.13	57.79	47.95
6	URI	609.68	546.12	444.31	520.79	331.91
7	RANGIT	144.53	127.00	91.10	42.94	48.06
8	CHAMERA II	34.48	271.90	338.36	408.14	384.95

9	DHAULI GANGA	0.00	0.00	87.68	168.25	194.92
10	DULHASTI	0.00	0.00	0.00	0.00	566.51
11	TEESTA-V	0.00	0.00	0.00	0.00	6.73
	<b>TOTAL</b>	<b>1392.91</b>	<b>1575.52</b>	<b>1644.49</b>	<b>1801.34</b>	<b>2171.49</b>

56. Ex-gratia and performance based Productive Link incentive has not been considered since these are required to be borne out of from the profits of the petitioner. After excluding these expenses and also the expenses towards payment of ex-gratia and donation, the following Corporate Office expenses have been allowed towards O&M expenses of the generating station for the period 2003-08:

(₹ in lakh)						
Sl. No.	Items	2003-04	2004-05	2005-06	2006-07	2007-08
1	2	4	5	6	7	8
<b>(A)</b>	<b>Breakup of Corporate Expenses (Aggregate at Comp. level)</b>					
1	<b>Employee Expenses</b>					
a	Salary, Wages, Allowances and Benefits	5730.96	6664.58	7997.50	8229.27	9875.12
b	Staff Welfare Expenses	818.54	841.32	1009.58	1334.45	1533.02
c	productive linked incentive	0.00	0.00	0.00	0.00	0.00
d	Expenditure on VRS	0.00	0.00	0.00	0.00	0.00
e	Ex-gratia	0.00	0.00	0.00	0.00	0.00
	<b>Sub-total</b>	<b>6550</b>	<b>7506</b>	<b>9007</b>	<b>9564</b>	<b>11408</b>
2	<b>Administrative Expenses</b>					
a	Repair & Maintenance	355.55	340.93	332.96	331.75	398.10
b	Training and Recruitment	285.30	342.36	281.66	259.97	311.96
c	Communication	166.65	181.02	217.22	182.99	173.21
d	Travelling & Conveyance	541.18	552.85	536.42	563.46	672.43
e	Rent	71.42	85.70	37.11	44.53	10.78
f	Others	1263.47	1214.19	1304.71	1316.58	1562.28
	Sub-Total (Administrative Expenses)	<b>2683.57</b>	<b>2717.05</b>	<b>2710.08</b>	<b>2699.28</b>	<b>3128.76</b>
3	Security	29.07	34.88	38.22	45.01	54.01
4	Donation	0.00	0.00	0.00	0.00	0.00
5	provision	0.00	0.00	0.00	0.00	0.00
6	Others	680.62	551.26	661.51	661.98	713.05
	Total (1 to 6)	<b>9942.76</b>	<b>10809.09</b>	<b>12416.89</b>	<b>12969.99</b>	<b>15303.97</b>
8	Less: Recoveries	433.51	459.26	469.43	601.46	472.87
9	<b>Net Corporate Expenses (Aggregate)</b>	<b>9509.25</b>	<b>10349.84</b>	<b>11947.47</b>	<b>12368.53</b>	<b>14831.10</b>

57. Accordingly, the proportional ratio of the year-wise total corporate office expenses claimed and allowed is as stated overleaf:

(₹ in lakh)

	2003-04	2004-05	2005-06	2006-07	2007-08
Total corporate expenses considered	9509.25	10349.84	11947.47	12368.53	14831.10
Total corporate expenses claimed	9596.29	10633.19	13610.4	12988.42	16043.03
Proportional ratio (r)	0.99093	0.97335	0.87782	0.95227	0.92446

(₹ in lakh)

	2003-04	2004-05	2005-06	2006-07	2007-08
Total corporate expenses for the generating station (Ranjit HE) claimed	144.53	127.00	91.10	42.94	48.06
Total corporate expenses proportioned for (Ranjit HE) (considered)	143.22	123.62	79.97	40.89	44.43
Employee Cost (Considered)	98.66	89.65	60.29	31.62	34.18
Other expenses (Considered)	44.56	33.97	19.68	9.27	10.25

### Regional Office expenses

58. The petitioner has submitted Year-wise details of total Regional Office (at Region-III-Kolkata) expenses incurred and its apportionment to the running generating stations, construction projects and other activities of the petitioner and proportionate regional expenses charged to the generating station are given here under:

(₹ in lakh)

Sl. No.	Items	2003-04	2004-05	2005-06	2006-07	2007-08
	Net Corporate Expenses (Aggregate)	384.34	504.56	583.25	645.53	637.35
<b>(B) Allocation of Region-II Expenses to various functional activities</b>						
1	O&M			73.24	52.96	46.01
2	Contract & Consultancy			10.83	49.41	115.69
3	Construction			499.17	543.16	475.66
	<b>Total</b>			583.25	645.53	637.35
<b>(C) Allocation of Region-II Expenses to Power Stations/Projects falling under Region-II</b>						
	<b>Rangit hydro generating station</b>			19	20.68	14.40

59. The petitioner has submitted that for the years 2003-04 and 2004-05, the regional office expenses were considered under the natural head of expenditure by the project under the region. Thus, these expenditures form part of the expenses of the generating station.



60. The expenditure on account of depreciation and adjustments for prior periods has not been allowed. The expenses under the head 'administrative expenses' has been limited to an increase of 20% specifically on expenses towards travelling & conveyance charges and others, where proper justification has not submitted by the petitioner. Also the expenditure towards 'Corporate Social Responsibility' (CSR) has not been considered since is required to be borne by the petitioner from its own resources.

61. Based on the above, the regional office expenses (normalized) is worked out as under:

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Net regional O&M Expenses	-	-	54.24	32.27	29.03
Proportion ratio ( r ) (Considered to Claimed)	-	-	0.93	0.90	0.72
Employee cost (Ratio)	-	-	0.686	0.747	0.713

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Total Regional expenses (Region -III Level) for the generating station Ranjit HE (claimed)	Included in the natural head of plant		19	20.68	14.40
Total Regional expenses (Region -III Level) proportioned for the generating station (Ranjit HE)(considered)			17.67	18.61	10.368
Employee Cost (Considered)			12.12	13.90	7.39
Other expenses (Considered)			5.55	4.71	2.98

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Total corporate expenses Allocated for the generating station (Ranjit HE) (claimed)	144.53	127.00	91.10	42.94	48.06
Total corporate expenses proportioned the generating station (Ranjit HE) (Considered)	143.22	123.62	79.97	40.89	44.43
Total RO expenses (Region -III Level)	0	0	19	20.68	14.40

allocated to the generating station					
Total Regional expenses (Region –III Level) proportioned for the generating station (considered)	0	0	17.67	18.61	10.368
Total corporate expenses and Regional expenses proportionate for the generating station (Ranjit HE) (CO+RO) ( r x allocated expenses for corresponding year)	143.22	123.62	97.64	59.50	54.80

### Total Employee cost

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Total employee cost (corporate office)	98.66	89.65	60.29	31.62	34.18
Total employee cost (Regional office)			12.12	13.90	7.39
Total Employee cost	98.66	89.65	72.41	45.52	41.57
Corporate other expenses	44.56	33.97	19.68	9.27	10.25
Regional other expenses	0	0	5.55	4.71	2.98
Total other expenses	44.56	33.97	25.23	13.98	13.23

### Other (Specific items)

62. The other expenses claimed are as under:

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Other (Specific items)	172.94	223.15	96.57	67.03	110.72

63. Details of the above expenses and the reasons for non-inclusion are as under:

- (a) Loss on sale of fixed assets:** Any loss on sale on assets and other assets should be borne by the petitioner and the beneficiaries cannot be burdened on this count.
- (b) Payment of compensation of land:** Expenses of this nature are normally allowed under additional capital expenditure and is allowed by the Commission after prudence check. There is no justification to claim such expenses under O&M cost. Hence, the same has not been considered.
- (c) There is significant variation in the claim under the head “Other Miscellaneous expenses”** which include items like printing & stationery, consultancy charges, books & periodicals, audit expenses, other general expenses, expenses on staff car etc. The petitioner has not submitted sufficient

justification. Hence, these expenses are restricted to an increase of 20% during the years where such increase is more than 20% of the previous years.

64. Accordingly, the following Other expenses allowed during the period 2003-04 to 2007-08 for calculation of O&M expenses for 2009-14 is as under:

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Other (Specific items)	80.69	36.93	60.51	63.27	95.60

#### O&M expenses allowed for the period 2003-08

65. Based on the above discussions and after prudence check, the following O&M expenses have been considered for the period 2003-08 for calculation of O&M expenses for the tariff period 2009-14.

		(₹ in lakh)				
Sl. No.	Items	2003-04	2004-05	2005-06	2006-07	2007-08
<b>(A)</b>	<b>Breakup of O &amp; M expenses</b>					
1	Consumption of Stores and Spares	13.40	11.76	315.27	165.15	20.42
2	Repair and Maintenance	333.33	355.52	341.22	316.45	379.74
3	Insurance (Including Self Insurance)	249.26	248.84	248.33	248.30	248.75
4	Security	2.45	6.55	0.25	1.17	3.10
5	Administration Expenses	41.99	44.63	66.01	76.19	79.56
6	Employee Cost	869.63	920.76	1007.96	1015.89	1039.15
7	Loss of store	0	0	0	0	0
8	Provisions	0	0	0	0	0
9	Corporate office expenses allocation *	44.56	33.97	19.68	9.27	10.25
	Regional office *expenses allocation *			5.55	4.71	2.98
10	Other Items	80.69	36.93	60.51	63.27	95.60
11	<b>Total (1 to 10 )</b>	<b>1635.31</b>	<b>1658.96</b>	<b>2064.78</b>	<b>1900.40</b>	<b>1879.56</b>
12	Revenue/Recoveries, if any	49.85	40.94	13.11	23.43	24.15
13	<b>Net O&amp;M expenses</b>	<b>1585.46</b>	<b>1618.02</b>	<b>2051.67</b>	<b>1876.97</b>	<b>1855.41</b>

\* excludes the employee cost of Regional office and corporate office which has been considered in employee cost

66. Accordingly, the year-wise O&M expenses for the generating station, after applying escalation @ 5.72% from 2008-09 and 50% increase of employee cost by considering the percentage of employee cost (54%) of normalized employee cost

during years 2003-04 to 2007-08, for the tariff period 2009-14 work out as follows:

### Employee Cost percentage

(₹ in lakh)

	2003-04	2004-05	2005-06	2006-07	2007-08	Average normalized at Avg.2007-08 Price level
Employee cost (Considered)	869.63	920.76	1007.96	1015.89	1039.15	
Average normalized Employee cost at 2007-08 price level	1063.91	1071.09	1114.88	1068.41	1039.15	1071.49
O&M Expense Considered	1585.46	1618.02	2051.67	1876.97	1855.41	
Average normalized O&M at 2007-08 price level	1939.65	1882.18	2269.30	1974.01	1855.41	1984.11
	(P1)X(Esc) <sup>4</sup>	(P2)X(Esc) <sup>3</sup>	(P3)X(Esc) <sup>2</sup>	(P4)X(Esc)	(P5)	
Escalation rate (Esc)%	5.17	5.17	5.17	5.17	5.17	
Percentage of employee cost (1071.49/ 1984.11*100 )						<b>54 %</b>

67. Based on the above discussions, the O&M expenses allowed are as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
O&M expenses claimed	3323.46	3513.56	3714.54	3927.01	4151.63
<b>O&amp;M expenses allowed</b>	<b>2816.33</b>	<b>2977.42</b>	<b>3147.73</b>	<b>3327.78</b>	<b>3518.13</b>

### Interest on Working Capital

68. 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.*

69. Clauses (3) and (4) of Regulation 18 of the 2009 regulations, as amended on 21.6.2011 provides as under:

"(3) Rate of interest on working capital shall be on normative basis and shall be considered as follows:

- (i) SBI short-term Prime Lending Rate as on 01.04.2009 or on 1st April of the year in which the generating station or a unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later, for the unit or station whose date of commercial operation falls on or before 30.6.2010.
- (ii) SBI Base Rate plus 350 basis points as on 1.7.2010 or as on 1st April of the year in which the generating station or a unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later, for the units or station whose date of commercial operation lies between the period 1.7.2010 to 31.3.2014:

Provided that in cases where tariff has already been determined on the date of issue of this notification, the above provisions shall be given effect to at the time of truing up.

(4) 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.

70. 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:

	<i>(in lakh)</i>				
	2009-10	2010-11	2011-12	2012-13	2013-14
Receivables	1231.82	1261.53	1292.11	1324.13	1357.87

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

	<i>(₹ in lakh)</i>				
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	422.45	446.61	472.16	499.17	527.72

(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:

	<i>(₹ in lakh)</i>				
	2009-10	2010-11	2011-12	2012-13	2013-14
O & M expenses	234.69	248.12	262.31	277.32	293.18

71. 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.

72. Necessary computations in support of calculation of interest on working capital is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	422.45	446.61	472.16	499.17	527.72
O & M expenses (1 month)	234.69	248.12	262.31	277.32	293.18
Receivables	1231.82	1261.53	1292.11	1324.13	1357.87
<b>Total</b>	<b>1888.96</b>	<b>1956.26</b>	<b>2026.58</b>	<b>2100.62</b>	<b>2178.76</b>
Rate of interest	12.25%	12.25%	12.25%	12.25%	12.25%
<b>Interest on working capital</b>	<b>231.40</b>	<b>239.64</b>	<b>248.26</b>	<b>257.33</b>	<b>266.90</b>

#### **Annual Fixed Charges**

73. 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	3279.06	3284.27	3286.81	3288.39	3289.74
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Depreciation	1064.13	1067.84	1069.85	1071.31	1072.43
Interest on Working Capital	231.40	239.64	248.26	257.33	266.90
O & M Expenses	2816.33	2977.42	3147.73	3327.78	3518.13
<b>Total</b>	<b>7390.92</b>	<b>7569.17</b>	<b>7752.65</b>	<b>7944.80</b>	<b>8147.20</b>

74. The petitioner shall be entitled to compute and recover the annual fixed charges and energy charges in accordance with Regulation 22 of the 2009 regulations.

75. The recovery of the annual fixed charges shall be subject to trueing up, in terms of Regulation 6 of the 2009 regulations.

76. The recovery of the annual fixed charges shall be subject to truing up, in terms of the above provisions of the regulations.

### **Design Energy**

77. The month-wise details of design energy in respect of the generating station is indicated in the table below:

<b>Month</b>	<b>Design Energy (MUs)</b>
April	22.83
May	30.29
June	41.04
July	42.41
August	42.41
September	41.04
October	40.1
November	24.44
December	15.04
January	13.46
February	11.88
March	13.67
<b>Total</b>	<b>338.61</b>

78. Monthly energy charges shall be computed in terms of the provisions contained in Regulation 22 of the 2009 regulations.

### **Application fee and the publication expenses**

79. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition for determination of tariff for the generating station. However, the details of the actual expenditure incurred for publication of notice in the newspapers, has not been submitted by the petitioner.

80. In terms of Regulation 42 of the 2009 regulations and in line with the Commission's order dated 11.1.2010 in Petition No.109/2009 (pertaining to approval of tariff for SUGEN power plant for the period from DOCO to 31.3.2014)

the filing fees in respect of main petitions for determination of tariff and the expenses on publication of notices are to be reimbursed.

81. Accordingly, the expenses incurred by the petitioner on application filing fees amounting to ₹1,20,000/-each for the years 2009-10 and 2010-11 and 2011-12 in connection with the present petition, shall be directly recovered from the beneficiaries, on *pro rata* basis. However, the reimbursement of charges towards the publication of notices in newspapers shall be recovered on *pro rata* basis, on submission of documentary proof of the same.

82. Petition No.121/2010 is disposed of in terms of the above.

**Sd/-**  
**[M.DEENA DAYALAN]**  
**MEMBER**

**Sd/-**  
**[V.S.VERMA)**  
**MEMBER**

**Sd/-**  
**[S. JAYARAMAN]**  
**MEMBER**

**Sd/-**  
**[DR.PRAMOD DEO]**  
**CHAIRPERSON**

