

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.75/2010

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

DATE OF HEARING: 19.8.2010

DATE OF ORDER: 10.5.2011

IN THE MATTER OF

Approval of generation tariff in respect of Tanakpur Hydroelectric Project (3 x 31.4 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 Generation Corporation Ltd., Panchkula
3. BSES-Yamuna Power Ltd., New Delhi
4. Uttar Pradesh Power Corporation Ltd, Lucknow
5. BSES-Rajdhani Power Ltd., New Delhi
6. Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Jaipur
7. North Delhi Power Ltd., Delhi
8. Uttarakhand Power Corporation of Ltd., Dehradun
9. Jaipur Vidyut Vitaran Nigam Ltd., Jaipur
10. Himachal Pradesh State Electricity Board, Shimla
11. Jodhpur Vidyut Vitaran Nigam Ltd., Jodhpur
12. Engineering Department, UT Secretariat, Chandigarh
13. Ajmer Vidyut Vitaran Nigam Ltd., Ajmer
14. Power Development Deptt. Govt of J&K, Jammu

...Respondents

The following were present

1. Shri S.Balaji, NHPC
2. Shri A.K.Tewari, NHPC
3. Ms. Reshma Hemrajani, NHPC
4. Shri Ansuman Ray, NHPC
5. Shri S.K.Meena, NHPC
6. Shri M.M.Mishra, NHPC
7. Shri N.K.Chadha, NHPC
8. Shri K.K.Goel, NHPC
9. Shri Padamjit Singh, HPPC
10. Shri T.P.S.Bawa, HPPC
11. Shri A.N.Ghosh, Consultant, UPPCL
12. Shri K.Prasad, UPPCL



ORDER

This petition has been filed by the petitioner, NHPC Ltd, for approval of generation tariff in respect of Tanakpur Hydroelectric Project, (3 x 31.4 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 commissioned during April 1993. 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.30/2005 and was revised by order dated 5.2.2007 in Review Petition No.68/2006 (in Petition No.30/2005). The Commission vide its order dated 17.9.2009 in Petition No.53/2009 revised the annual fixed charges for the generating station after considering the additional capitalization/de-capitalization incurred during the years 2004-05 and 2005-06. Subsequently, the tariff for the generating station was revised by Commission’s order dated 23.12.2009 in Petition No.187/2009 after considering the additional capitalization / de-capitalization incurred during the period 2006-09. The annual fixed charges approved by the Commission for 2006-09 based on the capital cost of ₹39250.80 lakh as on 31.3.2006 and ₹39301.26 lakh as on 31.3.2009, is as under:

Particulars	(₹ in lakh)		
	2006-07	2007-08	2008-09
Depreciation	877.24	629.78	630.63
Interest on Loan	27.60	0.00	0.00
Return on Equity	1359.43	1365.59	1366.65
Advance Against Depreciation	0.00	0.00	0.00
Interest on Working Capital	179.92	182.47	190.09
O & M Expenses	2340.00	2434.00	2531.00
TOTAL	4784.19	4611.84	4718.37

3. Reply to the petition has been filed by the respondents, namely UPPCL (Respondent No.4), NDPL (Respondent No. 7) and the Haryana Power Purchase Centre (HPPC) on behalf of respondent Nos.2 (HPGCL).



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

	(₹ in lakh)				
Annual Fixed Charges	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	1838.20	1868.90	1896.82	1910.14	1912.64
Interest on Loan	13.39	40.63	63.17	70.30	66.53
Depreciation	888.90	916.31	942.69	956.06	958.74
Interest on Working Capital	304.36	320.27	336.83	353.34	370.08
O & M Expenses	4942.63	5225.35	5524.24	5840.23	6174.29
Total	7987.49	8371.46	8763.75	9130.07	9482.29

CAPITAL COST

(A) Capital Cost as on 1.4.2009

5. 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.”

6. As stated above, the Commission vide its order dated 23.12.2009 in Petition No. 187/2009 had approved the capital cost of ₹39301.26 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 ₹39301.26 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

7. 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.

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

	<i>(₹ in lakh)</i>				
	2009-10	2010-11	2011-12	2012-13	2013-14
Expenditure necessary for successful and efficient plant operation- Regulation 9(2)(iv)	516.87	643.70	526.00	76.00	37.50
Total	516.87	643.70	526.00	76.00	37.50
Deletions	5.76	67.55	105.53	20.95	3.08
Additional Capital expenditure claimed	511.11	576.15	420.47	55.05	34.42

9. After examining the asset-wise details and justification for additional capitalization claimed by the petitioner under various categories, the reply of the

respondents, the admissibility of additional capital expenditure based on prudence check is discussed in the subsequent paragraphs.

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

10. The petitioner has claimed an amount of ₹516.87 lakh, ₹643.70 lakh, ₹526.00 lakh, ₹76.00 lakh and ₹37.50 lakh during the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively under this head. The claim includes assets like power channel, auxiliary and ancillary system, cranes, dumper, excavator, pumps, DG sets, laboratory testing and meter testing equipments, transformer kiosks, transformer sub-station equipments and other fixed apparatus, trucks/ tankers, buildings, miscellaneous power plant equipments, computers and printers and some other assets.

11. The respondent No. 2, HPPC has objected to the additional capitalization of one spare generator air cooler, the replacement of worn out parts of units such as runner, the provision for one electro hydraulic governor, replacement of digital voltage regulators and has submitted that the claims should not be allowed. It has also submitted that the claim for latest digital governor in place of obsolete electro governor is not justified. On prudence check, the claim of capital spares by the petitioner has not been allowed to be capitalized. However, the objection of the respondent as regards the claim for digital governor has been rejected and the said claim has been allowed to be capitalized, since the electro hydraulic governor has become obsolete.

12. The respondent No.7, NDPL has submitted that the claim for capitalization of computers and software for the tariff period amounting to Rs 29.52 lakh should not be allowed in terms of the proviso to Regulation 9 (2) of the 2009 regulations. It has also submitted that there is no proper justification for inclusion of Rs 234.29 lakh in



the capital cost on account of unclassified land as it does not form part of the capital cost as on 1.4.2009. The claim of the petitioner in respect of assets like computers etc are in the nature of minor works and the said claims have not been allowed to be capitalized in terms of the proviso to Regulation 9(2) of the 2009 regulations. The cost towards unclassified land has not been allowed and does not form part of the capital expenditure for the period 2009-14.

13. The claim of the petitioner for additional capital expenditure for the respective years have been examined and our findings on the same are as under:

Year	Assets	Amount (₹ in lakh)	Findings
2009-10	Excavator	48.00	Not allowed as these assets are construction equipments.
	Dumpers	48.00	
	Tippers	23.00	
	Replacement of street lighting	19.10	Not allowed since the petitioner has not submitted the gross value of the old asset.
	Welding sets	2.60	Not allowed since these assets are in the nature of tools and tackles
	Laboratory and meter testing equipments	25.50	
	Special tools and plants	3.00	
	Telephone and Telex machine	1.00	Not allowed since these are in the nature of minor assets
	Television and LCD projector	6.00	
	Pumps	35.00	Not allowed since these assets are in the nature of spares
	Control metering and protection system	3.00	
Assets, other than the above	302.67	Allowed as the expenditure is in respect of items/assets which are necessary to increase the efficiency of the generating station.	
2010-11	Balance payment for excavator	12.00	Not allowed as these assets are construction equipments.
	Dumpers	12.00	
	Tippers	5.00	
	Control metering	10.00	Not allowed as the expenditure is in the nature of O&M expenses
	Miscellaneous assets/equipments	12.00	Not allowed since these assets are in the nature of tools and tackles
	Laboratory and meter testing equipments	47.00	
	Photocopy/duplicating machines	2.00	

Year	Assets	Amount (₹ in lakh)	Findings
2010-11	Telephone and Telex machine	3.00	Not allowed since these are in the nature of minor assets
	Pumps	0.50	Not allowed since these assets are in the nature of spares
	Control metering and protection system	7.00	
	Building Construction of record room	15.00	Not allowed as the expenditure on assets do not contribute to the efficient operation of the generating station
	Purchase and installation of new cooling tower	15.00	Not allowed since sufficient justification has not been provided as to why the asset was necessary after 17 years (approx) of operation without installation of the said asset.
	Replacement of internal distribution lines	12.00	Not allowed since the petitioner has not submitted the gross value of the old assets.
	Assets, other than the above	491.20	Allowed as the expenditure is in respect of items/assets which are necessary to increase the efficiency of the generating station.
2011-12	Welding sets	4.00	Not allowed since these assets are in the nature of tools and tackles.
	Pumps	18.00	Not allowed since this asset is proposed to be purchased as spares
	Assets, other than the above	503.00	Allowed as the expenditure is in respect of items/assets which are necessary to increase the efficiency of the generating station.
2012-13	Welding sets	3.00	Not allowed since these assets are in the nature of tools and tackles
	Telephone and Telex machine	1.00	Not allowed since these are in the nature of minor assets
	Oil/water flow meter	5.00	Not allowed as the expenditure is in the nature of O&M expenses
	Numerical distance relay	10.00	Not allowed since this asset is in the nature of spares.
	Assets, other than the above	57.00	Allowed as the expenditure is in respect of items/assets which are necessary to increase the efficiency of the generating station.
2013-14	Telephone and Telex machine	1.00	Not allowed since these are in the nature of minor assets
	Purchase of one OPU pump	10.00	Not allowed since the gross value of the old pump has not submitted by the petitioner
	Assets, other than the above	26.50	Allowed as the expenditure is in respect of items/assets which are necessary to increase the efficiency of the generating station.

14. Accordingly, based on prudence check amounts of ₹302.67 lakh, ₹491.20 lakh, ₹503.00 lakh, ₹57.00 lakh and ₹26.50 lakh have been allowed to be capitalized for the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively, as stated above.

15. In addition to the capitalization under the above category, the petitioner has de-capitalized an amount of ₹5.76 lakh, ₹67.55 lakh, ₹105.53 lakh, ₹20.95 lakh, and ₹3.08 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.

16. The first proviso to Regulation 7(1) of the 2009 regulations provides as under:

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

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. In terms of Regulation 9 (2)(iv) and after prudence check, the claim on some of these assets have not been considered. In view of this, the gross value of these original assets which have been proposed to be replaced has not been considered under deletions, for the respective years as stated under:

2010-11: As some of the replaced minor assets like laboratory testing and meter testing equipment amounting to ₹2.00 lakh and photocopy/duplicate machine amounting to ₹2.00 lakh and items like control metering and protection system amounting to ₹10.00 lakh have been disallowed for the year as stated above, the gross value of these original assets, amounting to ₹0.18 lakh, ₹1.31 lakh and ₹0.43 lakh respectively, claimed as deletion by the petitioner, has not been considered.

2011-12 : As some of the replaced minor assets like welding Set amounting to ₹2.00 lakh and replaced spare amounting to ₹8.00 lakh have been disallowed, as stated above for the year, the gross value of these original assets amounting to ₹0.01 lakh and ₹2.50 lakh respectively, claimed as deletion by the petitioner, has not been considered.

2012-13: As some of the replaced spares like numerical distance relay amounting to ₹10.00 lakh and Item like oil/water flow meter amounting to ₹5.00 lakh have been disallowed as stated above for the year, the gross value of these

original assets amounting to ₹6.57 lakh and ₹0.43 lakh respectively, claimed as deletion by the petitioner, has not been considered.

18. Based on the above, on prudence check, amounts of ₹5.76 lakh, ₹65.63 lakh, ₹103.02 lakh, ₹13.95 lakh and ₹3.08 lakh during the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively, has been allowed as deletions.

19. The petitioner is directed to submit all necessary supporting documents including the recommendations of the Ministry of Home Affairs in respect of claims towards security related items, at the time of truing up.

Additional capital expenditure

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

	<i>(₹ in lakh)</i>				
	2009-10	2010-11	2011-12	2012-13	2013-14
Expenditure necessary for successful and efficient plant operation- Regulation 9(2)(iv)	302.67	491.20	503.00	57.00	26.50
Total	302.67	491.20	503.00	57.00	26.50
Deletions	5.76	65.63	103.02	13.95	3.08
Total additional capitalization allowed	296.91	425.57	399.98	43.05	23.42

Un-discharged/discharged liabilities

21. The petitioner vide its affidavit dated 9.3.2010, has submitted that the un-discharged liabilities of ₹8.83 lakh 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 liabilities of ₹8.83 lakh during the year 2009-10 has been allowed.

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

22. The un-discharged liability of ₹8.83 lakh during the year 2004-09 proposed to be discharged during 2009-10 has been considered and the additional capitalization allowed after adjustment of un-discharged liabilities, 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)	296.91	425.57	399.98	43.05	23.42
(+) Liabilities discharged	8.83	0.00	0.00	0.00	0.00
Additional Capitalization allowed for the purpose of tariff	305.74	425.57	399.98	43.05	23.42

Capital Cost

23. As stated above, the Commission had considered the capital cost of ₹39301.26 lakh as on 31.3.2009 in Petition No.187/2009. 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.

24. 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	39301.26	39607.00	40032.57	40432.55	40475.60
Additional Capitalization allowed for tariff	305.74	425.57	399.98	43.05	23.42
Capital Cost as on 31 st March of the financial year	39607.00	40032.57	40432.55	40475.60	40499.02

Debt-Equity Ratio

25. 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.

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

Return on Equity

27. Regulation 15 of the 2009 regulations 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 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.

28. The petitioner has considered the 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.

29. 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 stated below:

	(₹ in lakh)				
Return on Equity	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional Equity	9765.64	9857.37	9985.04	10105.03	10117.95
Additions due to additional capitalization	91.72	127.67	119.99	12.92	7.03
Closing Equity	9857.37	9985.04	10105.03	10117.95	10124.97
Average Equity	9811.51	9921.20	10045.03	10111.49	10121.46
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%
Return on Equity	1715.10	1734.28	1755.93	1767.54	1769.29

30. 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

31. 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.

32. The normative loan for the generating station has already been repaid. Moreover, the normative loan on account of admitted additional capital expenditure during the respective years of the tariff period has been considered to be paid in full, as the admitted depreciation is more than the amount of normative loan for these years. As such, the interest on loan during the period 2009-14 is 'Nil'.

Depreciation

33. 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”.

34. The date of commercial operation of the generating station is 1.4.1993. Since the generating station has completed 16 years of operation as on 1.4.2009, the remaining depreciable value has been spread over the balance useful life of the assets.

35. Assets amount of ₹5.76 lakh, ₹65.63 lakh, ₹103.02 lakh, ₹13.95 lakh and ₹3.08 lakh have been proposed for de-capitalization during the years 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)				
Depreciation	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block as on 31.3.2009	39301.26	39607.00	40032.57	40432.55	40475.60
Additional capital expenditure during 2009-14	305.74	425.57	399.98	43.05	23.42
Closing gross block	39607.00	40032.57	40432.55	40475.60	40499.02
Average gross block	39454.13	39819.78	40232.56	40454.07	40487.31
Rate of Depreciation	4.8684%	4.8684%	4.8684%	4.8684%	4.8684%
Depreciable value @ 90%	35508.72	35837.81	36209.30	36408.67	36438.58
Balance useful life of the asset	19.0	18.0	17.0	16.0	15.0
Remaining depreciable value	16989.16	16426.90	15919.06	15235.95	14321.24
Depreciation	894.17	912.61	936.42	952.25	954.75

O&M Expenses

36. Sub-clauses (i) to (iii) of Clause (f) of Regulation 19 of the 2009 regulations provides for normative operation and maintenance expenses for hydro generating stations as stated overleaf:

“(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 normalized 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.”

37. The petitioner has claimed the following O&M expenses for the period 2009-14 in terms of the above regulations:

(₹ in lakh)					
Year	2009-10	2010-11	2011-12	2012-13	2013-14
O & M Expenses	4942.63	5225.35	5524.24	5840.23	6174.29

38. 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 2009-14 have been claimed are as under:

(₹ in lakh)					
Items	2003-04	2004-05	2005-06	2006-07	2007-08
Breakup of O & M expenses					
Consumption of stores and spares	98.36	90.91	303.29	105.96	75.16
Repair and maintenance	358.90	240.02	628.51	345.31	1516.51
Insurance	199.02	200.38	199.27	199.85	200.07
Security (Other than Salary & Wages)	19.70	20.20	32.47	33.42	31.83
Administrative Expenses	48.32	78.64	71.93	111.90	109.30
Employee Cost	1630.21	1672.93	1826.30	2087.69	2640.11
Loss of stores	101.25	0.00	0.45	0.16	0.00
Provisions	0.00	0.00	53.61	0.00	(-) 67.12
Corporate Office expenses allocation	54.50	54.10	0.00	42.04	36.68
Others	44.28	41.89	53.61	351.89	183.77
Total	2554.53	2399.08	3169.44	3278.22	4726.33
Revenue/ Recovery if any (Misc. receipt recovery only)	67.64	41.28	74.92	82.86	56.09
Net Expenses	2486.90	2357.80	3094.52	3195.36	4670.23

39. The actual O&M expenses during the period 2003-04 to 2007-08 have been examined for any abnormal increase for the purposes of normalization duly



considering the justifications submitted by the petitioner and the same is discussed in the subsequent paragraphs:

Consumption of Stores & Spares and Repairs & Maintenance:

40. The expenditure incurred by the petitioner under this head during the period 2003-04 to 2007-08 is as under:

		<i>(₹ in lakh)</i>				
		2003-04	2004-05	2005-06	2006-07	2007-08
1	Consumption of Stores & Spares	98.36	90.91	303.29	105.96	75.16
2	Repair & Maintenance	358.90	240.02	628.51	345.31	1516.51

41. The actual R&M expenses vary during the different years depending on the requirement of actual repairs and maintenance undertaken based on the planning of repair and maintenance works which vary from year to year. The variations further depend upon the number of units of the generating station taken up for major capital maintenance, the quantity and type of spares consumed for replacement of damaged components during the year, special repairs of civil structures, if any, like spillway, silt excluder gallery, intake area, Head Race Tunnel (HRT), hydro mechanical equipments (radial and penstock gates etc) of the generating station to be undertaken during the year as per requirement. Accordingly, the expenses as submitted by the petitioner have been examined in the subsequent paragraphs.

Consumption of Stores and Spares

42. It is observed that the expenditure on consumption of stores and spares during the years 2005-06 is higher in comparison to the previous years. The petitioner has submitted that the higher expenditure on consumption of stores and spares during 2005-06 is on account of the change in accounting policy in capital spares under which the generating plant and machinery spares which have been charged to capital account during the last three years, have been transferred to revenue accounts. In view of this, the said expenditure has been considered.



Repair and Maintenance

43. There has been an increase in the expenses for repair & maintenance expenses in the year 2005-06 and 2007-08 which is more than 20% higher in comparison to the previous years. The petitioner has submitted that this is on account of repair of major equipment of generating plant machinery (GPM) unit and special repair of water regulating system during the year 2005-06 and special repair in power channel and fixing of geo-membrane during the year 2007-08 and these repairing works were necessary for smooth operation of generating station. In view of this, the expenditure has been considered.

44. Based on the above discussions, the normalized expenditure on Consumption of Stores and Spares' and Repair and Maintenance works' during the period 2003-04 to 2007-08 considered for calculation of O&M expenses for the period 2009-14 is as under:

		<i>(₹ in lakh)</i>				
		2003-04	2004-05	2005-06	2006-07	2007-08
1	Consumption of Stores & Spares	98.36	90.91	303.29	105.96	75.16
2	Repair & Maintenance	358.90	240.02	628.51	345.31	1516.51

Insurance expenses

45. The expenditure on insurance claimed is as per the normal practice of 0.5% of the gross block. The insurance expenses claimed by the petitioner as under, has been considered:

		<i>(₹ in lakh)</i>				
		2003-04	2004-05	2005-06	2006-07	2007-08
	Insurance expenses	199.02	200.38	199.27	199.85	200.07

Security

46. Expenditure on account of security considered by the petitioner is as stated overleaf:

(₹ in lakh)

	2003-04	2004-05	2005-06	2006-07	2007-08
Security Expenses (Other than Salary & wages)	19.70	20.20	32.47	33.42	31.83

47. There is an increase in the security charges during the year 2005-06 by more than 20 % in comparison to the year 2004-05 which is on account of the expenditure on private security and other allowances being paid to Central Industrial Security Force (CISF) on the basis of bills raised by them. In addition to the cost towards establishment of CISF security, the supervision charges, clothing of the security personnel etc has to be borne by the petitioner. Keeping in view the security aspects involved in the generating station, the expenditure during the year 2005-06 as claimed by the petitioner has been considered. In view of this, the actual security expenses considered by the petitioner have been allowed.

Administrative expenses

48. The details of the administrative expenses incurred by the petitioner for 2003-08 are as under:

(₹ in lakh)

Administrative Expenses	2003-04	2004-05	2005-06	2006-07	2007-08
Rent	8.67	7.63	6.35	3.30	5.33
Electricity Charges	0.22	0.64	24.52	61.18	60.89
Travelling and Conveyance	21.59	29.03	23.61	32.04	21.85
Communication Expenses	14.22	10.86	11.35	10.68	12.85
Advertising	3.62	5.48	5.52	3.49	7.98
Entertainment	0.00	0.00	0.58	1.21	0.41
Filing Fees	0.00	25.00	0.00	0.00	0.00
Administrative Expenses	48.32	78.64	71.93	111.90	109.30

49. It is observed that the expenses towards rent, electricity charges, travelling charges and entertainment during the different years has increased by more than 20% in comparison to the previous years. The justification for increase in these expenses as submitted by the petitioner is examined as under:

(a) Rent: The expenses towards rent have significantly increased to ₹5.33 lakh during 2007-08 from ₹3.30 lakh during 2006-07 on account of hiring of more vehicles and



grounding of departmental vehicle, since the operating cost for departmental vehicles have increased. In view of this, the same has been considered.

(b) Electricity charges: It is observed that there has been significant increase in the electricity expenses during the years 2004-05, 2005-06 and 2006-07. The higher electricity charge during 2004-05 is on account of booking of electricity charges for corporate office (CO) under the head 'projects'. The increase during 2005-06 and 2006-07 is on account of booking of electricity charges paid to the beneficiaries for supplies made to Regional administrative office and corporate office etc, which were earlier adjusted against supplies made top beneficiaries by the petitioner. In view of this, they said expenses have been considered.

(c) Travelling Allowances: It is observed that travelling allowances during the years 2004-05 and 2006-07 has increased significantly and the petitioner has submitted that the same is on account of tours and transfer allowances, including foreign tour. In view of this, the expenses claimed by petitioner have been considered.

(d) Communication expenses: It is observed that there is significant increase in the communication expenses during the year 2007-08 and the petitioner has not submitted any justification for the same. Hence, the claim of the petitioner has been limited to 20% i.e ₹12.81 lakh.

(e) Advertisement expenses: It is observed that there is an increase of more than 20% towards advertisement expenses during the years 2004-05 and 2007-08 and petitioner has not submitted sufficient justification for the same. Hence, the claim of the petitioner has been limited to 20% i.e ₹4.33 for 2004-05 and ₹4.19 lakh for 2007-08.

(f) Entertainment expenses: It is observed that there is an increase of more than 20% towards advertisement expenses during the years 2005-06 and 2006-07 and



petitioner has not submitted sufficient justification for the same. Hence, the claim of the petitioner has been limited to 20% i.e ₹0.57 lakh for 2005-06 and ₹0.69 lakh for 2006-07.

(g) Filing fees: The claim of the petitioner for ₹25 lakh on account of fees for filing tariff petition before the Commission has not been considered and the same would be dealt with separately in terms of Regulation 42 of the 2009 Regulations.

50. Based on the above, the normalized administrative expenses considered for the purpose of O&M are as under:

(₹ in lakh)					
Administrative Expenses	2003-04	2004-05	2005-06	2006-07	2007-08
Rent	8.67	7.63	6.35	3.30	3.96
Electricity Charges	0.22	0.64	24.52	61.18	60.89
Travelling and Conveyance	21.59	29.03	23.61	32.04	21.85
Communication expenses	14.22	10.86	11.35	10.68	12.82
Advertising	3.62	4.34	5.52	3.49	4.18
Entertainment	0.00	0.00	0.58	0.69	0.41
Filing Fees	0.00	0.00	0.00	0.00	0.00
Total	48.32	52.50	71.93	111.38	104.11

Employees cost

51. The petitioner has claimed the following project specific expenses under employee cost:

(₹ in lakh)					
	2003-04	2004-05	2005-06	2006-07	2007-08
Employee Cost	1630.21	1672.93	1826.30	2087.69	2640.11

52. The respondent No.4, UPPCL has submitted that the petitioner has not submitted the calculation certified by Chartered Accountant indicating that the actual rise in wage revision from 1.1.2007 was 35% in order to justify the moderation of O&M expenses for 2009-10. The petitioner has submitted that the provision for employee cost has been made during 2005-06 and 2007-08 in respect of pay revision/arrears of pay and the same should be considered in terms of the 2009 regulations. The provisions made on account of pay revision of employees' during 2005-06 and 2007-08 have not been considered and has been dealt separately as per

provisions of the 2009 regulations. Accordingly, the O&M expenses have been calculated in line with the provisions of the 2009 regulations.

53. The salaries, wages & allowances of corporate office/regional offices are being dealt separately in subsequent paragraphs. Excluding these expenses, the project specific employee cost claimed by the petitioner is discussed as under:

54. It is noticed that productive linked incentive have been included in the employee cost. The same has not been considered since incentives are to be paid out of the organizational profit and the beneficiaries should not be burdened on this count. Similarly, the cost incurred on VRS or Ex-gratia of the employees should also be borne by the petitioner. Similarly, the employee cost in respect of corporate office expenses and regional office expenses also include similar type of expenses and the same has been rationalized in line with the above and allowed.

55. The proportional employee cost in respect of total corporate and regional office expenses allocated has been considered for salary, wages and allowances of corporate office and Regional office as submitted by the petitioner and the balance other expenses for corporate office and Regional office would be considered in the expenses allocated for Corporate Office and Regional office. Based on the above, the employees cost considered after normalization works out as under:

	<i>(₹ in lakh)</i>				
	2003-04	2004-05	2005-06	2006-07	2007-08
Employees cost	1645.24	1657.50	1785.76	1831.56	1963.79

Corporate Office expenses

56. The allocated expenses in respect of corporate office and regional office which includes employee cost and other expenses are discussed below:

57. The petitioner has submitted that the as per policy of the petitioner company, 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 @ 5% of the

project expenditure during the year in case of construction projects. The year-wise details of the 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
1.	Net corporate expenses (aggregate)	9596.29	10633.19	13610.40	12988.42	16043.03
2	Allocation of Corporate expenses to various functional activities					
(i)	O&M	1392.91	1575.52	1644.49	1801.33	2171.50
(ii)	Contract and Consultancy	104.44	63.42	68.53	202.78	187.74
(iii)	Construction	8098.94	8994.25	11897.38	10984.31	13683.79
	Total	9596.29	10633.19	13610.4	12988.42	16043.03
3	Allocation of Corporate expenses relating to functional activity of power generation to various generating stations					
	TANAKPUR (the generating station)	54.50	54.10	53.13	57.79	47.95

58. The expenses towards ex-gratia, donations and provisions for productivity linked performance have not been considered as stated above. After excluding these expenses paid by the petitioner, the following corporate office expenses have been considered towards O&M expenses of the generating station for the period 2003-04 to 2004-08:

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

59. The ratio of the total corporate expenses (year-wise) claimed and considered is as under:

(₹ in lakh)					
Year	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 considered	9509.25	10349.84	11947.47	12368.53	14831.10
Ratio of the total corporate expenses Considered and claimed	0.99093	0.97335	0.87782	0.95227	0.92446

60. The total corporate expenses (year-wise) for 2003-08 claimed and considered for the generating station is as under:

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Total proportionate corporate expenses claimed	54.50	54.10	53.13	57.79	47.95
Total proportionate corporate expenses considered	54.00	52.66	46.64	55.03	44.33
Employee Cost considered	39.96	38.97	34.52	40.73	32.80
Other expenses considered	14.04	13.69	12.12	14.30	11.53

Regional Office expenses (at Uttarakhand)

61. The petitioner has submitted that as per policy of the petitioner company the O&M expenses of the regional office have been allocated amongst the respective projects /power generating stations / contract and consultancy in the ratio of the fund utilized by the generating station and other activities of the petitioner and the proportionate regional office expenses (at Uttarakhand) which has been charged to the generating station are as under:

(₹ in lakh)						
Sl. No	ITEMS	2003-04	2004-05	2005-06	2006-07	2007-08
1	2	(for the generating station)	4	5	6	7
(A)	Breakup of Regional Office expenses (aggregate at corporate level)					
1.	Net Corporate expenses (Aggregate)	12.23	419.32	540.18	459.96	598.78
(B)	Allocation of Regional Office expenses to various functional activities					
1	O&M	12.23	12.96	26.20	354.17	323.34
2	Contract & Consultancy					
3	Construction		406.35	513.98	105.79	275.44
	Total	12.23	419.32	540.18	459.96	598.78
(C)	Allocation of Regional Office Expenses relating to functional activity of power generation to various generating stations					
	TANAKPUR (the generating station)	12.23	12.96	18.74	110.39	131.73

62. Expenses towards ex-gratia, donation, and provisions for productivity linked performance have not been considered as stated earlier. After excluding these expenses paid by the petitioner, the following regional office expenses have been considered towards O&M expenses of the generating station for the period 2003-04 to

2004-08, after restriction of 20% increase in the consecutive years on account of non-submission of proper justification by the petitioner. The Regional Office expenses have been considered towards O&M expenses of the Regional Office (at Uttarakhand) for the period 2003-08..

63. The petitioner has submitted that for the years 2003-04 and 2004-05, the Regional Office expenses have been indicated under the natural head of expenditure by the generating station under the region. Thus, these expenditure forms part of the expenses of generating station.

64. The regional office expenses after normalization work out as under:

(₹ in lakh)						
Sl. No.	ITEMS	2003-04	2004-05	2005-06	2006-07	2007-08
(A) Breakup of Regional Office Expenses (Region-Uttarakhand)						
1.	Regional Office Expenses (proportionate)	0	0	494.19	412.71	329.69
Year		2003-04	2004-05	2005-06	2006-07	2007-08
Total Regional Office expenses claimed		0	0	540.18	436.22*	481.33*
Total Regional Office expenses considered		0	0	494.19	412.71	329.69
Ratio of the total Regional Office expenses considered and claimed (r)		0	0	0.9149	0.9461	0.6850
<i>* after deducting arrears</i>						
		2003-04	2004-05	2005-06	2006-07	2007-08
Total Regional expenses considered (region-Uttarakhand) proportioned to generating station		0	0	1714833	10444035	9022870
Employee Cost considered		0	0	1098113	6687958	5777899
Other expenses considered		0	0	616720	3756077	3244971

65. The summary of the corporate expenses and regional expenses allowed is as stated overleaf:

(₹ in lakh)

Year	2003-04	2004-05	2005-06	2006-07	2007-08
Total corporate expenses allocated for the generating station and claimed	54.50	54.10	53.13	57.79	49.50
Total corporate expenses proportioned for generating station and considered	54.00	52.66	46.64	55.03	44.33
Total Regional office expenses (Region -Uttarakhand) allocated for generating station and claimed	0	0	18.74	110.39	131.73
Total Regional office expenses (Region – Uttarakhand) proportioned for generating station and considered	0	0	17.15	104.44	90.23
Total corporate expenses and Regional expenses proportionate for the generating station (CO+RO) (r X allocated expenses for corresponding year)	54.00	52.66	63.77	159.47	134.56

Others

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

Year	2003-04	2004-05	2005-06	2006-07	2007-08
Others administrative expenses	44.28	41.89	53.61	351.89	183.77

67. The claim for the above expenses is examined as under:

- Loss on sale of fixed assets: Any loss on sale on assets should be borne by the petitioner and cannot be allowed to be recovered from the beneficiaries.
- Payments towards compensation of land: These expenses are usually claimed as additional capitalization by the petitioner and considered and allowed by the Commission after prudence check. In view of this, the expenses under O&M cost are not justifiable and hence not allowed.
- There is significant variation in respect of the claim under “Other miscellaneous expenses” like printing & stationery, consultancy charges, books & periodicals, audit expenses, other general expenses, expenses on staff car etc. Since, the petitioner has not submitted proper justification these expenses are restricted to an increase of 20% during the consecutive years where the increase is more than 20%.

68. Based on the above, the administrative expenses during the period 2003-08 allowed for calculation of O&M expenses, is as under:

Year	2003-04	2004-05	2005-06	2006-07	2007-08
Administrative expenses	32.60	39.12	46.94	62.21	69.88



O&M expenses considered during 2003-04 to 2007-08

69. Based on the above discussions and after prudence check, the following O&M expenses have been considered for the period 2003-04 to 2004-08 for calculation of O&M expenses for the tariff period 2009-14.

(₹ in lakh)

Items	2003-04	2004-05	2005-06	2006-07	2007-08
Breakup of O & M expenses					
Consumption of Stores and Spares	98.36	90.91	303.29	105.96	75.16
Repair and maintenance	358.90	240.02	628.51	345.31	1516.51
Insurance	199.02	200.38	199.27	199.85	200.07
Security (Other than Salary & Wages)	19.70	20.20	32.47	33.42	31.83
Administrative Expenses	48.32	52.50	71.93	111.38	104.11
Employee Cost	1645.24	1657.50	1785.77	1831.56	1963.79
Loss of stores	0	0	0	0	0
Provisions	0	0	0	0	0
Corporate & Regional office expenses *	2416.17	2314.32	3080.30	2703.99	3972.88
Revenue/ recovery, if any (miscellaneous receipt & recovery only)	67.64	41.28	49.53	82.86	56.09
Net Expenses	2348.53	2273.05	3030.77	2621.14	3916.79

* Excluding the employee cost of Regional office and Corporate office which is considered under the heads of corporate office expenses allocation and Regional office expenses allocation respectively

70. Accordingly, the year-wise O&M expenses for the generating station for the tariff period 2009-14 applying escalation @ 5.72% from 2008-09 and 50% increase of employee cost by considering the percentage of averaged normalized employee cost (1961.22 / 3108.60 *100 = 63.09 % as shown below) for the 2003-08 at 2007-08 price level to the averaged normalized net operation and maintenance expenses for the 2003-08 at 2007-08 price level after prudence check, work out as under:

Year	2003-04	2004-05	2005-06	2006-07	2007-08	Average normalized at 2007-08 price level
Employee cost considered	1645.24	1657.50	1785.77	1831.56	1963.79	-
Average normalized Employee cost at 2007-08 price level	2012.78	1928.10	1975.19	1926.25	1963.79	1961.22
O&M Expense considered	2348.53	2273.05	3030.77	2621.14	3916.79	-
Average normalized O&M at 2007-08 price level	2873.19	2644.14	3352.25	2756.65	3916.79	3108.60
	(P1)X(Esc) ⁴	(P2)X(Esc) ³	(P3)X(Esc) ²	(P4)X(Esc)	(P5)	-
Escalation rate (Esc)%	5.17	5.17	5.17	5.17	5.17	-
Percentage of employee cost (1961.22 / 3108.60 *100)						63.09 %

71. The total Operation & Maintenance Expenses claimed and approved for the period 2009-14 is as under:

<i>(₹ in lakh)</i>					
Year	2009-10	2010-11	2011-12	2012-13	2013-14
O&M expenses claimed	4942.63	5225.35	5524.24	5840.23	6174.29
O&M expenses approved	4570.40	4831.82	5108.20	5400.39	5709.29

Interest on Working Capital

72. 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.*

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

74. 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 stated below:

<i>(₹ in lakh)</i>					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Receivables	1243.78	1295.93	1352.03	1407.83	1462.62

- (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)					
Year	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	685.56	724.77	766.23	810.06	856.39

(a) **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)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
O & M expenses	380.87	402.65	425.68	450.03	475.77

75. 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.

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

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	685.56	724.77	766.23	810.06	856.39
O & M expenses (1 month)	380.87	402.65	425.68	450.03	475.77
Receivables	1243.78	1295.93	1352.03	1407.83	1462.62
Total	2310.20	2423.35	2543.94	2667.93	2794.78
Rate of interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest on working capital	283.00	296.86	311.63	326.82	342.36

Annual Fixed Charges

77. The annual fixed charges approved for the generating station for the period from 1.4.2009 to 31.3.2014 is as stated overleaf:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	1715.10	1734.28	1755.93	1767.54	1769.29
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Depreciation	894.17	912.61	936.42	952.25	954.75
Interest on Working Capital	283.00	296.86	311.63	326.82	342.36
O & M Expenses	4570.40	4831.82	5108.20	5400.39	5709.29
Total	7462.67	7775.05	8112.18	8447.00	8775.69

78. 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.

79. The recovery of the annual fixed charges shall be subject to truing up in terms of Regulation 6 of the 2009 regulations.

Design Energy

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

Month	Design Energy (MUs)
April	19.71
May	28.94
June	42.29
July	66.59
August	66.59
September	64.44
October	51.92
November	31.12
December	24.13
January	21.25
February	17.12
March	18.09
Total	452.19

81. The 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

82. 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.

83. 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.”

84. 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.

85. Accordingly, the expenses incurred by the petitioner on application filing fees amounting to ₹188400/-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 also be recovered on *pro rata* basis on submission of documentary proof of the same.

86. Petition No.75/2010 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

