#### CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Petition No. 90/2010

#### Coram:

- 1. Dr. Pramod Deo, Chairperson
- 2. Shri S.Jayaraman, Member
- 3. Shri V.S.Verma, Member
- 4. Shri M.Deena Dayalan, Member

#### DATE OF HEARING: 19.8.2010

#### **DATE OF ORDER: 15.6.2011**

#### IN THE MATTER OF

Approval of generation tariff for Bairasiul Hydroelectric Project,  $(3 \times 66 \text{ MW})$  for the period from 1.4.2009 to 31.3.2014.

#### AND IN THE MATTER OF

NHPC Ltd, Faridabad ..... Petitioner Vs
1. Punjab State Electricity Board, Patiala
2. Haryana Power Purchase Centre, Panchkula
3. BSES-Rajdhani Power Ltd, New Delhi
4. BSES-Yamuna Power Ltd, New Delhi
5. North Delhi Power Ltd, Delhi
6. Himachal Pradesh State Electricity Board, Shimla ....Respondents

#### The following were present:

- 1. Shri S.Balaji, NHPC
- 2. Shri A.K.Tewari, NHPC
- 3. Shri Ansuman Ray, NHPC
- 4. Shri S.K.Meena, NHPC
- 5. Ms. Reshma Hemrajan, NHPC
- 6. Shri K.K.Goel, NHPC
- 7. Shri M.M.Mishra, NHPC
- 8. Shri N.K.Chadha, NHPC
- 9. Shri Padamjit Singh, HPPC
- 10. Shri T.P.S.Bawa, HPPC

#### ORDER

This petition has been filed by the petitioner, NHPC Ltd, for approval of generation tariff for Bairasiul Hydroelectric Project (3 x 66 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 comprises of 3 units with its capacity uprated from 180 MW (3 x 60 MW) to 198 MW (3 x 66 MW) with annual design energy of 779.28 MUs. All the three units of the generating station had been declared under commercial operation on 1.4.1982.

3. The tariff of 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. 158/2004. Subsequently, the Commission by order dated 14.10.2009 in Petition No.71/2009, revised the annual fixed charges of the generating station after considering the additional capital expenditure for the period 2004-06. The annual fixed charges for the period 2006-09 were later revised by Commission's order dated 18.12.2009 in Petition No.198/2009, based on the capital cost of ₹18199.26 lakh as on 31.3.2009, as under:

			(₹in lakh)
Particulars	2006-07	2007-08	2008-09
Depreciation	478.26	483.87	488.00
Interest on Loan	0.00	0.00	0.00
Return on Equity	1103.46	1105.90	1107.96
Advance Against	0.00	0.00	0.00
Depreciation			
Interest on Working Capital	172.76	179.92	187.39
O & M Expenses	3253.00	3383.00	3518.00
TOTAL	5007.48	5152.69	5301.35

4. The respondent Nos.2 HPPC has filed its reply to the petition and has raised specific issues which are discussed in the subsequent paragraphs.

5. The respondent No.2, HPPC in its reply has submitted that even though the generating station has been uprated to 198 MW, the uprated capacity has not been fully utilized and that the full capacity of 198 MW should be ensured in scheduled

mode. The respondent has further submitted that the generating station has not been giving its design energy of 779.28 MUs in the past years.

6. After uprating the capacity of the generating station to 198 MW, the declared capacity of the generating station would be the operational capacity of 198 MW. This would adequately take care of the concerns raised by the respondent.

7. The respondent No.5, NDPL in its comments dated 16.8.2010 has submitted that any capitalization could be considered only after corresponding de-capitalization of the assets and reduction from capital cost. It has also submitted that the petitioner has considered an amount of ₹25.00 lakh as filing fees during the year 2004-05 as part of O&M expenses and hence the claim of the petitioner for filing fees should be disallowed as it leads to double claim.

8. We have considered the submissions. The capitalization of an asset is allowed only after corresponding de-capitalization and the consequent reduction from the capital cost of the generating station. Also, the amount of ₹25 lakh claimed towards filing fees for 2004-05 has not been considered during normalization of O&M expenses for the period 2003-08.

9. The annual fixed charges claimed by the petitioner for the period 2009-14 is as under:

					(₹in lakh)
<b>Annual Fixed Charges</b>	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	1481.56	1489.46	1504.61	1517.68	1529.93
Interest on Loan	2.54	8.92	19.97	25.90	27.57
Depreciation	747.82	765.95	806.51	848.49	897.72
Interest on Working Capital	387.80	408.00	430.02	453.11	477.50
O & M Expenses	6822.69	7212.95	7625.53	8061.71	8522.84
Total	9442.42	9885.29	10386.65	10906.89	11455.57

### CAPITAL COST

#### (A) 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 18.12.2009 in Petition No. 198/2009 had approved the capital cost of ₹18199.26 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 ₹18199.26 lakh as on 31.3.2009, has been considered as the opening capital cost as on 1.4.2009.

# (B) Additional Capital Expenditure for 2009-14

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) Undischarged 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, undischarged 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 additional capital expenditure for the period 2009-14 claimed by the

petitioner, is as under:

				(₹ i	in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Expenditure necessary for successful and efficient plant operation- <b>Regulation</b> 9(2)(iv)	109.00	192.00	368.00	108.00	411.00
Deletions	15.20	13.71	5.45	4.09	77.33
Additional Capital expenditure claimed	93.80	178.29	362.55	103.91	333.67

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

# Expenditure necessary for successful and efficient plant operation-Regulation 9(2)(iv)

15. The petitioner has claimed an expenditure of ₹109.00 lakh, ₹192.00 lakh, ₹368.00
lakh, ₹108.00 lakh and ₹411.00 lakh during the years 2009-10, 2010-11, 2011-12,

2012-13 and 2013-14 respectively under this head, in respect of assets like acoustic enclosure for DG Room, automatic power factor correction panel, numerical protection relays, digital relay test kits, LT control panel, Loader, temperature signaling device, bullet proof jackets, sewerage treatment plant, buildings, DG sets, dumper, oil filtration plant, distribution transformer, unit's mechanical over speed protection, vacuum circuit breaker, PMG/tooth generator and some other assets.

16. Based on the submissions made by the parties and the documents available on record, the claims for additional capital expenditure for the respective years have been examined and our findings are as under:

			(₹ in lakh)
Year	Assets	Amount	Findings
2009-10	Acoustic enclosure for DG room	12.00	<b>Allowed</b> in terms of Regulation <b>9(2)(ii)</b> [instead of 9(2)(iv)] as the expenditure is in line with the directions of the Himachal Pradesh Pollution Control Board.
	LT Control panel	15.00	<b>Allowed</b> in terms of Regulation <b>9(2)(ii)</b> [instead of 9(2)(iv)] as the expenditure is based on the recommendations of the Electrical Inspector of CEA during inspection.
	Numerical protection relays	21.00	Not allowed as the expenditure is
	Digital relay test kit	25.00	in the nature of replacement. Moreover, the gross value of the original assets has also not been furnished by the petitioner.
	Miscellaneous plant equipment, loader and sub- station equipments	36.00	Allowed under Regulation 9(2)(iv)] as the expenditure is in respect of items/assets which are necessary to increase the efficiency of the generating station.
2010-11	Temperature signaling device	5.00	<b>Allowed</b> in terms of Regulation <b>9(2)(ii)</b> [instead of 9(2)(iv)] as the expenditure is for fulfillment of the requirements in terms of ISO 9001:2000 and effective operation of power house.
	LT control panel	10.00	<b>Allowed</b> in terms of Regulation <b>9(2)(ii)</b> [instead of 9(2)(iv)] as the
	Sewerage treatment plant	50.00	expenditure is in line with the requirements in terms of the directions of the Himachal Pradesh Pollution Control Board.

Year	Assets	Amount	Findings
	DG set	3.00	<b>Not allowed</b> as the expenditure is on assets in the nature of
			replacement. Moreover, the gross
			value of the original assets has also
			not been furnished by the
			petitioner
	Buildings (others),	124.00	Allowed under Regulation 9(2)(iv)]
	dumpers, sub-station		as the expenditure is in respect of
	transformers (replacement)		items/assets which are necessary
	oil filtration plant,		to increase the efficiency of the
	temperature scanner etc.		generating station.
2011-12	Unit's mechanical over	15.00	Not allowed as the expenditure is
	speed protection system		on assets in the nature of
	33 kV Vacuum Circuit	5.00	replacement. Moreover, the gross
	Breaker (VCB)		value of the original assets has also
			not been furnished by the
			petitioner.
	Sewerage treatment plant	30.00	Allowed in terms of Regulation
	for colony		<b>9(2)(ii)</b> [instead of 9(2)(iv)] as the
			expenditure is in line with the
			requirements in terms of the
			directions of the Himachal Pradesh
		07.00	Pollution Control Board.
	Buildings (others), sub- station transformers	27.00	Allowed under Regulation 9(2)(iv)]
			as the expenditure is in respect of
	(replacement)		items/assets which are necessary to increase the efficiency of the
			generating station.
2012-13	PMG/tooth generator	30.00	<b>Not allowed</b> as the expenditure is
2012-10	i may tooth generator	30.00	on assets in the nature of
			replacement. Moreover, the gross
			value of the original assets has also
			not been furnished by the
			petitioner.
	Sub-station transformers	27.00	Allowed under Regulation 9(2)(iv)]
	(replacement)		as the expenditure is in respect of
			items/assets which are necessary
			to increase the efficiency of the
			generating station.
2013-14	Dozers, Loaders (as	71.00	Allowed under Regulation 9(2)(iv)]
	replacement)		as the expenditure is in respect of
			items/assets which are necessary
			to increase the efficiency of the
			generating station.

# Additional capital expenditure for Replacement of Permanent Residential Building (quarters) at Surangani-Regulation 9(2)(iv)

17. In addition to the above, the claim of the petitioner for additional capital expenditure towards the replacement of permanent residential building (quarters) at

Surangani along with corresponding de-capitalization, under Regulation 9(2)(iv) of the 2009 regulations, is examined as under: The claim of the petitioner is as follows:

		(₹ in	lakh)
Year	Type of quarters	Amount claimed	Amount de- capitalized
2011-12	Replacement of Type-III and Type-IV residential quarter buildings built during 1972-73	291.00	2.43
2012-13	Replacement of Type-V residential quarter building built during 1975-76	51.00	2.73
2013-14	Replacement of Type-II residential building quarters built during 1974-75	340.00	10.95

18. In consideration of the above, the Commission by its letter No. CERC/NHPC/90/120 dated 20.4.2011 directed the petitioner to submit its clarification on the following:

- (a) Whether these quarters are rebuilt since the term 'replacement' is not clear;
- (b) If so, whether the same number of quarters are being built and whether built at the same location;
- (c) Whether additional capitalization also includes cost of dismantling of these quarters, if any.
- (d) *The details of the quarters being built/replaced.*

19. In response, the petitioner vide its affidavit dated 2.5.2011 has submitted that the same number of quarters are to be re-built at the same location and the cost of dismantling has not been included in its claim for additional capitalization. It has also submitted that 12 nos. of Type-III and 8 nos. of Type-IV quarters during 2011-12, 2 nos. of Type-V quarters during 2012-13 and 40 nos. of Type-II quarters during 2013-14 were to be built.

20. The submission of the petitioner has been examined. Keeping in view the extreme weather conditions in the State of J&K where the generating station is situated, the rebuilding of quarters after 35 years of construction is considered necessary. In view of the above and since these assets contribute to the smooth and efficient operation of the

generating station, the claims of the petitioner for replacement of quarters amounting to ₹291.00 lakh, ₹51.00 lakh and ₹340.00 lakh for the years 2011-12, 2012-13 and 2013-14 respectively, is allowed under Regulation 9 (2)(iv) of the 2009 regulations.

21. Based on our findings in paragraphs 16 (table) and 20 above, the total additional capital expenditure allowed for the period 2009-14 is summarized as under:

# (a) Change in law- Regulation 9(2)(ii)

		(₹in lakh)
Year	Items/Assets	Amount
2009-10	(a) Acoustic enclosure for DG Roo	om <b>12.00</b>
	(b) LT Control panel	15.00
2010-11	(a) Temperature signaling device	e <b>5.00</b>
	(b) LT Control panel	10.00
	(c) Sewerage treatment plant	50.00
2011-12	Sewerage treatment plant	30.00

#### (b) Expenditure necessary for successful and efficient plant operation-Regulation 9(2)(iv)

	(₹ in lak	:h)
Year	Type of quarters	Amount
2009-10	Miscellaneous plant equipment, loader and sub-station equipments	36.00
2010-11	Buildings (others), dumpers, sub-station transformers (replacement) oil filtration plant, temperature scanner etc.	124.00
2011-12	Buildings (others), sub-station transformers (replacement), Replacement of Type-III and Type-IV residential quarter buildings built during 1972-73	318.00
2012-13	Sub-station transformers (replacement), Replacement of Type-V residential quarter building built during 1975-76	78.00
2013-14	Dozers, Loaders (as replacement), Replacement of Type-II residential building quarters built during 1974-75	411.00

22. In addition to the capitalization under the above categories, the petitioner has decapitalized amounts of ₹15.20 lakh, ₹13.71 lakh, ₹5.45 lakh, ₹4.09 lakh, and ₹77.33 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. 23. The first proviso to Regulation 7(1) of the 2009 regulations provides that 'the assets forming part of the project, but not in use shall be taken out of the capital cost."

24. It is observed that all 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 in terms of Regulation 9 (2)(iv), the deletions of the above amounts have been allowed.

# Additional capital expenditure

25. Based on the above discussions, the additional capital expenditure allowed prior to the adjustment of un-discharged liabilities, is as stated under:

					(₹in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
On account of change in	27.00	65.00	30.00	0.00	0.00
law-Regulation 9(2)(ii)					
Expenditure necessary for successful and efficient	36.00	124.00	318.00	78.00	411.00
plant operation- <b>Regulation</b>					
9 (2)(iv)					
Deletions	15.20	13.71	5.45	4.09	77.33
Total additional	47.80	175.29	342.55	73.91	333.67
capitalization allowed					

# Un-discharged/discharged liability

26. The petitioner vide its affidavit dated 18.3.2010, has submitted that the undischarged liabilities of ₹9.87 lakh as on 31.3.2009 (for the period 2004-09) has been projected to be discharged during the year 2009-10. In view of this, the discharge of un-discharged liability of ₹9.87 lakh during 2009-10 has been allowed.

# Additional capital expenditure after adjustment of un-discharged/discharged liabilities:

27. After considering the adjustment un-discharged liabilities of ₹9.87 lakh as on

31.3.2009, during 2009-10, the additional capitalization allowed is as stated overleaf:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Additional Capitalization allowed (prior to adjustment on account of un- discharged liabilities)	47.80	175.29	342.55	73.91	333.67
(+) Liabilities discharged	9.87	0.00	0.00	0.00	0.00
Additional Capitalization allowed for the purpose of tariff	57.67	175.29	342.55	73.91	333.67

#### Capital Cost

28. As stated at para 11 above, the Commission had considered the capital cost of ₹18199.26 lakh as on 31.3.2009 in Petition No.198/2009. 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. Accordingly, the capital cost approved by the Commission for the period 2009-14 is as under:

					(₹in lakh)
Year	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	18199.26	18256.93	18432.22	18774.77	18848.68
Additional Capitalization recommended for the purpose of tariff	57.67	175.29	342.55	73.91	333.67
Capital Cost as on 31 <sup>st</sup> March of the financial year	18256.93	18432.22	18774.77	18848.68	19182.35

#### **Debt-Equity Ratio**

29. 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.

30. The petitioner has submitted that the additional capital expenditure has been financed through internal resources. In terms of the above said regulation, the debt-equity ratio of 70:30 has been considered on the additional capital expenditure allowed for the purpose of tariff.

#### **Return on Equity**

31. Regulation 15 of the 2009 regulations provides that:

"(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 normal tax rate for the year 2008-09 applicable to the concerned generating company or the transmission licensee, as the case may be.

Provided that return on equity with respect to the actual 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 trued up separately for each year of the tariff period along with the tariff petition filed for the next tariff period.

(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.* 

32. The petitioner has considered Rate of Return on Equity @ 18.674%, based on

prevailing MAT rate (Basic rate of 15%+10% surcharge+3% education cess =16.995%)

for 2009-10.

33. In terms of the provisions of the above regulations, 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)
Return on Equity	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional Equity	7922.03	7939.33	7991.92	8094.69	8116.86
Addition due to Additional capitalization	17.30	52.59	102.77	22.17	100.10
Closing Equity	7939.33	7991.92	8094.69	8116.86	8216.96
Average Equity	7930.68	7965.63	8043.30	8105.77	8166.91
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%
Return on Equity	1386.33	1392.44	1406.01	1416.93	1427.62

34. Any change in rate of return on equity due to changes in the tax rate would

however be considered at the time of truing up.

#### Interest on loan

35. 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.

36. The normative loan of the generation station has already been repaid. The

normative loan on account of the additional capital expenditure allowed during the

period 2009-14 have been considered to be paid in full, as the admitted depreciation is

more than the normative loan amount during the years. As such, the interest on loan

during the period 2009-14 is 'Nil'.

#### Depreciation

37. 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 3[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".

38. The date of commercial operation of the generating station is 1.4.1982. Since the generating station has completed 12 years of operation as on 1.4.1994, the remaining depreciable value has been spread over the balance useful life of the assets. Assets amounting to ₹15.20 lakh, ₹13.71 lakh, ₹5.45 lakh, ₹4.09 lakh and ₹77.33 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 decapitalized 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)
Depreciation	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block as on 31.3.2009	18199.26	18256.93	18432.22	18774.77	18848.68
Additional capital	57.67	175.29	342.55	73.91	333.67
expenditure during 2009-14					
Closing gross block	18256.93	18432.22	18774.77	18848.68	19182.35
Average gross block	18228.10	18344.58	18603.50	18811.73	19015.52
Land related cost	148.22	148.22	148.22	148.22	148.22
Rate of Depreciation	4.9450%	4.9450%	4.9450%	4.9450%	4.9450%
Depreciable value @ 90%	16271.89	16376.72	16609.75	16797.16	16980.57
Balance Useful life of the	8.0	7.0	6.0	5.0	4.0
asset					
Remaining Depreciable	5954.39	5324.12	4805.34	4195.52	3542.74
Value					
Depreciation	744.30	760.59	800.89	839.10	885.68

# O&M Expenses

39. Sub-clause (i) 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. 40. The petitioner has claimed the following O&M expenses for the period 2009-14:

					(₹in lakh)
Year	2009-10	2010-11	2011-12	2012-13	2013-14
O&M Expenses	6822.69	7212.95	7625.53	8061.71	8522.84

41. 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 to 2014 have been claimed are as under:

					(₹in la	ıkh)
S1. No.	Items	2003-04	2004-05	2005-06	2006-07	2007-08
(a) <b>E</b>	Breakup of O&M Expenses					
1	Consumption of stores & spares	0.00	0.00	0.00	0.00	0.00
2	Repair & Maintenance	377.49	350.55	672.25	550.32	827.67
3	Insurance	94.51	94.69	93.66	94.99	94.91
4	Security Expenses	3.03	0.60	2.29	3.31	12.90
5	Administrative Expenses	271.22	269.86	251.71	274.51	246.53
6	Employee Cost	2317.44	3073.31	2878.44	3089.42	3856.19
7	Loss of Stores	3.54	0.00	0.29	0.17	1.69
8	Provisions	0.00	1.63	30.65	62.58	0.49
9	Corporate office expenses allocation	51.53	47.54	26.01	28.72	29.78
10	Others	38.73	52.14	68.09	77.00	113.72
11	Total (1 to 10)	3157.48	3890.32	4023.38	4181.03	5183.88
12	Revenue / recoveries	30.51	38.53	48.01	50.07	89.43
13	Net Expenses	3126.98	3851.79	3975.37	4130.96	5094.45

42. It is observed that the employee cost forms a major component of the O&M cost. There has also been a gradual rationalization of manpower and the manpower strength has been reduced from a figure of 696 nos in 2003-04 to 552 nos in 2007-08.

43. The actual O&M expenses in different year have been examined for any abnormal increase for the purpose of normalization duly considering the justifications furnished by the petitioner and the same has been discussed in subsequent paragraphs:

# **Repairs & maintenance Expenses**

44. The petitioner has claimed the Repair & Maintenance (R&M) expenses as stated overleaf:

(₹in								
	2003-04	2004-05	2005-06	2006-07	2007-08			
R &M expenses	377.49	350.55	672.25	550.32	827.67			

45. It is observed that during the year 2005-06, the R&M expenses has increased by 91% in comparison to the previous year. The petitioner has submitted that the increase of ₹189.23 lakh was on account of the change in the accounting policy on machinery spares whereby the machinery spares were charged to the head of 'expenditure' in the year of consumption. In addition to this, occasional replacements/repairs of many machinery parts during the current year had resulted in the increase in expenditure.

46. The petitioner has further submitted that an additional expenditure of ₹41.51 lakh had been spent on R&M of buildings in comparison to the previous year. The petitioner has also submitted that variations had occurred in the expenditure on account of repairs which were made after a gap of 2 to 3 years and due to the work of painting of buildings which were undertaken during 2002-03 and 2005-06. An expenditure of ₹21.04 lakh incurred towards repair of roads, dams, vehicles, communication equipments has been allowed. However, the balance expenditure has not been allowed as the petitioner has not submitted proper justification for the same.

47. The increase in expenditure for 2005-06 is ₹251.78 lakh and the same has been allowed.

48. During 2007-08 also there is an increase in expenditure by 50% incurred towards the repair and maintenance of buildings and for consumption of machinery stores and spares. It is also noticed that increase in R&M expenditure during 2007-08 on account of consumption of Stores & Spares was ₹184.00 lakh and ₹97.88 lakh on building works and road repairs. Out of ₹184.00 lakh, an expenditure of ₹98.51 lakh towards replacement of Static Excitation system during 2007-08 is not a recurring expenditure

and hence the said amount has not been considered in the normalization of O&M expenses. Accordingly, the expenditure towards Repairs & Maintenance allowed for the purpose of tariff is as under:

					(₹in lakh)
	2003-04	2004-05	2005-06	2006-07	2007-08
R & M expenses claimed	377.49	350.55	672.25	550.32	827.67
R & M expenses allowed	377.49	350.55	602.33	550.32	729.16

#### Insurance

49. Insurance charges at actuals claimed by the petitioner is reasonable and has been allowed as under:

				(₹	in lakh)
	2003-04	2004-05	2005-06	2006-07	2007-08
Insurance charges	94.51	94.69	93.66	94.99	94.91

#### Security Expenses

50. The following expenses have been claimed by the petitioner towards expenses on security:

	(₹ in lakh) 2003-04 2004-05 2005-06 2006-07 2007-08					
	2003-04	2004-05	2005-06	2006-07	2007-08	
Security Expenses	3.03	0.60	2.29	3.31	12.90	

51. It is noticed that during 2007-08 there has been a significant increase in the security expenses. However, keeping in view the security aspect of the generating station, the expenditure claimed by the petitioner is allowed.

# Administrative Expenses

52. The details of the administrative expenses claimed by the petitioner is as under:

				(₹	'in lakh)
	2003-04	2004-05	2005-06	2006-07	2007-08
Administrative Expenses	271.22	269.86	251.71	274.51	246.53

53. The claim of the petitioner is examined as under:

(a) **Rent:** It is observed that during the year 2004-05, the expenditure on rent had increased to 132% over the previous year. The petitioner has submitted that the said increase was on account of the leased accommodation facility provided to employees

covered under the said scheme. Also, the expenditure on this count had been charged under Staff welfare expenses (employee cost) during the previous years. During the year 2005-06 also the expenses on this count had increased to about 1700% (i.e from ₹1.06 lakh in 2004-05 to ₹19.11 lakh in 2005-06, which according to the petitioner was on account of change in the accounting procedure as per manual of the corporation and also due to the expenditure on hiring of vehicle being accounted under this head for the first time. During the year 2006-07, the expenditure on rent increased to about 45% on account of increase in the number of vehicles hired as a result of departmental vehicles due to high increase in operational cost. In view of the justification, the expenditure has been considered.

(b) **Travelling and Conveyance:** During the year 2004-05, the expenditure towards travelling and conveyance increased by more than 25% on account of increased training activities undertaken and also due to the increase in the fares and fuel rates and the rate of DA. During the year 2006-07, this expenditure had further increased by over 56% in comparison to the previous years for the reasons as stated above. In view of this, the additional expenditure of ₹11.82 lakh and ₹19.42 lakh for the years 2004-05 and 2006-07 over the previous year on this count has been considered.

(c) **Telephone, Telex & Postage:** During the year 2007-08, the expenditure towards telephone, telex and postage had increased by over 60% in comparison to the previous years. The petitioner has submitted that the increase in expenditure was on account of increase control through communication channels. In view of this, the additional expenditure of ₹2.72 lakh and ₹9.53 lakh for the years 2004-05 and 2007-08 over the previous year on this count has been considered.

(d) **Advertising and Publicity:** During the year 2006-07, the expenditure on advertising and publicity had increased by over 280% in comparison to the expenditure for the year 2005-06, since more tenders were published for the repair/purchase and sale of scraps. In view of this, the additional expenditure of ₹4.69 lakh for the year 2006-07 over the previous year on this count has been considered.

(e) **Entertainment and Hospitality Expenses:** There has been an increase in the expenditure during 2005-06 by over 68.73% in comparison to the previous years. As the petitioner has not furnished any justification for the said expenditure, the same has been restricted to 20% of the expenses during 2004-05, and allowed for the years 2005-06, 2006-07 and 2007-08.

54. Accordingly, the normative Administrative Expenses allowed for the purpose of O&M is as under:

				(₹in i	lakh)
	2003-04	2004-05	2005-06	2006-07	2007-08
Administrative Expenses claimed	271.22	269.86	251.71	274.51	246.53
Administrative Expenses allowed	271.22	244.85	251.64	274.44	246.53

#### **Employee Cost**

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

(₹in lakh)									
	2003-04	2004-05	2005-06	2006-07	2007-08				
Employee Cost	2317.44	3073.31	2878.44	3089.42	3856.19				

56. The petitioner has submitted that an expenditure of ₹165.70 lakh and ₹619.59 lakh had been provided for during the years 2006-07 and 2007-08 respectively, towards employee cost on account of revision/arrears of salary/pay. The provision made for expenditure on account of pay revision of employees' during the years 2006-07 and 2007-08 and the claim for salaries, wages and allowances of corporate office

and regional offices have not been considered under this head and is dealt with separately in terms of Regulation 19(f) of the 2009 regulations.

57. Excluding the above expenses, the project specific expenses claimed under employee cost is examined as under:

(a) During 2004-05, the Staff welfare expenditure increased by over 32% on account of the increase in the provision for Retired Employees Health Scheme based on actuarial valuation by ₹36.74 lakh in comparison to the previous year. In view of the justification, the expenditure of ₹67.20 lakh for 2004-05 and ₹236.73 lakh for 2006-07 has been allowed.

(b) During 2006-07, the staff welfare expenses increased over 108% as ₹85.04 lakh payment made for compensation against compensatory appointment to legal heir of deceased employee. This being one-time payment and not a repetitive activity, may not be considered. During the year 2006-07, petitioner had stated that a provision of ₹80.05 lakh was made for LTC based on actuarial valuation for the first time and there is increase in provision by ₹49.25 lakh for Retired Employees Health Scheme based on actuarial valuation caused to increase in staff welfare expenditure compared to corresponding previous year. This has been allowed.

(c) It is observed that expenses towards productive linked incentive amounting to  $\overline{104.50}$  lakh for 2005-06 and  $\overline{11.18}$  lakh for 2007-08 have been included in the employee cost. The same has not been considered since incentives are to be borne by the petitioner out of the incentives earned and the beneficiaries could not be burdened on this count. Similarly, the expenditure for  $\overline{138.04}$  lakh for 2004-05 and  $\overline{180.84}$  lakh for 2007-08 incurred towards the implementation of Voluntary Retirement Scheme

(VRS) or ex gratia of the employees, has not been considered as the same is to be borne by the petitioner out of incentive earned.

58. In view of the above, the employees cost (normalized) allowed is as under:

				(₹in	lakh)
	2003-04	2004-05	2005-06	2006-07	2007-08
Employees cost claimed	2317.44	3073.31	2878.44	3089.42	3856.19
Employees cost allowed	2254.35	2566.68	2603.62	2595.84	2899.05

# **Others Expenses**

59. The details of Other Expenses claimed by the petitioner is as under:

				(₹in lo	ikh)
	2003-04	2004-05	2005-06	2006-07	2007-08
Other Expenses	38.73	52.14	68.09	77.00	113.72

60. During the year 2004-05, the expenditure increased by over 34% in comparison to the previous year, on account of increase in the staff car expenses by ₹4.37 lakh due to increase in fuel rates etc, increase in printing charges by ₹4.07 lakh and stationery expenditure by ₹3.87 lakh, incurred towards construction of class rooms in Village Manzir, under 'community development' expenses.

61. The increase of ₹4.38 lakh as miscellaneous expenditure has not been considered as the petitioner has not furnished details of the same. Also, the expenditure of ₹3.87 lakh, as above, incurred towards construction of class rooms in Village Manzir, under 'community development' expenses has not been considered under this head.

62. During the year 2005-06, an expenditure of ₹13.61 lakh had been incurred towards the celebration of silver jubilee of the generating station. This is an increase by over 30% in comparison to the previous year. This being an occasional expenditure has not been considered. Similarly an expenditure of ₹0.17 lakh on account of fixed assets written off has also not been considered. In view of this, only an amount of Rs 54.21 lakh has been allowed.

63. During the year 2006-07, an expenditure of ₹77.00 lakh was an increase of about
42 % as compared to the previous year. As no proper justification has been submitted
by the petitioner, only 20% over the expenditure for 2005-has been considered.

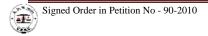
64. It is observed that during the year 2007-08, the expenditure of ₹113.72 lakh was an increase of over 47% as compared to the previous year. An increase in the expenditure of ₹5.38 lakh on account of re-grouping of operating expenses of DG Set has been allowed. Similarly, an increase in the expenditure of ₹9.93 lakh on account of conduct of Training for efficiency of work has also been considered.

65. The petitioner claim for an increased amount of ₹13.30 lakh incurred towards the community development scheme and ₹2.00 lakh incurred towards celebration of festivities, has not been considered.

66. An increase in the expenditure of ₹6.80 lakh towards operational expenditure of Guest House was on account of re-grouping of expenditure as this expenditure was previously booked to R/M Guest house. Hence, the same is considered. Also the expenditure on assets not belonging to the petitioner corporation, loss on sale of assets and fixed assets written-off has not been considered. In view of this, an expenditure of ₹20.47 lakh has been considered over and above the expenditure for 2006-07.

67. Based on the above, the Other Expenses considered during the period 2003-08 is as under:

		-		(₹	'in lakh)
	2003-04	2004-05	2005-06	2006-07	2007-08
Other Expenses claimed	38.73	52.14	68.09	77.00	113.72
Other Expenses allowed	38.73	40.82	54.21	65.05	85.64



#### **CORPORATE AND REGIONAL OFFICE EXPENSES**

#### **Corporate Office expenses**

68. The petitioner has submitted that the as per its policy and practice, the Corporate Office expenses allocated to the generating stations are considered @ 1% of sale of energy for the year excluding taxes and duties and in case of projects under construction it was considered @ 5% of the project expenditure during the year.

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

						(₹ın lakh)
S1.	ITEMS	2003-04	2004-05	2005-06	2006-07	2007-08
No.						
2	Net Corporate Expenses	9596.29	10633.19	13610.40	12988.42	16043.03
	(aggregate)					
(B)	Allocation of Corporate	expenses to	various funct	tional activit	ies	
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
	Total	9596.29	10633.19	13610.4	12988.42	16043.03
(C)	Allocation of Corporate	expenses re	lating to func	tional activit	y of power g	eneration
	to various generating st	ations				
	Bairasiul generating	51.53	47.54	55.40	66.54	59.02
	station					

70. The expenses towards ex-gratia have not been considered as it was an incentive and should be borne out of the profit of the petitioner company. After excluding the proportionate expenses on account of ex-gratia, incentives and donations paid by the petitioner, the following corporate office expenses(normalized) have been considered for the period 2003-04 to 2007-08:

(₹ in lakh)									
	2003-04	2004-05	2005-06	2006-07	2007-08				
Net corporate	9509.25	10349.84	11947.47	12368.53	14831.10				
expenses (aggregate)									

(Fin Labb)

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

				(₹ ir	ı lakh)
	2003-04	2004-05	2005-06	2006-07	2007-08
Total corporate expenses Claimed	9596.29	10633.19	13610.4	12988.42	16043.03
Total corporate expenses allowed	9509.25	10349.84	11947.47	12368.53	14831.10
Proportional ratio	0.99093	0.97335	0.87782	0.95227	0.92446

72. The total allocation claimed by the petitioner and the ratio approved in case of the generating station, is calculated as under:

				(₹in lakh)	
	2003-04	2004-05	2005-06	2006-07	2007-08
Total corporate expenses allocated for the generating station	51.53	47.54	55.40	66.54	59.02
Proportional ratio (r)	0.99093	0.97335	0.87782	0.95227	0.92446
Total corporate expenses proportionate for the generating station (r X allocated expenses for corresponding year)	51.06	46.27	48.63	63.36	54.56

### **Regional Office expenses**

73. The petitioner has submitted the year-wise details of the total Regional Office (at Benikhet) expenses incurred and its apportionment to the generating stations, projects under construction and other activities of the petitioner and proportionate regional expenses charged to the generating station are as under:

						(₹in lakh)
<b>S</b> 1.	ITEMS	2003-04	2004-05	2005-06	2006-07	2007-08
No.						
	Net Corporate Expenses	327.37	451.27	600.59	652.42	1030.40
	(Aggregate)					
(B)	Allocation of Region-II Exp	penses to vario	ous function	nal activitie	S	
1	O&M	72.12	270.49	265.08	227.32	264.79
2	Contract & Consultancy					
3	Construction	255.25	180.78	335.51	425.10	765.61
	Total	327.37	451.27	600.59	652.42	1030.40
(C)	Allocation of Region-II Exp	penses to Powe	er Stations/	Projects fal	ling under R	egion-II
	BAIRASIUL generating station	27.56	40.52	71.81	68.05	79.32



74. 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.

75. 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.

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

				(₹in lal	kh)
Particulars	2003-04	2004-05	2005-06	2006-07	2007-08
Net Corporate Expenses (Aggregate)	315.92	427.12	574.61	597.11	929.87
Ratio for allocation of Region-l	I expenditure				
BAIRASIUL generating station	Regional Office exp shown under natu	penses were aral head of	12.23%	10.18%	7.80%
Allocation of Regional office expenses	expenditure by under the region	the project	70.27	60.79	72.53

#### O&M expenses for 2003-08

77. Based on the above discussions and after prudence check, the following normalized O&M expenses have been considered for the period 2003-08:

				(₹in lakh	)
	2003-04	2004-05	2005-06	2006-07	2007-08
O&M Expenses	3059.90	3305.94	3678.73	3658.03	4105.86

78. In comparison to the actual escalation of O&M expenses during the tariff period 2004-09, the normalized O&M expenses allowed after prudence check, is reasonable.

79. The average O&M expenses for the base year 2007-08, after considering the annual escalation @ 5.17 % is as under:

						(*	ιη ιακή
		2003-04	2004-05	2005-06	2006-07	2007-08	Average
O&M Ex allowed	penses	3059.90	3305.94	3678.73	3658.03	4105.86	-
Escalated @ to arrived normalized expenses at 08 price level	l at 2007-	3743.48	3845.65	4068.94	3847.15	4105.86	3922.21

80. In order to consider an increase of 50% in the employee salary on account of pay revision, the average employee cost works out to about 74 % of the total O&M cost.

# O & M Expenses for 2009-14

81. Accordingly, after applying the escalation @ 5.72% from 2008-09 and the 50% increase of employee cost by considering the percentage of employee cost (74%) in the year 2009-10, the year-wise O&M expenses for the generating station for the tariff period 2009-14 work out as under:

				(₹ ir	ı lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
O&M Expenses claimed	6822.69	7212.95	7625.53	8061.71	8522.84
O&M Expenses allowed	6005.74	6349.26	6712.44	7096.39	7502.31

# **Interest on Working Capital**

82. 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.

83. 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.

84. 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				
Receivables	1413.53	1477.46	1550.18	1625.74	1706.52				

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

					(₹in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	900.86	952.39	1006.87	1064.46	1125.35

(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)			in lakh)	
	2009-10	2010-11	2011-12	2012-13	2013-14
O & M expenses	500.48	529.11	559.37	591.37	625.19

85. 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.

86. Necessary computations in support of calculation of interest on working capital is as stated overleaf:

				(₹in lak	h)
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	900.86	952.39	1006.87	1064.46	1125.35
O & M expenses (1 month)	500.48	529.11	559.37	591.37	625.19
Receivables	1413.53	1477.46	1550.18	1625.74	1706.52
Total	2814.87	2958.95	3116.42	3281.56	3457.06
Rate of interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest on working capital	344.82	362.47	381.76	401.99	423.49

#### **Annual Fixed Charges**

87. 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)
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	1386.33	1392.44	1406.01	1416.93	1427.62
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Depreciation	744.30	760.59	800.89	839.10	885.68
Interest on Working Capital	344.82	362.47	381.76	401.99	423.49
O & M Expenses	6005.74	6349.26	6712.44	7096.39	7502.31
Total	8481.19	8864.76	9301.10	9754.42	10239.10

88. 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.

89. The recovery of the annual fixed charges shall be subject to truing up, in terms of

Regulation 6 of the 2009 regulations.

#### **Design Energy**

90. The month-wise details of design energy in respect of the generating station is

indicated in the table as under:

Month	Design Energy (MUs)
April	97.85
May	106
June	92.8
July	109.24
August	115.08
September	59.86
October	35.39
November	25.22
December	22.21
January	23.81
February	29.43
March	62.39
Total	779.28



91. 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

92. 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.

93. Regulation 42 of the 2009 regulations provides as under:

"The application filing fee and the expenses incurred on publication of notices in the application for approval of tariff, may in the discretion of the Commission, be allowed to be recovered by the generating company or the transmission licensee, as the case may be, directly from the beneficiaries or the transmission customers, as the case may be."

94. The Commission in its 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) had decided that filing fees in respect of main petitions for determination of tariff and the expenses on publication of notices are to be reimbursed.

95. Accordingly, the expenses incurred by the petitioner on application filing fees amounting to ₹3.60 lakh each for the years 2009-10 and 2010-11 in connection with the present petition, shall be directly recovered from the beneficiaries, on *pro rata* basis. 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.

96. Petition No.90/2010 is disposed of in terms of the above.

Sd/-Sd/-Sd/-[M.DEENA DAYALAN][V.S.VERMA)[S. JAYARAMAN][DR.PRAMOD DEO]MEMBERMEMBERMEMBERCHAIRPERSON