

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Review Petition No. 18/2011**

**in**

**Petition No. 84/2010**

**Coram:**

**Shri S. Jayaraman, Member**

**Shri V. S. Verma, Member**

**Date of Hearing: 12.1.2012**

**Date of Order: 10.12.2012**

**IN THE MATTER OF**

Review of the order dated 12.7.2011 in Petition No.84/2010 regarding approval of generation tariff of Chamera-I Hydroelectric project (540 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 Department, Government of J&K, Jammu
- ...Respondents**

**Parties Present:**

1. Shri R.Raina, NHPC
2. Shri Amrik Singh, NHPC
3. Shri S.K.Meena, NHPC
4. Shri M.D.Faruque, NHPC
5. Shri C.Vinod, NHPC
6. Shri R.B.Sharma, Advocate, BRPL
7. Shri T.P.S.Bawa, PSPCL



## ORDER

Petition No. 84/2010 was filed by the petitioner, NHPC, for approval of generation tariff of Chamera-I Hydroelectric Project (540 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 ("the 2009 Tariff Regulations") and the Commission by its order dated 12.7.2011 had determined the annual fixed charges for the generating station for the period 2009-14, as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	10803.07	10832.26	10867.21	10893.56	10891.64
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Depreciation	4017.64	4046.32	4090.31	4119.14	4119.06
Interest on Working Capital	746.99	773.25	801.39	830.55	860.12
O&M Expenses	8758.11	9259.07	9788.69	10348.60	10940.54
<b>Total</b>	<b>24325.81</b>	<b>24910.90</b>	<b>25547.60</b>	<b>26191.85</b>	<b>26811.36</b>

2. Aggrieved by the said order, the petitioner has filed this review petition seeking review of the order dated 12.7.2011 on the following issues, namely:

- (a) Disallowance of additional capitalization on certain assets/items for 2009-14;
- (b) Error in calculation of Depreciation; and
- (c) Error in the calculation of O&M expenses.

3. By order dated 14.11.2011, the review petition was admitted on the above issues and notices were issued to the respondents. Reply to the petition has been filed by the Respondent No.1 PSPCL and the Respondent No.3, BRPL. The petitioner has filed its rejoinder to the said replies.



4. During the hearing on 12.1.2012, the representative of the petitioner made his submissions on the above issues and prayed that the order dated 12.7.2011 be reviewed for the reasons mentioned in the application.

5. The learned counsel for the respondent, BRPL and the representative of the respondent, PSPCL have in general, submitted that the Commission has given detailed reasons in its order for disallowance of the expenditure for capitalization and the petitioner cannot be allowed to give fresh justification now and/or re-argue his case on the ground that there is an error apparent on the face of record. The respondent, BRPL has submitted that the power of review is to be exercised by the Commission only for correction of clerical or arithmetical errors/mistakes in the order and not for correction of any error in judgment and hence the application for review of order was not maintainable. During the hearing, the learned counsel for respondent, BRPL while pointing out that none of the grounds raised for review of the order has been justified by the petitioner, has submitted that a review is by no means an appeal in disguise whereby an erroneous decision is reheard and corrected, but lies only for patent error. In this regard, the learned counsel placed reliance on the decision of the Hon'ble Supreme Court in Parsion Devi & ors-v-Sumitra Devi & ors (1997) 8 SCC 715 and judgments of the Appellate Tribunal for Electricity dated 12.8.2011 in Review Petition No. 2/2011 in Appeal No. 26/2008, judgment dated 24.3.2009 in Review Petition No. 1/2009 in Appeal No. 64/2008, judgment dated 26.8.2011 in Review Petition No. 1/2011 in Appeal No. 24/2011) and the judgment dated 19.1.2011 in Review Petition No. 7/2009 in Appeal No. 85/2007. The learned counsel submitted that the review application is devoid of merits and the prayers in the application be rejected.



6. Heard the parties and examined the documents on record. We now proceed to consider the issues raised by the petitioner, as discussed in subsequent paragraphs:

7. In accordance with Rule 1 Order 47 of the Code of Civil Procedure (CPC), a person aggrieved by an order may apply for a review under the following circumstances:

- (a) On discovery of new and important matter or evidence which after exercise of due diligence was not within his knowledge or could not be produced by him at a time when the order was made;
- (b) An error apparent on the face of the record;
- (c) For any other sufficient reason.

**(A) Disallowance of additional capitalization on assets/items for 2009-14**

8. The petitioner had sought review of order dated 12.7.2011 against disallowance of certain assets for additional capitalization, under this head, which are examined hereunder:

**(a) Purchase of Hospital equipment during 2009-10 and 2011-12**

9. The petitioner had claimed ₹25.00 lakh during 2009-10 and ₹10.00 lakh during 2011-12 for purchase of Hospital equipments under Regulation 9(2)(iv) of the 2009 Tariff Regulations. The petitioner had made the following submissions in support of its claim.

"Project hospital for CPS-1 was built in 1992 which caters to the medical treatment requirement of power station as well as adjoining local population as part of community service. It is a 16 bedded hospital where various medical equipments are installed for diagnostic purposes. Due to continuous R&D and application of information technology to clinical purpose, new instruments are available which have intelligent functions and are more accurate. The reliability and result-interpretation of medical equipments and systems are vital for proper diagnosis. It is therefore required to replace some of the old medical equipment like suction machine, urine analyzer etc. with upgraded equipments as well as to purchase new equipments like Nycocard Reader, Automatic Film Processor, Lumber/Traction Machine etc. for proper functioning of hospital. Also

new equipments like TMT machine, exercising equipments etc. were needed and have been purchased and delivered in 2009, which needs to be capitalized."

10. The above claim of the petitioner was disallowed on the ground that the gross value of the original assets has not been furnished by the petitioner.

11. In justification of its claim for 2009-10, the petitioner has submitted in the review petition as under:

"Project Hospital with latest medical equipment is one of the mandatory requirements of any project which caters the medical facilities of power station personnel as well as adjacent local population as part of community service. Several new and latest medical equipments have been purchased under this head for proper and better diagnosis and better medical facility.

In the year 2009-10 several new items has been purchased for betterment of medical facility like TMT Machine, HBA 1C Analyzer, Wall Mounted O.T Light, Shoulder Wheel Exerciser, Lumber Cum Cervical Traction Unit, Transtutaneous Electronic Nerve Stimulator, Examination Patient Table and Plain Instrument Table with railing amounting to ₹11.39 lakh.

Since purchase of latest medical equipment is totally new expenditure and not a replacement, hence gross value of the old asset is not required to be furnished. Accordingly, this expenditure of ₹11.39 lakh may kindly be allowed."

12. Similar submission has been made by the petitioner in respect of its claim of ₹10.00 lakh during 2011-12.

13. From the submissions made in the original petition, it is observed that the petitioner had claimed ₹25.00 lakh both for replacement of old assets and for purchase of new assets. However, the petitioner had not categorically submitted the break-up of the expenditure on new assets and the replacement of old asset. Further, for replacement of old assets the gross value of the original asset was not furnished. In the absence of the required information the entire cost had been disallowed in the order dated 12.7.2011. The petitioner has now submitted additional information regarding the new assets and has sought the capitalization of the same.



Review is allowed for rectification of errors of clerical and /or arithmetical errors and the process cannot be used to revisit the decision with additional justification. Accordingly, review on this ground is disallowed. Similarly, the disallowance of the claim for 2011-12 for this asset was based on the submissions of the petitioner in its petition and the petitioner cannot be allowed to raise fresh grounds for consideration of its claim for the asset during 2011-12, in review. In view of this, there is no error apparent on the face of the order and review on this count is also rejected.

**(b) Air Conditioning System during 2009-10 and 2010-11, Purchase of Special Tools & Tackles and Measuring testing equipments during 2011-12, 2012-13 and 2013-14.**

14. The claim of the petitioner for purchase of 'Air conditioning system' for ₹15.00 lakh each during 2009-10 and 2010-11, and Purchase of special Tools & Tackles and Measuring testing equipments for ₹15.00 lakh each during 2011-12, 2012-13 and 2013-14 under Regulation 9(2)(iv) was disallowed by the Commission on the ground that the expenditure is in the nature of minor assets, based on the submissions of the petitioner in the original petition under the respective head, as under:

**Air conditioning system**

"Domestic type split-type air conditioning system was installed in powerhouse control block area in 2003 as replacement of original plant. As control room is manned around the clock, the operational life of these air conditioners has been completed and various faults are regularly appearing in the systems which are being rectified from time to time. Since control room has also got the CMR panel where many heat generating devices like relay, lamps, contactors, transducers etc. are installed, the temperature control of control room is extremely important to have a genuine ambience for personnel working there. Therefore is required to replace the existing system of powerhouse control room block by latest package type Air-Conditioning system. Against this, old asset has already been deleted in the year 2008-09."

**Purchase of special Tools & Tackles and Measuring Testing Equipments**

"Different types of special tools and tackles are used in daily and annual maintenance work in powerhouse. Being hydraulically, pneumatically or electrically operated, these

tools save great time and effort and increase the productivity and efficiency of manpower. Many of these tools are being frequently used for a long time and need replacement. Further some of the tools have become obsolete and need to be replaced with their upgraded versions. It is therefore required to replace these items in a phased manner so as to maintain the quality of work and efficiency. Being an operating power station, the maintenance of the systems and equipments and continual development of the maintenance process is most important. Measuring and testing equipments are the interface with which proper diagnostics can be made for correct maintenance. Many of the existing measuring and testing equipment being used are based on old technology and their range, accuracy, repeatability are very less which proves a hindrance in their use. Many of them are electronics based and their operating life is over. Further, the spare part support for these is also not available. It is therefore required to replace these equipments with new ones like using latest technology to have a better preventive maintenance of equipments and systems. Some items have already been purchased which are to be capitalized in the year 2009-10.”

15. In justification of the above expenditure, the petitioner has now submitted as under:

**Air conditioning system**

“Chamera Power station I, being underground centralized Air Conditioning System is vital and integrated part of the power plant. Various Electrical and Electronic components as a part of Control and Monitoring system are installed in the control room. Various devices associated with this system dissipates heat and accordingly temperature control of control room is extremely important to prevent the failure of equipments and also to have a genuine ambience for personnel working there round the clock. In addition to this, power station is going to install SCADA System, for which proper Air Conditioning is a mandatory requirement.

Old Air conditioning plant has already completed the useful life and against this, old asset has already been deleted in the year 2008-09 (Refer Sl.No.2(1) of Part-B). Accordingly, new latest package type Air conditioning system has been installed for proper and efficient plant operation.”

**Purchase of special Tools & Tackles and Measuring Testing Equipments**

“Purchase of special tools and tackles and measuring instruments under this head are special type and are not minor in nature. These special tools and tackles are extensively used during the preventive or breakdown maintenance of the generating units. Nowadays several new technologies have evolved in hydraulic, pneumatic or electrical operated special tools, tackles and measuring devices. These equipments save great time and efforts, minimize downtime resulting into increase in the productivity of the plant. Thus, the expenditure is necessary for successful and efficient plant operation.”

16. We have examined the issue. The petitioner in its application has sought to reopen the issue by making additional submissions by justifying the capitalization of the said items. This is not permissible in review. In terms of the proviso to Regulation



9(2) of the 2009 Tariff Regulations, expenditure towards assets minor in nature is not permissible for additional capitalization. Since expenditure for air-conditioning system is in the nature of minor assets, the submissions of the petitioner are not acceptable. Similarly, expenditure towards the purchase of tools and tackles and measuring testing equipments falls under the said proviso to Regulation 9(2) and the same is not admissible for capitalization. Moreover, the nature of the tools & tackles were also not furnished by the petitioner. In view of the above, there is no error apparent on the face of the order and review on this count fails.

**(c) Hydraulic Bolt Tensioner for runner shaft Assembly in 2010-11**

17. The claim of the petitioner for purchase of 'Hydraulic Bolt Tensioner for runner shaft Assembly' amounting to ₹30.00 lakh during 2010-11 was disallowed by the Commission on the ground that the item is in the nature of spares, based on the submission of the petitioner in the original petition as under:

“Additional bolt Tensioner is required to minimize dismantling and installation time of runner during major maintenance to reduce overall shutdown period and improve PAF.”

18. In this regard the petitioner has now submitted as under:

“The case for the purchase of new Hydraulic Bolt Tensioner is in process in the year 2011-12. Accordingly, this expenditure is being claimed in the year 2011-12.”

19. The Commission by a conscious decision has disallowed the capitalization of these assets, on the ground that these are in the nature of spares, based on the submissions of the petitioner. The justification submitted by the petitioner, that new hydraulic bolt tensioner is in process in the year 2011-12 and the expenditure is claimed during 2011-12, is not acceptable since mere shifting of the projected expenditure to next year does not change the fact that the asset being procured is



additional i.e. it is in the nature of spares and is not allowable for the purpose of tariff after cut-off date. In the circumstances, in our view, there is no error apparent on the face of record and consequently, the petitioner's prayer for review of order on this count is rejected.

**(d) Installation of SCADA system in 2010-11 and 2011-12**

20. The claim of the petitioner for 'Installation of SCADA system' amounting to ₹200.00 lakh in 2010-11 and ₹100 lakh during 2011-12 was disallowed by the Commission, based on the submission of the petitioner in the original petition as under:

"CPS-1 was commissioned in 1994. The unit control system at CPS-1 was implemented using hard-wired-relay-logic control. Automation level of the present system was latest at the time of commissioning in Indian context. Although SCADA technology was available at the time of construction its application in HEPs was economically viable in view of the relatively simple control philosophy of HEPs compared with others. With research and development in the area of Plant Automation, the same can now be implemented at justifiable cost with reference to the additional benefits it provides. The present unit control system is as efficient as the operator and does not have any intelligent capability like backup, supervision, integration, architecture management, remote data communication etc. In the present scenario and future prospects of Grid Management, Power Exchange, Tariff Regulations etc. the plant automation is a must for better utilization and age-enhancement of installed assets.

Keeping in view this typical layout of individual power station, the SCADA system is required to be developed as site specific and should be integrated at higher levels of supervision."

21. In this regard the petitioner has now submitted as under:

"The case for installation of SCADA system is already in process in the year 2011-12. Accordingly, this expenditure is being claimed in the year 2011-12."

22. The Commission in its order had disallowed the said expenditure, on the ground that the gross value of the original assets was not furnished by the petitioner. The petitioner has submitted additional justification in support of its claim in this review petition. Review cannot be in the disguise of an appeal and the issues

involved cannot be reopened on merits. In view of this, there is no error apparent in the order and review on this ground fails.

**(e) Replacement of temporary B-type quarter during 2010-11**

23. The petitioner has submitted that the Commission has erred in considering the assumed deletion of the gross value of ₹138.00 lakh during 2010-11 towards B-type quarters. In this regard, the petitioner in its original petition had submitted as under:

“Acquisition cost of these temporary B type quarter was ₹1.38 crore and construction depreciation of ₹1.38 crore already charged during construction period of the project. Now, O&M gross block for these quarters is zero.”

24. In justification of its claim, the petitioner has now submitted as under:

“Actual O&M gross block for this asset is zero as asset has been fully depreciated during the construction period of the project and the following was mentioned under additional capitalization for 2010-11(at Si.no. 34) of the original petition 2009-14.”

25. It is observed that the gross value of ₹138.00 lakh towards the said asset was considered as assumed deletion for the year 2010-11 on the ground that the same was not proposed to be reduced during the year in which the asset was replaced. Thus, the Commission in its order had arrived at the said conclusion and considered the said amount as assumed deletions, based on the submissions of the petitioner. The petitioner has now sought to reopen the case on merits, which is not permissible in review. Even otherwise, the submission of the petitioner that the gross block of the said quarters is zero is not correct. The cost of temporary quarters for ₹138.00 lakh, even when fully depreciated, form part of capital cost of the project through IEDC. Hence, the deduction of ₹138.00 lakh and the consideration of ₹250.00 lakh towards new B-type quarters is in order and do not suffer from any infirmity. Hence, there is no error apparent on the face of the order and review on this count fails.

26. Based on the above discussions, the additional capital expenditure allowed for 2009-10 in the table under paragraph 20 of our order dated 12.7.2011, does not change, as mentioned under:

	<i>(₹ in lakh)</i>				
	2009-10	2010-11	2011-12	2012-13	2013-14
Additional capital Expenditure allowed	518.51	594.56	738.37	266.65	(-) 339.81

**(B) Error in calculation of O & M Expenses**

27. The petitioner has submitted that the Commission in its order has excluded certain actual expenditure under the head 'Consumption of Stores & Spares', Repair and Maintenance expenses and Other expenses, incurred by the petitioner, during the period 2003-08, while working out the normative O&M expenses for the period 2009-14, which has resulted in loss to the petitioner. The petitioner has also submitted that the Commission in its order has ignored the fact that the expenditure disallowed, pertain to the previous period and have already been incurred by the petitioner and the same had been certified by statutory auditors. The respondent, BRPL has submitted that the Commission in terms of Regulation 19(f) of the 2009 Tariff Regulations had considered the actual O&M expenses during the period 2003-08 for any abnormal increase for the purpose of normalization duly considering the justification and arriving at the permissible O&M expenses for the year 2009-10, which is further escalated at the rate of 5.72% per annum to arrive at the permissible O&M expenses for the subsequent years of tariff period. The respondent has also submitted that the petitioner has not pointed out any fundamental errors but has only made submissions pointing to errors in the judgment, which cannot be cured in review petition.

28. Taking into consideration the submission of the parties and the documents on record, we consider the issues raised by the petitioner as mentioned under:

**(a) Consumption of Stores & Spares in 2005-06 and 2006-07**

29. The petitioner has submitted that the Commission has re-grouped the expenditure under the heads "Consumption of stores & spares" and as per the petition (before regrouping), the increase in expenditure during 2005-06 and 2006-07 was well within 20% and accordingly no justification was furnished. The petitioner has also submitted that the claim for expenses have been restricted to an increase of 20% over the expenses of the previous year for 2005-06 and 2006-07.

30. It is observed from the petition and the order dated 12.7.2011 that the original claim and regrouped claim were as follows:

**As per petition:**

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Consumption of stores and spares	97.57	556.41	290.89	196.83	471.79
Repair & maintenance	765.82	1142.25	788.45	1089.90	1005.32

**After regrouping:**

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Consumption of stores and spares	97.57	187.68	290.89	295.83	471.79
Repair & maintenance	765.82	1510.98	788.45	990.90	1005.32

31. It may be observed from the above table that before regrouping was carried out, the expenditure during 2005-06 and 2006-07 on 'Consumption of stores and spares' was well within the limit of 20% and petitioner was not required to furnish the reasons for the same as per the 2009 Tariff Regulations. However, after regrouping of the expenditure, the expenditure during 2005-06 and 2006-07 on 'Consumption of

stores and spares' went beyond the limit of 20% increase and since the reasons for the same were not available in the petition, the expenses were restricted to 20% of last year's expenses. In view of above, the reasons/justifications furnished by the petitioner in the review petition have been considered on merit for the admissibility of the expenditure claimed during 2005-06 and 2006-07.

32. In justification of its claim, the petitioner has now submitted as under:

**Consumption of stores & spares during 2005-06**

"Due to change in the accounting policy of the Corporation, capital spare of Generator having gross block of ₹209.82 lakh (Depreciation ₹37.89 lakh), net WDV of ₹171.93 lakh charged to revenue as and when consumed. Accordingly, the Commission is requested to kindly allow ₹290.89 lakh under this head during 2005-06 being reasonable and valid expenses, instead of the allowed expenditure of ₹140.50 lakh at paragraph no. 42 of the tariff order dated 12.7.2011. It is pertinent to mention here that the Commission has already allowed the expenditure during 2007-08 as per the above policy of the Corporation."

**Consumption of Stores & Spares during 2006-07**

"Due to change in the accounting policy of the Corporation, capital spare of Generator having gross block of ₹79.53 lakh (Depreciation ₹18.66 lakh), net WDV of ₹60.87 lakh charged to revenue as and when consumed. Accordingly, the Commission is requested to kindly allow ₹295.83 lakh under this head during 2006-07, being reasonable and valid expenses, instead of the allowed expenditure of ₹168.6 lakh at paragraph no. 42 of the tariff order dated 12.7.2011. It is pertinent to mention here that the Commission has already allowed the expenditure during 2007-08 as per the above policy of the Corporation."

33. In view of the justification furnished by the petitioner and considering the fact that capitalization of spares is not allowed after cut-off date and the expenditure on spares has been consistently allowed by the Commission in O&M on consumption, we allow the expenditure of ₹290.89 lakh and ₹196.83 lakh (295.83-99.00) on 'Consumption of stores and spares' during 2005-06 and 2006-07, respectively. It may be mentioned that ₹99.00 lakh shifted to 'Consumption of stores and spares in 2006-07' pertaining to 'Replacement of 47 no. of state bar/winding (₹99 lakh)' which

was dealt and disallowed at paragraph 41 of our order under review, pertaining to 'Repairs and Maintenance', is not allowed on the same grounds of not being of recurring nature.

34. Accordingly, the following expenses towards 'Consumption of stores & spares' for the period of 2003-04 to 2007-08 have been allowed after review for calculation of O&M expenses for the period 2009-14.

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Consumption of stores and spares	97.57	117.08	290.89	196.83	471.79

**(b) Repair and Maintenance (R&M) during 2004-05**

35. The petitioner has submitted that the Commission has erred in not considering the actual incurred expenditure under various heads for ₹621.35 lakh and has prayed for review of order on this count be allowed. The petitioner in the original petition has submitted as under:

**R&M of building**

"a) Increase in expenditure is due to execution of under mentioned works:

- 1) Rewiring of Quarter of Banikhet & Chilly colony by ₹34.71 lakh.
- 2) Renewal and replacement of Roof Topping of Switchyard amounting to ₹14.79 lakh,
- 3) Repairing of Existing R/wall of park near 'C' type quarters by ₹10.39 lakh.
- 4) Development of area near permanent bridge and back side of 'B' Type quarter by ₹9.33 lakh.
- 5) Repairing/Renovation of False ceiling of Power house control area room amounting to ₹7.94 lakh.
- 6) Fabrication /Installation of steel/Brass fencing in power house amounting to ₹7.16 lakh.
- 7) Providing Grill, Stair case and painting of Gas Insulated Switchgear hall of switchyard amounting to ₹4.25 lakh.
- 8) Increase in other miscellaneous works ₹1.03 lakh.

**R&M of Machinery**

b) The major overhauling of Main Inlet Valve, 10 yearly maintenance of gas Insulated Switchgear and annual maintenance of Units was taken up during 2004-05 and following payments were made:

- 1) ₹17.99 lakh was made for Condition Monitoring of Test on HIV Electrical Equipment and ₹55 lakh for Partial Discharge Test on Transformers & Reactors by Acoustic Emission Technique to CPRI Bangalore,
- 2) Engineering and supervision charges paid to M/S Alstom Canada for Main Inlet Valve ₹62.19 lakh.
- 3) Engineering and supervision charges paid to M/s Siemens Germany for Gas Insulated Switchgear ₹46.19 lakh.
- 4) Painting work of Spiral Casing, Main Inlet Valve etc. ₹5.61 lakh,
- 5) ₹3.71 to GE Power Services as service engineer charges.
- 6) Increase in consumption of consumables, spares etc. by ₹65.23 lakh.

36. The Commission in its order had disallowed the claim for ₹621.35 lakh under R&M expenses for 2004-05 in paragraph 40 of the tariff order observing as under:

“From the above, it is noticed that the total expenditure of ₹621.35 lakh incurred in respect of the above works asset during 2004-05 is a onetime expenditure and not recurring in nature. Hence, the expenditure of ₹621.35 lakh has not been allowed for the purpose of normalization of O&M expenses.....”

37. In justification of its claim, the petitioner has now submitted that the expenditure under various works/assets mentioned in paragraph 39 of the said order is not a one-time expenditure, but are a recurring expenditure. The OEMs have recommended the performance of the above work on routine basis. The work/asset wise justification submitted is as under:

<i>(₹ in lakh)</i>			
Sl. no.	Works/Assets	Amount	Justification
1	Condition Monitoring test on EHV Electrical Equipments by CPRI, Bangalore.	17.99	Condition Monitoring tests on EHV Electrical equipments are not a onetime expenditure and are periodic expenditure in nature. These types of tests indicate the healthiness of the system. As per the recommendation of the testing agency (CPRI), these tests should be done periodically in 2-3 years. Accordingly, the expenditure for testing of EHV equipments, live Transformer & Reactors etc. amounting to ₹22.54 lakh may kindly be allowed during 2004-05 for normalization of O&M expenses.
2	Partial Discharge test on Transformers & Reactors by Acoustic Emission Technique by CPRI, Bangalore.	4.55	
3.	Engineering and Supervision Charges paid to M/s Siemens, Germany for Maintenance of GIS.	46.19	This Maintenance is periodic in nature and required to be done periodically in every 5 years/10 years/15 years as per the recommendation of the OEM i.e. M/s Siemens. Accordingly, the expenditure for R&M of gas
4.	Procurement of Gas	66.71	

	Insulated Switchgear from M/s Siemens, Germany.		Insulated Switchgear amounting to ₹112.90 lakh may kindly be allowed during 2004-05 for normalization of O&M expenses.
5.	Engineering and Supervision Charges paid to M/s Alstom, Canada for Main Inlet Valve.	62.19	The maintenance of MIV is periodic in nature and is required to be done periodically every 3 years as per the recommendation of OEM i.e. M/s MIL Tracy, Canada now known as M/s Alstom, Canada. Accordingly, the expenditure for Repair & Maintenance of Main Inlet Valve amounting to ₹429.44 lakh may kindly be allowed during 2004-05 for normalization of O&M expenses.
6.	Special repair/maintenance of Main Inlet Valve by M/s Alstom, Canada for all the three units.	367.25	
7.	Painting work of spiral casing, Main Inlet Valve etc.	5.61	The generating station is an underground power station. Due to moisture, heavy rusting is observed in underwater components. Hence, to maintain & increase the life span of hence components, periodically primer and Epoxy painting is required and is done in every Annual Maintenance. In the year 2004-05, painting of underwater parts i.e. Spiral Casing, Main Inlet Valve and other equipments has been done as per routine Annual Maintenance. Hence, the expenditure for painting of Spiral Casing, Main Inlet Valve of ₹5.61 lakh may kindly be allowed during 2004-05 for normalization of O&M expenses.
8.	Providing Grill, staircase and painting of Gas Insulated Switchgear hall of Switchyard.	4.25	Painting of GIS Hall was necessary to protect the life of existing building. The nature of work is routine and certainly not involving one time expenditure of ₹4.25 lakh may kindly be allowed during 2004-05 for normalization of O&M expenses.
9.	Engineering Services charges paid to M/s GE power services.	3.71	In the generating station GE make Generators are installed. Hence, time to time expert services of OEM is taken by the power station for Vibration Analysis, Dynamic Balancing, alignment of machine etc. Since these types of maintenance work is not a onetime expenditure and is of periodical in nature, hence ₹3.71 lakh should be allowed during 2004-05 for normalization of O&M expenses.
	Total	578.45	

38. From the submissions made, it is observed that the petitioner has submitted additional justification in support of its contention that the expenditure claimed is in the nature of recurring expenses. However, even now the petitioner has not established the fact that the OEM recommendations regarding periodicity of the maintenance measures are being followed regularly and the expenditure incurred in



2004-05 was also made subsequently after the number of years as recommended by OEM. Had petitioner made this expenditure on recurring basis, it would have substantiated the same by bringing out that the expenditure was made again in so and so year and qualifies to be termed as recurring in nature. As such, no further increase in expenditure under this head is allowed for the year 2004-05. In view of this, there is no error apparent in the order and review on this ground fails.

**(c) Repair and Maintenance (R&M) during 2006-07:** The petitioner has submitted as under:

(1) Replacement of 47 no. of state bar/winding (₹99.0 lakh): In the original tariff petition for the period 2009-14, ₹196.83 lakh was reflected against consumption of stores and spares and ₹1089.90 lakh against Repair & Maintenance work. As per the tariff order dated 12.7.2011, ₹99 lakh of expenditure against replacement of stator bar/winding reflected under Repair & Maintenance has been shifted to consumption of stores & spares (para 37). Further, the same amount i.e. ₹99 lakh has again been disallowed from repair & maintenance expenses during 2006-07 as per para-14 of the tariff order. This has resulted into double deduction for the same expenditure of ₹99.00 lakh during 2006-07 from Repair and Maintenance head as this expenditure has already been shifted to "consumption of stores & spares" from repair and maintenance. This is error in tariff order.

(2) Repair of rotor pole coils (₹290 lakh): Repair of Rotor pole is carried out for smooth running of the system and to minimize the outage time, which is periodic in nature and not one time expenditure. Hence, already incurred expenditure amounting to ₹29 lakh on this head may kindly be allowed for normalization of O&M expense.

(3) Special repair in Radial Gates under water regulating system (₹15 lakh): Radial gates are one of the most vital equipments for Hydro power station. Special maintenance of these gates being part of preventive maintenance is periodic in nature and definitely is not a onetime expenditure. Hence, the incurred expenditure amounting to ₹15 lakh on this head may kindly be allowed for normalization of O&M expenses.

(4) Repair of DG Set (₹34 lakh): DG set is one of the most important equipment used for backup power for the power station. 2 nos. of 1000 KVA DG set is installed since commissioning. Being old equipment several repair and maintenance has been carried out for smooth running of these equipments, which is periodic in nature. Hence, the incurred expenditure amounting to ₹34

lakh on this head may kindly be allowed for normalization of O&M expenses. In view of the above, the Hon'ble Commission is requested to kindly rectify the above mentioned error and allow the deducted expenses of ₹177 lakh during 2006-07 as per the justification given at Sl. No (a) to (d). Thus, the total expenditure for normalization of O&M expenses during 2006-07 works out to ₹990.90 lakh which may kindly be allowed by the Hon'ble Commission.

**(d) Repair and Maintenance (R&M) during 2007-08**

In view of justification given for 2006-07, the increase in expenditure for 2007-08 is within 20% limit. Accordingly, the Hon'ble Commission is requested to kindly allow the expenditures of ₹1005.32 lakh during 2007-08.

39. On scrutiny of the order, it is observed that the petitioner's contention with regard to double deduction of ₹99.00 lakh is correct. Accordingly, in view of the fact that the expenditure has been shifted and dealt under the head "Consumption of stores and spares" the expenditure should not have been deducted from the Repair and Maintenance cost of 2006-07. With regard to other expenditure pertaining to repair of DG Set, Radial Gates under water regulating system and rotor pole coils pronounced to be of non-recurring nature based on the information filed in original petition cannot be allowed on the basis of new justifications filed in review petition.

40. Accordingly, the following expenses towards consumption of 'Repair and Maintenance works' for the period 2003-04 to 2007-08 have been allowed after review for calculation of O&M expenses for the period 2009-14.

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
Repair and maintenance allowed in order dated 12.7.2011	765.82	889.63	788.45	813.90	976.68
Additional repair and maintenance allowed in review	-	-	-	99.00	28.54
R&M allowed after review	765.82	889.63	788.45	912.90	1005.32*

\* being within 20% of previous year



## Filing Fees

41. The petitioner has submitted that the expenses on account of filing fee paid to the Commission for determination of tariff of the generating station may be considered in O&M expenses. In addition, the petitioner has mainly submitted as under:

"In terms of CERC (Payment of Fees Regulations), 2004, NHPC had paid filing fee of ₹25 lakh in FY 2004-05 to CERC. In the tariff period 2001-04, CERC had allowed reimbursement of filing fee from the beneficiaries. CERC while allowing tariff of the Salal Power Station for the period 2004-09 vide order dated. 9.5.2006 observed as under:

"92. The petitioner has sought reimbursement of filing fee of ₹25 lakh paid. A final view on reimbursement of filing fee is yet to be taken by the Commission for which views of the stakeholder have been called for. The view taken on consideration of the comments received shall apply in the present case as regards reimbursement of filing fee.

Further the Hon'ble Commission vide order dated 11.9.2008 in Petition No. 129/2005 (suo-motu) directed as under:

"12. .... Recently, the CPSUs have furnished to the Commission past data of O&M expenses. On analysis of the data it has been found that the application filing fee constitutes less than 0.5% of the actual O&M expenses. The proportion of the application filing fee will be infinitesimally small when compared to overall tariff for the generating station or the transmission system. Year-wise, escalation being allowed in whole lot of O&M expenses seems to take care of the enhanced application filing fee."

xxxx

"14 In the light of above analysis, we decline the claim of the CPSUs to allow reimbursement of expenditure on the application filing fee. This decision will, however, not be quoted as a precedent for any decision on similar issue arising in future." Further, NHPC has claimed this amount of filing fees under O&M expenses during 2005-06 in Form-15B of the petition. Regulation 42 deals with the filing fees paid for the tariff period 2009-14, not for filing fees of previous tariff period 2004-09."

42. The submissions of the petitioner have been examined. The norms of O&M expenses under sub-clauses (i) to (iii) of Regulation 19(f) of the 2009 Tariff Regulations is based on the actual O&M expenses for the period 2003-04 to 2007-08. Admittedly, the Commission by its order dated 11.9.2008 in Petition No.

129/2005 (*suo motu*) had rejected the claim of the petitioner for reimbursement of filing fees for 2004-09 by observing that the year-wise escalation allowed in O&M expenses has taken care of the enhanced application filing fee. Since the filing fee of ₹25.00 lakh claimed during 2004-09 has not been allowed to be reimbursed in terms of the decision contained in order dated 11.9.2008, the said expenditure has not been considered for the purpose of normalization of O&M expenses for the period 2009-14. Moreover, separate provision has been made by the Commission for reimbursement of expenditure for filing fees during the period 2009-14 under Regulation 42 of the 2009 Tariff Regulations. The expenditure on filing fees for the years 2009-10 and 2010-11 incurred by the petitioner has been allowed to be recovered from the beneficiaries in terms of paragraph 84 of the order dated 12.7.2011. Since filing fee cannot form part of the O&M expenses, there is no reason why the actual expenditure during the previous tariff period should be considered for fixing the norms of O&M expenses. In view of this, there is no error apparent on the face of the record and accordingly, review on this count fails.

#### **Other Expenses (Specific/administrative items)**

43. The petitioner has submitted that the Commission in paragraph 65 of order dated 12.7.2011 had not allowed the expenditure on account of loss on sale of fixed assets and stores (written-off) for 2006-07 and 2007-08. The petitioner in its original petition had submitted as under:

“(i) Technical books worth ₹0.96 lakh were purchased for conducting various training programmes due to urgent requirement of Hydro Power Training Institute Khairi.

(ii) Assets had been survey-off as they had outlived its life and were beyond economical repair and all the survey of assets were reinstated at Net Realizable Value as per Corporate Policy resulting into increase in loss on assets retired from active use.



(iii) Other general expenses is increased mainly due to training expenses of ₹28 lakh on account of specialized training on Vibro system & PD analyzer of generating units, increase in payment to KVS by ₹7 lakh, Community Development Expenses by ₹21 lakh due to introduction of new policy and other expenses etc.”

44. In justification of its claim, the petitioner has now submitted as under:

“The Hon’ble Commission had not allowed the expenditure on account of loss on sale of fixed assets and stores (written off). However, the petitioner has already put its justification for 2006-07 & 2007-08 for increase in the expenses under the head. The justification already given for increase in expenditure under this head is reproduced hereunder:

**2006-07**

“Purchase of technical books worth ₹0.99 lakh for conducting various training programme as per the requirement of HPTI, Khairi, Chamera-I, increase in training expenses of ₹28 lakh on account of specialized training on Vibro system & PD analyzer of generating units, increase in payment of KVS by ₹7.0 lakh and increase in Community Development expenses by ₹21 lakh due to introduction of new policy.

**2007-08**

“The increase is on account of accounting of yearly taxes of power station vehicles paid to state authorities under Rates and Taxes Vehicles, which were earlier booked under R&M vehicles, Consumption of computer cartages & stationary used for generation of various documents required as per the norms of OHSAS/ISO Certificate etc., ₹3.10 lakh paid as consultancy charges for OHSAS/ISO Certificate & the expenditure for arbitration fees as per advice received from Corporate Office.

In view of the above approach of CERC adopted in tariff order 12.7.2011 and the justification of the petitioner, the revised claim under “other expenses (Specific/administrative items)” during 2006-07 & 2007-08 are ₹210.62 lakh & ₹322.75 lakh respectively. The Hon’ble Commission is requested to kindly allow these expenditures.”

45. We have considered the submissions of the petitioner. From the details of the expenditure indicated during 2006-07, it is observed that the petitioner has not been able to establish that the listed expenditure is of recurring nature. Specialized training, purchase of books etc. shall be managed within permissible limit of 20% increase. Further, during 2007-08, the petitioner has only quantified ₹3.10 lakh (out of its revised claim of ₹322.75 lakh) which too cannot be termed of recurring nature. As such, we do not find any reason to allow any further expenditure over and above

already allowed expenditure with 20% increase under the head of 'other expenses'. Hence, there is no error apparent on the face of the record. Also, the petitioner has not shown the existence of any sufficient reason for review of the said order on this count. In view of this, submissions of the petitioner are rejected and consequently, review of order on this count fails.

### **Corporate & Regional office expenses**

46. The O&M expenses allowed during the period 2003-08 for calculation of O&M expenses for the period 2009-14, in paragraph 68 of the order dated 12.7.2011 are as under:

(₹ in lakh)						
Sl. no.		2003-04	2004-05	2005-06	2006-07	2007-08
	<b>Breakup of O &amp; M expenses</b>					
1	Consumption of Stores and Spares	97.57	117.08	140.50	168.60	471.79
2	Repair and Maintenance	765.81	889.63	788.45	813.90	976.68
3	Insurance (including Self Insurance)	1056.09	1054.11	1056.39	1059.94	1062.84
4	Security	68.51	82.97	86.84	106.23	164.95
5	Administrative Expenses	332.48	311.18	349.32	258.36	303.61
6	Employee Cost	2788.50	2956.78	3038.36	3270.40	3006.72
7	Loss of stores	0.00	0.00	0.00	0.00	0.00
8	Provisions	0.00	0.00	0.00	0.00	0.00
9	Corporate & Regional office expenses allocation other than employee cost	76.20	69.30	78.92	66.38	71.00
10	Other items	112.98	135.58	165.97	187.94	187.94
11	<b>Total (1 to 10)</b>	<b>5221.94</b>	<b>6239.47</b>	<b>5776.22</b>	<b>6169.60</b>	<b>6203.17</b>
12	Revenue/Recoveries, if any	108.38	63.45	94.56	152.78	84.80
13	<b>Net O&amp;M expenses</b>	<b>5113.56</b>	<b>5483.88</b>	<b>5531.27</b>	<b>5712.59</b>	<b>6089.73</b>

47. The petitioner has submitted that the expenses indicated in Sl. No. 9 of the above table, in respect of 'Corporate and Regional office expenses allocation other than employee cost' has not been considered while computing the total expenses (Sl. No. 1 to 10) arrived at in Sl. No.11 of the table. It has also submitted that the expenses in respect of "Other items" in Sl. No. 10 of the table do not match the

figures allowed in respect of 'Other expenses' in the table under paragraph 67 of the order dated 12.7.2011.

48. We have examined this issue. It is found that clerical errors had occurred in the calculation of total expenses at Sl. No.11 of the table under paragraph 68 of the order dated 12.7.2011, as pointed out by the petitioner. However, in view of the fact that the O&M expenditure is being revised based on the deliberations above, this inadvertent errors would get rectified.

**Methodology of 20% restriction of expenses**

49. The petitioner in this application has objected to the methodology adopted by the Commission, by restricting the increase in expenses of a particular year to 20% of the expenses of the previous year. According to the petitioner, in some cases, the original claim was well within 120% of previous year expenses and therefore following the prescribed footnote under Form-15B, justification was not given. However, due to reduction of previous year expenses by the Commission, the increase in expenses of subsequent years becomes more. Therefore, in the absence of proper justification, Commission has again restricted the incremental increase to 20% of the previous year and in this manner all future expenses have been restricted.

50. We have considered the submissions of the petitioner. As per Appendix-II to Form-15 B to the petition, the annual increase in O&M expenses under a given head in excess of 20% should be explained by the petitioner with proper justification. While normalizing the O&M expenses, the abnormal expenses are to be excluded. It is not correct to assume that normal O&M expenses would increase by more than

20% every year and during the end of the five year period (2003-04 to 2007-08) these expenses would become 2.4 times the normal expenses. Normal O&M expenses would remain more or less constant, except on account of impact of inflation and other escalation factors. For the purpose of normalization of O&M expenses, based on prudence check, the abnormal increase in O&M expenses are either excluded or restricted to 20% increase (of the previous year) based on the justification submitted by the petitioner. If no justification for any increase is submitted by the petitioner the expenses are restricted on prudence check. In view of this, there is no error apparent on the face of the record and the submission of the petitioner for reconsideration of the issue is rejected.

51. Based on the discussions in the foregoing paragraphs, the revised O&M expenses considered for the period 2003-04 to 2004-09, for calculation of O&M expenses for 2009-14 is given under:

(₹ in lakh)						
Sl. No.		2003-04	2004-05	2005-06	2006-07	2007-08
1	2	3	4	5	6	7
<b>(A)</b>	<b>Breakup of O &amp; M expenses</b>					
1	Consumption of Stores and Spares	97.57	117.08	290.89	196.83	471.79
2	Repair and Maintenance	765.82	889.63	788.45	912.90	1005.32
3	Insurance (Including Self Insurance)	1056.09	1054.11	1056.39	1059.94	1062.84
4	Security	68.51	82.97	86.84	106.23	164.95
<b>5</b>	<b>Administrative Expenses</b>	<b>332.48</b>	<b>311.18</b>	<b>349.32</b>	<b>258.36</b>	<b>303.61</b>
<b>6</b>	<b>Employee Cost</b>					
a(i)	Salaries, wages and allowances (Project)	2083.24	2161.00	2277.60	2284.08	1997.73
a(ii)	Salaries, wages and allowances (Allocation of Corporate Office Expenses)	168.75	182.88	196.9	192.22	191.03
	Salaries, wages and allowances (Allocation of RO Office Expenses)	0.00	0.00	87.43	77.06	90.49



a(iii)	Salaries, wages and allowances (CISF / Kendriya Vidyalaya)	215.30	230.87	234.59	258.52	359.29
b	Staff Welfare expenses	321.21	382.03	41.84	458.52	368.18
c	Productivity linked incentives	0.00	0.00	0.00	0.00	0.00
d	Expenditure on VRS	0.00	0.00	0.00	0.00	0.00
e	Ex-gratia	0.00	0.00	0.00	0.00	0.00
	<b>Sub-Total (Employee Cost) 6(a) to 6(e)</b>	<b>2788.50</b>	<b>2956.78</b>	<b>3038.36</b>	<b>3270.40</b>	<b>3006.72</b>
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	76.20	69.30	64.27	56.38	57.32
10	Regional office expenses allocation	0.00	00.00	14.65	10.00	13.68
11	<b>Other Items</b>	<b>95.57</b>	<b>112.98</b>	<b>135.57</b>	<b>165.97</b>	<b>187.94</b>
12	<b>Total (1 to 10)</b>	<b>5280.73</b>	<b>5594.03</b>	<b>5824.74</b>	<b>6037.01</b>	<b>6274.17</b>
13	<b>Revenue/Recoveries, if any</b>	<b>108.38</b>	<b>63.45</b>	<b>94.56</b>	<b>152.78</b>	<b>84.80</b>
14	<b>Net expenses</b>	<b>5172.35</b>	<b>5530.58</b>	<b>5730.18</b>	<b>5884.23</b>	<b>6189.37</b>

52. The average employee cost works out to 52.92% of the average O&M cost as per the following calculation prescribed in 2009 Tariff Regulations.

	(₹ in lakh)					
	2003-04	2004-05	2005-06	2006-07	2007-08	Average normalized at 2007-08 price level
Employee cost (Considered)	2788.50	2956.78	3038.36	3270.40	3006.72	
Average normalized Employee cost at 2007-08 price level	3411.44	3439.49	3360.65	3439.48	3006.72	3331.56
O&M Expense (Considered)	5172.35	5530.58	5730.18	5884.23	6189.37	
Average normalized O&M at 2007-08 price level	6327.84	6433.49	6338.00	6188.44	6189.37	6295.43
	$p1 = (P1) \times (Esc)^4$	$p2 = (P2) \times (Esc)^3$	$p3 = (P3) \times (Esc)^2$	$p4 = (P4) \times (Esc)^1$	$p5 = (P5)$	
Escalation rate (Esc)%	5.17	5.17	5.17	5.17	5.17	
Percentage of employee cost $(3331.56/6295.43*100)$						<b>52.92 %</b>

53. The year-wise O&M expenses for the generating station for the period 2009-14 have been arrived at after applying escalation @5.72% from 2008-09 and 50% increase of employee cost by considering the percentage of averaged normalized employee cost. Accordingly, the O&M expenses allowed are revised as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
O&M Expenses allowed	8898.02	9406.98	9945.06	10513.92	11115.31

54. Thus, the issues raised by the petitioner in this application, is disposed of in terms of the above. Based on this, the annual fixed charges determined by order dated 12.7.2011 is revised, as under:

55. As stated, the capital cost allowed in our order dated 12.7.2011 do not undergo any change.

56. Return on Equity in order dated 12.7.2011 is revised as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional Equity	61722.77	61878.32	62056.69	62278.20	62358.20
Additional capitalization	155.55	178.37	221.51	80.00	(-) 101.94
Closing Equity	61878.32	62056.69	62278.20	62358.20	62256.25
Average Equity	61800.55	61967.51	62167.44	62318.20	62307.22
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
MAT rate for the year 2008-09	11.330%	15.500%	15.500%	15.500%	15.500%
Rate of Return on Equity	17.481%	17.481%	17.481%	17.481%	17.481%
<b>Return on Equity</b>	10803.35	10832.54	10867.49	10893.84	10891.93

57. Depreciation in order dated 12.7.2011 has been revised as under:

(₹ in lakh)

	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Gross block as on 31.3.2009	203272.04	203790.55	204385.10	205123.47	205390.13
Additional capital expenditure during 2009-14	518.51	594.56	738.37	266.65	(-) 339.81
Closing gross block	<b>203790.55</b>	<b>204385.10</b>	<b>205123.47</b>	<b>205390.13</b>	<b>205050.31</b>
Average gross block	<b>203531.29</b>	<b>204087.82</b>	<b>204754.29</b>	<b>205256.80</b>	<b>205220.22</b>
Depreciable value	180923.80	181424.68	182024.49	182476.75	182443.83
Balance useful life of the asset	20.1	19.1	18.1	17.1	16.1
Remaining Depreciable value	81938.30	78405.66	75092.80	71432.88	67250.14
<b>Depreciation</b>	<b>4079.90</b>	<b>4108.58</b>	<b>4152.58</b>	<b>4181.42</b>	<b>4181.34</b>

58. Interest on working capital in order dated 12.7.2011 is revised as under:

(₹ in lakh)

	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Maintenance Spares	1334.70	1411.05	1491.76	1577.09	1667.30
O & M expenses	741.50	783.92	828.76	876.16	926.28
Receivables	4089.43	4188.34	4295.94	4404.88	4509.79
Total	6165.63	6383.30	6616.46	6858.13	7103.36
<b>Interest on Working Capital</b>	<b>755.29</b>	<b>781.95</b>	<b>810.52</b>	<b>840.12</b>	<b>870.16</b>

### Annual Fixed Charges

59. Based on the above, the annual fixed charges approved for the period 2009-14 by order dated 12.7.2011 in Petition No. 84/2010 stands revised as under:

(₹ in lakh)

	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Return on Equity	10803.35	10832.54	10867.49	10893.84	10891.93
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Depreciation	4079.90	4108.58	4152.58	4181.42	4181.34
Interest on Working Capital	755.29	781.95	810.52	840.12	870.16
O & M Expenses	8898.02	9406.98	9945.06	10513.92	11115.31
<b>Total</b>	<b>24536.57</b>	<b>25130.05</b>	<b>25775.65</b>	<b>26429.31</b>	<b>27058.74</b>

60. The petitioner shall claim the difference in respect of the tariff determined by order dated 12.7.2011 and the tariff determined by this order from the beneficiaries



in six equal monthly installments, in terms of the proviso to Regulation 5(3) of the 2009 Tariff Regulations.

61. Except the above, all other terms contained in the order dated 12.7.2011 remains unchanged.

62. Review Petition No. 18/2011 is disposed of as above.

**Sd/-**  
**[V. S. Verma]**  
**Member**

**Sd/-**  
**[S. Jayaraman]**  
**Member**

