

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.104/2010

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

DATE OF HEARING: 17.8.2010

DATE OF ORDER: 27.6.2011

IN THE MATTER OF

Approval of generation tariff in respect of Salal Hydroelectric Project (6 x 115 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-Rajdhani Power Ltd., New Delhi
4. Uttar Pradesh Power Corporation Ltd, Lucknow
5. BSES-Yamuna Power Ltd., New Delhi
6. Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Jaipur
7. North Delhi Power Ltd., Delhi
8. Jaipur Vidyut Vitaran Nigam Ltd., Jaipur
9. Jodhpur Vidyut Vitaran Nigam Ltd., Jodhpur
10. Uttarakhand Power Corporation of Ltd., Dehradun
11. Ajmer Vidyut Vitaran Nigam Ltd., Ajmer
12. Himachal Pradesh State Electricity Board, Shimla
13. Engineering Department, UT Secretariat, Chandigarh
14. Power Development Department, Govt. of J&K, Jammu

...Respondents

The following were present

1. Shri Sachin Datta, Advocate, NHPC
2. Shri N.K.Chadha, NHPC
3. Shri Prashant Kaul, NHPC
4. Shri A.K.Tewari, NHPC
5. Shri S.K. Meena, NHPC
6. Shri Ansuman Ray, NHPC
7. Shri M.M.Mishra, NHPC
8. Shri K.K.Goel, NHPC
9. Ms. Reshma Hemrajan, NHPC
10. Ms. Niti Singh, NHPC
11. Shri Padamjit Singh, HPPC
12. Shri T.P.S.Bawa, HPPC



ORDER

This petition has been filed by the petitioner, NHPC Ltd, for approval of generation tariff in respect of Salal Hydroelectric Project, (6 x 115 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 on 1.4.1995. 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.197/2004, based on capital cost of ₹91436.81 lakh (inclusive of FERV and additional capital expenditure) as on 31.3.2004. Subsequently, the Commission vide its order dated 4.1.2010 in Petition No.87/2009 determined the additional capital expenditure/de-capitalization for the years 2004-05 and 2005-06. Thereafter, in Petition No.154/2009 the Commission by its order dated 7.1.2010, revised the tariff of the generating station after considering the impact of additional capital expenditure incurred during the period 2004-09. The revised annual fixed charges for the period from 1.4.2004 to 31.3.2009 approved by order dated 7.1.2010 is as under:

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	2119.02	2115.10	1835.88	1841.21	1848.04
Interest on Loan	397.78	80.49	0.00	0.00	0.00
Return on Equity	6779.08	6772.04	6766.25	6763.91	6772.78
Advance Against Depreciation	1476.31	0.00	0.00	0.00	0.00
Interest on Working Capital	517.99	502.70	513.23	531.01	549.89
O & M Expenses	7258.00	7549.00	7851.00	8165.00	8491.00
TOTAL	18548.19	17019.33	16966.35	17301.13	17661.72

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

(₹ in lakh)					
Annual Fixed Charges	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	9043.28	9205.82	9385.05	9453.14	9502.17
Interest on Loan	4.22	153.41	307.06	345.73	360.99
Depreciation	2403.36	2539.66	2702.91	2781.03	2841.63
Interest on Working Capital	900.76	947.97	998.34	1044.53	1091.88
O & M Expenses	13236.29	13993.40	14793.82	15640.03	16534.64
Total	25587.91	26840.26	28187.18	29264.46	30331.31

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

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. The Commission vide its order dated 7.1.2010 in Petition No. 154/2009 had approved the capital cost of ₹91159.37 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 ₹91159.37 lakh has been considered as the opening capital cost as on 1.4.2009.

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:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Change in law- Regulation 9(2)(ii)	0.00	5400.00	0.00	0.00	0.00
Expenditure necessary for successful and efficient plant operation- Regulation 9(2)(iv)	184.58	261.10	1149.21	1823.01	112.07
Deletions	33.77	22.76	389.06	152.55	32.02
Additional Capital expenditure claimed	150.81	5638.34	760.15	1670.46	80.05

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.

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

10. The petitioner has claimed an amount of ₹5400.00 lakh towards the payment of Stamp duty and Court fees during 2010-11 in terms of Section 140 D of the J & K Transfer of Property Act, 1977, for transfer of land from the Government of India to the petitioner in respect of the generating station. Since the payment is on account of compliance with the statutory provisions, the expenditure is allowed to be capitalized under this head.

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

11. The petitioner has claimed an amount of ₹184.58 lakh, ₹261.10 lakh and ₹1149.21 lakh, ₹1823.01 lakh and ₹112.07 lakh during the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively in respect of assets like pumps, fire tender, switchgear including cable connection, main generating equipments, transformer kiosks and substation equipments, jeep/station wagon, transit camp and field hostel buildings, auxiliary and ancillary equipments, building containing HE generation plant, sub-station transformer and some other assets.

12. HPPC, on behalf of the respondent No. 2, has objected to the capitalization of expenditure towards replacement of worn out parts such as runners, relays, pumps and welding sets, purchase of motors etc., on the ground that the expenditure on these assets should be covered under O&M expenses. It has also submitted that the existing digital hydraulic governors should be continued in view of the minimum operational requirement and has also objected to the capitalization of Current Transformers by submitting that the expenses on this count could have been avoided by the petitioner and hence the claim for capitalization should not be allowed. The

respondent No.7, NDPL, in its comments dated 16.8.2010 has objected to the capitalization of ₹347.00 lakh towards main generating equipments, the inclusion of a claim for ₹493.85 lakh under the head land for reservoir and the recovery of filing fees as part of O&M expenses for 2004-05. In response, the petitioner has submitted that no O&M items have been claimed under additional capitalization. It has also submitted capitalization of these replacement items like relays, pumps has been sought only after reducing the gross value of these items from the gross block and proper justification has been furnished for the need for replacement of digital hydraulic governors.

13. Based on the submissions of the parties and the documents on record, the claims of the petitioner for additional capital expenditure under Regulation 9(2) (iv) for the respective years have been examined and our findings on the same is as under:

Year	Assets	Amount (₹ in lakh)	Findings
2009-10	Purchase of Air Circuit Breaker	4.79	Not allowed since these assets are in the nature of spares.
	Replacement of 220 kV CVTs	23.18	
	Welding set	2.55	Not allowed since the expenditure is on minor assets in the nature of tools and tackles.
	LCD Projector	0.48	Not allowed as the asset is in the nature of minor assets.
	Assets, other than the above	153.58	Allowed as the expenditure is in respect of items/assets which are necessary to increase the efficiency of the generating station.
2010-11	Purchase of Silt Excluder gates (2 nos)	14.54	Not allowed as these assets are in the nature of spares.
	Current Transformer 245 kV Crompton Greaves make	3.91	
	Assets, other than the above	242.65	Allowed as the expenditure is in respect of items/assets which are necessary to increase the efficiency of the generating station
2011-12	Construction of bachelor accommodation (20 nos)	100.00	Not allowed since these assets are in the nature of replacement and the gross value of the original asset has not been furnished.

Year	Assets	Amount (₹ in lakh)	Findings
	Centrifugal separator (1 no)	12.99	Not allowed since proper justification for the asset has not been furnished.
	Assets, other than the above.	1036.22	Allowed as the expenditure is in respect of items/assets which are necessary to increase the efficiency of the generating station.
2012-13	New bay for captive power 220 kV switchyard,	264.35	Not allowed since proper justification for the asset has not been furnished.
	Assets, other than the above like modification/up-gradation of excitation/governing system, up-gradation of existing hydraulic elevator of power house etc.	1558.66	Allowed as the expenditure is in respect of items/assets which are necessary to increase the efficiency of the generating station.
2013-14	Assets, like switchgear including cable connection, main generating equipments etc	112.07	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, expenditure of ₹153.58 lakh, ₹242.65 lakh, ₹1036.22 lakh, ₹1558.66 lakh and ₹112.07 lakh for the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively, have been allowed to be capitalized, as shown above.

Deletions (Deductions)

15. In addition to the capitalization under the above heads, the petitioner has also de-capitalized amounts of ₹33.77 lakh, ₹22.76 lakh, ₹389.06 lakh, ₹152.55 lakh, and ₹32.02 lakh respectively during the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 in respect of 'gross value of original assets not in use' in terms of the provision under Regulation 7(1) of the 2009 regulations.

16. Some of these assets proposed for de-capitalization are connected to assets proposed to be replaced by a new one. After prudence check, some of these assets claimed have not been considered for capitalization. As such, the gross value of these original assets proposed to be taken out of service are taken out of deletion, as detailed overleaf:

2009-10: Some of the replaced spare assets like 220 kV CVTs amounting to ₹23.18 lakh and replaced minor asset like welding asset amounting to ₹2.55 lakh have not been allowed to be capitalized, as shown in the table above. In view of this, the gross value of these original assets amounting to ₹4.57 lakh and ₹0.27 lakh respectively claimed as deletions by the petitioner, has not been allowed.

17. As such, based on the prudence check, amounts of ₹28.93 lakh, ₹22.76 lakh, ₹389.06 lakh, ₹152.55 lakh, and ₹32.02 lakh during the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively, is allowed as deletions.

Un-discharged liabilities

18. The petitioner vide its affidavit dated 23.3.2010 has submitted that the un-discharged liability of ₹13.84 lakh for the period 2004-09, has been projected to be discharged during the year 2009-10. The projected discharge of un-discharged liability of ₹13.84 lakh during the year 2009-10 is allowed.

19. Based on the above discussions, the additional capital expenditure allowed for the period 2009-14 is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Change in law- Regulation 9(2)(ii)	0.00	5400.00	0.00	0.00	0.00
Expenditure necessary for successful and efficient plant operation- Regulation 9(2)(iv)	153.58	242.65	1036.22	1558.66	112.07
Deletions	28.93	22.76	389.06	152.55	32.02
Liabilities discharged during the year	13.84	0.00	0.00	0.00	0.00
Total additional capitalization allowed	138.49	5619.89	647.16	1406.11	80.05

Capital Cost

20. As stated, the Commission had considered the capital cost of ₹91159.37 lakh as on 31.3.2009 in Petition No.154/2009. 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. As such, the capital cost approved for the period 2009-14 is as stated overleaf:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	91159.37	91297.87	96917.76	97564.92	98971.03
Additional Capitalization allowed for tariff	138.49	5619.89	647.16	1406.11	80.05
Capital Cost as on 31 st March of the financial year	91297.87	96917.76	97564.92	98971.03	99051.08

Debt-Equity Ratio

21. 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.

22. The petitioner has submitted that the additional capital expenditure has been financed through internal resources and others. Therefore, in terms of the above said regulations, the debt-equity ratio of 70:30 has been considered on the admitted additional capital expenditure, after adjustment of un-discharged liability, for the purpose of tariff.

Return on Equity

23. Regulation 15 of the 2009 regulations provides as stated 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:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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

24. 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.

25. 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%. Accordingly, Return on equity is worked out as under:

	(₹ in lakh)				
Return on Equity	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional Equity	48402.40	48443.95	50129.92	50324.06	50745.90
Additions due to additional capitalization	41.55	1685.97	194.15	421.83	24.02
Closing Equity	48443.95	50129.92	50324.06	50745.90	50769.91
Average Equity	48423.17	49286.93	50226.99	50534.98	50757.90
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	8464.63	8615.62	8779.95	8833.79	8872.76

26. 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

27. 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.

28. The respondent No.4, UPPCL has submitted that the annualized rate of interest of 7.617% considered by the petitioner as against the weighted average rate of interest of 7.4181% has resulted in an excess recovery of interest on loan by ₹30.60 lakh which is not in consonance with clause (5) of Regulation 16 of the 2009 regulations. The

submission of the respondent is accepted and the weighted average rate of interest of 7.42% has been considered in the computation of interest on loan.

29. The interest on loan has been worked out in the manner given hereunder:

- (a) The opening gross normative loan as on 1.4.2009 of each unit has been arrived at in accordance with Regulation 16 of the 2009 regulations.
- (b) The repayment for the respective years of the tariff period has been considered equal to the depreciation allowed for that year.
- (c) The interest on loan has been calculated on the normative average loan of the year by applying the weighted average rate of interest.
- (d) The last available weighted average rate of interest is 9.55% in 2006-07. However, the petitioner has claimed annualized actual weighted average rate of interest on loan of the company as a whole @ 7.62% from the year 2009-10 onwards. The simple weighted average rate of interest on loan of the company as a whole has been calculated as 7.42% in terms of the above proviso of the 2009 regulations, and the same has been considered for the purpose of tariff.

30. The calculations for working out the weighted average rate of interest on loan are annexed to this order. The computations of interest on notional loan by applying weighted average interest rate are as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	42756.98	42853.92	46787.85	47240.86	48225.14
Cumulative Repayment upto previous year	42756.98	42853.92	44911.19	47117.45	48225.14
Net Loan-Opening	0.00	0.00	1876.66	123.41	0.00
Repayments during the year	96.95	2057.27	2206.26	1107.69	56.04
Additions due to additional capitalization for 2009-14	96.95	3933.93	453.01	984.28	56.04
Net Loan-Closing	0.00	1876.66	123.41	0.00	0.00
Average Loan	0.00	938.33	1000.04	61.71	0.00
Weighted Average Rate of Interest on Loan	7.42%	7.42%	7.42%	7.42%	7.42%
Interest on loan	0.00	69.61	74.18	4.58	0.00

Depreciation

31. 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”.

32. The date of commercial operation of the generating station is 1.4.1995. Since the generating station has completed 12 years of operation as on 1.4.2007, the remaining depreciable value is spread over the balance useful life of the assets. The balance useful life of the generating station shall be considered as 21 years, 20 years, 19 years and 18 years and 17 years respectively, for the period 2009-14.

33. As stated in paragraphs 17 above, assets amounting to ₹28.93 lakh, ₹22.76 lakh, ₹389.06 lakh, ₹152.55 lakh and ₹32.02 lakh have been de-capitalized during the years 2009-10, 2010-11, 2011-12 and 2013-14 respectively. The amount of cumulative depreciation allowed in tariff against those 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 stated overleaf:

(₹ in lakh)					
Depreciation	2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as on 31.3.2009	91159.37	91297.87	96917.76	97564.92	98971.03
Additional capital expenditure during 2009-14	138.49	5619.89	647.16	1406.11	80.05
Closing gross block	91297.87	96917.76	97564.92	98971.03	99051.08
Average gross block	91228.62	94107.82	97241.34	98267.98	99011.06
Rate of Depreciation	5.0511%	5.0511%	5.0511%	5.0511%	5.0511%
Depreciable value @ 90%	81632.18	84223.46	87043.63	87967.60	88636.38
Balance useful life of the asset	21.0	20.0	19.0	18.0	17.0
Remaining depreciable value	40467.46	41145.36	41918.86	40824.57	39301.35
Depreciation	1927.02	2057.27	2206.26	2268.03	2311.84

O&M Expenses

34. 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 under:

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

(ii) The 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.”

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

(₹ in lakh)					
	2009-10	2010-11	2011-12	2012-13	2013-14
O & M Expenses	13236.29	13993.4	14793.82	15640.03	16534.64

36. The major components of O&M expenses are:

- (a) Consumption of Stores & Spares
- (b) Repair & Maintenance
- (c) Insurance coverage

- (d) Security expenses
- (e) Administrative Expenses
- (f) Other (Specific/Administrative items)
- (g) Employee Cost
- (h) Corporate Office's Expenses

37. 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 is as under:

(₹ in lakh)						
Sl. No.	ITEMS	2003-04	2004-05	2005-06	2006-07	2007-08
Breakup of O&M expenses						
1	Consumption of Stores and Spares	0.00	0.00	0.00	0.00	0.00
2	Repair and Maintenance	1642.60	1339.58	3258.37	857.37	942.00
3	Insurance	478.20	475.00	466.07	462.78	464.75
4	Security	98.44	8.45	35.99	19.34	22.75
5	Administrative Expenses	105.01	135.77	346.49	292.82	416.40
6	Employee Cost	4007.29	4722.31	4432.45	4758.64	5653.92
7	Loss of store	0.00	0.00	6.66	4.54	0.09
8	Provisions	913.36	761.06	421.36	158.97	-775.26
9	Corporate office expenses allocation	206.40	225.51	74.61	58.06	58.67
10	Sub-Total (Others)	150.19	172.16	202.00	110.23	441.29
11	Total (1 to 10)	7601.49	7839.84	9244.00	6722.76	7224.61
12	Revenue/ Recoveries, if any	117.83	104.02	75.03	98.71	108.19
13	Net O & M Expenses	7483.66	7735.82	9168.97	6624.05	7116.42

38. The petitioner has furnished reasons wherever O&M expenses during a year exceed the expenses from the previous year. It is noticed that in case of Repair & Maintenance works there has been variations in the expenditure during certain years. The actual O&M expenses during the period 2003-08 have been examined for any abnormal increase for the purposes of normalization duly considering the justifications submitted by the petitioner and admissibility of the same is discussed in the subsequent paragraphs:

Repairs & Maintenance

39. 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
R & M expenses	1642.60	1339.58	3258.37	857.37	942.00

40. As regards the expenditure under this head, the petitioner has submitted that the expenditure during 2003-04, includes repair of Runner by M/S BHEL amounting to ₹536.28 lakh. As the work is not of a recurring nature, the said amount has been deducted while normalizing the O&M expenses for future years. Further, during 2005-06, the expenditure on repair and maintenance increased by over 143 % to that of the previous year, which has been attributed to charging of Generating Plant & Machinery (GPM) spares to revenue and accumulated depreciation, amounting to ₹1602.27 lakh and ₹129.14 lakh respectively. This has been considered. In addition to this, it is noticed that an amount of ₹414.64 lakh has been incurred for payment towards special repair of GPM to outside agencies. The special repairs and payments made to outside agencies being one-time, the same has been deducted while normalizing the O&M expenses for future years. For the years 2006-07 and 2007-08 the expenditure is within the permissible limit of 20% over the expenses of the previous years, and the same is allowed. Based on the above, the normalized expenditure 'Repair and Maintenance' during the period 2003-08, 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
Repair & Maintenance	1106.32	1339.58	2843.73	857.37	942.00

Insurance expenses

41. The insurance expenses claimed by the petitioner is as stated overleaf:

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Insurance expenses	478.20	475.00	466.07	462.78	464.75

42. The Commission in its order relating to determination of tariff of the generation station for the period 2004-09, had observed that in terms of the policy of the petitioner corporation, there was a need to establish a self-insurance reserve/fund in respect of O & M of the projects by transferring on year to year basis an amount equal to 0.5% of the gross block of assets under O&M. This reserve/fund is to be utilized for losses of assets due to fire, storms, cyclones, earthquakes, landslides, terrorist activities (inserted from May, 2002), floods (inserted from September, 2005) and not for routine wear and tear, repairs and maintenance etc, accidents or breakdown of machinery or shortage of inventory or insurance for human life. According to the petitioner, it has also been decided that losses on account of natural calamities, as above, shall be assessed by a Committee to be constituted for this purpose by the Chairman & Managing Director of the petitioner corporation and the actual losses based on the recommendations of the Committee, duly accepted, shall be reimbursed from the fund. On prudence check, the justification towards the expenditure for insurance coverage and the nature of assets covered under the insurance, submitted by the petitioner is found to be in order. Hence, the expenses claimed under this head are considered.

Security

43. Expenditure on account of security considered by the petitioner is as under:

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Security Expenses (other than salary & wages)	98.44	8.45	35.99	19.34	22.75

44. During 2003-04, an excessively high expenditure of ₹98.44 lakh has been incurred towards security in comparison to the other years. The petitioner has attributed the increase in expenses due to purchase of clothing and ammunition

amounting to ₹87.85 lakh for CISF. It has also been submitted that some amount is required to be paid to CRPF for purchase of ammunition after 2 to 3 years. Considering the fact that in the year 2005-06 an amount of ₹30 lakh has been incurred towards purchase of ammunition for CISF, the same is assumed in the claim for 2003-04. Hence, the total amount considered for 2003-04 works out to ₹40.59 lakh {₹30.0+ (₹98.44-₹87.85)} which is allowed. The expense of ₹30.00 lakh for 2005-06 towards the procurement of ammunition for CISF has been considered, keeping in view the security environment of the generating station. For the years 2006-07 and 2007-08, the expenditure is found to be within the permissible limit of 20% over that of the previous years, and hence the same has been considered. To summarize, the following expenses has been allowed under this head:

	<i>(₹ in lakh)</i>				
	2003-04	2004-05	2005-06	2006-07	2007-08
Security Expenses (other than salary & wages)	40.59	8.45	35.99	19.34	22.75

Administrative expenses

45. The total administrative expenses incurred by the petitioner for 2003-08 are as under:

	<i>(₹ in lakh)</i>				
	2003-04	2004-05	2005-06	2006-07	2007-08
Administrative expenses	105.01	135.77	346.49	292.82	416.40

46. The administrative expenses comprises of the expenditure towards rent, electricity charges, Travelling and Conveyance, Communication expenses, Donations, Entertainment charges, and filing fees, etc. The details of the items wherein the increase in expenses is abnormal are examined as under:

47. During 2004-05, the expenditure on rent had increased by 39% i.e from ₹105.01 lakh to ₹135.77 lakh as compared to the previous year. According to the petitioner, this increase was on account of payment of lease rent towards residential

accommodation provided to the executives of the petitioner corporation. This has been considered.

48. During 2004-05, the expenditure on account of entertainment had increased by 40% as compared to the previous year i.e from ₹0.20 lakh to ₹0.28 lakh. Similarly, the said expenses had increased by 275% during 2005-06 as compared to the previous year (from ₹0.28 lakh to ₹1.05 lakh). Since proper justification has not been submitted by the petitioner, the expenses during the years have been restricted to an increase of 20% over the expenses of the previous years.

49. During 2005-06, the administrative expenses on account of electricity charges have increased from ₹47,324 to ₹250,28,808 on account of payment of the arrears of electricity charges to the Power Development Department, Govt. of J&K, due to the levy of maximum demand charges which was not raised earlier. It is also observed that the electricity charges during the previous years are low. Hence, the expense on this count is allowed. The electricity charge was ₹159.74 lakh during 2006-07 which increased to ₹312.36 lakh during 2007-08, on account of the increase in tariff and the introduction of maximum demand charges. In view of this, the expenditure has been allowed.

50. During 2006-07, the expenses towards travelling and conveyance increased by 58% over the expenses of the previous years (from ₹38.02 lakh to ₹60.06 lakh) which has been attributed to a provision created for transfer of TA expenses based on actuarial valuation for 2006-07. However, the expenses have been restricted to an increase of 20% over the expenses of the previous year and the same has been allowed.

51. During 2006-07, the expenses on account of advertisement have increased by 110% in comparison to the previous year on account of the visit of Standing Committee of Energy and the Parliamentary Committee. This is not a recurring expenditure. In view of this, the expenditure has been restricted to an increase of 20% over the expenses of the previous year and the same is allowed.

52. Filing fees for ₹25 lakh has not been considered since the same is to be dealt with separately in terms of Regulation 42 of the 2009 regulations

53. Other expenses incurred during the period are within the permissible limit and hence considered. Based on the above, the normalized administrative expenses considered for the purpose of O&M for 2009-14 is as under:

<i>(₹ in lakh)</i>					
Administrative Expenses	2003-04	2004-05	2005-06	2006-07	2007-08
Rent	13.59	18.83	19.38	16.38	19.49
Electricity Charges	0.61	0.47	250.29	159.74	312.35
Travelling and Conveyance	49.11	49.88	38.02	45.62	40.18
Communication expenses	23.56	19.98	23.27	25.83	24.44
Advertisement expenses	17.94	21.33	14.48	17.38	19.26
Entertainment	0.20	0.24	0.34	0.47	0.67
Filing Fees	0.00	0.00	0.00	0.00	0.00
Total	105.01	110.73	345.78	265.42	416.40

Other Expenses (Specific/administrative items)

54. Details of other administrative expenses incurred and claimed are as under:

<i>(₹ in lakh)</i>					
Other Expenses	2003-04	2004-05	2005-06	2006-07	2007-08
Amount written-off against deferred Revenue Expenditure	6.63	3.49	0.00	0.00	0.00
Rates & Taxes	61.26	17.25	20.62	1.83	168.89
Printing and Stationery	11.83	12.23	12.16	8.99	21.20
Other Miscellaneous expenses	47.93	44.85	48.36	84.30	240.09
Loss on sale of assets	22.54	94.34	5.34	3.54	3.58
Books and Periodicals	0.0	0.00	0.43	0.45	0.38
Consultancy charges	0.00	0.00	20.12	10.61	6.59
Audit expenses	0.00	0.00	0.00	0.51	0.55
Interest payment on Court / Arbitration cases	0.0	0.00	94.95	0.00	0.00
Sub-Total	150.19	172.16	202.00	110.23	441.29

55. The above claims of the petitioner are examined overleaf:

(a) The loss on sale of fixed assets is to be borne by the petitioner and should not be recovered from the beneficiaries. Hence, the expenditure for the period 2003-08 is not considered.

(b) Expenses incurred in respect of payments made towards compensation for land are normally allowed by the Commission after prudence check in the petitions filed by the petitioner containing claims for additional capitalization. Hence, there is no justification to allow these expenses under O&M.

(c) No proper justification has been submitted by the petitioner as regards the variation in expenses incurred under the head "Other Misc. expenses" during the year 2006-07. In view of this, the expenses incurred have been restricted to an increase of 20% over the expenses of the previous years, where increase is more than 20%. During 2007-08, there is an increase of the expenses by 300 % (i.e from ₹84.3 lakh to ₹240.09 lakh) in "Other Misc. expenses". According to the petitioner, this increase was mainly due to the creation of a provision for Rs.64.80 lakh towards wage revision arrears under Central Dearness Allowance (CDA) pattern with effect from 1.1.2006 payable to employees of Kendriya Vidyalaya, Jyotipuram, and ₹149.79 lakh for payment of Sales Tax amounting to pertaining to the years 1989-93, 1994-99 and 2004-05 under the Amnesty Scheme. In view of the justification, the expenditure of ₹64.80 lakh is considered. However, the expenditure of ₹149.79 lakh towards payment of Sales Tax under the Amnesty Scheme has not been considered since it relates to a period prior to 2003-04.

(d) The expenditure incurred under other heads, apart from the above, is found to be reasonable and within the permissible of 20% increase and hence allowed.

56. Based on the above, the expenses during the period 2003-08 considered under the head 'Other expenses' for calculation of O&M expenses for 2009-14, is as under:

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Amount written-off against deferred Revenue Expenditure	6.63	3.49	0.00	0.00	0.00
Rates & Taxes	61.26	17.25	20.62	1.83	168.89
Printing and Stationery	11.83	12.23	12.16	8.99	21.20
Other Miscellaneous expenses	47.93	44.85	48.36	58.03	90.30
Loss on sale of assets	0.00	0.00	0.00	0.00	0.00
Books and Periodicals	00.0	0.00	0.43	0.45	0.38
Consultancy charges	0.00	0.00	20.12	10.61	6.59
Audit expenses	0.00	0.00	0.00	0.51	0.55
Interest payment on Court / Arbitration cases	00.0	0.00	94.95	0.00	0.00
Sub-Total	127.65	77.83	196.65	80.43	287.92

Employees cost

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

	<i>(₹ in lakh)</i>				
	2003-04	2004-05	2005-06	2006-07	2007-08
Employee Cost	4007.29	4722.31	4432.45	4758.64	5653.92

58. The expenses on account of employee cost forms a major part of the total O&M expenses. The employee cost comprises of salaries, wages and allowances, honorarium, leave encashment, provident fund contribution, compensation made under a statute, gratuity and provisions on account of gratuity made on actuarial valuation basis every year, VRS and also payment of arrears on account of wage revision of the employees. Similarly, staff welfare expenses include the Leave Travel Concession (LTC), medical reimbursement, liveries and uniform, ex-gratia, grants and subsidies made to sports and canteen, new year gifts, project school and hospital expenses, transport expenses etc., productivity-linked incentives, which are paid as per policy of the petitioner corporation. The year-wise break-up of the employees cost is as under:

	<i>(₹ in lakh)</i>				
	2003-04	2004-05	2005-06	2006-07	2007-08
Salary, wages and allowances (Project)	3312.17	3395.05	3160.26	3325.12	4076.02
Salary, wages and allowances- (Allocation of corporate office and Regional office)	0.00	0.00	312.01	265.67	264.77
Salary, wages & allowances - CISF & Kendriya Vidyalaya	453.38	480.40	401.62	413.69	596.32
Staff welfare expenses	172.68	224.49	317.89	514.20	428.64
Productivity link incentive	61.35	54.79	199.23	201.59	276.24
Expenditure on VRS	7.71	567.58	41.44	38.37	11.93
Total	4007.29	4722.31	4432.45	4758.64	5653.92

59. 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.

60. During 2004-05, the Staff welfare expenses of ₹224.49 lakh is 30% higher than the expenses for the previous years. The petitioner has submitted that the increase was on account of provision created by Corporate office for medical expenses (post-retirement) and for gratuity payments to 81 employees who had opted for VRS during the year 2004-05. However, the expenditure of ₹111.26 lakh on account of gratuity payments to employees who opted for VRS has not been considered for purpose of normalization of O&M expenses. No justification has been submitted by the petitioner for the increase in Staff welfare expenses during 2005-06. Hence, the same is restricted to an increase of 20% over the expenses of the previous year. Similarly, the Staff welfare expenses during 2006-07 and 2007-08 has also been restricted to an increase of 20% over the expenses for 2005-06 and 2006-07 respectively.

61. The Productive Linked Incentives included in the employee cost, has not been considered as the same is required to be borne by the petitioner from the organizational profit and the beneficiaries cannot be burdened on this count. Similarly, the cost incurred on VRS and/or ex gratia of the employees has not been considered as the same is required to be borne by the petitioner.

62. During 2003-04 and 2004-05, the Salaries, Wages and Allowances of Corporate Office/Regional Office have been included in the salaries, wages and allowances of the generating station (project). As the expenses towards Corporate/Regional office are to be considered separately in terms of Regulation 19(f) of the 2009 regulations, the amount of ₹72.28 lakh and ₹88.63 lakh for 2003-04 and 2004-05 towards employee cost of corporate office has not been considered under Salaries, Wages and Allowances

of the project. During 2006-07 and 2007-08, the employee cost towards salary, wages and allowances (project) had increased substantially due to creation of a provision for ₹18.34 lakh and ₹1132.77 lakh towards wages, revision of pay for under IDA pattern with effect from 1.1.2007. These amounts ₹18.34 lakh and ₹1132.77 lakh have not been considered for 2006-07 and 2007-08 and would be dealt with in terms of Regulation 19 (f) of the 2009 regulations.

63. During 2007-08, the expenses on account of Salaries, Wages and Allowances of Kendriya Vidhyalaya (KV)/ Central Industrial Security forces have increased from ₹413.69 lakh to ₹596.32 lakh due to creation of a provision for revision of pay under IDA pattern with effect from 1.1.2007 to Kendriya Vidhyalaya (KV) employees and to the Security forces. The amount of increase in the expense has not been considered as the same would be treated in terms of Regulation 19 (f) of the 2009 regulations.

64. The Productivity Link Incentives, Expenditure of VRS and Ex-gratia has not been considered in the employee cost as they are required to be borne by the petitioner.

65. On prudence check, the Employee Cost considered for normalization of O&M expenses for 2009-14 is as under:

		(₹ in lakh)				
		2003-04	2004-05	2005-06	2006-07	2007-08
a(i)	Salary, wages and allowances (Project)	3239.39	3306.42	3160.26	3306.78	2943.25
a(ii)	Salary, wages and allowances- (Allocation of corporate office and Regional office)	0.00	0.00	0.00	0.00	0.00
a(iii)	Salary, wages & allowances - CISF & Kendriya Vidyalaya	453.38	480.40	401.62	413.69	413.69
b	Staff welfare expenses (excluding expenditure of Kendriya Vidyalaya, Gingle only in the year 2003-04 and 2004-05).	172.68	113.23	135.88	163.05	195.66
c	Productivity link incentive	0.00	0.00	0.00	0.00	0.00
d	Expenditure on VRS	0.00	0.00	0.00	0.00	0.00
e	Ex-gratia	0.00	0.00	0.00	0.00	0.00
	Total	3865.45	3900.05	3697.76	3883.52	3552.60

Corporate Office expenses

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

67. The petitioner has submitted that the as per policy of the petitioner corporation, 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
(A) Breakup of Corporate Expenses (Aggregate at corporate level)						
1	Employee Expenses	6637	7652	10513	10171	12411.37
2	Administrative Expenses	2683.57	2851.15	2783.09	2704.96	3319.75
3	Security	29.07	38.24	38.22	45.01	70.97
4	Provision	0.00	0.00	6.41	6.89	0.76
5	Others	680.62	551.26	738.79	661.98	713.05
	Total (1 to 6)	10029.8	11092.45	14079.83	13589.88	16515.9
6	Less: Recoveries	433.51	459.26	469.43	601.46	472.87
7	Net Corporate Expenses (Aggregate)	9596.29	10633.19	13610.40	12988.42	16043.03
(B) Allocation of Corporate expenses to various functional activities						
1	O&M	1392.91	1575.52	1644.49	1801.33	2171.50
2	Contract & Consultancy	104.44	63.42	68.53	202.78	187.74
3	Construction	8098.94	8994.25	11897.38	10984.31	13683.79
	Total	9596.29	10633.19	13610.4	12988.42	16043.03
(C) Allocation of Corporate expenses relating to functional activity of power generation to various generating stations						
4	Salal-I (the generating station)	206.40	225.51	227.02	210.98	203.92
	Allocation to generating station [Salal HEP] (% of total O&M)	2.15	2.12	1.67	1.62	1.27

68. The expenses towards ex-gratia and provisions for productivity linked performance have not been considered as these are incentives which are required to be borne by the petitioner. After excluding these expenses, the following corporate

office expenses have been considered towards O&M expenses of the generating station for the period 2003-08:

(₹ in lakh)						
Sl. No.	Items	2003-04	2004-05	2005-06	2006-07	2007-08
Breakup of Corporate Expenses (Aggregate at corporate level)						
1	Employee Expenses	6550	7506	9007	9564	11408
2	Administrative Expenses	2683.57	2717.05	2710.08	2699.28	3128.76
3	Security	29.07	34.88	38.22	45.01	54.01
4	Provision	0.00	0.00	0.00	0.00	0.00
5	Others	680.62	551.26	661.51	661.98	713.05
	Total (1 to 6)	9942.76	10809.09	12416.89	12969.99	15303.97
6	Less: Recoveries	433.51	459.26	469.43	601.46	472.87
7	Net Corporate Expenses (Aggregate)	9509.25	10349.84	11947.47	12368.53	14831.10
	Allocation to Salal (% of total O&M)	2.15	2.12	1.67	1.62	1.27

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

(₹ in lakh)					
	2003-04	2004-05	2005-06	2006-07	2007-08
Corporate office expenses claimed	9596.29	10633.19	13610.40	12988.42	16043.03
Share of the generating station (Salal HEP)	206.40	225.51	227.02	210.98	203.92
Allocation to the generating station (Salal) (% of total exp)	2.15	2.12	1.67	1.62	1.27
Net corporate expenses approved	9509.25	10349.84	11947.47	12368.53	14831.10
Allocation to the generating station (Salal) (% of total O&M expenses)	2.15	2.12	1.67	1.62	1.27
Allocation to generating station (Salal)	204.45	219.42	199.52	200.37	188.35
Employee cost in approved O&M	6.550	7.506	9.007	9.564	11.408
Employee cost in percentage	68.88	72.52	75.39	77.33	76.92
Corporate Office employee cost allocated to generating station (Salal)	140.83	159.13	150.42	154.94	144.88
Corporate Office expenses other than employee cost allocated to generating station (Salal)	63.62	60.29	49.11	45.43	43.47

Regional Office Expenses

70. The expenditure on account of depreciation and prior period adjustment has not been allowed. The administrative expenses have been restricted to an increase of 20%, mainly in respect of expenses towards Travelling and Conveyance and others and in cases where no proper justification has been submitted by the petitioner. The

expenses on account of Corporate Social Responsibility (CSR) have not been considered. The Regional Office expenses approved after prudence check, is as under:

(₹ in lakh)				
	2003-05	2005-06	2006-07	2007-08
Corporate office expenses claimed		731.43	923.49	1283.74
Share of the generating station (Salal HEP)		159.59	112.75	119.52
Allocation to the generating station (Salal) (% of total exp)		21.82	12.21	9.31
Net corporate expenses approved		704.05	763.77	938.85
Allocation to the generating station (Salal) (% of total O&M exp)	The expenses have been booked in relevant heads of the project	21.82	12.21	9.31
Allocation to generating station (Salal)		153.62	93.25	87.41
Employee cost in approved O&M		605.11	696.96	808.33
Employee cost in percentage		85.95	91.25	86.10
Regional Office employee cost allocated to generating station (Salal)		132.03	85.10	75.25
Regional Office expenses other than employee cost allocated to generating station (Salal)		21.59	8.16	12.15

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

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

(₹ in lakh)						
SI. No.	Items	2003-04	2004-05	2005-06	2006-07	2007-08
(A)	Breakup of O&M expenses					
1	Consumption of Stores and Spares	0.00	0.00	0.00	0.00	0.00
2	Repair and Maintenance	1106.32	1339.58	2843.73	857.37	942.00
3	Insurance	478.20	475.00	466.07	462.78	464.75
4	Security	40.59	8.45	35.99	19.34	22.75
	Administrative Expenses					
a	Rent	13.59	18.83	19.38	16.38	19.49
b	Electricity Charges	0.61	0.47	250.29	159.74	312.36
c	Traveling and conveyance	49.11	49.88	38.02	45.62	40.18
d	Communication expenses	23.56	19.98	23.27	25.33	24.44
e	Advertising	17.94	21.33	14.48	17.38	19.26
f	Foundation laying and inauguration	0.00	0.00	0.00	0.00	0.00
a	Donations	0.00	0.00	0.00	0.00	0.00
h	Entertainment	0.20	0.24	0.34	0.47	0.67
i	Filing Fees	0.00	0.00	0.00	0.00	0.00
	Sub-Total (Administrative Expenses)	105.01	110.73	345.78	265.42	416.40
6	Employee Cost					
a(i)	- Salaries, wages and allowances (Project)	3239.39	3306.42	3160.26	3306.78	2943.25
a(ii)	- Salaries, wages and allowances (Corporate office / Regional office Expenses)	140.83	159.13	282.45	240.03	220.14

a(iii)	Salary, Wages and Allowances (CISF /KV/ Central Security Forces)	453.38	480.40	401.62	413.69	413.69
b	Staff welfare expenses	172.68	113.23	135.88	163.05	195.66
c	Productivity linked incentive	0.00	0.00	0.00	0.00	0.00
d	Expenditure on VRS	0.00	0.00	0.00	0.00	0.00
e	Ex-gratia	0.00	0.00	0.00	0.00	0.00
	Sub-Total (Employee Cost)	4006.28	4059.18	3980.20	412356	3772.74
7	Loss of store	0.00	0.00	0.00	0.00	0.00
8	Provisions	0.00	0.00	0.00	0.00	0.00
9	Corporate office expenses allocation except Employee cost	63.62	60.29	49.11	45.43	43.47
	Regional office expenses allocation except Employee cost		21.59	8.16	12.15	
10	Others (Specify items)					
(a)	Amount Written Off against Deferred Revenue Expenditure	0.00	0.00	0.00	0.00	0.00
(b)	Rates & Taxes	61.26	17.25	20.62	1.83	168.89
(c)	Printing and Stationery	11.83	12.23	12.16	8.99	21.20
(d)	Other Misc Expenses	47.93	44.85	48.36	58.03	90.30
(e)	Loss on Sale of Assets	0.00	0.00	0.00	0.00	0.00
(n)	Books and Periodicals			0.43	0.45	0.38
(g)	Consultancy Charges			20.12	10.61	6.59
(h)	Expenses transferred to IEDC			0.00	0.00	0.00
(i)	Audit expenses			0.00	0.51	0.55
(j)	Interest payment on Court/Arbitration cases			94.95	0.00	0.00
	Sub-Total (Others)	121.02	74.33	196.65	80.43	287.92
11	Total (1 to 10)	5921.04	6127.56	7939.11	5862.49	5962.18
12	Revenue/ Recoveries if any	117.83	104.02	75.03	98.71	108.19
13	Net Expenses	5803.21	602354	7864.08	5763.78	5853 59

72. Accordingly, O &M expenses at 2007-08 level with escalation of 5.17% from 2003-04 to 2007-08 as per proviso of Regulation 19(f) of the 2009 regulations, is s under:

	(₹ in lakh)					
	2003-04	2004-05	2005-06	2006-07	2007-08	Average
O&M expense considered for calculations	5803.21	6023.54	7863.08	5764.78	5853.99	
Escalation @5.17 % to arrive at normalized expenses at 2007-08 price level	7099.63	7006.92	8698.25	6061.77	5853.99	6944.11

73. The average employee cost works out to 64 % (approx) of the average O&M cost. Accordingly, the year-wise O&M expenses for the generating station after applying escalation @ 5.72% from 2008-09 and 50% increase of employee cost by considering the percentage of employee cost (64 %) in the year 2009-10, for the tariff period 2009-14 is allowed as stated overleaf:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
O&M Expenses claimed	13236.29	13993.4	14793.82	15640.03	16534.64
O&M Expense allowed	10244.83	10830.84	11450.36	12105.32	12797.75

Interest on Working Capital

74. 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.*

75. 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.

76. 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:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Receivables	3560.92	3723.17	3885.67	4008.12	4142.60

- (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	1536.72	1624.63	1717.55	1815.80	1919.66



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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
O & M expenses	853.74	902.57	954.20	1008.78	1066.48

77. 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.

78. 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	1536.72	1624.63	1717.55	1815.80	1919.66
O & M expenses (1 month)	853.74	902.57	954.20	1008.78	1066.48
Receivables	3560.92	3723.17	3885.67	4008.12	4142.60
Total	5951.38	6250.36	6557.42	6832.70	7128.75
Rate of interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest on working capital	729.04	765.67	803.28	837.01	873.27

Annual Fixed Charges

79. 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	8464.63	8615.62	8779.95	8833.79	8872.76
Interest on Loan	0.00	69.61	74.18	4.58	0.00
Depreciation	1927.02	2057.27	2206.26	2268.03	2311.84
Interest on Working Capital	729.04	765.67	803.28	837.01	873.27
O & M Expenses	10244.83	10830.84	11450.36	12105.32	12797.75
Total	21365.53	22339.01	23314.04	24048.72	24855.62

80. 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.

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

Design Energy

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

Month	Design Energy (MUs)
April	189.52
May	324.94
June	471.9
July	487.70
August	487.70
September	424.30
October	229.61
November	128.63
December	94.57
January	60.69
February	68.97
March	113.47
Total	3082.00

83. 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

84. 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.

85. 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.”

86. In terms of the Commission’s order dated 11.1.2010 in Petition No.109/2009 (pertaining to approval of tariff for SUGEN power plant for the period from DOCO to

31.3.2014) the filing fees and the expenses on publication of notices incurred in respect of the petition for determination of tariff of the generating station are allowed to be recovered.

87. Accordingly, the expenses incurred by the petitioner on application filing fees amounting to ₹13.80 lakh each for the years 2009-10 and 2010-11 respectively 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.

88. The difference between the provisional annual fixed charges already recovered by the petitioner and the annual fixed charges determined by this order shall be payable by the respondents in installments within a period of six months, in terms of the proviso to Clause (3) of Regulation 5 of the 2009 regulations.

89. Petition No.104/2010 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



ANNEXURE

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST AS ON 31.3.2009

(₹ in lakh)				
Name of the Bank / FI	Loan o/s as on 31.3.2009	Rate of interest	Interest Amount	Weighted average interest rate
DOMESTIC LOAN				
State Bank Of India	8571.43	10.50%	900.00	
State Bank Of Hyderabad	3214.28	11.00%	353.57	
Central Bank Of India	5000.00	9.50%	475.00	
Bank Of India	7500.00	10.25%	768.75	
State Bank Of Patiala	3214.29	10.75%	345.54	
Punjab National Bank	8250.00	8.75%	721.88	
HDFC	6428.57	10.50%	675.00	
Punjab & Sind Bank	7500.00	11.00%	825.00	
Indian Bank- Dul	10000.00	7.70%	770.00	
Canara Bank-Dul	6800.00	6.75%	459.00	
Canara Bank	16000.00	6.86%	1097.60	
Syndicate Bank	14640.00	7.207%	1055.10	
Oriental Bank of Commerce	16000.00	7.207%	1153.12	
Indian Overseas Bank Faridabad Branch	3750.00	9.50%	356.25	
State Bank of Patiala - Term Loan -2	3200.00	8.322%	266.30	
Canara Bank	4000.00	11.00%	440.00	
Oriental Bank of Commerce	10000.00	7.207%	720.70	
	134068.57		11382.81	
LIC (Rs.2500 Cr.)	10000.00	9.25%	925.00	
	240000.00	8.00%	19200.00	
	250000.00		20125.00	
LIC (Rs 6500 Cr. Line Of Credit)	1100.00	8.0065%	88.07	
	8500.00	8.4395%	717.36	
	5000.00	8.65%	432.50	
	3500.00	9.53%	333.55	
	11500.00	9.11%	1047.65	
	5000.00	9.15%	457.50	
	46700.00	9.11%	4254.37	
	48300.00	8.88%	4289.04	
	20000.00	8.78%	1756.00	
	40000.00	9.78%	3912.00	
	189600.00		17288.04	
PFC (Rs.2087 Cr. Line Of Credit)	10000.00	9.85%	985.00	
	5000.00	9.70%	485.00	
	4000.00	9.90%	396.00	
	12500.00	10.36%	1295.00	
	400.00	11.70%	46.80	
	18800.00	8.82%	1658.16	
	50700.00		4865.96	
PFC (Rs.413 Cr. Line Of Credit)	18000.00	9.85%	1773.00	
	2000.00	9.70%	194.00	
	6000.00	9.90%	594.00	

	5000.00	10.36%	518.00	
	10300.00	8.82%	908.46	
	41300.00		3987.46	
PFC (Rs.500 Cr. Line Of Credit)	11700.00	9.85%	1152.45	
	300.00	9.83%	29.49	
	3000.00	9.70%	291.00	
	6000.00	9.90%	594.00	
	11500.00	10.36%	1191.40	
	800.00	11.71%	93.68	
	5800.00	11.75%	681.50	
	2200.00	11.70%	257.40	
	8700.00	8.87%	771.69	
	50000.00		5062.61	
PFC (Rs.750 Cr. Line Of Credit)	5000.00	9.90%	495.00	
	5200.00	10.36%	538.72	
	4400.00	11.71%	515.24	
	15000.00	8.82%	1323.00	
	29600.00		2871.96	
PFC (Rs.186 Cr. Line Of Credit)	11070.00	9.90%	1095.93	
	3000.00	10.36%	310.80	
	3600.00	11.71%	421.56	
	17670.00		1828.29	
PFC (Rs.70 Cr. Line Of Credit)	7000.00	9.90%	693.00	
	7000.00		693.00	
Subordinate Debt-GOI Loan	3400.00	0.00%	0.00	
Short Term Loan				
Indian Overseas Bank	50000.00	7.20%	3600.00	
Bank Of Baroda	20000.00	6.90%	1380.00	
Bank Of Maharashtra	10000.00	7.25%	725.00	
	80000.00		5705.00	
Commitment Fee, Other Issue Expenses, Other Finance Charges Etc.			293.00	
Average Interest Rate (A)	853338.57		74103.13	8.68%
Bonds (B)	51300.00	7.70%	3950.10	7.70%
NIB	5184.04	1.69500%	87.87	
CCF	17352.93	8.96%	1554.82	
EDC	36323.93	6.01%	2183.07	
JBIC Trench-I	21708.36	2.30%	499.29	
JBIC Trench-II	79593.85	2.30%	1830.66	
JBIC Trench-III	62567.97	1.30%	813.38	
Deutsche Bank	96033.60	1.74625%	1676.99	
Commitment Fee, Agency Fees And TDS (Deutsche Bank)			228.35	
Guarantee Fees @ 1.20%		1.20%	3825.18	
Average Interest Rate (C)	318764.68		12699.61	3.9840%
Average Rate (A+B+C)	1223403.25		90752.84	7.4181%