

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No.271/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 Maithon Hydel Power Station (63.2 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 Maithon Hydel Power Station, Units I to III (63.2 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 63.2 MW comprises of 2 units of 20 MW each and one unit of 23.2 MW. The date of commercial operation (COD) of the different units of the generating station is as under:

Unit -I	October, 1957
Unit -II	March, 1958
Unit -III	December, 1958

### **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 Shrachhi 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 October 3, 2006 in terms of the findings and observations made therein and according to the 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 Shraichi 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	290.22	290.22	290.22
Interest on Loan	95.31	63.17	31.29
Return on Equity	378.00	378.00	378.00
Interest on Working Capital	47.80	48.73	49.75
O & M Expenses	1088.00	1131.00	1176.00
Sub-total (A)	1899.33	1911.12	1925.25
Additional Charges on account of Return on Equity, Interest on loan, Depreciation of Director's/Central/other offices & Subsidiary activities	13.18	12.49	11.92
<b>Total</b>	<b>1912.52</b>	<b>1923.61</b>	<b>1937.17</b>

14. The closing capital cost as on 31.3.2009 approved by the Commission in the above said order was ₹5881.05 lakh.

15. The annual fixed charges claimed by the petitioner for the period 2009-14 in respect of this generating station based on the capital cost of ₹6684.17 lakh as on 1.4.2009 is as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	363.33	376.66	384.94	391.71	394.19
Interest on Loan	235.76	231.50	230.04	197.62	65.97
Return on Equity	581.36	617.30	627.01	634.45	637.18
Interest on working capital	137.18	146.47	155.57	161.87	168.03
O & M expenses	1613.01	1705.27	1802.81	1905.93	2014.95
<b>Total</b>	<b>2930.63</b>	<b>3077.20</b>	<b>3200.37</b>	<b>3291.57</b>	<b>3280.32</b>
Share of Other office expenditure	35.75	42.995	53.43	57.30	47.15
Share of additional claims	1494.52	1666.25	1842.04	1911.01	2081.58
<b>Grand Total</b>	<b>4460.90</b>	<b>4786.45</b>	<b>5095.84</b>	<b>5259.88</b>	<b>5409.05</b>

16. The petitioner vide its affidavits dated 25.4.2012, 24.1.2013 and 22.2.2013 respectively has filed additional submissions in this petition 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 systems 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.

17. 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 Shrachhi Alloys Ltd (BSAL), M/s SAIL-BSL, Bihar Foundry and Casting Ltd (BFCL), 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.

18. 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**

19. 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,"*

20. 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."*

21. 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 ₹5881.05 lakh as on 31.3.2009. Accordingly, the capital cost of ₹5881.05 lakh as on 31.3.2009 shall be considered as the opening capital cost as on 1.4.2009.

#### **Additional Capital expenditure during 2009-14**

22. 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 non-availability 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.”

23. 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	328.89	140.43	177.00	79.00	15.00	740.32
Add: De-capitalization of old assets replaced	(-) 85.53	(-) 21.72	0.00	0.00	0.00	(-) 105.80
Less: Un-discharged liabilities included in above	0.00	23.42	0.00	0.00	0.00	23.42
Add: Discharge of liabilities	0.00	0.00	0.00	0.00	0.00	0.00
Share of dams allocated to Maithon HPS	76.50	18.30	0.00	0.00	0.00	94.80
<b>Total</b>	<b>319.86</b>	<b>113.59</b>	<b>177.00</b>	<b>79.00</b>	<b>15.00</b>	<b>811.69</b>

24. The petitioner vide its affidavit dated 25.4.2012 has submitted the item-wise details of the additional capital expenditure incurred during the years 2009-10 and 2010-11 on actual basis as per audited accounts. The petitioner has submitted that significant part of the capital expenditures required for this generating station which had been planned to be incurred could not be implemented during the past two years on account of resource crunch pending the decision in tariff petitions and various litigations. As a result, the petitioner had put

restriction on all expenditure leading to less expenditure in the areas of additional capitalization thereby severely affecting the sustenance of generation and necessitating significant expenditure in near future. It has further submitted that all the works/projects are in the final stage and projected expenditure will be utilized during the balance years of the tariff period 2009-14. The respondent, JSEB has pointed out that amounts disallowed/not considered have been included by the petitioner for additional capitalization. The objector, MAL has submitted that most of the expenditure claimed with justifications under Form-9 do not qualify to be considered for additional capitalization under Regulation 9 of the 2009 Tariff Regulations. Another objector, namely, DVC HT consumers of Jharkhand has submitted that the petitioner has not provided the corresponding regulation under which the additional capital expenditure for different works/assets has been claimed. It has further submitted that additional capitalization claimed revolve around capital expenses which are in the nature of minor expenses. Similar submissions have been made by other objectors.

25. The submissions have been considered. It is noticed that in response to the letter of the Commission, the petitioner, had furnished the details of actual capital expenditure for the period 2009-11, but had not specified the regulations under which the said claims had been made and also justification for incurring such expenditure. In view of this, by letter dated 13.2.2013 the petitioner was directed to submit the details of regulations under which the actual capital expenditure for the period 2009-11 was claimed, along with proper justification. In compliance with this, the petitioner vide its affidavit dated 22.2.2013 has submitted that all the expenditure has been claimed under Regulation 9(2)(iv) of the 2009 Tariff Regulations i.e the expenditure on assets which have become necessary for the efficient and successful operation of the plant. However, since the petitioner had not submitted justification for incurring the said expenditure, the Commission vide its record of the proceedings held on 5.4.2013 directed the petitioner to submit the required information, which had been subsequently submitted by the petitioner on 19.4.2013.

26. 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 Capital Expenditure**

27. 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**

28. The petitioner has claimed an expenditure of ₹243.36 lakh on assets which have become necessary for the efficient and successful operation of the generating station under Regulation 9(2)(iv) of the 2009 Tariff Regulations. The break-up of the expenditure claimed are categorized as under:

<i>(₹ in lakh)</i>	
New assets	2.30
De-capitalization without corresponding addition	(-) 205.26
Replacement of old assets	531.68
Corresponding de-capitalization for above replacement	(-) 85.53
Minor assets	0.17
<b>Total</b>	<b>243.36</b>

29. On prudence check, it is noticed that expenditure of ₹1.17 lakh has been incurred on new assets like welding machine (₹0.80 lakh) and installation charges for Inductive proximity sensor (₹0.025 lakh) and Neyrpc module (₹0.34 lakh). Since the expenditure claimed is in the nature of minor assets/tools and tackles, the same has not been allowed to be capitalized in terms of the provisions of Regulation 9(2) of the 2009 Tariff Regulations. Accordingly, the expenditure incurred on minor assets has been disallowed.

30. Further, an expenditure of ₹1.13 lakh incurred on new assets like sensitive earth fault relays for protection of 132/33 KV transformers, G.I earth wire for strengthening of existing earthing network of the switchyard and 33 KV C.T for facilitating protection system at

switchyard for newly commissioned lines, has been allowed as these assets are considered necessary for the safe operation of the generating station.

31. De-capitalization of (-) ₹205.26 lakh towards assets such as old power cables, circuit breakers along with galvanized steel structure etc. has been allowed as these assets do not render any useful service in the operation of the generating station. Hence, de-capitalization of these assets has been allowed.

32. Expenditure of ₹531.68 lakh towards replacement of old assets like power cables, isolators, insulators, breakers, etc., which were put in service long back, has been allowed under Regulation 9(2)(iv) of the 2009 Tariff Regulations along with the corresponding de-capitalization amount of (-) ₹85.53 lakh which represents the gross value of old assets, as these assets are considered necessary for the efficient and successful operation of the generating station.

33. Expenditure of ₹0.17 lakh claimed for minor assets like Dustbins has not been allowed under the provisions of the 2009 Tariff Regulations.

34. Based on the above discussions, the additional capital expenditure allowed for the year 2009-10 is as under:

<i>(₹ in lakh)</i>	
New assets	1.13
De-capitalization without corresponding addition	(-) 205.26
Replacement of old assets	531.68
Corresponding de-capitalization for above replacement	(-) 85.53
Minor assets	0.00
<b>Total</b>	<b>242.02</b>

### **2010-11**

35. The petitioner has claimed an expenditure of ₹95.29 lakh on assets which have become necessary for the efficient and successful operation of the generating station under Regulation 9(2)(iv) of the 2009 Tariff Regulations. The break-up of the expenditure claimed are categorized as under:

	(₹ in lakh)
New assets	22.68
Replacement of old assets including liability provision of ₹23.42 lakh	117.74
Corresponding de-capitalization for above replacement	(-) 21.72
Less liability provision	23.42
<b>Total (without share of dams)</b>	<b>95.29</b>

36. It is observed on prudence check that the expenditure on 'New assets' include ₹4.95 lakh towards Annunciation panels for 132 kV and 33 kV lines and Power house, ₹2.74 lakh for Junction Box [1\*12 way], ₹0.85 lakh for new metering panel for consumer metering, replacement of old MOCB for ₹2.22 lakh, ABT compatible meters for ₹10.00 lakh, meter reading and reporting software for ₹1.25 lakh and ₹0.67 lakh for LT MCCBs for power supply to different locations in the power house. The justification for incurring the expenditure on new annunciation panels as provided by the petitioner is as under:-

*“New annunciation panels connected with each control panel for different transmission lines and transformers.”*

37. Since 'Annunciation panels', 'New junction box for AC power supply' and 'New metering panel for consumer metering' are considered necessary for the efficient operation of the generating station, the expenditure of ₹4.95 lakh, ₹2.74 lakh and ₹0.85 lakh, respectively claimed for the year has been allowed under Regulation 9(2) (iv) of the 2009 Tariff Regulations.

38. Expenditure towards replacement of old MOCB for ₹2.22 lakh has been considered as new addition without the gross value of the replaced asset being provided by the petitioner. The replacement of old MOCB is considered necessary for the generating station and is allowed. However, as the gross value of the replaced asset is required to be reduced from the capital cost, we deduct an expenditure of ₹0.22 lakh, which constitutes 10% value of the amount incurred as the gross value of the old asset. As such, an amount of ₹2.22 lakh along with de-capitalization of ₹0.22 lakh has been allowed towards replacement of the old MOCB.

39. The petitioner has claimed expenditure of ₹11.25 lakh towards installation of ABT compatible meters and for meter reading and reporting software. As the expenditure incurred by the petitioner is required to meet the functional requirement and is considered necessary for the generating station, the same is allowed under Regulation 9(2)(iv) of the 2009 Tariff Regulations.

40. The petitioner has claimed an expenditure of ₹0.67 lakh for installation of circuit breakers. The petitioner justification for incurring the expenditure on new circuit breakers for power supply to different locations in the underground power house has not been submitted. Moreover, the need for this asset and the details of the proposed locations in the power house has also not been specified by the petitioner. In absence of this information, the expenditure claimed by the petitioner has not been allowed.

41. Accordingly, against a claim of ₹22.68 lakh for new assets, an expenditure of ₹22.01 lakh along with de-capitalization of ₹0.22 lakh has only been allowed under Regulation 9(2)(iv) of the 2009 Tariff Regulations.

42. Expenditure of ₹117.74 lakh towards replacement of old assets like circuit breakers, junction boxes, switchyard structures, pipe buses, guide pipes, earthing network, connectors and accessories, etc., which were put into service long back, is considered necessary for the efficient and successful operation of the generating station, especially in view of the fact that these old plants are required to meet the availability/operational norms specified under the 2009 Tariff Regulations. As such, the expenditure of ₹117.74 lakh is allowed under Regulation 9(2)(iv) along with the corresponding de-capitalization amount of ₹21.72 lakh towards gross value of old assets.

43. The liability provision for replacement of certain assets, for which details have not been mentioned in the petition, which are included in the above expenditure of ₹117.74 lakh

towards replacement of the old assets has been deducted for the purpose of arriving at the additional capital expenditure on cash basis.

44. Based on the above, the additional capital expenditure allowed for the year 2010-11 is as under:

<i>(₹ in lakh)</i>	
New assets	22.01
De-capitalization towards replacement of MOCB included in new asset	(-) 0.22
Replacement of old assets including liability provision of ₹23.42 lakh	117.74
Corresponding de-capitalization for above replacement	(-) 21.72
Less: liability provision	23.42
<b>Total</b>	<b>94.39</b>

#### **Projected Additional Capital Expenditure**

45. The projected additional capital expenditure claimed by the petitioner for the years 2011-12, 2012-13 and 2013-14 are discussed in the subsequent paragraphs.

46. The petitioner has claimed an expenditure of ₹144.50 lakh on assets which have become necessary for the efficient and successful operation of the generating station under Regulation 9(2)(iv) of the 2009 Tariff Regulations. The break-up of the expenditure claimed are categorized as under:

<i>(₹ in lakh)</i>	
Replacement of old assets	177.00
Corresponding de-capitalization for above replacement	(-) 32.50
<b>Total</b>	<b>144.50</b>

47. The petitioner has claimed capitalization of a projected expenditure of ₹27.00 lakh towards replacement of electrical equipment like metering class CTs, PTs, etc., in switchyard along with the de-capitalization of ₹25.00 lakh towards gross value of the replaced assets put in service during 1997-98. As replacement of the old assets with higher accuracy CTs and PTs would result in accurate energy audit which in turn will help in the efficient operation of the generating station, the expenditure along with corresponding de-capitalization has been allowed under Regulation 9(2)(iv) of the 2009 Tariff Regulations.

48. The petitioner has claimed expenditure of ₹150.00 lakh towards up-gradation of fire-fighting equipment for reason of plant safety along with de-capitalization of ₹7.50 lakh as the gross value of the old fire fighting system put in service during 1958-59. As replacement of the old assets is considered to be necessary for safe and secure operation of the generating station, the expenditure along with corresponding de-capitalization has been allowed under Regulation 9(2)(iv) of the 2009 Tariff Regulations. Accordingly, the additional capital expenditure allowed for the purpose of tariff for the year 2011-12 is as under:

<i>(₹ in lakh)</i>	
Replacement of old assets	177.00
Corresponding de-capitalization for above replacement	(-) 32.50
<b>Total</b>	<b>144.50</b>

### **2012-13**

49. The petitioner has claimed an expenditure of ₹61.05 lakh on assets which have become necessary for the efficient and successful operation of the generating station under Regulation 9(2)(iv) of the 2009 Tariff Regulations. The break-up of the expenditure claimed are categorized as under:

<i>(₹ in lakh)</i>	
Replacement of old assets	79.0
Corresponding de-capitalization for above replacement	(-) 17.95
<b>Total</b>	<b>61.05</b>

50. The petitioner has projected an amount of ₹47.00 lakh towards replacement of power house equipment like protection panels & relays due to non-availability of spares, along with de-capitalization of ₹3.50 lakh towards gross value of the replaced assets put into service during 1958-59. As replacement of the old assets is considered to be necessary for efficient operation of the generating station, the expenditure along with corresponding de-capitalization has been allowed under Regulation 9(2)(iv) of the 2009 Tariff Regulations. However, the petitioner is directed to furnish the complete details of the replaced assets along with certificate from the auditor that such expenditure is not being booked to O&M



expenditure at the time of truing-up exercise to be undertaken for this generating station in terms of Regulation 6 of the 2009 Tariff Regulations.

51. The petitioner has claimed the projected expenditure of ₹20.00 lakh towards replacement of battery bank and the charger of power house, along with the de-capitalization of ₹6.00 lakh towards gross value of the replaced assets put in service during 1997-98. As replacement of battery bank is considered to be necessary for efficient operation of the generating station, the expenditure along with corresponding de-capitalization has been allowed under Regulation 9(2)(iv) of the 2009 Tariff Regulations.

52. The petitioner has projected an expenditure of ₹12.00 lakh towards the replacement of earthing transformers along with the de-capitalization of ₹8.45 lakh towards gross value of old assets put in service during 1998-99. Generally, the life of the transformer is considered as 25 years. The petitioner has not justified with reasons as to the necessity for the said replacement after 15 years of operation. As such, we are not inclined to allow the expenditure along with the corresponding de-capitalization. However, the petitioner is at liberty to claim the said expenditure with proper justification at the time of truing up exercise to be undertaken for this generating station in terms of Regulation 6 of the 2009 Tariff Regulations. Accordingly, the additional capital expenditure allowed for the purpose of tariff for the year 2012-13 is as under:

<i>(₹ in lakh)</i>	
Replacement of old assets	67.00
Corresponding de-capitalization for above replacement	(-) 9.50
<b>Total</b>	<b>57.50</b>

### **2013-14**

53. The petitioner has projected an expenditure of ₹15.00 lakh towards replacement of battery bank and charger in switchyard and control room along with the de-capitalization of ₹4.22 lakh towards gross value of the replaced assets put in service during 1995-96. As replacement of battery bank is considered to be necessary for efficient operation of the generating station, the expenditure along with corresponding de-capitalization has been

allowed under Regulation 9(2)(iv) of the 2009 Tariff Regulations. Accordingly, the additional capital expenditure allowed for the purpose of tariff for the year 2013-14 is as under:

<i>(₹ in lakh)</i>	
Replacement of old assets	15.00
Corresponding de-capitalization for above replacement	(-) 4.22
<b>Total</b>	<b>10.78</b>

#### **Additional capitalization towards Share of Maithon dam**

54. The petitioner has claimed capitalization of ₹76.50 lakh and ₹18.30 lakh during the years 2009-10 and 2010-11 respectively, towards 34% share allocated to this generating station. As no asset-wise details along with justification for the said expenditure have been submitted by the petitioner, the said claim has not been considered. However, the petitioner is at liberty to claim the said expenditure, with proper justification, at the time of truing up exercise to be undertaken for this generating station in terms of Regulation 6 of the 2009 Tariff Regulations.

#### **Additional capital expenditure for 2009-14**

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

<i>(₹ in lakh)</i>	
2009-10	242.02
2010-11	94.39
2011-12	144.50
2012-13	57.50
2013-14	10.78

#### **Capital Cost for 2009-14**

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

<i>(₹ in lakh)</i>					
	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Opening Capital cost	5881.05	6123.07	6217.46	6361.96	6419.46
Additional capital expenditure allowed	242.02	94.39	144.50	57.50	10.78
<b>Closing Capital cost</b>	<b>6123.07</b>	<b>6217.46</b>	<b>6361.96</b>	<b>6419.46</b>	<b>6430.24</b>
<b>Average Capital cost</b>	<b>6002.06</b>	<b>6170.26</b>	<b>6289.71</b>	<b>6390.71</b>	<b>6424.85</b>

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

57. 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.*

58. Accordingly, gross loan and equity amounting to ₹3064.00 lakh and ₹2817.04 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**

59. 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.

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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Notional Equity- Opening	2817.04	2889.65	2917.96	2961.31	2978.56
Addition of Equity due to Additional Capital Expenditure	72.61	28.32	43.35	17.25	3.23
Normative Equity-Closing	2889.65	2917.96	2961.31	2978.56	2981.80
Average Normative Equity	2853.34	2903.80	2939.64	2969.94	2980.18
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%
<b>Return on Equity (Pre Tax)- (annualised)</b>	<b>532.83</b>	<b>562.12</b>	<b>569.61</b>	<b>575.48</b>	<b>577.47</b>

## Interest on Loan

61. 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 actual loan portfolio at the beginning of each year applicable to the project.

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered.

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute.

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan.

62. The interest on loan has been worked out as under:

(a) As stated, the gross normative loan of ₹3064.00 lakh has been considered as on 1.4.2009.

(b) Cumulative repayment as on 31.3.2009 works out to ₹2224.70 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. As such, the same is considered as cumulative repayment as on 1.4.2009.

(c) Accordingly, the net normative opening loan as on 1.4.2009 works out to ₹839.30 lakh.

(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.

63. 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	3064.00	3233.41	3299.49	3400.64	3440.89
Cumulative repayment of loan up to previous year	2224.70	2347.96	2668.57	2988.30	3329.62

Net Loan Opening	839.30	885.46	630.92	412.34	111.26
Addition due to Additional capitalisation	169.41	66.07	101.15	40.25	7.55
Repayment of loan during the year	326.81	335.97	342.48	347.98	121.76
Add: Repayment adjustment on account of de-capitalization	203.56	15.36	22.75	6.65	2.95
Less: Repayment adjustment on account of discharges of liabilities	0.00	0.00	0.00	0.00	0.00
Net Repayment	123.26	320.61	319.73	341.33	118.81
Net Loan Closing	885.46	630.92	412.34	111.26	0.00
Average Loan	862.38	758.19	521.63	261.80	55.63
Weighted Average Rate of Interest on Loan	8.8451%	8.8202%	8.6980%	8.6720%	8.7430%
<b>Interest on Loan</b>	<b>76.28</b>	<b>66.87</b>	<b>45.37</b>	<b>22.70</b>	<b>4.86</b>

## Depreciation

64. 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.”*

65. The cumulative depreciation of ₹2360.57 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 considering 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 to 5.45% after accounting for fixed assets of multipurpose dams i.e Maithon & Konar. The value of freehold land is ₹0.66 lakh. The weighted average rate of depreciation as claimed by petitioner is 5.29% 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.

66. The necessary calculations for depreciation are as under:

	(₹in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening capital cost	5881.05	6123.07	6217.46	6361.96	6419.46
Closing capital cost	6123.07	6217.46	6361.96	6419.46	6430.24
Average capital cost	6002.06	6170.26	6289.71	6390.71	6424.85
Depreciable value @ 90%	5401.26	5552.65	5660.15	5751.05	5781.7
Balance depreciable value	3040.69	3126.98	2918.25	2695.93	2387.23
<b>Depreciation (annualized)</b>	<b>326.81</b>	<b>335.97</b>	<b>342.48</b>	<b>347.98</b>	<b>349.83</b>
Cumulative depreciation at the end of the year	2687.38	2761.64	3084.37	3403.09	3744.38
Add: Cumulative depreciation adjustment on account of discharges liabilities	0.00	0.00	0.00	0.00	0.00
Less: Cumulative depreciation adjustment on account of de-capitalization	261.72	19.75	29.25	8.55	3.80
Cumulative depreciation (at the end of the period)	2425.67	2741.89	3055.12	3394.54	3740.58

### Operation and Maintenance expenses

67. 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. "

68. 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	1613.01
2010-11	1705.27
2011-12	1802.81
2012-13	1905.93
2013-14	2014.95

69. On prudence check of the details of the O&M expenses submitted by the petitioner vide its submission dated 12.7.2013, the O&M expenses, which have not been allowed for the purpose of normalization of O&M expenses for arriving at the allowable O&M expenses for the period 2009-14 , are as under:

(Amount in ₹)					
Particulars/year	2003-04	2004-05	2005-06	2006-07	2007-08
<b>A- Head-salaries, Wages &amp; Allowances</b>					
Festive Advance (officer)	13057	(-) 22750	0	(-) 30500	3200
Festival advance (1)	0	68203	(-) 48225	79677	0
Festival advance (staff)	(-) 26750	0	0	0	(-) 6400
Productivity incentive (officer)	0	0	0	0	1112732
Productivity incentive (staff)	2164	0	420	56332	3979273
Pension fund	1093492	1504250	1572132	1635612	0
Bonus (officer)	15900	28380	37905	40871	220000
Bonus (staff)	429687	1215333	1203645	1633000	1688500
Leave encashment, (officer)	634754	233809	395665	486511	725013
Leave encashment (staff)	1121313	950058	2067070	2033658	1530074
<b>Sub-total (A)</b>	<b>3283617</b>	<b>3977283</b>	<b>5228612</b>	<b>5935161</b>	<b>9252392</b>



<b>B- Head- Staff welfare expenses and Repair &amp; Maintenance &amp; others</b>					
Ex-gratia payment	54	0	10500	0	21000
Cash award	0	0	0	0	1800
General stores	1702402	1701963	2248149	3093443	2953559
Sub-Total (B)	<b>1702456</b>	<b>1701963</b>	<b>2258649</b>	<b>3093443</b>	<b>2976359</b>
<b>Total (A+B)</b>	<b>4986073</b>	<b>5679246</b>	<b>7487261</b>	<b>9028604</b>	<b>12228751</b>
<b>Total (₹ in lakh)</b>	<b>49.86</b>	<b>56.79</b>	<b>74.87</b>	<b>90.29</b>	<b>122.29</b>

70. From the table above, the expenses incurred towards Bonus, productivity linked incentive, Ex-gratia payment, Adhoc payment, Festival advance, etc have not been allowed as we are of the view that the same shall be met by the petitioner from its own resources and the beneficiaries cannot be burdened on this count.

71. As regards Pension Fund and Leave encashment, a separate provision is made towards contribution of pension, gratuity & leave encashment requirements of the existing employees during 2009-14. Hence, the same has been excluded for the purpose of normalization of O&M expenses for arriving at the allowable O&M expenses for the period 2009-14.

72. As regards the increase in O&M expenses (above 20%) over the preceding years, the justification submitted by the petitioner is as under:

(i) **Repair & maintenance:** Increase of revenue expenses during 2004-05 @ 64.29% over the year 2003-04 is due to making of payment to M/s Alstom for the work of "Major short term overhauling of Unit-III of the generating station.

(ii) **Staff welfare:** Increase of revenue expenses during 2005-06 @108.90% over the year 2004-05 is due to increase in medical treatment.

(iii) **Insurance:** Increase of revenue expenses during 2007-08 @ 64 % over the year 2006-07 is due to making payment of higher insurance payment for safety purpose.

73. On prudence check, we find that the justifications submitted by the petitioner for year to year variation in O&M expenses under different heads of O&M as stated above are found acceptable. Accordingly, the O&M expenses for the period 2003-08, after deducting the amounts which have not been allowed for the purpose of normalization of O&M expenses (as in para 70 above), has been considered for the calculation of O&M expenses for the

period 2009-14 based on the methodology prescribed under the sub-clauses (i), (ii) and (iii) of Regulation 19(f) for existing generating stations and is allowed as under.

	(₹ in lakh)				
	2003-04	2004-05	2005-06	2006-07	2007-08
O&M expenses	830.61	1232.22	900.24	1015.78	1200.51
Employee cost included in above	231.50	249.81	247.44	263.33	305.19

74. Based on the approved O&M expenses for the period 2003-08 as above after 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	1437.08
2010-11	1519.28
2011-12	1606.18
2012-13	1698.06
2013-14	1795.19

#### **Additional O&M expenses**

#### **O&M expenses allowed for contribution to pension, gratuity & leave encashment**

75. As stated above, the O&M expenses allowed for the period 2009-14 has been worked out after excluding the expenditure towards pension fund and leave encashment incurred during the period 2003-08 for the reasons stated therein. As such, the O&M expenses allowed for the period 2009-14 do 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 above order reads 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 for inclusion of actuarial liability of existing employees on account of contribution for pension, gratuity and leave encashment 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= ₹241.03 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.

Year	2007-08	2008-09	2009-10(without salary hike)	(₹ in lakh)	
				2009-10 (with salary hike of 50%)	
Basic Pay +D.A	241.03	241.03x1.0572 =254.82	254.82x1.0572= 269.40	269.40x1.5=	404.10

(c) Contribution for pension, gratuity & leave encashment for actuarial fund for the year 2009-10 = 30.41% of ₹404.10 lakh =₹122.89 lakh

(d) The figure so 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:

	(Rs. in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Liability towards Pension, Gratuity & leave encashment of existing employees	122.89	129.91	137.35	145.20	153.51

76. The petitioner, in addition to above, has claimed additional O&M Expenses for 2009-14 towards share for CISF Security and Share of subsidiary activities which are examined as under:

## CISF Security

77. The additional O&M expenses on CISF security has been claimed by the petitioner as under:

(₹ in lakh)

2009-10	2010-11	2011-12	2012-13	2013-14
310.00	327.67	346.35	366.09	386.96

78. The petitioner has submitted that all its Thermal and Hydro Power generating stations of namely, are located in high alert security zones and in the support of its claim, the petitioner has submitted documentary evidences like the correspondence from the Ministry of Power, Govt. of India directing petitioner to take appropriate security arrangements at hydro power plants, dams etc., with instructions to strengthen the physical security of the various plants and tightening the security of the personnel working there. It has also submitted that there has been IB inspection and recommendations from time to time for improvement in security arrangements in the generating stations and the significant threat to the generating station, dam and the personnel employed, cannot be ignored. We have examined the matter. Since, the petitioner's claim for O&M expenses towards CISF security, in Form-15B of the petition has already been considered in the O&M expenses allowed to the generating station, the additional O&M expenses claimed on this count has been rejected.

## Share of subsidiary activities

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

## Interest on Working Capital

80. 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.

81. 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 1<sup>st</sup> 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 1<sup>st</sup> 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.

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

### Receivables

83. Receivables equivalent to two months of fixed cost has been worked out and allowed as under:

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
410.73	430.06	443.99	458.15	472.76

### Maintenance spares

84. Maintenance spare in the working capital has been allowed as under:

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
215.56	227.89	240.93	254.71	269.28

### O&M expenses for 1 month

85. 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	119.76	126.61	133.85	141.50	149.60

86. 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)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Receivables – 2 months	410.73	430.06	443.99	458.15	472.76
Maintenance Spares	215.56	227.89	240.93	254.71	269.28
O&M Expenses – 1 month	119.76	126.61	133.85	141.50	149.60
<b>Total working capital</b>	<b>746.05</b>	<b>784.56</b>	<b>818.77</b>	<b>854.36</b>	<b>891.64</b>
Rate of interest	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%
<b>Interest on working capital</b>	<b>91.39</b>	<b>96.11</b>	<b>100.30</b>	<b>104.66</b>	<b>109.23</b>

### Normative annual plant availability factor (NAPAF)

87. 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

88. 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

89. The Commission while determining the tariff of 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:

(₹ in lakh)	
	<b>Amount</b>
<b>Petition No: 66/2005 order dated 3.10.2006 &amp; 6.8.2009</b>	
<b>Actuarial Valuation as on 31.3.2006</b>	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
<b>Mejia TPS, Unit-IV (Petition No:279/2010)</b>	
Total admitted claim	14952.00
Recoverable in 2006-09 (60%)	8971.20
Recoverable in 2009-14 (40%)	5980.80

90. The petitioner, in this petition, has claimed ₹116710.68 lakh towards 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 in respect of the generating stations of the petitioner for the period 2009-14 has been worked out as detailed below.

(₹ in lakh)	
	<b>Amount</b>
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%)	<b>58031.48</b>
Share of Mejia TPS, Unit-IV in the proportion allowed earlier	5133.78
<b>Share of Other generating stations</b>	<b>52897.69</b>

91. The amount calculated as above was recoverable by the petitioner in five annual equal installments during the period 2009-14 in addition to the staggered P&G contribution amount allowed by the Commission for the period 2006-09. Based on the approved capital cost as on 31.3.2009 vide order dated 8.5.2013 in Petition No. 272/2010, the total P&G liability has been apportioned among all the generating stations of the petitioner. Accordingly, the year wise P&G liability for this generating station, which is subject to truing-up is worked out and allowed as under:

(₹ in lakh)						
	<b>Total</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
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
<b>Total</b>	<b>114277.29</b>	<b>22855.46</b>	<b>22855.46</b>	<b>22855.46</b>	<b>22855.46</b>	<b>22855.46</b>
<b>Share of Maithon HPS</b>	<b>1839.34</b>	<b>367.868</b>	<b>367.868</b>	<b>367.868</b>	<b>367.868</b>	<b>367.868</b>

### **Contribution to sinking fund**

92. 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 vide 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 (Maithon HPS) is as under:

(₹ in lakh)					
	2009-10	2010-11	2011-12	2012-13	2013-14
Contribution to Sinking fund	132.92	140.35	362.11	387.45	414.58

### Cost of Common Offices

93. 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
Direction office	97.14007431	100.1817411	103.3977873	100.2624944	71.32147857
Subsidiary activities	1167.992611	1187.261132	1207.110904	899.6573171	454.2926313
Other offices	67.11021245	69.23305468	71.32526325	69.28959589	50.4989169
R&D	350.8629241	731.6206126	1296.920848	1799.508049	1750.02557
IT	24.50192967	89.80658005	183.9040484	269.0223588	270.3194891
Central office	691.4021894	707.0766878	722.6266689	707.4940516	567.8090716
<b>Total expenditure</b>	<b>2399.009941</b>	<b>2885.179808</b>	<b>3585.28552</b>	<b>3845.233867</b>	<b>3164.267157</b>

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

(₹ in lakh)						
	Capital cost as on 1.4.2009	2009-10	2010-11	2011-12	2012-13	2013-14
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 & III	161070	861.5038338	1036.09136	1287.505	1380.85452	1136.31388
Mejia TPS, Unit-IV	72403	387.2568578	465.736155	578.74975	620.711552	510.787444

<b>Maithon HS</b>	<b>6684</b>	<b>35.75024291</b>	<b>42.9951861</b>	<b>53.428219</b>	<b>57.3019905</b>	<b>47.1541687</b>
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
<b>TOTAL</b>	<b>448527.93</b>	<b>2399.009941</b>	<b>2885.17981</b>	<b>3585.2855</b>	<b>3845.23387</b>	<b>3164.267</b>

95. 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.

96. 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 prudent 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)				
<b>Central Office</b>		<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
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
	<b>Total</b>	<b>502.82</b>	<b>511.75</b>	<b>511.30</b>	<b>511.16</b>	<b>511.56</b>
<b>Direction office</b>						
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
	<b>Total</b>	<b>32.53</b>	<b>33.72</b>	<b>33.76</b>	<b>33.76</b>	<b>33.76</b>
<b>Other Office</b>						
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
	<b>Total</b>	<b>34.62</b>	<b>35.89</b>	<b>35.92</b>	<b>35.92</b>	<b>35.92</b>
<b>Subsidiary Activity</b>						
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
	<b>Total</b>	<b>648.80</b>	<b>568.94</b>	<b>256.30</b>	<b>256.30</b>	<b>256.30</b>
<b>Total</b>						
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
		<b>1218.78</b>	<b>1150.30</b>	<b>837.28</b>	<b>837.13</b>	<b>837.53</b>

97. 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 ₹5881.05 lakh. Based on this capital cost, the cost of common offices apportioned to this generating station for 2009-14 is as under:

(₹ in lakh)				
<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
16.37	15.45	11.25	11.25	11.25

98. The petitioner vide its affidavit dated 19.4.2013 has furnished the Cumulative depreciation recovered as on 31.3.2009 in Common Assets. 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

99. 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 be in operation during 2009-14. This according to us, would address the concerns of the respondents/objectors.

100. 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 centres 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**

101. 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)."*

102. 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 Ratio 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."

103. 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%**

104. 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 61 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.

#### **Annual Fixed Charges**

105. 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	326.81	335.97	342.48	347.98	349.83
Interest on Loan	76.28	66.87	45.37	22.70	4.86
Return on Equity	532.83	562.12	569.61	575.48	577.47
Interest on Working Capital	91.39	96.11	100.30	104.66	109.23
O&M Expenses	1437.08	1519.28	1606.18	1698.06	1795.19
<b>Sub Total</b>	<b>2464.40</b>	<b>2580.35</b>	<b>2663.94</b>	<b>2748.88</b>	<b>2836.58</b>
Pension & Gratuity Contribution	367.87	367.87	367.87	367.87	367.87
Sinking Fund	132.92	140.35	362.11	387.45	414.58
Common office expenditure	16.37	15.45	11.25	11.25	11.25
Additional O&M expenditure	122.89	129.91	137.35	145.20	153.51
<b>Total</b>	<b>3104.44</b>	<b>3233.94</b>	<b>3542.51</b>	<b>3660.65</b>	<b>3783.78</b>

*Note: (i) All figures are on annualized basis. (ii) All the figures under each head have been rounded. (iii) 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.*

106. 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**

107. 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.

108. 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.

109. 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.

110. This order disposes of Petition No.271/GT/2012.

Sd/-  
**[M.Deena Dayalan]**  
Member

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