CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No.273/GT/2012

Coram: Shri V.S.Verma, Member Shri M.Deena Dayalan, Member

Date of Hearing: 2.4.2013 Date of Order: 7.8.2013

In the matter of

Determination of generation tariff of Tilaiya Hydel Power Station (4 MW) for the period from 1.4.2009 to 31.3.2014.

And in the matter of

Damodar Valley Corporation, Kolkata

.....Petitioner

Vs

- 1. West Bengal State Electricity Distribution Company Ltd, Kolkata
- 2. Jharkhand State Electricity Board, Ranchi

....Respondents

Parties present:

Shri M.G.Ramachandran, Advocate, DVC Ms. Swagatika Sahoo, Advocate, DVC

Shri P.Jena, DVC

Shri D.K.Aich, DVC

Shri P.Bhattacharya, DVC

Shri A. Biswas, DVC

Shri R.B.Sharma, Advocate, JSEB

Ms. Sugandha Somani, Advocate, Jai Balaji Industries Ltd

Shri Rajiv Shankar Dwivedi, Advocate, SAIL-BSL

Ms. Tulika Mukherji, Advocate, SAIL-BSL

Shri Sunil Kumar, Sr. Advocate, Impex Ferro Alloys Ltd

Shri Sagar Bandhopadhyay, Advocate

Shri Tapas Saha, Advocate

Shri Hiren Dasan, Advocate

Shri M.Prahladka, BSAL

ORDER

This petition has been filed by the petitioner, Damodar Valley Corporation (DVC) for determination of generation tariff in respect of Tilaiya Hydel Power Station (4 MW) (hereinafter called 'the generating station') for the period 1.4.2009 to 31.3.2014 based on the provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff)

Regulations, 2009 ('the 2009 Tariff Regulations') and in compliance with the directions contained in the order of the Commission dated 23.6.2011 in Petition No. 240/2009.

- 2. The petitioner is a statutory body established by the Central Government under the Damodar Valley Corporation Act, 1948 (hereinafter referred to as the 'DVC Act') for the development of the Damodar Valley, with three participating Governments, namely, the Central Government, the Government of West Bengal and the Government of Jharkhand.
- 3. The generating station with an installed capacity of 4 MW comprises of 2 units of 2 MW each and the date of commercial operation (COD) of the units of the generating station is as under:

Unit-I	February, 1953
Unit-II	August, 1953

Background

- 4. Petition No. 66/2005 was filed by the petitioner for approval of the revenue requirements and for determining the tariff for electricity related activities, that is, the generation, transmission and distribution of electricity, undertaken by it for the period from 1.4.2004 to 31.3.2009. The Commission by its order dated 3.10.2006 had determined tariff in respect of the generating stations and inter-state transmission systems of the petitioner, after allowing a special dispensation to the petitioner to continue with the prevailing tariff till 31.3.2006.
- 5. Against the Commission's order dated 3.10.2006, the petitioner filed Appeal No.273/2006 before the Appellate Tribunal for Electricity (hereinafter referred to as "the Tribunal") on various issues. Similarly, appeals were also filed before the Tribunal by some of the objectors/consumers, namely, Maithon Alloys Ltd and others (Appeal No.271/2006), Bhaskhar Shrachi Alloys Ltd and others (Appeal No 272/2006), State of Jharkhand (Appeal No.275/2006) and the West Bengal State Electricity Regulatory Commission (Appeal No.8/2007) challenging the order of the Commission dated 3.10.2006 on various grounds.

The Tribunal by its judgment dated 23.11.2007 disposed of the said appeals by remanding the matter to the Commission for *de novo* consideration of the tariff order dated 3.10.2006, in terms of the findings and observations made therein and in accordance with law.

- 6. Against the judgment dated 23.11.2007, some of the parties namely, the Central Commission (Civil Appeal No.4289/2008), the West Bengal State Electricity Regulatory Commission (Civil Appeal No.804/2008), M/s Bhaskhar Shrachi Alloys Ltd & ors (Civil Appeal No 971-973/2008), State of Jharkhand (Civil Appeal No.4504-4508/2008) and the State of West Bengal (Civil Appeal No.1914/2008) filed Civil Appeals before the Hon'ble Supreme Court, and the same are pending as on date. Thereafter, in terms of the directions contained in the judgment of the Tribunal dated 23.11.2007 in Appeal No.273/2006 and other connected appeals, Petition No. 66/2005 was heard and tariff of the generation and inter-state transmission systems of the petitioner for the period 2006-09 was re-determined by order dated 6.8.2009, subject to the final outcome of the said Civil Appeals pending before the Hon'ble Supreme Court. Against the Commission's order dated 6.8.2009, the petitioner filed Appeal (Appeal No.146/2009) before the Tribunal on various issues, including the question of non-consideration of the different elements for tariff.
- 7. The petitioner had filed Petition No. 240/2009 during October, 2009 for determination of generation and inter-state transmission tariff by the Commission in respect of the generating stations and transmission systems/other assets of the petitioner for the period 1.4.2009 to 31.3.2014 (except for Mejia TPS, Unit Nos V and VI), without considering the additional capital expenditure during 2009-14. Thereafter, by affidavit dated 12.2.2010, the petitioner revised the tariff filing forms taking into consideration the proposed additional capital expenditure for the period 2009-14. The petitioner also published the tariff petition in accordance with Regulation 3(6) of the CERC (Procedure for making of application for determination of tariff, publication of application and other related matters) Regulations, 2004 and had also served copies of the tariff petition on the respondents/HT consumers.

- 8. Meanwhile, the Tribunal by its judgment dated 10.5.2010 in Appeal No.146/2009 rejected the prayers of the petitioner and upheld the order of the Commission dated 6.8.2009 in Petition No. 66/2005. Against the judgment of the Tribunal dated 10.5.2010, the petitioner filed appeal (Civil Appeal No.4881/2010) before the Hon'ble Supreme Court and the Court by its interim order dated 9.7.2010 has stayed the directions of the Tribunal for refund of excess amount billed, until further orders. The Civil Appeals filed by the parties as aforesaid against the judgments of the Tribunal dated 23.11.2007 and 10.5.2010 has been admitted by the Hon'ble Supreme Court and is pending.
- 9. Pursuant to the above, the petitioner filed Petition No. 272/2010 for determination of deferred elements of tariff for generation and inter-State transmission systems of the petitioner for the period 1.4.2006 to 31.3.2009 (excepting Mejia TPS, Unit Nos. V and VI), in terms of the provisions of the 2004 Tariff Regulations and the judgment dated 13.6.2007 of the Tribunal.
- 10. While so, in Petition No. 240/2009 filed by the petitioner for approval of tariff for 2009-14 in respect of the generating and transmission systems/other assets of the petitioner (except for Mejia TPS, Unit Nos. V and VI), the Commission in exercise of its power under Clause 4 of Regulation 5 of the 2009 Tariff Regulations granted provisional tariff for the period 2009-14 by its order dated 23.6.2011, pending determination of the final tariff. Against the order dated 23.6.2011, some of the HT consumers of the petitioner in the States of West Bengal and Jharkhand, filed several Writ Petitions before the Hon'ble High Court of Calcutta (W. P. No.15077 (W) of 2011 [(Jai Balaji Industries Ltd-v-UOI & ors) with 46 connected petitions)[and Hon'ble High Court of Jharkhand [(W.P (C) No. 4097 of 2011 (Gautam Ferro Alloys-v-UOI & ors) with 48 connected petitions)], challenging amongst others, the constitutional validity of Regulation 5(4) of the 2009 Tariff Regulations and the provisional tariff order dated 23.6.2011.

- 11. During the pendency of the above writ petitions before the High Courts of Calcutta and Jharkhand, the petitioner, in terms of the direction contained in the order of the Commission dated 23.6.2011 in Petition No. 240/2009, filed separate petitions for determination of tariff in respect of its generation stations and inter-state transmission systems for the period 2009-14 (except for Mejia TPS, Unit Nos.V and VI) including the tariff petition for the instant generating station on 19.10.2011.
- 12. Thereafter, the High Court of Jharkhand by its judgment dated 23.3.2012 in W.P. 4097/2011 upheld the Constitutional validity of Regulation 5(4) of the 2009 Tariff Regulations and the provisional tariff order dated 23.6.2011 and the High Court of Calcutta by its judgment dated 7.12.2012 in W.P. No.15077/2011 and others, declared Regulation 5(4) of the 2009 Tariff Regulations as *ultra vires* the Constitution and the Electricity Act, 2003 and set aside the same along with the provisional tariff order dated 23.6.2011. Against the judgment of the High Court of Jharkhand, some of the HT Consumers/objectors have filed SLPs [(SLP (c) 10945/2012 (GFL-v-UOI & ors) and other connected petitions] before the Hon'ble Supreme Court of India. Similarly, against the judgment of the High Court of Calcutta, SLPs have been filed by this Commission in SLP(c) No.12929-12961/2013 (CERC-v-BSAL & ors) and the petitioner, DVC in SLP (C) No 13167-13212/2013 before the Hon'ble Supreme Court and the same are pending.
- 13. Thereafter, the Commission by its order dated 8.5.2013 in Petition No.272/2010, determined the deferred elements of tariff for generation and inter-State transmission systems of the petitioner, which included the instant generating station, for the period 1.4.2006 to 31.3.2009. The annual fixed charges determined by the Commission for this generating station for the period 2006-09 by the said order is as under:

			(₹in lakh)
	2006-07	2007-08	2008-09
Depreciation	6.25	6.25	6.32
Interest on Loan	0.00	0.00	0.00
Return on Equity	17.95	17.96	18.07
Interest on Working Capital	8.90	9.23	9.62
O & M Expenses	314.00	326.00	340.00

Sub-Total	347.11	359.45	374.01
Additional Charges on account of ROE, IOL,	0.42	0.40	0.38
Depreciation of Direction/Central/other offices			
and subsidiary activities			
Grand Total	347.53	359.85	374.39

14. The annual fixed charges claimed by the petitioner in respect of this generating station for the period 2009-14 based on the capital cost of ₹5076.78 lakh as on 1.4.2009 is as under:

					(₹in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	7.00	7.05	7.53	7.96	7.96
Interest on Loan	9.12	8.31	8.96	8.35	2.71
Return on Equity	25.65	26.70	27.89	28.94	28.94
Interest on working capital	28.77	30.44	32.28	34.07	35.89
O & M expenses	534.77	565.36	597.70	631.88	668.03
Total	605.30	637.86	674.35	711.20	743.53
Share of Other office					
expenditure	1.55	1.86	2.31	2.48	2.04
Share of Additional claims	53.42	59.70	67.56	70.60	76.89
Total	660.27	699.41	744.23	784.28	822.46

- 15. The petitioner vide its affidavits dated 25.4.2012 and 22.2.2013 has filed additional information/submissions in compliance with the directions of the Commission. The petitioner has also served copies of the additional submissions on the respondents/HT consumers. The instant petition along with the tariff petitions in respect of other generating stations and transmission system of the petitioner for 2009-14 were clubbed and heard by the Commission on 5.2.2013, 21.3.2013 and 2.4.2013 respectively and orders were reserved.
- 16. Reply to the petition has been filed by the Respondent, JSEB. Objections have also been filed by the Objectors, namely, Maithon Alloys Ltd (MAL), Jai Balaji Industries, Impex Ferro Tech Ltd, Bhaskar Shrachi Alloys Ltd (BSAL), M/s SAIL-BSL, K.B. Sponge & Iron Ltd, BRGD Inputs Pvt. Ltd, Shree Waris Piya Steel Co Pvt. Ltd, Mark Steel Ltd, Maan Steel & Power Ltd, Rattan Ispat Pvt. Ltd, BDG Metal & Power Ltd, Impex Steel Ltd, Hira Concast Ltd, Alishan Steel Pvt. Ltd, VSP Udyog Pvt. Ltd, SRC Vyapaar Pvt. Ltd and Association of DVC HT Consumers of Jharkhand. The petitioner has also filed its rejoinder to the above

replies. During the hearing on 21.3.2013, the submissions of the objector, Maithon Alloys Ltd were adopted by other objectors namely, Jai Balaji Industries Ltd and BSAL.

17. Taking into consideration the submissions of the parties and the documents available on record including the submissions of the parties in Petition No. 240/2009, we now proceed to consider the claims of the petitioner and determine the annual fixed charges in respect of this generating station for the period 2009-14, subject to the final outcome of the SLPs pending before the Hon'ble Supreme Court, as discussed in the subsequent paragraphs.

Capital Cost

- 18. Regulation 7 (1) (a) of the 2009 Tariff Regulations provides as under:
 - "7. Capital Cost. (1) Capital cost for a project shall include: (a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;"
- 19. The last proviso to Regulation 7 of the 2009 Tariff Regulations, as amended on 21.6.2011 provides as under:

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

20. The Commission vide its order dated 8.5.2013 in Petition No.272/2010 revised the annual fixed charges of the generating station for the period 2006-09 based on the capital cost of ₹263.80 lakh as on 31.3.2009. Accordingly, the capital cost as on 31.3.2009 will be considered as the opening capital cost as on 1.4.2009.

Additional Capital expenditure during 2009-14

21. Regulation 9 of the 2009 Tariff Regulations, as amended on 21.6.2011 and 31.12.2012, provides as under:

- "9. **Additional Capitalisation.** (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) Un-discharged 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;
- (iii) 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, un-discharged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff.

- (2) The capital expenditure incurred or projected to be 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.
- (vi) In case of gas/liquid fuel based open/ combined cycle thermal generating stations, any expenditure which has become necessary on renovation of gas turbines after 15 year of operation from its COD and the expenditure necessary due to obsolescence or nonavailability of spares for successful and efficient operation of the stations.
 - Provided that any expenditure included in the R&M on consumables and cost of components and spares which is generally covered in the O&M expenses during the major overhaul of gas turbine shall be suitably deducted after due prudence from the R&M expenditure to be allowed.
- (vii) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receipt system arising due to non-materialisation of full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station.

- (viii) Any un-discharged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date, after prudence check of the details of such deferred liability, total estimated cost of package, reason for such withholding of payment and release of such payments etc.
- (ix) Expenditure on account of creation of infrastructure for supply of reliable power to rural households within a radius of five kilometres of the power station if, the generating company does not intend to meet such expenditure as part of its Corporate Social Responsibility."

Additional Capital Expenditure claimed for the period 2009-14

22. The actual/projected additional capital expenditure claimed by the petitioner for the period 2009-14 is as under:

					(₹.	in lakh)
	2009-10 (actual)	2010-11 (actual)	2011-12	2012-13	2013-14	Total
Additional capital expenditure claimed	4.88	0.00	36.00	0.00	0.00	40.88

23. After examining the asset-wise details and justification submitted by the petitioner, the replies and rejoinders filed by the parties, and on prudence check, the admissibility of the additional capital expenditure claimed by the petitioner under various categories is discussed as under:

Actual Additional Capital Expenditure

24. The year-wise and asset-wise details of the actual additional capital expenditure claimed by the petitioner for the years 2009-10 and 2010-11 is discussed in the subsequent paragraphs.

2009-10

25. The additional capital expenditure claimed and the justification for the expenditure (on power plant) is as under:

			(₹in lakh)
	Details	Details	Amount
Power House plant	Transformer	Used in colony electric supply	3.55
and Machinery		system, new set up	
Other assets (Minor	Bench desk	-	1.33
assets)	and Godrej		
	chairs for		
	High School		
	Total		4.88

26. The claim of the petitioner for capitalization of ₹3.55 lakh towards replacement of an old transformer for electricity supply in the project colony has been allowed under Regulation 9(2) (iv) of the 2009 Tariff Regulations for benefits of employees and their families. Further, the claim of the petitioner towards capitalization of expenditure of ₹1.33 lakh towards minor assets like Bench, desk and Godrej chairs for High School, which has been indicated as undischarged liability during 2009-10, but discharged during 2010-11 has not been allowed since capitalization of minor assets brought after the cut-off date is not permissible under the provisions of Regulation 9(2) of the 2009 Tariff Regulations. Accordingly, the total expenditure of ₹3.55 lakh has been allowed to be capitalized during 2009-10.

2010-11

27. The petitioner has claimed capitalization of expenditure of ₹1.33 lakh towards discharge of liability created during 2009-10 in respect of minor assets, as stated above. As assets of minor nature have not been allowed to be capitalized, the expenditure claimed has not been allowed.

<u>2011-12</u>

- 28. The petitioner has claimed capitalization of expenditure of ₹36.00 lakh towards replacement of old 33/11kV outdoor/ indoor Breakers, CTs, Relays, etc., which have outlived their useful life and has submitted that these assets are required to be replaced for the purpose of safety and up-gradation of technology. In view of the submissions, the capitalization of expenditure on these assets has been allowed under Regulation 9(2) (iv) of the 2009 Tariff Regulations along with de-capitalization of ₹3.60 lakh (10% of the gross value of new asset). Accordingly, the net expenditure of ₹32.40 lakh has been allowed to be capitalized during 2011-12.
- 29. The petitioner has not claimed any additional capital expenditure for the years 2012-13 and 2013-14.

Additional capitalization for 2009-14

30. Based on the prudence check, the additional capital expenditure allowed for the period 2009-14 is as under:

	(₹in lakh)
Year	Amount
2009-10	3.55
2010-11	0.00
2011-12	32.40
2012-13	0.00
2013-14	0.00

Capital Cost for 2009-14

31. Accordingly, the capital cost considered for the purpose of tariff for different years of the period 2009-14 is as under:

					(₹in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital cost	263.80	267.35	267.35	299.75	299.75
Additional capital expenditure allowed	3.55	0.00	32.40	0.00	0.00
Closing Capital cost	267.35	267.35	299.75	299.75	299.75
Average Capital cost	265.58	267.35	283.55	299.75	299.75

Debt-Equity Ratio

- 32. Regulation 12 of the 2009 Tariff 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.

33. Accordingly, gross loan and equity amounting to ₹133.96 lakh and ₹129.83 lakh respectively as approved vide order dated 8.5.2013 in Petition No.272/2010 has been considered as the gross loan and equity as on 1.4.2009. Further, the additional expenditure approved as above has been allocated in debt-equity ratio of 70:30 and the same is subject to truing-up in line with Regulation 6 of the 2009 Tariff Regulations.

Return on Equity

- 34. Regulation 15 of the 2009 Tariff Regulations, as amended on 21.6.2011, provides that:
 - (1) Return on equity shall be computed in rupee terms on the equity base determined in accordance with regulation 12.
 - (2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation.

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

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

- (3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09 as per the Income Tax Act 1961 as applicable to the concerned generating company or the transmission licensee as the case may be.
- (4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

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

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

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

Provided further that Annual Fixed Charge with respect to 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 in accordance with Regulation 6 of these regulations.

35. Accordingly, Return on Equity has been worked out after accounting for the approved additional capital expenditure, as under:

(₹in lak	h)
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	2009-10	2010-11	2011-12	2012-13	2013-14
Notional Equity- Opening	129.83	130.90	130.90	140.62	140.62
Addition of Equity due to Additional	1.07	0.00	9.72	0.00	0.00
Capital Expenditure					
Normative Equity-Closing	130.90	130.90	140.62	140.62	140.62
Average Normative Equity	130.36	130.90	135.76	140.62	140.62
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%

Tax Rate for the year 2008-09	16.995%	19.931%	20.008%	20.008%	20.008%
Rate of Return on Equity (Pre Tax)	18.674%	19.358%	19.377%	19.377%	19.377%
Return on Equity (Pre Tax)-	24.34	25.34	26.31	27.25	27.25
(annualised)					

Interest on Loan

- 36. Regulation 16 of the 2009 Tariff Regulations provides that:
 - "(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 <u>actual loan portfolio</u> 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.

- 37. The interest on loan has been worked out as under:
 - (a) As stated, the gross normative loan of ₹133.96 lakh has been considered as on 1.4.2009.

- (b) Cumulative repayment as on 31.3.2009 works out to ₹133.96 lakh as per order dated 8.5.2013 in Petition No.272/2010. The same has been considered as cumulative repayment as on 1.4.2009.
- (c) Accordingly, the net normative opening loan as on 1.4.2009 works out as 'nil'.
- (d) Addition to normative loan to the tune of 70% of admissible additional capital expenditure has been considered on year to year basis.
- (e)Depreciation allowed has been considered as repayment of normative loan during the respective year of the tariff period 2009-14. Further proportionate adjustment has been made to the repayments corresponding to discharges of liabilities considered during the respective years on account of cumulative repayment adjusted as on 1.4.2009. Also, proportionate adjustment has been made to the repayments on account of de-capitalization considered in the projected additional capital expenditure approved above.
- (f) The rate of interest has been calculated considering the actual loan portfolio.
- 38. The necessary calculation for interest on loan is as under:

					(₹in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross opening loan	133.96	136.45	136.45	159.13	159.13
Cumulative repayment of loan	133.96	136.45	136.45	141.07	148.62
up to previous year					
Net Loan Opening	0.00	0.00	0.00	18.06	10.51
Addition due to Additional	2.49	0.00	22.68	0.00	0.00
capitalisation					
Repayment of loan during	2.49	0.00	7.14	7.55	7.55
the year					
Less: Repayment adjustment					
on account of de-	0.00	0.00	2.52	0.00	0.00
capitalization					
Add: Repayment adjustment					
on account of discharges of	0.00	0.00	0.00	0.00	0.00
liabilities					
Net Repayment	2.49	0.00	4.62	7.55	7.55
Net Loan Closing	0.00	0.00	18.06	10.51	2.96
Average Loan	0.00	0.00	9.03	14.28	6.73
Weighted Average Rate of	8.8451%	8.8202%	8.6980%	8.6720%	8.7430%
Interest on Loan					
Interest on Loan	0.00	0.00	0.79	1.24	0.59

Depreciation

- 39. Regulation 17 of the 2009 Tariff 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."
- 40. The cumulative depreciation of ₹169.26 lakh as on 31.3.2009 as per order dated 8.5.2013 in Petition No.272/2010 has been considered. The rate of depreciation has been arrived by taking the weighted average of depreciation computed on the gross value of asset as on 31.3.2009 at the rates approved by C & AG and the same works out as 2.52% after accounting for the fixed assets of multipurpose dams Tilaiya & Konar. The total value of freehold land is ₹0.54 lakh. The rate of depreciation claimed by petitioner is 2.42% based on the composite weighted average depreciation rate as per Commission's order dated 6.8.2009 in Petition No. 66/2005, which is not in line with the 2009 Tariff Regulations and the judgment of the Tribunal dated 23.11.2007. The necessary calculations for depreciation are as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Opening capital cost	263.80	267.35	267.35	299.75	299.75
Closing capital cost	267.35	267.35	299.75	299.75	299.75
Average capital cost	265.58	267.35	283.55	299.75	299.75
Depreciable value @ 90%	238.53	240.13	254.71	269.29	269.29
Balance depreciable value	69.27	64.18	72.03	82.71	75.16
Depreciation (annualized)	6.69	6.73	7.14	7.55	7.55
Cumulative depreciation at the	175.95	182.68	189.83	194.14	201.69
end of the year					
Add: Cumulative depreciation adjustment on account of	0.00	0.00	0.00	0.00	0.00

discharges liabilities					
Less: Cumulative depreciation adjustment on account of decapitalization	0	0	3.24	0	0
Cumulative depreciation (at the end of the period)	175.95	182.68	186.59	194.14	201.69

Operation and Maintenance expenses

- 41. Sub-clauses (i), (ii) and (iii) of Clause (f) of Regulation 19 of the 2009 Tariff Regulations provides for Operation and Maintenance expenses in respect of the generating station 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 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 the 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. "
- 42. The petitioner has submitted the details of the actual O&M expenses for the period 2003-04 to 2007-08 in the formats specified under the 2009 Tariff Regulations and has submitted that the same is based on audited balance sheet. By letter dated 13.2.2013, the petitioner was directed to submit the O&M data for the period 2003-08, duly certified by auditor and the same has been submitted by the petitioner vide its affidavit dated 22.2.2013. The petitioner has claimed O&M expenses for the period 2009-14 as follows:

	(₹in lakh)
2009-10	534.77
2010-11	565.36
2011-12	597.70
2012-13	631.88
2013-14	668.03

43. Based on the directions, details of the O&M expenses have been submitted by the petitioner on 12.7.2013. It is noticed that O&M expenses (including share of dam) for the period 2003-08 as claimed by the petitioner is as under:

					(₹in lakh)
	2003-04	2004-05	2005-06	2006-07	2007-08
O&M Expenses	280.15	411.27	331.56	249.49	480.59

44. Out of this, the expenditure claimed under employee cost for the generating station is as under:

				((₹in lakh)
	2003-04	2004-05	2005-06	2006-07	2007-08
Employee cost	160.17	183.77	186.68	184.80	229.57

- 45. On prudence check of the above expenses, the expenses claimed on account of the following has been excluded for the purpose of normalization of expenses for 2003-08 to calculate the permissible O&M expenses for the period 2009-14.
 - (a) The expenses towards Bonus, productivity linked incentive, Ex-gratia payment, Festival advance, shall be met by the petitioner from its own resources and the beneficiaries cannot be burdened on this count. Hence, the same has not been allowed.
 - (b) Pension Fund and Leave encashment: In view of a separate provision made towards Pension fund and leave encashment towards contribution of pension, gratuity & leave encashment requirements of the existing employees during 2009-14, the same has been excluded for the purpose of normalization of O&M expenses for 2009-14.
- 46. Based on the above, the following year-wise amounts have not been allowed for the period 2003-08 for normalization for the purpose of calculation of O&M expenses for 2009-14 is as under:

				(₹i	n lakh)
	2003-04	2004-05	2005-06	2006-07	2007-08
O&M expenses	15.53	26.45	32.77	27.55	29.22
disallowed					

- 47. As regards the increase in O&M expenses (above 20%) over the previous years, the justification submitted by the petitioner is as under:
- (i) **Salary, wages and allowance:** Increase of revenue expenditure @32.7% in 2004-05 is due to increase @20% of the filed compensatory allowance and 72.5% in2007-08 is due to payment of incremental dearness allowance and annual increment to employees.

- (ii) **Repair & Maintenance(R&M)**: Increase of revenue expenditure @63.2% in 2007-08 over the year 2006-07 is due to payments for major Repair & Maintenance works of the generating station.
- (iii) **Staff welfare**: Increase of revenue expenditure @41.3% in 2005-06 and 212.5% in 2007-08 over the corresponding previous years is due to increase in medical treatment expenses.
- (iv) **Colony services**: Increase of revenue expenditure @52.6% in 2005-06, @51.2% in 2006-07 and @40.6% in 2007-08 over the corresponding previous years is due to major Repair & Maintenance works of staff colony residential buildings.
- (v) **Administrative expenses**: Increase of revenue expenditure @21.4% in 2004-05, @43.4% in 2006-07, and 26.9% in 2007-08 over the corresponding previous years is due to payment of general office expenses for cost of deployment of CISF.
- 48. On prudence check, the justification submitted by the petitioner on year to year variations in O&M expenses under different heads mentioned under O&M is found acceptable. The very idea of obtaining five year data is to capture such variations for arriving at the permissible O&M for tariff setting of 2009-14.
- 49. Based on the above discussions, the O&M expenses allowed for 2003-08 and considered for the purpose of normalization for calculation of O&M expenses for 2009-14 is as under:

				(₹ IN IAKN)
	2003-04	2004-05	2005-06	2006-07	2007-08
O&M Expenses claimed	280.15	411.27	331.56	249.49	480.59
Amount disallowed	15.53	26.45	32.77	27.55	29.22
O&M Expenses allowed for normalization	264.62	384.82	298.79	321.94	451.37
Employee cost included in above allowed O&M expenses	144.75	157.58	154.03	157.26	214.75

50. Based on the approved O&M expenses for the period 2003-08 as above for the purpose of normalization, the O&M expenses for the period 2009-14 have been worked out based on the methodology prescribed under the sub-clauses (i), (ii) and (iii) of Regulation 19(f) for the generating station of the petitioner and is allowed as under:

(₹in lakh)

Year	O&M Expenses allowed
2009-10	524.70
2010-11	554.71
2011-12	586.44
2012-13	619.98
2013-14	655.44

O&M expenses allowed for contribution to Pension, Gratuity & Leave encashment

51. As stated in para 45(b) above, the O&M expenses allowed for the period 2009-14 based on normalization of the O&M expenses for 2003-08 in terms of the provisos of the regulations, has been worked out after excluding the expenditure towards pension/gratuity fund and leave encashment incurred during the period 2003-08. As such, the O&M expenses allowed for the period 2009-14 does not contain any element of expenditure towards contribution for pension, gratuity and leave encashment of the existing employees of the petitioner. For the purpose of considering the recurring expenditure towards the contribution for pension, gratuity and leave encashment of the existing employees in O&M and for transfer of the same to the actuarial fund, a factor of 30.41% of the employee cost (Basic Pay+D.A.) had been considered by the Commission in its order dated 3.10.2006 in Petition No. 66/2005 pertaining to the period 2006-09. The relevant para of the said order is extracted as under:

"83. However, as a corollary to the creation of the Pension and Gratuity fund, there is a need to take out all pension, gratuity and leave encashment liabilities on cash basis from the normalized O&M. A provision of 30.41% of basic pay plus DA merged plus DA as contribution to the fund for the existing employees shall be provided in normalized O&M. Further, proportionate apportionment of depreciation on capital investment on central offices, director's offices and other offices and subsidiary activities amongst various generating stations and transmission system has been considered to be allowed additionally in O&M."

As observed in the said order, this factor of 30.41% has been considered in this order for inclusion of actuarial liability on account of contribution for pension, gratuity and leave encashment of existing employees for the period 2009-14. Accordingly, in terms of the provisions of Regulation 19(f) as stated above, the additional O&M expenses have been worked out for the period 2009-14 as under:

- (a) Average Basic Pay + D.A for the year 2007-08 based on the data for the period 2003-08= ₹152.87 lakh.
- (b) The above figure for the year 2007-08 has been escalated @ 5.72% per annum to arrive at the figure for the year 2009-10 (without salary hike), which is further escalated by 50% to account for the increase in the employee cost.

(₹in lakh)

Year		2007-08	2008-09	2009-10(without	2009-10
				salary hike)	(with salary hike of 50%)
Basic	Pay	152.87	152.87x1.0572	161.61x1.0572=	170.86x1.5.5=
+D.A			=161.61	170.86	256.29

- (c) Contribution for pension, gratuity & leave encashment for actuarial fund for the year 2009-10 = 30.41% of ₹256.29 lakh =₹77.94 lakh
- (d) The figure allowed for the year 2009-10 is escalated @ 5.72% per annum to arrive at the permissible expenses for the respective years of the tariff setting 2009-14. Accordingly, based on the above methodology, the following expenditure representing liability towards pension, gratuity and leave encashment of existing employees of the generating station has been allowed as additional O&M expenses for the period 2009-14 in relaxation of the provisions of the 2009 Tariff Regulations as under:

					(₹in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Liability towards Pension, Gratuity & leave encashment of existing employees	77.94	82.40	87.11	92.09	97.36

52. The petitioner, in addition to above, has claimed additional O&M Expenses for 2009-14 towards share of subsidiary activities which is examined as under:

Share of subsidiary activities

53. Since, the petitioner's claim for O&M expenses towards share of subsidiary activity as in Form-15B of the petition has already been considered in the O&M expenses allowed to the generating station as above, the additional O&M expenses claimed on this count has been rejected.

Interest on Working Capital

- 54. Regulation 18(1)(c) of the 2009 Tariff Regulations provides that the working capital for 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.
 - (ii) O&M expenses for one month.
- 55. Clause (3) of Regulation 18 of the 2009 Tariff Regulations as amended on 21.6.2011 provides as under:

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

- (i) SBI short-term Prime Lending Rate as on 01.04.2009 or on 1st April of the year in which the generating station or unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later, for the unit or station whose date of commercial operation falls on or before 30.06.2010.
- (ii) SBI Base Rate plus 350 basis points as on 01.07.2010 or as on 1st April of the year in which the generating station or a unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later, for the units or station whose date of commercial operation lies between the period 01.07.2010 to 31.03.2014.

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

56. Working capital has been calculated considering the following elements:

Receivables

57. Receivables equivalent to two months of fixed cost has been allowed as under:

				(₹ in lakh)
2009-10	2010-11	2011-12	2012-13	2013-14
97.10	102.53	108.45	114.63	120.72

Maintenance spares

58. The expenses for maintenance spares as allowed is as under:

				<i>(</i> ₹ in lakh)
2009-10	2010-11	2011-12	2012-13	2013-14
78.71	83.21	87.97	93.00	98.32

O&M expenses for 1 month

59. O & M expenses for 1 month as claimed by the petitioner for the purpose of working capital are allowed as under:

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
O & M for 1 month	43.73	46.23	48.87	51.66	54.62

60. SBI PLR of 12.25% has been considered in the computation of the interest on working capital. Necessary computations in support of calculation of interest on working capital are as under as under:

(₹in	lakh)
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					1 · · · · · · · · · · · · · · · · · · ·
	2009-10	2010-11	2011-12	2012-13	2013-14
Receivables – 2 months	97.10	102.53	108.45	114.63	120.72
Maintenance Spares	78.71	83.21	87.97	93.00	98.32
O&M Expenses – 1 month	43.73	46.23	48.87	51.66	54.62
Total working capital	219.53	231.97	245.29	259.29	273.66
Rate of interest	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%
Interest on working capital	43.73	46.23	48.87	51.66	54.62

Normative annual plant availability factor (NAPAF)

61. In terms of Regulation 27 (5) of the 2009 Tariff Regulations, the NAPAF of 80% has been considered for the generating station.

Other Elements of tariff

62. In addition, the petitioner has claimed expenditure towards Pension & Gratuity contribution, Interest on Government capital as per Section 38 of the DVC Act, 1948, Contribution to the Sinking fund created for redemption of bond and Cost of Common Offices. We now discuss and decide these elements as detailed below:

Pension & Gratuity Contribution

63. The petitioner has submitted the actuarial valuation of ₹3140.94 crore as on 31.3.2009 duly certified by the Actuary, towards Pension & Gratuity (P&G) liability for existing pensioners and existing employees. The leave encashment liability of ₹90.06 crore for existing employees as on as on 31.3.2009 has not been considered in the actuarial liability of ₹3140.94 crore. The details of Pension & Gratuity liability as on 31.3.2009 are as given under:

Statement of Pension & Gratuity liability as on 31.3.2009

Actuarial liabilities as on 31.3.2009	₹in crore
Pension	
Existing Employees	1222.46
Existing Pensioners	1770.35
Gratuity	
Existing Employees	148.13
Leave	
Existing Employees	90.06
Total	3231.00
Pension & Gratuity liability	3140.94
excluding Leave	
Annual liability for 2009-10	60.00
Total liability	3200.94

64. The P&G liability of ₹3200.94 crore also include annual liability of ₹60.00 crore for the year 2009-10. However, as certified by the Actuary, P&G liability as on 31.3.2009 excluding ₹90.06 crore towards leave encashment works out to ₹3140.94 crore. The Commission while determining the tariff of the generating & transmission systems of the petitioner in its order

dated 3.10.2006 in Petition No. 66/2005 had allocated an amount of ₹14952 lakh towards the pension and gratuity contribution of Mejia, TPS, Unit-IV of the petitioner out of the total admitted claim of ₹169015 lakh allocated towards 'power business'. Subsequently, in order dated 6.8.2009 in Petition No. 66/2005, the Commission had allowed the petitioner to recover 60% of the admitted liability of ₹153449.00 lakh during the period 2006-09 and the balance 40% of liability during the period 2009-14 in compliance of the directions contained in the judgment of the Tribunal. In line with this, the Commission vide its order dated 8.5.2013 in Petition No. 272/2010 had allowed the recovery of an amount of ₹92069.40 lakh, being 60% of ₹153449.00 lakh towards Pension and Gratuity Fund for all its generating stations along with the tariff for the period and 2006-09 and ₹61379.60 lakh, being the balance 40% amount in five equal yearly instalments along with the tariff for the period 2009-14. The details are as under:

	<u>in lakh)</u>
	Amount
Petition No: 66/2005 order dated 3.10.2006 and 6.8.2009	
Actuarial Valuation as on 31.3.2006	170900.00
Amount allocated to power business	169015.00
Liability pertains to Distribution system	614.00
Liability pertains to Mejia TPS, Unit IV	14952.00
Net Amount	153449.00
Recoverable in 2006-09 (60%)	92069.40
Recoverable in 2009-14 (40%)	61379.60
Mejia TPS, Unit-IV (Petition No: 279/2010)	
Total admitted claim	14952.00
Recoverable in 2006-09 (60%)	8971.20
Recoverable in 2009-14 (40%)	5980.80

65. The petitioner, in this petition, has claimed ₹116710.68 lakh towards the Pension & Gratuity liability for all its generating stations, excluding Mejia, TPS, Unit-IV based on the actuarial valuation as on 31.3.2009. The respondent, JSEB has submitted that no provisions for claiming such type of expenses exist under the 2009 Tariff Regulations and hence the claim is liable to be rejected. The objector, Jai Balaji Inds and MAL have submitted that the claim towards P&G contributions are already covered under the normative O&M expenses specified by the Commission under the 2009 Tariff Regulations and hence further claim is not admissible. The objector's have also submitted that the petitioner should deduct the

interest earned on P&G fund from the ARR. The petitioner has clarified that the Fund is invested by a trust constituted for its administration in the approved securities and the income accrued is used on the welfare activities of the employees. The clarification of the petitioner merits acceptance and accordingly, the submissions of the objectors is rejected. After considering the documents available on record and the previous orders of the Commission, the P&G liability of the generating stations of the petitioner for the period 2009-14 has been worked out as detailed below.

	(₹in lakh)
	Amount
Liability as per Actuarial Valuation as on 31.3.2009	314093.69
Liability as per Actuarial Valuation as on 31.3.2006	169015.00
Difference	145078.69
Recoverable in 2009-14 (40%)	58031.48
Share of Mejia TPS, Unit-IV in the proportion allowed earlier	5133.78
Share of other generating stations & transmission system	52897.69

66. The Commission in its order dated 8.5.2013 in Petition No. 272/2010 had decided the P&G liability and accordingly directed that the petitioner would recover 40% of the said liability which was staggered for the period 2009-14 along with the 40% of the liability due to pay revision. The relevant portion of the said order is extracted as under:

"Accordingly, in line with the judgment of the Tribunal, the prayer of the petitioner for adjustment of 40% of the pension and gratuity fund to be recovered from additional capitalization for the period 2006-09 is not accepted and the same is recoverable during 2009-14. Similarly, the impact of P&G contribution on account of revision of employee cost due to pay revision during the period 2006-09 (1.1.2006 to 31.3.2009) is recoverable by the petitioner to the extent of 60% during 2006-09 and the balance 40% is recoverable during the period 2009-14 along with the P&G liability to be recovered during the period 2009-14, in line with the decision of the Tribunal."

Thus, the amount towards P&G liability is recoverable by the petitioner in five annual equal installments during the period 2009-14 in addition to the staggered P&G contribution allowed by the Commission for the period 2006-09. Based on the approved capital cost as on 31.3.2009 vide order dated 8.0.2013 in Petition No. 272/2010, the total P&G liability has been apportioned among all the generating stations of the petitioner. Accordingly, the yearwise P&G liability for this generating station, which is subject to truing-up in terms of the 2009 Tariff Regulations is worked out and allowed as under:

(₹in lakh)

	Total	2009-10	2010-11	2011-12	2012-13	2013-14
P&G contribution staggered from previous tariff period	61379.60	12275.92	12275.92	12275.92	12275.92	12275.92
P&G contribution allowed as per actuarial valuation as on 31.3.2009	52897.69	10579.54	10579.54	10579.54	10579.54	10579.54
Total	114277.29	22855.46	22855.46	22855.46	22855.46	22855.46
Share of Tilaiya HPS	82.51	16.50	16.50	16.50	16.50	16.50

Contribution to sinking fund

67. The respondent, JSEB has submitted that no provisions for claiming such type of expenses exist under the 2009 Tariff Regulations and hence the claim is liable to be rejected. The objectors, MAL and Jai Balaji Inds have submitted that the computations and validity of such claims clearly need a detailed investigation before any provision for sinking fund is allowed by the Commission. As per judgment of the Tribunal dated 23.11.2007, sinking fund, established with the approval of Comptroller and Accountant General of India vide letter dated December 29, 1992 under the provision of Section 40 of the DVC Act, 1948 is to be taken as an item of expenditure to be recovered through tariff. Accordingly, the contribution towards sinking fund created for redemption of bond is allowed. The total contribution allowed is allocated among all the generating stations of the petitioner based on the proportion of capital cost allowed as on 31.3.2009 in orders dated 8.5.2013 and 22.4.2013 in Petition Nos. 272/2010 and 279/2010 respectively and the amount considered for this generating station (Tilaiya HPS) is as under:

				(₹in	ı lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Contribution to Sinking fund	5.96	6.30	16.24	17.38	18.60

- 68. Regulation 43 of the 2009 Tariff Regulations deals with the "Special Provisions relating to Damodar Valley Corporation" as under:
 - "(1) Subject to clause (2), these regulations shall apply to determination of tariff of the projects owned by Damodar Valley Corporation (DVC).
 - (2) The following special provisions shall apply for determination of tariff of the projects owned by DVC:

(i) Capital Cost: The expenditure allocated to the object 'power', in terms of sections 32 and 33 of the Damodar Valley Corporation Act, 1948, to the extent of its apportionment to generation and inter-state transmission, shall form the basis of capital cost for the purpose of determination of tariff:

Provided that the capital expenditure incurred on head office, regional offices, administrative and technical centers of DVC, after due prudence check, shall also form part of the capital cost.

- (ii) Debt Equity Ratio: The debt equity ratio of all projects of DVC commissioned prior to 01.01.1992 shall be 50:50 and that of the projects commissioned thereafter shall be 70:30.
- (iii) Depreciation: The depreciation rate stipulated by the Comptroller and Auditor General of India in terms of section 40 of the Damodar Valley Corporation Act, 1948 shall be applied for computation of depreciation of projects of DVC.
- (iv) Funds under section 40 of the Damodar Valley Corporation Act, 1948: The Fund(s) established in terms of section 40 of the Damodar Valley Corporation Act, 1948 shall be considered as items of expenditure to be recovered through tariff.
- (3) The provisions in clause (2) of this regulation shall be subject to the decision of the Hon'ble Supreme Court in Civil Appeal No 4289 of 2008 and other related appeals pending in the Hon'ble Court and shall stand modified to the extent they are inconsistent with the decision.

Interest on Capital as per Section 38 of DVC Act

- 69. The petitioner has claimed interest on capital in terms of the judgment of the Tribunal dated 23.11.2007. The Commission in its order dated 6.8.2009 had rejected this claim of the petitioner based on the judgment of the Tribunal dated 23.11.2007, the relevant portion of which is extracted as under:
 - "E.13 As regards the liability arising under section 38 of the DVC Act on account of interest on capital provided by each of the participating Governments, we have to keep in mind that the total capital to be serviced has to be equal to the value of operating assets when they are first put to commercial use. Subsequently, the loan component gets reduced on account of repayments while equity amount remain static. As per the scheme of the determination of tariff as per Tariff Regulations 2004, the recovery is in two forms; either by way of ROE or by way of interest on loans. We direct the Central Commission to ensure that capital deployed in financing operating assets is getting fully serviced either through Return on Equity or interest on loan (including on the equity portion not covered as part of equity eligible for Return of Equity."
- 70. The respondent, JSEB has submitted that since nothing has been mentioned in the petition if any capital was provided by the participating Governments in this generating station, the claim of interest on capital and additional interest on notional loan may not be permitted. As per the provisions of the 2009 Tariff Regulations, the interest on Government capital is not allowable. Also, the Tribunal in its judgment dated 10.5.2010 in Appeal No. 146/2009 (against Commission's order dated 6.8.2009) had confirmed that the interest on Government capital is not to be allowed separately, if the capital deployed is getting fully

serviced either through return on equity or interest on loan. The relevant portion of the judgment is extracted as under:

"(7) In regard to the issue relating to the aspect of Revenues to be allowed under section 38 of the DVC Act, 1948, the Tribunal in the Remand order directed the Central Commission to ensure that the capital deployed in financing operating assets is getting fully serviced either through Return on Equity or interest on loan. In compliance with the said order, the Central Commission allowed Debt Equity Ratio on the total capital employed and provided return @ of 14% on normative equity capital and also provided interest on loan of the normative type. The revised Debt Equity Ration and depreciation was considered in line with the direction of the Tribunal. The Appellant itself had admitted in the earlier appeal that the Appellant is required to pay interest on the amount of capital under section 38 of the DVC Act, but the same was retained by the Appellant in view of the obligation of participating Governments and as such the retained interest is ploughed back as capital to the creation of capital assets relating to power. Thus, the Appellant enjoyed the perpetual moratorium on it and never repaid the loans. So the question of adjustment of depreciation for the loan does not arise."

71. Accordingly, this interest on Government capital has not been considered for the computation of tariff.

Additional interest on notional loan at Government notification rate of 9.5%

72. The petitioner has based its claim under this head by submitting the additional interest on notional loan is the "differential rate, equivalent to Govt. of India notification rate of 9.75% minus the interest rate allowed as per the 2009 Tariff Regulations. The respondents and the objectors have objected to the said claim. The matter has been examined and we are of the view that the provisions of Regulation 16 of the 2009 Tariff Regulations (as quoted in para 36 above) lay emphasis on the interest rate to be worked out on the basis of the actual loan portfolio and the Government of India notified rate has no relevance. Accordingly, the claim of the petitioner has not been allowed in terms of the 2009 Tariff Regulations.

Cost of Common Offices

73. The petitioner has claimed expenses pertain to Common offices such as Direction office, Central office, R&D, IT centre, Subsidiary activities, Other offices etc. catering services in respect of each of the generating stations as well as the Transmission & Distribution systems. The petitioner has computed the Return on Equity, Interest on Loan and Depreciation on the Common Assets for the period 2009-14 based on the opening capital cost as on 1.4.2009 for different offices and has apportioned them to each of the

productive generating stations/T&D systems in proportion to the capital cost based on the opening capital cost as on 1.4.2009. The annual fixed charges claimed towards Common Assets are as under:

(₹in lakh) 2009-10 2010-11 2011-12 2012-13 2013-14 100.1817411 Direction office 97.14007431 103.3977873 100.2624944 71.32147857 1167.992611 1207.110904 454.2926313 Subsidiary activities 1187.261132 899.6573171 Other offices 67.11021245 69.23305468 71.32526325 69.28959589 50.4989169 R&D 350.8629241 731.6206126 1296.920848 1799.508049 1750.02557 24.50192967 89.80658005 183.9040484 269.0223588 270.3194891 Central office 691.4021894 707.0766878 722.6266689 567.8090716 707.4940516 **Total expenditure** 2399.009941 2885.179808 3585.28552 3845.233867 3164.267157

74. The apportioned expenditure claimed by the petitioner in respect of its generating stations/T&D system is as under:

					((₹in lakh)
	Capital	2009-10	2010-11	2011-12	2012-13	2013-14
	cost as on					
	1.4.2009					
Bokaro TPS	59008	315.6119589	379.572104	471.67749	505.8761	416.288628
Chandrapura TPS	28137	150.4944023	180.992752	224.9117	241.218747	198.500426
Durgapur TPS	20096.43	107.4883684	129.271357	160.63981	172.28687	141.77595
Mejia TPS Units I, II	161070	861.5038338	1036.09136	1287.505	1380.85452	1136.31388
& III						
Mejia TPS, Unit-IV	72403	387.2568578	465.736155	578.74975	620.711552	510.787444
Maithon HS	6684	35.75024291	42.9951861	53.428219	57.3019905	47.1541687
Panchet HS	5077	27.1549945	32.658073	40.582745	43.5251654	35.8171326
Tilaiya HS	289	1.54575407	1.8590079	2.310107	2.47759953	2.03883225
T&D	95763.5	512.2035288	616.003816	765.48074	820.981323	675.590699
TOTAL	448527.93	2399.009941	2885.17981	3585.2855	3845.23387	3164.267

75. The respondent, JSEB has sought clarification from the petitioner as to the offices which can be classified under the category of head office, regional office, administrative and technical centres whose expenses can be allocated to the object 'power' from the six offices mentioned. It has also submitted that the subsidiary activities office cannot be the center whose expenses can be legitimately be allocated to the object 'power'. The objector, M/s Jai Balaji Industries as submitted that the petitioner has taken into account the capital cost allegedly as per its accounts whereas the same should be considered at the levels considered in the last tariff order. Accordingly, it has been submitted that the difference in the allowable share of other office expenditure may be scaled down. In response, the petitioner has clarified that the details of other offices are well defined in the annual accounts

of the petitioner company duly audited by the C&AG. It has also submitted that the expenditure on other offices/common offices are to be serviced through tariff as per decision of the Tribunal dated 23.11.2007.

The matter has been examined. We notice that the claim of the petitioner is in accordance with the Commission order dated 6.8.2009 in Petition No. 66/2005 which was based on the judgment of the Tribunal dated 23.11.2007. Accordingly, the annual fixed cost for common offices has been worked out by taking the capital cost admitted by the Commission as on 31.3.2009 as the opening capital cost as on 1.4.2009. The annual fixed charges of Common offices so computed are then apportioned to each of the productive generating stations/T&D system of the petitioner in proportion to the capital cost of generating stations/ T&D systems as admitted by the Commission as on 1.4. 2009 in order dated 8.5.2013 in the Petition No. 272/2010. In the common office expenditure, the petitioner has claimed expenses for another two offices viz. R&D Centre and Information Technology (IT) for the period 2009-14 in addition to Direction Office, Central Office, Other Offices and for Subsidiary activities. Since no justification has been submitted by the petitioner for inclusion of expenditure of these new offices (IT and R&D) in the common office expenditure, the expenditure on IT and R&D have not been considered at this stage. However, the same would be considered at the time of truing up, subject to prudence check based on the justification of such expenditure. Further, no justification has been submitted by the petitioner for additional capitalization on different offices during 2009-14 and the same will be considered at the time of truing up, subject to prudent check based on the justification of such expenditure. Accordingly, the annual fixed charges of common offices (excluding IT and R&D) are worked out as under:

(₹in lakh)

						ranni
Central Office		2009-10	2010-11	2011-12	2012-13	2013-14
1	Depreciation	205.00	205.00	205.00	205.00	205.00
2	Interest on Loan	50.27	50.13	49.44	49.29	49.69
3	Return on Equity	247.55	256.62	256.87	256.87	256.87
	Total	502.82	511.75	511.30	511.16	511.56
Direction office						
1	Depreciation	0.00	0.00	0.00	0.00	0.00

2	Interest on Loan	0.00	0.00	0.00	0.00	0.00
3	Return on Equity	32.53	33.72	33.76	33.76	33.76
	Total	32.53	33.72	33.76	33.76	33.76
Other Of	fice					
1	Depreciation	0.01	0.00	0.00	0.00	0.00
2	Interest on Loan	0.00	0.00	0.00	0.00	0.00
3	Return on Equity	34.62	35.89	35.92	35.92	35.92
	Total	34.62	35.89	35.92	35.92	35.92
Subsidia	ry Activity					
1	Depreciation	401.80	312.90	0.00	0.00	0.00
2	Interest on Loan	0.00	0.00	0.00	0.00	0.00
3	Return on Equity	247.00	256.05	256.30	256.30	256.30
	Total	648.80	568.94	256.30	256.30	256.30
Total						
1	Depreciation	606.81	517.90	205.00	205.00	205.00
2	Interest on Loan	50.27	50.13	49.44	49.29	49.69
3	Return on Equity	561.70	582.27	582.84	582.84	582.84
		1218.78	1150.30	837.28	837.13	837.53

77. The capital cost as on 31.3.2009 allowed in respect of this generating station as per order dated 8.5.2013 in Petition No. 272/2010 is ₹263.80 lakh. Based on this capital cost, the cost of common offices apportioned to this generating station for 2009-14 is as under:

	2009-10	2010-11	2011-12	2012-13	2013-14	
ĺ	0.73	0.69	0.50	0.50	0.50	

- 78. The respondents and the objectors have submitted that the petitioner is exporting power from its newly commissioned generating stations at lesser tariff at the cost of the beneficiaries/consumers of the DVC command area. Accordingly, they have submitted that the petitioner should be directed to apportion the total cost of Common Assets, expenses towards subsidiaries activities and contribution to sinking fund and apportionment thereof to all the units including the units meant for export on the basis of installed capacity in MW, namely:
 - (i) Chandrapura TPS- Unit Nos. 7&8
 - (ii) Chandrapura TPS Extension unit nos.1&2
 - (iii) Mejia TPS Phase-II- Unit Nos. 1 & 2
 - (iv) Koderma TPS Unit Nos. 1&2
 - (v) Durgapur Steel TPS Unit Nos. 1 & 2
- 79. We agree with submissions of the respondents/objectors that the expenses on Common Assets are required to be apportioned to all the operating units/ generating stations of the petitioner. In this view, we direct that the Common Office expenditure as allowed by

this order would be subject to truing-up in terms of Regulation 6 of the 2009 Tariff Regulations and would be apportioned to all the units/generating stations and Transmission & Distribution systems of the petitioner which would are in operation during 2009-14. This according to us would address the concerns of the respondents/objectors.

Annual Fixed Charges

80. The annual fixed charges for the period 2009-14 in respect of the generating station are summarized as under:

				(₹in lakh)	
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	6.69	6.73	7.14	7.55	7.55
Interest on Loan	0.00	0.00	0.79	1.24	0.59
Return on Equity	24.34	25.34	26.31	27.25	27.25
Interest on Working	26.89	28.42	30.05	31.76	33.52
Capital					
O&M Expenses	524.70	554.71	586.44	619.98	655.44
Sub Total	582.63	615.20	650.72	687.78	724.35
Pension & Gratuity	16.50	16.50	16.50	16.50	16.50
Contribution					
Sinking Fund	5.96	6.30	16.24	17.38	18.60
Contribution					
Common office	0.73	0.69	0.50	0.50	0.50
expenditure					
Additional O&M	77.94	82.40	87.11	92.09	97.36
Expenses					
Total	683.76	721.09	771.08	814.25	857.31

Note: (i) All figures are on annualized basis.(ii) All the figures under each head have been rounded.
(ii) The figure in total column in each year is also rounded. Because of rounding of each figure the total may not be arithmetic sum of individual items in columns.

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

Application fee and the publication expenses

82. In terms of our decision contained in order dated 11.1.2010 in Petition No.109/2009, the expenses towards filing of tariff application and the expenses incurred on publication of notices are to be reimbursed. Accordingly, the expenses incurred by the petitioner for petition filing fees for the period 2009-14 in connection with the present petition and the publication expenses incurred shall be directly recovered from the beneficiaries, on *pro rata* basis.

83. The difference between the tariff determined by this order and the tariff already recovered from the respondents/consumers shall be adjusted in accordance with the proviso to Regulation 5(3) of the 2009 Tariff Regulations.

84. The tariff approved above is subject to truing up and is also subject to the outcome of the Civil Appeals pending before the Hon'ble Supreme Court relating to the determination of tariff of the generating stations of the petitioner for 2006-09 as stated in the relevant paragraphs of this order.

85. This order disposes of Petition No.273/GT/2012.

Sd/[M.Deena Dayalan]
Member

Sd/[V.S.Verma]
Member