

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.269/GT/2012 (Dock. No. 31/GT/2011)

Coram:

**Shri V.S.Verma, Member
Shri M.Deena Dayalan, Member**

Date of Hearing: 2.4.2013

Date of Order: 9.7.2013

In the matter of

Determination of generation tariff of Mejia Thermal Power Station, Units I to III (3 x 210 MW) for the period 2009-14

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, JSEB
Ms. Sugandha Somani, Advocate, Jai Balaji Industries Ltd
Shri Rajiv Shankar Dvivedi, 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 Mejia Thermal Power Station, Units I to III (3 x 210 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'), the judgment of the Appellate Tribunal for Electricity and in compliance with the directions contained in the order of the Commission dated 23.6.2011 in Petition No. 240/2009.

2. The date of commercial operation (COD) of the different units of the generating station is as under:

| | |
|---------|----------------|
| Unit -1 | March,1996 |
| Unit -2 | March,1998 |
| Unit -3 | September,1999 |

3. 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.

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 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 Shracchi 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 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 (with I.A. Nos. 19/2009 and 23/2009) 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. The tariff in respect of Mejia Thermal Power Station Extension, Unit Nos. V and VI (2x250 MW) of the petitioner for the period from 29.2.2008 (COD) to 31.3.2009 was approved by the Commission by order dated 23.12.2009 in Petition No.155/2008.

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 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 Central Electricity Regulatory Commission (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. Similarly, separate petition (Petition No.279/2010) for determination of tariff in respect of Mejia TPS, Unit. No IV for the period from 13.2.2005 (COD) to 31.3.2009 was filed by the petitioner.

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 the 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, including the objectors 3 to 7 herein, 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).

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:

| | <i>(Rs in lakh)</i> | | |
|-----------------------------|---------------------|----------------|----------------|
| | 2006-07 | 2007-08 | 2008-09 |
| Depreciation | 9766.82 | 9789.81 | 9850.42 |
| Interest on Loan | 3237.69 | 2206.71 | 1268.33 |
| Return on Equity | 6658.98 | 6674.65 | 6715.97 |
| Interest on Working Capital | 2022.76 | 2017.61 | 1973.69 |
| O & M Expenses | 7018.00 | 8140.00 | 8179.00 |

| | | | |
|--|-----------------|-----------------|-----------------|
| Sub-Total | 28704.24 | 28828.77 | 27987.42 |
| Additional Charges on account of ROE, IOL, Depreciation of Direction/Central/other offices and subsidiary activities | 522.78 | 495.76 | 475.05 |
| Grand Total | 29227.02 | 29324.54 | 28462.47 |

14. The Energy Charges as allowed in order dated 3.10.2006/6.8.2009 in Petition No. 6.8.2009 was considered.

15. The annual fixed charges claimed by the petitioner for the period 2009-14 in respect of this generating station is as under:

| | (₹ in lakh) | | | | |
|-----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | 9961.65 | 10153.16 | 10476.10 | 10811.17 | 11086.03 |
| Interest on Loan | 9763.41 | 10202.23 | 11243.30 | 10869.98 | 4208.86 |
| Return on Equity | 9059.40 | 9572.08 | 9886.23 | 10202.44 | 10461.82 |
| Interest on working capital | 4204.61 | 4343.75 | 4500.83 | 4577.53 | 4658.63 |
| O & M expenses | 11466.00 | 12121.20 | 12814.20 | 13551.30 | 14326.20 |
| Secondary Fuel Oil Cost | 2591.16 | 2591.16 | 2591.16 | 2591.16 | 2591.16 |
| Compensation Allowance | 94.50 | 94.50 | 136.50 | 136.50 | 178.50 |
| Total | 47140.72 | 49078.09 | 51648.32 | 52740.08 | 47511.20 |
| Share of other office expenditure | 861.50 | 1036.09 | 1287.50 | 1380.85 | 1136.31 |
| Share of additional claims | 31472.34 | 35061.66 | 38755.76 | 40074.33 | 48202.66 |
| Total | 79474.56 | 85175.84 | 91691.59 | 94195.26 | 96850.18 |

16. The petitioner vide its affidavits dated 25.4.2012, 17.1.2013, 22.2.2013 and 18.4.2013 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, M/s SAIL-BSL, Maithon Alloys Ltd, Jai Balaji Industries, Impex Ferro Tech Ltd, Bhaskar Shrachi Alloys Ltd, 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 made 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 capital cost claimed by the petitioner as on 1.4.2009 is ₹161070.08 lakh. The Commission in its order dated 8.5.2013 in Petition No. 272/2010 has approved the closing capital cost of ₹160713.11 as on 31.3.2009. Accordingly, the capital cost as on 1.4.2009 after removal of un-discharged liabilities of ₹340.48 lakh, works out to ₹160372.63 lakh on cash basis. Discharges against these liabilities deducted, if any, made by the petitioner will be considered for tariff as additional capital expenditure in the year of discharge.

22. The petitioner vide Annexure-III of its affidavit dated 25.4.2012 has furnished the details of discharges during the period 2009-11. Out of the un-discharged liabilities deducted as on 1.4.2009, the petitioner has discharged ₹314.27 lakh during 2009-10 including the reversal of provisions to the extent of ₹303.94 lakh. Accordingly, in line with the above provision, this discharge of liabilities, after excluding the reversal of provision i.e. ₹10.33 lakh (314.27-303.94) has been allowed during the year 2009-10 in addition to the admitted additional capital expenditure. The discharges of liabilities during the years 2010-11 and 2011-12 have not been considered in this order, as the asset-wise discharges are not available on record. However, this would be considered at the time of truing up after submission of the asset-wise details of discharges made by the petitioner in respect of this generating station.

Additional Capital expenditure during 2009-14

23. 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.”

24. The actual additional capital expenditure for the period 2009-10 to 2011-12 and the projected additional capital expenditure for the period 2012-13 to 2013-14 claimed by the petitioner are as under:

(₹ in lakh)

| Actual/projected additional expenditure | | | | |
|---|---------|------------|---------|---------|
| 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| 836.58 | 367.31 | (-) 709.41 | 5322.10 | 3602.00 |

25. The petitioner has submitted that the additional capital expenditure claimed is of the following nature:

- (i) The additional capitalization proposal is broadly prepared under need based technical assessment which has to be done on an on-going basis for sustainable and reliable generation.

(ii) Expenditure under the head Environment & Pollution control measures as per guidelines of Ministry of Environment and Forest (MoEF) and Pollution Control Board (PCB), replacements made under guidelines of CEA and for compliance of ABT meter.

26. The petitioner has submitted that it has planned/undertook a number of capital works considered absolutely necessary to maintain the sustenance of the units/stations and the preparatory activities of the same are in advance stage. It has also submitted that many works had been undertaken with the guidance of PIE (Partnership in Excellence) programme mooted by the Ministry of Power, Govt. of India/CEA and most of these works are likely to be completed during the tariff period 2009-14. The petitioner while submitting that the projected expenditure on account of such works have been considered as capital cost of the tariff and hence prayed that the same may be considered for tariff by the Commission, since these works were/ are being taken up as per the prevalent regulations which shall be completed during the period 2009-14.

27. After examining the asset-wise details and justification submitted by the petitioner in its petition, the additional submissions, comments of the respondents and by applying prudence check, the admissibility of additional capitalization is discussed in the subsequent paragraphs:

Actual capital expenditure for the period 2009-10 to 2011-12

28. The petitioner vide its affidavit dated 19.4.2013 has submitted the details of the actual capital expenditure incurred for the years 2009-10, 2010-11 and 2011-12 duly certified by auditor. From the details of the actual expenditure submitted, it is observed that the assets capitalized under Regulation 9(2) of the 2009 Tariff Regulations are of following categories:

- (i) Different buildings such as club building, school building, hospital building, fire fighting building, residential building etc.
- (ii) Roads, culverts, railway sidings
- (iii) Plantations
- (iv) Plants & Machineries
- (v) Ash handling system and
- (v) Other assets

29. The respondent, JSEB has submitted that the claim of the petitioner for capitalization of actual/projected expenditure for 2009-14, would not be admissible under Regulation 9(2) of the

2009 Tariff Regulations, except for one or two items and accordingly, the petitioner has to meet the expenses on new assets of capital nature from the normative compensation allowance provided under Regulation 19(e) of the 2009 Tariff Regulations. The objector/HT consumer, M/s Maithon Alloys Ltd has submitted that the justification in respect of the expenses claimed under for capitalization do not qualify to be considered under additional capitalization in terms of Regulation 9 (2) of the 2009 Tariff Regulations. It has also submitted that expenses which are mostly new in nature and expenses in the nature of minor assets cannot be considered under additional capitalization. Similar submissions have been made by other consumers. In response, the petitioner has submitted that the additional capitalization under Regulation 9 also includes additional capitalization. It has also submitted that the claim for additional capitalization during the period 2009-14 is as per the 2009 Tariff Regulations and the details regarding actual capital expenditure claimed during 2009-11 is as per accounts duly audited by C&AG.

30. We have examined the matter. After prudence check of the assets capitalized towards different buildings, roads, culverts, railway sidings, plantations etc., it is found that these works are in the nature of modification, repair and maintenance. Since expenditures on this count are covered under the normative O&M expenses allowed to the generating station, these are not allowed to be capitalized. As regards expenditure towards 'Office furniture' and 'Other Assets', these include expenditures on Office/ residential furniture, pedestal fans, camera, cycle, hospital equipments, air conditioners, TV, Refrigerators, personal computers, water cooler, ladder etc. Since these are in the nature of minor assets, the capitalization of the same has not been allowed. In view of this, the capitalization of expenditure towards different buildings, roads, culverts, railway sidings, plantations, office furniture and other assets under Regulation 9(2) of 2009 Tariff Regulations have not been allowed.

Plant & Machinery

31. The additional capital expenditure claimed by the petitioner under Plant & machinery involves expenditure for replacement of Boiler Feed pump valve, Transformers, procurement of miscellaneous power plant equipment such as microprocessor controlled induction heater,

accessories of chlorination plant, coal conveyor motor, butter fly valve for coal handling plant etc. After scrutiny, it is found that expenditure towards Boiler Feed pump valve, accessories of chlorination plant and butter fly valve for coal handling plant are in the nature of O&M expenses and hence expenditure on the same has not been considered for capitalization. It is noticed that the replacement of two (2) transformers have been due to system fault and tripping of Buchholz relay. Also, the capitalization of microprocessor controlled induction heater is an up-gradation of the existing heater. Regulation 19 (e) of the 2009 Tariff Regulations provides for compensation allowance to meet the expenses of new assets of capital nature, including in the nature of minor assets following the year of completion of 10, 15, or 20 years of useful life of the generating station. In view of this, we are of the considered view that the expenditure incurred on these assets should be met by the petitioner from the Compensation allowance allowed to the generating station under Regulation 19(e) of the 2009 Tariff Regulations.

32. The petitioner has claimed expenditure of ₹58.59 lakh for 2009-10 incurred towards Ash bund under Regulation 9(2)(iii) of the 2009 Tariff Regulations. The respondent, JSEB has submitted that the claim of the petitioner cannot be permitted under Regulation 9(2) of the 2009 Tariff Regulations. The Objectors while objecting to the said claims for additional capitalization have submitted that major part of the expenses are for replacement assets and should be considered as R&M expenses. They have also submitted that unless these assets are replaced after RLA studies and are put to use and the benefit is provided to the consumers, the said expenses claimed cannot be included in the ARR. It has been further submitted that fly ash expenses should not be allowed being contrary to the Notification of Ministry of Environment & Forests, Govt. of India and on the contrary, the value of fly ash generated, which is a saleable item, should be reduced from the ARR. In response, the petitioner has denied that it had opportunity to sell the fly ash to earn significant income. It has also submitted that it is required to make arrangements for disposal of fly ash including at various times by incurring expenses.

33. We have examined the matter. Regulation 9(2)(iii) provides for consideration of expenditure for deferred works related to Ash pond/Ash handling system within the original

scope of work. Since these works form part of the original scope of work and are taken up in stages during the life of the generating station, the capitalization of the expenditure is allowed under this head.

Reversal of provisions

34. From the details of the actual additional capital expenditure incurred for the period from 2009-10 to 2011-12, it is observed that the petitioner has reversed provisions during the years 2009-10 and 2011-12 since some of the expenditure have been allowed by the Commission as additional capital expenditure during the period 2006-09. The details of the expenditure allowed in tariff during the period 2006-09 and which has been reversed during the years 2009-10 and 2011-12 are allowed as negative entries as under:

| Name of assets | (₹ in lakh) | |
|---------------------------------------|-------------------|------------------|
| | 2009-10 | 2011-12 |
| Fire fighting building | (-) 3.93 | - |
| Residential building | (-) 9.26 | - |
| Plantation | (-) 24.91 | - |
| Railway siding | (-) 251.41 | - |
| T.G .& Auxiliaries | (-) 14.43 | - |
| Sub-station transformer (written-off) | - | (-) 85.78 |
| Total | (-) 303.94 | (-) 85.78 |

35. During 2009-10, a negative entry of ₹1.17 lakh towards other assets, namely, Air conditioning plant and ₹1.22 lakh towards personal computer have not been considered as the expenditure on these assets had not been allowed for the period 2006-09. Similarly, during 2011-12, an expenditure of (-) ₹920.68 lakh towards Roads/Culvert and Railway siding has not been considered as this expenditure had not been allowed for the period 2006-09.

36. Based on the above discussions, the actual capital expenditure allowed for the years 2009-10 to 2011-12 are as under:

| Sl. No. | | (₹ in lakh) | | |
|---------|---|---------------------------------------|-------------|------------------|
| | | Actual additional capital expenditure | | |
| | | 2009-10 | 2010-11 | 2011-12 |
| 1. | Claimed | 836.58 | 367.31 | (-) 709.41 |
| 2. | Allowed | 58.59 | 0.00 | 0.00 |
| 3. | Provision reversed/write off allowed | (-) 303.94 | 0.00 | (-) 85.78 |
| 4. | Net additional capitalization allowed (2+3) | (-) 245.35 | 0.00 | (-) 85.78 |

Projected additional Capital Expenditure for the period 2012-13 and 2013-14

37. The petitioner vide its affidavit dated 14.10.2011 has claimed projected additional capital expenditure for the years 2012-13 and 2013 -14 as under:

| <i>(₹ in lakh)</i> | |
|---|----------------|
| Projected additional capital expenditure | |
| 2012-13 | 2013-14 |
| 5322.10 | 3602.00 |

38. From the details of the projected capital expenditure it is observed that the assets proposed to be capitalized during the period 2012-14 are of following categories:

- (a) Plant Works
- (b) Ash handling System
- (c) Environment & Pollution control

Plant Works

39. The capitalization of expenditure under this head include works in Boiler Auxiliaries such as Electrical winch/hoist, modification of APH internals and Air nozzle tips, reducer gear box of coal mill, Turbine Generator auxiliaries such as fully bladed LP turbine rotor for Units I to III, HP turbine module for Unit I to III, Electrical system viz., SF₆ Breakers, 415 V Air Circuit Breakers, Distribution Transformers, C&I system viz., up-gradation of existing solid state feeder system by microprocessor based control system to determine specific coal consumption, replacement of existing coal mill differential pressure measurement system and Special Tool & Plant such as Hydraulic Jack, Puller & Wedges etc. On scrutiny of the claim, it is observed that assets namely, Electrical winch/hoist, Special Tool & Plant such as Hydraulic Jack, Puller & Wedges etc. are in the nature of minor assets and hence not allowed to be capitalized. Assets of Turbine Generator auxiliaries such as fully bladed LP Turbine rotor for Unit I to III, HP turbine module for Unit I to III and 6.6 KV/415 V Distribution Transformers (26 Nos.) are sought to be capitalized as spares for future requirement in case of failure/or at the time of overhaul. Since Regulation 9(2) of the 2009 Tariff Regulations do not provide for capitalization of spares procured after the cut-off date, the same has not been allowed. The claim of the petitioner towards Up-gradation of existing solid state feeder system by microprocessor based control system to determine specific coal

consumption and replacement of existing coal mill differential pressure measurement system is for better boiler combustion control and for reduction in Auxiliary Power Consumption. Since the benefit of efficiency gains on this count are not being passed on to the beneficiaries during the tariff period, the capitalization of expenditure on these assets is not allowed. The petitioner has sought for the capitalization for modification of APH internals on the premise that it will reduce the Auxiliary power Consumption (APC) which is at present on the higher due to seal leakage, so that the APC norms as specified by the Commission could be achieved. We are of the considered view that APC of the generating station which is 12 to 15 years old is high only due to lack of proper maintenance of the generating station. Since the generating station is entitled for compensation allowance in terms of Regulation 19(e) of the 2009 Tariff Regulations, the claim of the petitioner under this head has not been allowed.

40. The petitioner has claimed expenditure of ₹10.00 lakh during the year 2013 and ₹12.00 lakh during the year 2013-14 towards 415 V Air circuit breaker on the ground that the existing circuit breakers have become obsolete and spares are also not available from Original Equipment Manufacturer (OEM). The petitioner has also submitted the corresponding de-capitalization value of ₹4.45 lakh during the year 2012-13 and ₹5.34 lakh during the year 2013-14 for the said asset. Considering the fact that these assets are necessary for successful and efficient operation of the generating station, the expenditure claimed is allowed along with the de-capitalization value of the said asset. Accordingly, the expenditure of ₹5.55 lakh (10.00-4.45) during 2012-13 and ₹6.66 lakh (12.00 –5.34) during 2013-14 has been allowed to be capitalized. Similarly, the petitioner has also claimed expenditure of ₹50.00 lakh during the year 2012-13 and ₹60.00 lakh during the year 2013-14 towards the replacement of NGEF make SF₆ Breakers by Siemens make VCB Breakers, as the spares, service and support from OEM was not available. Since spares & service support are not available to the petitioner from the OEM, the claim of the petitioner is justified. Considering the corresponding pro-rata de-capitalization of ₹30.31 lakh during the year 2012-13 and ₹36.38 lakh during the year 2013-14, for this asset, the expenditure, on net basis, amounting to ₹19.69 lakh (50.00-30.31) during the year 2012-13 and

₹23.62 lakh (60.00-36.38) during the year 2013-14 is allowed as these assets are necessary for successful and efficient operation of the generating station. Though Regulation 9(2)(iv) of the 2009 Tariff Regulations provides for consideration of expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation for hydro projects only, we as a special case, in exercise of our power under Regulation 44 of the 2009 Tariff Regulation, relax Regulation 9(2)(iv) of the 2009 Tariff Regulations and allow the capitalization of the said expenditure in respect of this thermal generation station keeping in view that these assets are necessary for successful operation and for sustenance of operation of the generating station.

41. The petitioner has sought the capitalization of Reducer Gear Box of Coal Mill on the ground that the Main Reducer Gear Box of Coal Mills has been running hot in summer season which requires external cooling. The petitioner has also submitted that the original equipment was imported where the designed ambient condition/temperature was relatively low and therefore a modified improved system is required to be installed by replacing the old one. The matter has been examined. We are of the considered view that the problem faced by the petitioner is on account of the design deficiency of the asset, for which the petitioner cannot absolve its responsibility. Hence, it would be unfair and unjust to burden the beneficiaries/objectors on this count. Accordingly, capitalization of the expenditure claimed by the petitioner has not been allowed.

Ash Handling System

42. The claim of the petitioner for expenditure of ₹70.00 lakh during 2012-13 towards ash handling includes works such as strengthening of ash dyke. The objector, MAL has submitted that Ministry of Environment & Forests, Govt. of India by notification dated 14.9.1999 has restrained all thermal power stations from dumping fly ash into ponds or on land as it is highly pollutant and directed the use of fly ash for manufacture of bricks and other construction activities. It has also submitted that from the report of CEA for the year 2010-11, it appears that

the petitioner has sold 6.2 lakh MTs of ash to cement plants and brick manufacturers and the said amount has not been shown in the tariff petition. The objector has further submitted that the petitioner has entered into agreements with M/s Lafarge and M/s Ultratech Cements for manufacturing of cement from fly ash sold and earning substantial amounts. It has therefore prayed that the capital cost for fly ash should not be allowed and on the contrary, the petitioner should be directed to reduce the sale value of ash from the ARR. The petitioner, in response has vehemently opposed the above submissions and has clarified that it is not in a position to sell the fly ash and earn revenue. It has also submitted that it has attempted to get the fly ash sold to interested persons including for the manufacture of bricks or construction activities but has not been able to do so on account of lack of interest shown. The petitioner has also reiterated that it has not earned any revenue on account of disposal of fly ash and on the other hand has to incur expenditure in handling the fly ash in accordance with environmental requirements. The petitioner has reiterated that the expenditure claimed is in accordance with the 2009 Tariff Regulations including the power of the Commission to relax the norms in justified circumstances. We have examined the matter and are inclined to accept the submissions of the petitioner for the reason that there has been no sale/tendering of fly ash. Also, the work relating to strengthening of Ash dykes form part of the original approved scope of works and are normally taken up in stages as and when required. In view of this, the expenditure claimed is allowed to be capitalized under this head under Regulation 9(2)(iii) of the 2009 Tariff Regulations. Similarly, the claim of the petitioner for ₹25.00 lakh during 2012-13 towards acquiring forest land for extension of road from ash pond to link road is allowed under Regulation 9(2)(iii).

Environment & Pollution Control

43. Environment & Pollution Control system includes assets for continuous monitoring of Ambient Air Quality, Development of Green Belt, Water Harvesting, Acquiring forest land for extension of road from ash pond to link road etc. The claim of the petitioner is examined and considered as under:

(a) The claim of the petitioner for expenditure of ₹200.00 lakh during 2012-13 towards Ambient Air Quality Monitoring system is allowed since the expenditure claimed by the petitioner is a statutory requirement in terms of the directions issued by the West Bengal Pollution Control Board. Hence, the same is allowed to be capitalized under Regulation 9(2)(ii) of the 2009 Tariff Regulations

(b) The expenditure of ₹35.00 lakh each for the years 2012-13 and 2013-14 towards the development of green belt are allowed under Regulation 9(2)(ii) in order to preserve and maintain proper environmental conditions for mankind in the adjoining areas of the generating station

(c) The expenditure of ₹10.00 lakh during 2012-13 and ₹5.00 lakh during 2013-14 towards Water harvesting has been allowed under Regulation 9(2)(ii) in terms of the guidelines of the Ministry of Environment and Forest (MOEF), Govt. of India.

44. Based on the above discussions, the projected additional capital expenditure allowed during the years 2012-13 and 2013-14 are as under:

| (₹ in lakh) | | |
|---|----------------|----------------|
| Projected additional capital expenditure | | |
| | 2012-13 | 2013-14 |
| Claimed | 5322.10 | 3602.00 |
| Allowed | 365.15 | 70.28 |

45. Accordingly, the year-wise additional capital expenditure (actual expenditure for the years 2009-10, 2010-11, 2011-12 and projected expenditure for the years 2012-13 and 2013-14) allowed after considering the discharge of liabilities are summarized as under:

| (₹ in lakh) | | | | | |
|--|----------------|----------------|------------------|----------------|----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Net additional capitalization allowed | (-) 245.35 | 0.00 | (-) 85.78 | 365.15 | 70.28 |
| Add: Reversal of liabilities | 303.94 | 0.00 | 0.00 | 0.00 | 0.00 |
| Add. Discharge of liabilities | 10.33 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total Additional Capitalization allowed | 68.92 | 0.00 | (-) 85.78 | 365.15 | 70.28 |

Capital Cost for 2009-14

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

(₹ in lakh)

| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|--------------------------------|------------------|------------------|------------------|------------------|------------------|
| Opening Capital cost | 160372.63 | 160441.56 | 160441.56 | 160355.78 | 160720.93 |
| Additional Capital Expenditure | 68.92 | 0.00 | (-) 85.78 | 365.15 | 70.28 |
| Closing Capital cost | 160441.56 | 160441.56 | 160355.78 | 160720.93 | 160791.21 |
| Average Capital cost | 160407.10 | 160441.56 | 160398.67 | 160538.36 | 160756.07 |

Debt-Equity Ratio

47. 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.

48. Accordingly, gross loan and equity amounting to ₹112499.18 lakh and ₹48213.93 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. However, un-discharged liabilities of ₹340.48 lakh included in the capital cost as on 31.3.2009 has been adjusted to debt and equity in the debt-equity ratio of 70:30 as these liabilities pertains to the period 2004-9. As such, the gross normative loan and equity as on 1.4.2009 is revised to ₹112260.85 lakh and ₹48111.79 lakh respectively. 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

49. 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:

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

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

(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.

50. 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 | 48111.79 | 48132.46 | 48132.46 | 48106.73 | 48216.28 |
| Addition of Equity due to Additional Capital Expenditure | 20.68 | 0.00 | (-) 25.73 | 109.55 | 21.08 |
| Normative Equity-Closing | 48132.46 | 48132.46 | 48106.73 | 48216.28 | 48237.36 |
| Average Normative Equity | 48122.13 | 48132.46 | 48119.60 | 48161.50 | 48226.82 |
| 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)- (annualised) | 8986.33 | 9317.48 | 9324.13 | 9332.25 | 9344.91 |

Interest on Loan

51. 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.

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

(a) As stated above, the gross normative loan of ₹112260.85 lakh has been considered as on 1.4.2009.

(b) Cumulative repayment as on 31.3.2009 works out to ₹102639.11 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. However, the same is adjusted by an amount equal to adjustment in the cumulative depreciation on account of removal of un-discharged liabilities from the capital cost as on 1.4.2009. As such, the cumulative repayment as on 1.4.2009 is revised to ₹102421.67 lakh.

(c) Accordingly, the net normative opening loan as on 1.4.2009 works out to ₹9839.18 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.

53. 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 | 112260.85 | 112309.09 | 112309.09 | 112309.09 | 112564.70 |
| Cumulative repayment of loan up to previous year | 102421.67 | 112309.09 | 112309.09 | 112249.05 | 112564.70 |
| Net Loan Opening | 9839.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| Addition due to Additional capitalisation | 48.25 | 0.00 | (-) 60.04 | 255.61 | 49.20 |
| Repayment of loan during the year | 9686.72 | 0.00 | 0.00 | 255.61 | 49.20 |
| Add: Repayment adjustment on account of de-capitalization | 0.00 | 0.00 | 60.04 | 0.00 | 0.00 |
| Less: Repayment adjustment on account of discharges of liabilities | 200.71 | 0.00 | 0.00 | 0.00 | 0.00 |
| Net Repayment | 9887.43 | 0.00 | (-) 60.04 | 255.61 | 49.20 |
| Net Loan Closing | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Loan | 4919.59 | 0.00 | 0.00 | 0.00 | 0.00 |
| Weighted Average Rate of Interest on Loan | 8.8451% | 8.8202% | 8.6980% | 8.6720% | 8.7430% |
| Interest on Loan | 435.14 | 0.00 | 0.00 | 0.00 | 0.00 |

Depreciation

54. 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.”

55. The cumulative depreciation of ₹102639.11 lakh as on 31.3.2009 as per order dated 8.5.2013 in Petition No.272/2010 has been considered. Further, proportionate adjustment has been made to this cumulative depreciation on account of un-discharged liabilities deducted as on 1.4.2009. Accordingly, the revised cumulative depreciation as on 1.4.2009 works out to ₹102421.67 lakh. Accordingly, the balance depreciable value (before providing depreciation) for the year 2009-10 works out to ₹40447.99 lakh. 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 it works out to be 6.1464%. The rates claimed by petitioner is 6.16% 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.

56. The necessary calculations for depreciation are as under:

| | (₹ in lakh) | | | | |
|--|----------------|----------------|----------------|----------------|----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Opening capital cost | 160372.63 | 160441.56 | 160441.56 | 160355.78 | 160720.93 |
| Closing capital cost | 160441.56 | 160441.56 | 160355.78 | 160720.93 | 160791.21 |
| Average capital cost | 160407.10 | 160441.56 | 160398.67 | 160538.36 | 160756.07 |
| Depreciable value @ 90% | 142869.65 | 142900.67 | 142862.07 | 142987.79 | 143183.73 |
| Balance depreciable value | 40447.99 | 30419.02 | 20519.03 | 10863.18 | 1191.78 |
| Depreciation (annualized) | 9859.28 | 9861.40 | 9858.76 | 9867.35 | 1191.78 |
| Cumulative depreciation at the end of the year | 112280.94 | 122343.05 | 132201.81 | 141991.95 | 143183.73 |
| Add: Cumulative depreciation adjustment on account of discharges liabilities | (-) 200.71 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | |
|--|-----------|-----------|-----------|-----------|-----------|
| Less: Cumulative depreciation adjustment on account of de-capitalization | 0.00 | 0.00 | 77.20 | 0.00 | 0.00 |
| Cumulative depreciation (at the end of the period) | 112481.65 | 122343.05 | 132124.61 | 141991.95 | 143183.73 |

Operation & Maintenance expenses

57. Clause (a) of Regulation 19 of Regulation of the 2009 Tariff Regulations provide the following O&M expense norms for 210 MW coal based generating stations as under:

| | (₹ in lakh/MW) | | | | |
|--|----------------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| O&M expenses for 210 MW units | 18.20 | 19.24 | 20.34 | 21.51 | 22.74 |

58. Based on the above norms, the O&M expenses allowed for the generating station are as under:

| | (₹ in lakh) | | | | |
|-------------------------|-------------|----------|----------|----------|----------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| O&M expenses | 11466.00 | 12121.20 | 12814.20 | 13551.30 | 14326.20 |

59. In addition, the petitioner has claimed additional O&M expenses towards Ash Evacuation as under:

Ash Evacuation

60. The respondent, JSEB and the objectors have all opposed the relaxation of O&M norms and have submitted that any claim of the petitioner beyond the 2009 Tariff Regulations may not be permitted. The objector Maithon Alloys Ltd has submitted that the petitioner should take steps to sell the fly ash and the sale proceeds should be reduced from the ARR. The petitioner has submitted its response to the said submissions as stated above. The matter has been examined. In addition to wet slurry ash disposal, dry fly ash system was commissioned in this generating station during 2009. The petitioner was allowed additional O&M in Ash evacuation during the period 2006-09 as the dry fly ash system was not available during that period. However, the dry fly ash system has been commissioned only during the period 2009-14. Further, additional capital expenditure towards strengthening of dyke at Ash pond and dry fly Ash system have been allowed in this order considering the fact that the petitioner is under obligation to comply with the statutory requirements under the notification of MoEF, GOI towards

the effective utilization of fly ash. In view of this, there is no justification in the claim of the petitioner for additional O&M due to Ash evacuation.

Mega Insurance

61. The respondent, JSEB and the Objectors have objected to the claim of the petitioner for additional O&M expenses towards Mega Insurance. The Commission in the order dated 8.5.2013 in Petition No. 272/2010 had allowed additional O&M expenses for the period 2006-09 taking into consideration the location of the generating stations of the petitioner, the security for the generating station against any acts of sabotage/terrorism and keeping in view that the normative O&M expenses allowed to the generating station in terms of the 2004 Tariff Regulations, do not include expenses on insurance. In line with the said order dated 8.5.2013, the Mega Insurance claimed by the petitioner for the period 2009-14, is allowed as additional O&M expenses in relaxation of the provisions of the 2009 Tariff Regulations.

Amortization of Capital Spares

62. The respondent, JSEB and the Objectors have objected to the claim of the petitioner for additional O&M expenses under this head. The normative O&M expenses allowed to the generating station for the period 2009-14 includes the expenses towards consumption of stores and capital spares. In view of this, we find no justification to allow the amortization of capital spares separately. Hence, the same has not been considered.

CISF Security

63. The petitioner vide its affidavit dated 19.4.2013 has submitted that all its Thermal and Hydro generating stations viz., Bokaro TPS, Chandrapura TPS, Mejia TPS, Durgapur TPS, Maithon HEP, Panchet HEP and Tilayia HEP are located in high alert security zones. In the support of this, the petitioner has submitted documentary evidences such as correspondence from the Ministry of Power, Govt. of India wherein direction to take appropriate security arrangements at hydrogenating stations, dams etc., and instructions for strengthening the physical security of the various generating stations and for tightening the personal security were given. It has also submitted that IB inspections were undertaken and recommendations were

issued from time to time for improvement of the security arrangements in the generating stations. The respondent, JSEB and the Objectors have objected to the claim of the petitioner for additional O&M expenses under this head. The matter has been considered. Based on the documentary evidence and considering the location and significant threat perception to the generating station and the personnel employed there, we consider the matter favorably and allow the claim of the petitioner for additional O&M on this count. However, the petitioner is directed to furnish the generating station- wise CISF personnel deployed/employed in each of its generating stations during the period 2008-09 to 2013-14 at the time of truing up exercise to be undertaken in terms of Regulation 6 of the 2009 Tariff Regulations.

Share of subsidiary activities

64. The petitioner has claimed the projected expenditure towards the share of subsidiary activities for the period 2009-10 to 2013-14 as additional O&M expenses as given below:

| | (₹ in lakh) | | | | |
|--------------------------------|-------------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Share of Subsidiary activities | 739.90 | 782.22 | 826.97 | 874.27 | 924.28 |

65. The respondent, JSEB and the Objectors have objected to the claim of the petitioner for additional O&M expenses under this head. The matter has been examined. In our order dated 3.10.2006 in Petition No. 66/2005, expenditure towards allocation of share of subsidiary activity for 2006-09 other than soil conservation has not been allowed. In line with said order and as the normative O&M allowed to the generating station during 2009-14 do not include revenue expenses on subsidiary activities, the additional O&M expenses for share of subsidiary activities has been considered and has been limited to the expenditure required for soil conservation. The Operating expenses of subsidiary activities for the years 2009-10, 2010-11 and 2011-12 have been verified/checked from the balance sheet of the petitioner company for the respective years in order to ensure that the expenses for the activities relating to soil conservation have only been accounted for in the computation of subsidiary expenses. However, in absence of balance sheet for the years 2012-13 and 2013-14, these expenses have been arrived at by escalating the expenses of 2011-12 and 2013-14 by 5.72% as per methodology followed under the 2009-

14 Tariff Regulations relating to escalation of O&M expense norms. Accordingly, the following expenditure has been allowed for the period 2009-14 as additional O&M expense towards subsidiary activities:

| | (₹ in lakh) | | | | |
|--------------------------------|-------------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Share of subsidiary activities | 220.42 | 248.75 | 252.47 | 298.32 | 352.49 |

66. The subsidiary expenses allowed as above for the years 2012-13 and 2013-14 are subject to truing-up based on the audited balance sheet for the years 2012-13 and 2013-14 respectively.

67. Based on the above discussions, the additional O&M expenses is allowed as under:

| | (₹ in lakh) | | | | |
|-----------------------------------|----------------|----------------|----------------|----------------|----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Additional O&M allowed | | | | | |
| a. Ash evacuation | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| b. Mega Insurance | 454.67 | 480.68 | 508.17 | 537.24 | 567.97 |
| c. Amortisation | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d. CISF Security | 382.00 | 403.85 | 426.95 | 451.37 | 477.19 |
| e. Share of Subsidiary activity | 220.42 | 248.75 | 252.47 | 298.32 | 352.49 |
| TOTAL | 1057.09 | 1133.28 | 1187.59 | 1286.93 | 1397.65 |

Interest on Working Capital

68. Regulation 18(1)(a) of the 2009 regulations provides that the working capital for coal based generating stations shall cover:

(i) Cost of coal for 1.5 months for pit-head generating stations and two months for non-pithead generating stations, for generation corresponding to the normative annual plant availability factor;

(ii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel oil, cost of fuel oil stock for the main secondary fuel oil;

(iii) Maintenance spares @ 20% of operation and maintenance expenses specified in regulation 19.

(iv) Receivables equivalent to two months of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor; and

(v) O&M expenses for one month.

69. Clause (3) of Regulation 18 of the 2009 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.

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

Fuel Components in working capital

71. The petitioner has claimed the following cost for fuel component in working capital in based on price and GCV of coal & secondary fuel oil procured and burnt for the preceding three months of January, 2009, February, 2009 and March, 2009.

| | (₹ in lakh) | | | | |
|-------------------------------------|-------------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Cost of coal for 2 months | 8698.50 | 8698.50 | 8698.50 | 8698.50 | 8698.50 |
| Cost of secondary fuel oil 2 months | 431.86 | 431.86 | 431.86 | 431.86 | 431.86 |

72. Accordingly, the fuel components in the working capital has been computed based on the price and GCV of coal & secondary fuel oil procured and burnt for the preceding three months of January, 2009, February, 2009 and March, 2009 and has been allowed as under:

| | (₹ in lakh) | | | | |
|-------------------------------------|-------------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Cost of coal for 2 months | 8699.89 | 8699.89 | 8723.72 | 8699.89 | 8699.89 |
| Cost of secondary fuel oil 2 months | 442.19 | 442.19 | 443.40 | 442.19 | 442.19 |

Maintenance spares

73. The petitioner has claimed the following maintenance spare in the working capital:

| | (₹ in lakh) | | | | |
|--|-------------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| | 2293.20 | 2424.24 | 2562.84 | 2710.26 | 2865.24 |

74. The expenses for maintenance spares as claimed by the petitioner are found to be in order and hence allowed.

Receivables

75. Receivables equivalent to two months of capacity charge and energy charge for sale of electricity has been calculated on normative plant availability factor. Accordingly, receivables have been worked out on the basis of two months of fixed and energy charges (based on primary fuel only) as shown below:

| | (₹ in lakh) | | | | |
|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Variable Charges -2 months | 8699.89 | 8699.89 | 8723.72 | 8699.89 | 8699.89 |
| Fixed Charges - 2 months | 6132.97 | 6236.34 | 6368.42 | 6498.77 | 5168.43 |
| Total | 14832.85 | 14936.23 | 15092.15 | 15198.66 | 13868.31 |

O&M expenses for 1 month

76. O & M expenses for 1 month as claimed by the petitioner for the purpose of working capital are allowed in terms of Regulation 18 (1)(a)(v) of the 2009 Tariff Regulations, as under:

| | (₹ in lakh) | | | | |
|-------------------|-------------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| O & M for 1 month | 955.50 | 1010.10 | 1067.85 | 1129.28 | 1193.85 |

77. 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 |
| Fuel Cost – 2 months | 8699.89 | 8699.89 | 8723.72 | 8699.89 | 8699.89 |
| Liquid fuel stock – 2 months | 442.19 | 442.19 | 443.40 | 442.19 | 442.19 |
| O&M Expenses – 1 month | 955.50 | 1010.10 | 1067.85 | 1129.28 | 1193.85 |
| Maintenance Spares | 2293.20 | 2424.24 | 2562.84 | 2710.26 | 2865.24 |
| Receivables – 2 months | 14832.85 | 14936.23 | 15092.15 | 15198.66 | 13868.31 |
| Total working capital | 27223.63 | 27512.65 | 27889.96 | 28180.27 | 27069.48 |
| Rate of interest | 12.2500% | 12.2500% | 12.2500% | 12.2500% | 12.2500% |
| Interest on working capital | 3334.89 | 3370.30 | 3416.52 | 3452.08 | 3316.01 |

Other Elements of tariff

78. 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

79. 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 excluding Leave | 3140.94 |
| Annual liability for 2009-10 | 60.00 |
| Total liability | 3200.94 |

80. 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 Mejja, 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 said liability during the period 2006-09 and the balance 40% of liability during the period 2009- 04 in compliance of the directions contained in the judgment of the Tribunal. In line with this, the Commission vide its order dated 22.4.2013 in Petition No. 272/2010 had allowed the recovery of an amount of Rs.92069.40 lakh, being 60% of Rs.14952 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)

| | Amount |
|--|-----------|
| Petition No: 66/2005 order dated 3.10.2006 & 6.8.2009 | |
| Actuarial Valuation as on 31.03.2006 | 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: 272/2010) | |
| Total admitted Claim | 14952.00 |
| Recoverable in 2006-09 (60%) | 8971.20 |
| Recoverable in 2009-14 (40%) | 5980.80 |

81. The petitioner, in this petition, has claimed Rs.116710.68 lakhs 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 in respect of this generating station 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 | 52897.69 |

82. The amount calculated as above is 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. The year-wise expenditure allowed for this generating station subject to truing-up is worked out 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 Mejia, TPS, Units I to III | 50264.15 | 10052.83 | 10052.83 | 10052.83 | 10052.83 | 10052.83 |

Contribution to sinking fund

83. 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 Petition Nos. 272/2010 and 279/2010 respectively and the amount considered for this generating station (Mejia TPS Units I to III) is as under:

| | (Rs. in lakh) | | | | |
|------------------------------|----------------|----------------|----------------|----------------|----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Contribution to Sinking fund | 3632.32 | 3835.51 | 9895.41 | 10588.08 | 11329.25 |

84. 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

85. 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)."

86. 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."*

87. Accordingly, this interest on Government capital has not been considered for the computation of tariff. Also, in terms of the provisions of the 2009 Tariff Regulations, additional interest on notional loan as claimed by the petitioner is not allowable. Hence, the same has not been considered for the computation of tariff for 2009-14.

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

88. 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 31 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

89. 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 centers 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.

90. We have examined the matter and are of the view that the expenditure on Other offices/Common offices are to be serviced through tariff as per decision 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. 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, the additional capitalization for these new units (IT and R&D) will 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:

| Central Office | | (₹ in lakh) | | | | |
|-----------------------|------------------|--------------------|----------------|----------------|----------------|----------------|
| S.No. | | 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*(₹ in lakh)*

| S.No. | | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|-------|------------------|--------------|--------------|--------------|--------------|--------------|
| 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 Office*(₹ in lakh)*

| S.No. | | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|-------|------------------|--------------|--------------|--------------|--------------|--------------|
| 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 |

Subsidiary Activity*(₹ in lakh)*

| S.No. | | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|-------|------------------|---------------|---------------|---------------|---------------|---------------|
| 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*(₹ in lakh)*

| S.No. | | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|-------|------------------|----------------|----------------|---------------|---------------|---------------|
| 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 |
| | Total | 1218.78 | 1150.30 | 837.28 | 837.13 | 837.53 |

91. The capital cost as on 31.3.2009 allowed in respect of this generating station as per order dated 22.4.2013 in Petition No. 272/2010 is ₹160713.11 lakh. Based on this capital cost, the cost of common offices apportioned to this generating station for 2009-14 is as under:

(₹ in lakh)

| 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|---------|---------|---------|---------|---------|
| 447.42 | 422.28 | 307.37 | 307.31 | 307.46 |

Contribution to subsidiary fund

92. The petitioner has claimed the following amounts for Contribution to Subsidiary Fund.

(₹ in lakh)

| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|--|---------|---------|---------|---------|---------|
| Contribution to Subsidiary Fund | 10205 | 11317 | 12841 | 13548 | 14182 |

93. The petitioner has submitted that it has been undertaking subsidiary activities in the Damodar Valley area for the last many years and in many respects, the need for increasing the subsidiary activities has now arisen, particularly, in the context of the urgent need in regard to soil erosion, cultivation of reservoirs, check dam, flood control, afforestation etc. because of the

increasing impact on environment. In addition, it has also submitted that there is also a need to increase social integration activities by establishing hospitals, schools, drinking water supply, sanitation, public health, training scheme, roads etc. In this connection, it has appointed SBI Capital Market to undertake a study in consultation with experts from IIT Kharagpur and Prof. Pradeep Kakkar. Accordingly, the petitioner has submitted that the expenditure on the subsidiary activities may be allowed.

94. The respondent, JSEB has submitted that the claim of the petitioner as other additional claims or miscellaneous claims are not maintainable under the 2009 Tariff Regulations. The objector, Maithon Alloys Ltd and M/s Jai Balaji Industries have submitted that since the Commission had allowed the same in terms of the judgment of the Tribunal dated 23.11.2007, the petitioner is stopped from claiming the same as a tariff item as it would amount to double charging. In response, the petitioner has submitted that in terms of the provisions of the DVC Act, 1948, the actual cash contribution is to be allowed. It has also submitted that the common assets created for subsidiary activities are also to be serviced and that Regulation 43 of the 2009 Tariff Regulations provides for such contribution to subsidiary fund.

95. The submissions have been considered. As stated by the respondent/objectors, the petitioner has been allowed Return on Equity, Interest on loan and Depreciation as per the claim made under head 'Common office expenditure' which includes expenditure for subsidiary activities, in addition to other office expenditure such as Direction Office, Central office, Other offices, R&D etc. Further, the O&M expenses for subsidiary activities, limited to the expenditure required for soil conservation has also been allowed. Accordingly, the cost components of subsidiary activities are already being recovered through tariff by the petitioner. In view of this, we are not inclined to allow the Contribution to Subsidiary fund separately.

Compensation Allowance

96. Regulation 19(e) of 2009 Tariff Regulations provides as under:

"In case of coal-based or lignite-fired thermal generating station a separate compensation allowance unit-wise shall be admissible to meet expenses on new assets of capital nature

including in the nature of minor assets, in the following manner from the year following the year of completion of 10, 15, 20 years of useful life.”

| Year of operation | Compensation Allowance (₹ in lakh/MW/Year) |
|-------------------|---|
| 0-10 | Nil |
| 11-15 | 0.15 |
| 16-20 | 0.35 |
| 21-25 | 0.65 |

97. The petitioner has claimed Compensation allowance for the period 2009-14 as under:

(Rs.in lakh)

| | COD | Capacity (MW) | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|----------|-----------------|---------------|--------------|--------------|---------------|---------------|---------------|
| Unit I | March, 1996 | 210 | 31.50 | 31.50 | 73.50 | 73.50 | 73.50 |
| Unit II | March, 1998 | 210 | 31.50 | 31.50 | 31.50 | 31.50 | 73.50 |
| Unit III | September, 1999 | 210 | 31.50 | 31.50 | 31.50 | 31.50 | 31.50 |
| Total | | | 94.50 | 94.50 | 136.50 | 136.50 | 178.50 |

98. In terms of the above regulations, the Compensation Allowance allowed for the generating station for the period 2009-14 is as under:

(Rs in lakh)

| Sl.No. | Description | Unit-I | Unit-II | Unit-III | |
|--------|------------------------------------|---------------|---------------|----------------|---------------|
| 1 | Capacity in MW | 210 | 210 | 210 | |
| 2 | COD | March 1996 | March 1996 | September 1999 | |
| 3 | Useful life as on 1.4.2009 | 13.08 | 11.08 | 9.58 | |
| 4 | Actual useful life after | | | | |
| | a) 10 years | 1.3.2006 | 1.3.2008 | 1.9.2009 | |
| | b) 15 years | 1.3.2011 | 1.3.2013 | 1.9.2014 | |
| | c) 20 years | 1.3.2016 | 1.3.2018 | 1.9.2019 | |
| | d) 25 years | 1.3.2021 | 1.3.2023 | 1.9.2024 | |
| 5 | Compensation Allowance (unit-wise) | | | | Total |
| | 2009-10 | 31.50 | 31.50 | 0.00 | 63.00 |
| | 2010-11 | 31.50 | 31.50 | 31.50 | 94.50 |
| | 2011-12 | 73.50 | 31.50 | 31.50 | 136.50 |
| | 2012-13 | 73.50 | 31.50 | 31.50 | 136.50 |
| | 2013-14 | 73.50 | 73.50 | 31.50 | 178.50 |
| | Total | 283.50 | 199.50 | 126.00 | 609.00 |

Annual Fixed Charges

99. 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 | 9859.28 | 9861.40 | 9858.76 | 9867.35 | 1191.78 |
| Interest on Loan | 435.14 | 0.00 | 0.00 | 0.00 | 0.00 |
| Return on Equity | 8986.33 | 9317.48 | 9324.13 | 9332.25 | 9344.91 |
| Interest on Working Capital | 3334.89 | 3370.30 | 3416.52 | 3452.08 | 3316.01 |
| O&M Expenses | 11466.00 | 12121.20 | 12814.20 | 13551.30 | 14326.20 |
| Cost of secondary fuel oil | 2653.15 | 2653.15 | 2660.42 | 2653.15 | 2653.15 |
| Compensation Allowance | 63.00 | 94.50 | 136.50 | 136.50 | 178.50 |
| Sub Total | 36797.79 | 37418.03 | 38210.53 | 38992.63 | 31010.55 |
| Pension & Gratuity Contribution | 10052.83 | 10052.83 | 10052.83 | 10052.83 | 10052.83 |
| Sinking fund Contribution | 3632.32 | 3835.51 | 9895.41 | 10588.08 | 11329.25 |
| Common office expenditure | 447.42 | 422.28 | 307.37 | 307.31 | 307.46 |
| Additional O&M | 1057.09 | 1138.28 | 1187.59 | 1286.93 | 1397.65 |
| Total | 51987.45 | 52866.92 | 59653.73 | 61227.79 | 54097.74 |

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.

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

Energy Charge Rate (ECR)

101. Sub-clause (b) of clause (6) of Regulation 21 of the 2009 regulations provides as under:

“Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formulae:

$$ECR = GHR \times LPPF \times 100 / \{CVPF \times (100 - AUX)\}$$

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF = Gross calorific value of primary fuel as fired, in kCal per kg, per litre or per standard cubic metre, as applicable.

ECR = Energy charge rate, in Rupees per kWh sent out.

GHR = Gross station heat rate, in kCal per kWh.

LPPF = Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month.

102. The petitioner has claimed an Energy Charge Rate (ECR) of 126.73 paise/kWh considering the normative transit and handling losses of 0.8% for coal supplied through Railway system. Accordingly, the base energy charge of 126.755 paise/kWh determined based on the price and GCV of fuel for the preceding three months and calculated in accordance with the 2009 Tariff Regulations are allowed as under:

| Description | Unit | 2009-14 |
|--------------------------------|-------------|----------------|
| Capacity | MW | 3 x 210 MW |
| Gross Station Heat Rate | Kcal/kWh | 2500 |
| Aux. Energy Consumption | % | 9.0 |
| Specific fuel oil consumption | ml/kWh | 2.00 |
| Weighted average GCV of oil | kCal/l | 10173.67 |
| Weighted average GCV of coal | kCal/kg | 3828.33 |
| Weighted average price of oil | Rs/Kl | 29313.88 |
| Weighted average price of coal | Rs/MT | 1780.84 |
| Rate of energy charge ex-bus | Paise/kWh | 126.755 |

103. The petitioner shall be entitled to compute and recover the annual fixed charges and energy charges in accordance with Regulation 21 of the 2009 regulations.

Application fee and the publication expenses

104. 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.

105. 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.

107. 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 paragraphs 6 to 12 of this order.

108. This order disposes of Petition No.269/GT/2012.

Sd/-
[M.Deena Dayalan]
Member

Sd/-
[V.S.Verma]
Member