CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No.274/GT/2012 (Dock. No. 36/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 in respect of Mejia Thermal Power Station, Unit IV (210 MW) for the period from 1.4.2009 to 31.3.2014.

And in the matter of

Damodar Valley Corporation, Kolkata

.....Petitioner

Vs

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

....Respondents

Parties present:

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

Shri P.Jena, DVC

Shri D.K.Aich, DVC

Shri P.Bhattacharya, DVC

Shri A. Biswas, DVC

Shri R.B.Sharma, 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

<u>ORDER</u>

This petition has been filed by the petitioner, Damodar Valley Corporation (DVC) for determination of generation tariff in respect of Mejia Thermal Power Station, Unit IV (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').

2. The scheduled date of commercial operation of the generating station was 26.9.2004. However, the generating station was declared under commercial operation on 13.2.2005. Accordingly, the petitioner filed Petition No.279/2010 for determination of tariff in respect of this generating station for the period from 13.2.2005 (COD) to 31.3.2009.

Background

The petitioner had earlier filed Petition No. 240/2009 during October, 2009 for 3. 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/given copies of the tariff petition on the respondents/HT consumers. Thereafter, the Commission in exercise of the power under Clause 4 of Regulation 5 of the 2009 Tariff Regulations granted provisional tariff (except for Mejia TPS, Unit Nos. V and VI), by its order dated 23.6.2011 for the period 2009-14, pending determination of the final tariff. Against the order dated 23.6.2011, some of the HT consumers of the petitioner in the States of West Bengal and Jharkhand, filed several Writ Petitions before the Hon'ble High Court of Calcutta (W. P. No.15077 (W) of 2011 [(Jai Balaji Industries Ltd-v-UOI & ors) with 46 connected petitions)[and Hon'ble High Court of

Jharkhand [(W.P (C) No. 4097 of 2011 (Gautam Ferro Alloys-v-UOI & ors) with 48 connected petitions)], challenging amongst others, the constitutional validity of Regulation 5(4) of the 2009 Tariff Regulations and the provisional tariff order dated 23.6.2011.

- 4. 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). Accordingly, the present petition for determination of tariff of the generating station for the period 2009-14 has been filed on 19.10.2011.
- 5. 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.
- 6. The petitioner vide its affidavits dated 14.2.2012, 30.4.2012 and 19.4.2013 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.

7. Thereafter, the Commission by its order dated 22.4.2013 in Petition No.279/2010 determined the tariff of the generating station for the period from 13.2.2005 to 31.3.2009. The annual fixed charges allowed for the generating station by the said order are as under:

| | | | | (₹in lakh) | |
|---------------------|----------|----------|----------|------------|----------|
| | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
| Depreciation | 4949.78 | 4991.15 | 5048.13 | 5085.72 | 5111.82 |
| Interest on Loan | 5084.69 | 4716.37 | 4123.28 | 3512.06 | 2883.19 |
| Return on Equity | 2942.14 | 2966.74 | 3000.61 | 3022.95 | 3038.47 |
| Advance Against | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Depreciation | | | | | |
| Interest on Working | 644.81 | 798.18 | 796.45 | 795.47 | 791.84 |
| Capital | | | | | |
| O&M Expenses | 2184.00 | 2272.20 | 2362.50 | 2457.00 | 2555.70 |
| Total | 15957.36 | 15744.64 | 15330.97 | 14873.20 | 14381.03 |

- 8. The Energy Charge Rate allowed by the Commission in the said order dated 22.4.2013 was 94.78 paise/kWh.
- 9. The annual fixed charges claimed by the petitioner for the period 2009-14 is as under:

(₹in lakh) 2009-10 2010-11 2011-12 2013-14 2012-13 Depreciation 4460.02 4460.02 4487.01 4514.91 4523.23 Interest on Loan 4371.27 4481.58 4815.60 4539.47 1717.26 4204.77 4234.36 Return on Equity 4056.07 4260.69 4268.54 1573.66 1629.11 1676.17 Interest on working capital 1486.96 1653.35 3822.00 4040.40 4271.40 4517.10 4775.40 O & M expenses Secondary Fuel Oil Cost 863.72 863.72 863.72 863.72 863.72 Total 19060.04 19624.16 20301.20 20349.24 17824.32 Share of Other office 387.26 465.74 578.75 620.71 510.79 expenditure Share of Additional claims 11228.08 12733.69 14266.73 14946.05 18259.80

10. 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 (BSAL), 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.

11. 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

- 12. 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;"
- 13. 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."

14. The Commission vide its order dated 22.4.2013 in Petition No.279/2010 has approved the annual fixed charges for the generating station for the period from COD (13.2.2005) to 31.3.2009 based on the admitted capital cost of ₹72402.68 lakh as on 31.3.2009. The petitioner vide its Annex-III of its affidavit dated 25.4.2012 has submitted that there is no un-

discharged liability. Accordingly, in terms of the above provisions of the 2009 Tariff Regulations, the admitted capital cost of ₹72402.68 lakh as on 31.3.2009, is considered as the opening capital cost as on 1.4.2009 for the generating station.

Additional Capital Expenditure

- 15. 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."
- 16. The petitioner had claimed additional capital expenditure on projected basis in their original petition. However this projected expenditure for the period 2009-10 to 2011-12 was revised based on the audited accounts vide affidavit dated 25.4.2012 and 19.4.2013 and the revised claim for additional capital expenditure is as under:

| | | | | | (₹ in lakh) |
|--------------------|----------|----------|----------|-------------|-------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| | (actual) | (actual) | (actual) | (projected) | (Projected) |
| Additional Capital | 0.66 | 47.28 | 3.41 | 30.00 | 240.00 |
| Expenditure | | | | | |

17. Considering the submissions of the parties, the additional capital expenditure claimed by the petitioner for the period 2009-14, is discussed in the subsequent paragraphs:

Actual Capital Expenditure for the period 2009-10, 2010-11 & 2011-12

18. The petitioner vide its affidavit dated 19.4.2013 has submitted details of the actual capital expenditure for the year 2009-10, 2010-11 and 2011-12 duly certified by auditor.

From the details submitted, it is observed that the actual expenditure in respect of the assets capitalised are of following categories:

- (i) Plant and Machineries
- (ii) Other Assets
- 19. 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 capitalisation 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. We have examined the matter. Based on the submissions of the parties, the expenditure claimed by the petitioner is discussed as under:

Plants & machineries

20. After prudence check of the assets capitalized towards power plant & machinery (steam generator), it is noticed that the assets claimed for ₹0.66 lakh during 2009-10, ₹39.98 lakh during 2010-11 and ₹3.41 lakh during 2011-12 are towards initial spares, for which the orders were placed vide Purchase Order dated 14.10.2004 i.e. before the COD of the Unit (13.2.2005) by the petitioner. The petitioner in its letter dated 11.2.2011 has submitted that amount of initial spares capitalized up to 31.3.2005 was 'nil' and was ₹371.14

lakh as on 31.3.2006. The petitioner had not claimed any initial spares during the period 2006-09. In addition, it is also noticed that the total capitalization of initial spares including the present claim of ₹0.66 lakh during 2009-10, ₹39.98 lakh during 2010-11, ₹3.41 lakh during 2011-12 (which was lying in CWIP) and ₹371.14 lakh as on 31.3.2006 works out to ₹415.19 lakh, which constitute only 0.58% of the capital cost of ₹71222.20 lakh and is within the ceiling norms of 2.5% of the original project cost. The delay in capitalisation of initial spares is on account of the fact that these spares were inadvertently kept under Capital Works In Progress (CWIP) though these were procured. The petitioner has thus sought capitalisation of these spares which are essential for the generating station. Considering the submissions of the petitioner, the expenditure of ₹0.66 lakh during 2009-10, ₹39.98 lakh during 2010-11 and ₹3.41 lakh during 2011-12 towards procurement of initial spares has been allowed in exercise of 'power to relax' under Regulation 44 of the 2009 Tariff Regulations.

Other assets

- 21. The petitioner has claimed an actual expenditure of ₹7.30 lakh during 2010-11 towards Gear Box of Cooling Tower without furnishing any justification for the said claim. In the absence of sufficient justification, the expenditure of ₹7.30 lakh as claimed by the petitioner has not been allowed.
- 22. Based on the above, the actual capital expenditure allowed during the years 2009-10, 2010-11 and 2011-12 are as under:

(₹in lakh)

| Actual additional capital expenditure | | | | | | |
|---------------------------------------|------|-------|------|--|--|--|
| 2009-10 2010-11 2011-12 | | | | | | |
| Claimed | 0.66 | 47.28 | 3.41 | | | |
| Allowed | 0.66 | 39.98 | 3.41 | | | |

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

23. The petitioner vide its affidavit dated 14.2.2012 has claimed projected additional capital expenditure during the years 2012-13 and 2013-14 under Regulation 44 of the 2009 Tariff Regulations (Power to relax) as under:

(₹in lakh)

| Projected additional capital expenditure | | |
|--|---------|---------|
| | 2012-13 | 2013-14 |
| Replacement of Flender make KENS 250 model | 30.00 | 240.00 |
| Gear Boxes with that of M/S PCTL make along with | | |
| related components like fan, shafts etc. | | |
| Total | 30.00 | 240.00 |

24. The projected additional capital expenditure of ₹270.00 lakh claimed in respect of Plant works (i.e ₹30.00 lakh during 2012-13 and ₹240.00 lakh during 2013-14) is towards the replacement of Flender make KENS 250 model Gear Boxes with that of M/s PCTL make along with associated components of cooling tower like fan, shafts etc., The petitioner has also submitted that the gross value of the old asset was ₹227.84 lakh. The petitioner has submitted that the gear boxes are to be replaced in a phased manner for better reliability and to avoid frequent repetitive expenditure and has prayed that the same may be allowed by the Commission in exercise of its power under Regulation 44 of the 2009 Tariff Regulations i.e. Power to Relax. The respondent, JSEB has submitted that the claim of the petitioner cannot be permitted under Regulation 9(2) of the 2009 Tariff Regulations. We have examined the matter. On scrutiny of the claim, it is observed that there is no proper justification for the replacement of Cooling tower gear boxes, fan, shafts etc., after 5 to 6 years of commercial operation of the generating station. We are of the view that the petitioner at the time of commissioning of the generating station could have decided for installation of Cooling tower of a similar make (M/s PCTL make) as was decided and installed in respect of the Units I to III of Mejia TPS (other generating station of petitioner), which is within the premises of this generating station. In view of this, we are not convinced that there exists a sufficient reason or justification for exercise of our power under Regulation 44 of the 2009 Tariff Regulations.

Accordingly, the additional capital expenditure for ₹270.00 lakh for 2012-14 claimed towards the replacement of the said asset has not been allowed. Hence, no projected additional capital expenditure has been allowed for the generating station during the period 2011-12 to 2013-14.

25. Based on the above, the actual /projected additional capital expenditure allowed for the generating station for the period 2009-14 is summarised as under:

(₹in lakh)

| | | | | (,, | | | |
|---------|--------------------------------|---------|---------|---------|---------|--|--|
| | Additional Capital Expenditure | | | | | | |
| | | Actual | Proje | ected | | | |
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | | |
| Claimed | 0.66 | 47.28 | 3.41 | 30.00 | 240.00 | | |
| Allowed | 0.66 | 39.98 | 3.41 | 0.00 | 0.00 | | |

Capital Cost for 2009-14

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

(₹in lakh)

| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|------------------------------|----------|----------|----------|----------|----------|
| Opening Capital cost | 72402.68 | 72403.34 | 72443.32 | 72446.73 | 72446.73 |
| Projected Additional Capital | 0.66 | 39.98 | 3.41 | - | |
| Expenditure | | | | | |
| Closing Capital cost | 72403.34 | 72443.32 | 72446.73 | 72446.73 | 72446.73 |
| Average Capital cost | 72403.01 | 72423.33 | 72445.03 | 72446.73 | 72446.73 |

Debt-Equity Ratio

- 27. 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.
- 28. Accordingly, gross loan and equity amounting to ₹50681.87 lakh and ₹21720.80 lakh respectively as approved vide order dated 22.4.2013 in Petition No.279/2010 has been considered as the gross loan and equity as on 1.4.2009. Further, the additional expenditure approved as above has been allocated in debt-equity ratio of 70:30 and the same is subject to truing-up in line with Regulation 6 of the 2009 Tariff Regulations.

Return on Equity

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

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

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

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

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

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

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

Provided further that Annual Fixed Charge with respect to tax rate applicable to the generating company or the transmission licensee as the case may be in line with the

provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations.

30. 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 | 21,720.80 | 21,721.00 | 21,733.00 | 21,734.02 | 21,734.02 |
| Addition of Equity due to | 0.20 | 11.99 | 1.02 | 0.00 | 0.00 |
| Additional Capital Expenditure | | | | | |
| Normative Equity-Closing | 21,721.00 | 21,733.00 | 21,734.02 | 21,734.02 | 21,734.02 |
| Average Normative Equity | 21,720.90 | 21,727.00 | 21,733.51 | 21,734.02 | 21,734.02 |
| 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 | 18.674% | 19.358% | 19.377% | 19.377% | 19.377% |
| Tax) | | | | | |
| Return on Equity (Pre Tax)- (annualised) | 4056.16 | 4205.91 | 4211.30 | 4211.40 | 4211.40 |

Interest on Loan

- Regulation 16 of the 2009 Tariff Regulations provides that:
 - "(1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.
 - (2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.
 - (3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year.
 - (4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.
 - (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the <u>actual loan portfolio</u> at the beginning of each year applicable to the project.

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

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

- (6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
- (7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the

costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

- (8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.
- (9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute.

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

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

- (a) As stated above, the gross normative loan of ₹50681.87 lakh has been considered as on 1.4.2009.
 - (a) Cumulative repayment as on 31.3.2009 works out to ₹20874.19 lakh as per order dated 22.4.2013 in Petition No.279/2010. The same has been considered as cumulative repayment of loan as on 1.4.2009.
 - (b) Accordingly, the net normative opening loan as on 1.4.2009 works out to ₹29807.68 lakh.
 - (c) Addition to normative loan to the tune of 70% of admissible additional capital expenditure has been considered on year to year basis.
 - (d) Depreciation allowed has been considered as repayment of normative loan during the respective year of the tariff period 2009-14.
 - (e) The rate of interest has been calculated considering the actual loan portfolio as furnished by the petitioner in Form 13 (revised vide submission dated 26.4.2012) and verified based on books of accounts.

33. 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 | 20874.19 | 25984.06 | 31095.37 | 36208.21 | 41321.17 |
| Cumulative repayment of loan | 29807.69 | 24698.27 | 19614.95 | 14504.50 | 9391.54 |
| up to previous year | | | | | |
| Net Loan Opening | 0.46 | 27.99 | 2.39 | 0.00 | 0.00 |
| Addition due to Additional | 5109.87 | 5111.31 | 5112.84 | 5112.96 | 5112.96 |
| capitalisation | | | | | |
| Repayment of loan during | 24698.27 | 19614.95 | 14504.50 | 9391.54 | 4278.58 |
| the year | | | | | |
| Net Loan Closing | 27252.98 | 22156.61 | 17059.72 | 11948.02 | 6835.06 |
| Average Loan | 20874.19 | 25984.06 | 31095.37 | 36208.21 | 41321.17 |
| Weighted Average Rate of | 8.845% | 8.820% | 8.698% | 8.672% | 8.743% |
| Interest on Loan | | | | | |
| Interest on Loan | 2410.56 | 1954.25 | 1483.85 | 1036.13 | 597.59 |

Depreciation

- 34. 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."
- 35. The cumulative depreciation of ₹20874.19 lakh, as on 31.3.2009, as per order dated 22.4.2013 in Petition No.279/2010 has been considered. The rate of depreciation has been arrived by considering the weighted average of depreciation computed on the gross value of asset as on 31.3.2009 at the rates approved by C&AG and the same works out to be 7.0575%. Though the rate of depreciation claimed by petitioner is 6.16% based on the composite weighted average depreciation rate vide Commission's order dated 6.8.2009 in Petition No. 66/2005, since, the claim of petitioner is not in line with the provisions of the

2009 Tariff Regulations and the judgment of the Tribunal dated 23.11.2007, the same has not been considered. Further, the rate of depreciation as considered in order dated 22.4.2013 in Petition No. 279/2010 in respect of this generating station based on C&AG rate was in this range only.

36. The necessary calculations for depreciation are as under:

| 2-13 | 2013-14 |
|------|----------|
| 6.73 | 72446.73 |
| 6.73 | 72446.73 |
| 6.73 | 72446.73 |
| 2.06 | 65202.06 |

(₹in lakh)

| | | | | | (X in takn) |
|------------------------------------|----------|----------|----------|----------|-------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Opening capital cost | 72402.68 | 72403.34 | 72443.32 | 72446.73 | 72446.73 |
| Closing capital cost | 72403.34 | 72443.32 | 72446.73 | 72446.73 | 72446.73 |
| Average capital cost | 72403.01 | 72,23.33 | 72445.03 | 72446.73 | 72446.73 |
| Depreciable value @ 90% | 65162.71 | 65181.00 | 65200.52 | 65202.06 | 65202.06 |
| Balance depreciable value | 44288.52 | 39196.93 | 34105.15 | 28993.84 | 23880.88 |
| Depreciation (annualized) | 5109.87 | 5111.31 | 5112.84 | 5112.96 | 5112.96 |
| Cumulative depreciation at the end | 25984.06 | 31095.37 | 36208.21 | 41321.17 | 46434.13 |

Operation & Maintenance expenses

Clause (a) of Regulation 19 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 | 18.20 | 19.24 | 20.34 | 21.51 | 22.74 |
| units | | | | | |

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 | 3822.00 | 4040.40 | 4271.40 | 4517.10 | 4775.40 |

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

| | | | | (₹и | ı lakh) |
|----------------|---------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Ash Evacuation | 547.00 | 578.29 | 611.37 | 646.34 | 683.31 |

In Petition No.240/2009, detailed submissions have been made by the petitioner as regards additional O&M expenses projected to be incurred in respect of ash evacuation for thermal power stations. The petitioner has reiterated the same in its note on ash evacuation & pollution measures as at Annexure-F of the affidavit dated 17.10.2011 and has prayed that the Commission may consider relaxation of the relevant norms while determining the tariff of the generating station. 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. 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. The matter has been examined. This is a new generating station which has provided with dry fly ash evacuation system. It appears that all the generating units of Mejia TPS do have Common Ash pond which had been developed for the old units of Mejia TPS and the same is being utilised for other units of Mejia TPS also. In view of this, the Ash pond gets over loaded and frequent evacuation of ash through road transport is necessitated. Considering this problem, the Commission has considered additional O&M for ash evacuation for old units (Mejia TPS, Units I to III) during the period 2006-09 as the dry fly ash system was not available during the said period. However, during the period 2009-14, dry fly ash system has been commissioned in Mejia TPS, Units I to III and hence additional O&M expenses for Ash evacuation in respect of Mejia TPS, Units I to III has not been allowed during the period 2009-14. In view of the above and considering the fact that this generating station has been provided with dry fly ash evacuation system, we are not inclined to accept the prayer of the petitioner for grant of additional O&M expenses for this generating station on this count. Hence, the expenditure claimed is not allowed.

41. Accordingly, the Operation & Maintenance expenses allowed for 2009-14 are as under:

(₹in lakh)

| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|--------------|---------|---------|---------|---------|---------|
| O&M expenses | 3822.00 | 4040.40 | 4271.40 | 4517.10 | 4775.40 |

Interest on Working Capital

- 42. 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.
- 43. 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.

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

Fuel Components in working capital

45. The petitioner has claimed the following cost for fuel component in working capital 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 | 2899.50 | 2899.50 | 2899.50 | 2899.50 | 2899.50 |
| Cost of secondary fuel oil 2 | 143.95 | 431.86 | 431.86 | 431.86 | 431.86 |
| months | | | | | |

46. 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 (leap year) | 2012-13 | 2013-14 |
|-------------------------------------|---------|---------|------------------------|---------|---------|
| Cost of coal for 2 months | 2899.96 | 2899.96 | 2907.91 | 2899.96 | 2899.96 |
| Cost of secondary fuel oil 2 months | 147.40 | 147.40 | 147.80 | 147.40 | 147.40 |

Maintenance spares

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

| | | | | (₹in lakh) |
|---------|---------|---------|---------|------------|
| 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| 764.40 | 808.08 | 854.28 | 903.42 | 955.08 |

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

Receivables

49. 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 | 2899.96 | 2899.96 | 2907.91 | 2899.96 | 2899.96 |
| Fixed Charges - 2 months | 2916.92 | 2903.45 | 2866.01 | 2832.38 | 2803.24 |
| Total | 5816.88 | 5803.42 | 5773.92 | 5732.34 | 5703.20 |

O&M expenses for 1 month

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

| | | | | | (₹ in lakh) |
|-------------------|---------|---------|---------|---------|-------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| O & M for 1 month | 318.50 | 336.70 | 355.95 | 376.43 | 397.95 |

51. 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:

| Æ | · | 11. | 1. | , |
|----------|----|-----|----|---|
| 1 | un | lak | n | ı |

| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|------------------------------|----------|----------|----------|----------|----------|
| Fuel Cost – 2 months | 2899.96 | 2899.96 | 2907.91 | 2899.96 | 2899.96 |
| Liquid fuel stock – 2 months | 147.40 | 147.40 | 147.80 | 147.40 | 147.40 |
| O&M Expenses – 1 month | 318.50 | 336.70 | 355.95 | 376.43 | 397.95 |
| Maintenance Spares | 764.40 | 808.08 | 854.28 | 903.42 | 955.08 |
| Receivables – 2 months | 5816.88 | 5803.42 | 5773.92 | 5732.34 | 5703.20 |
| Total working capital | 9947.14 | 9995.55 | 10039.86 | 10059.55 | 10103.59 |
| Rate of interest | 12.2500% | 12.2500% | 12.2500% | 12.2500% | 12.2500% |
| Interest on working capital | 1218.52 | 1224.46 | 1229.88 | 1232.29 | 1237.69 |

Other Elements of Tariff

52. 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 Fund Contribution

53. The Commission in its order dated 3.10.2006 in Petition No. 66/2005 while determining the tariff of the generating stations of the petitioner had allocated an amount of ₹14952 lakh towards Pension and Gratuity (P&G) contribution in respect of this generating station, out of the total admitted expenditure of ₹169015 lakh allocated towards 'power' business. Subsequently, in order dated 6.8.2009 in Petition No. 66/2005, the Commission allowed the recovery of 60% of the P&G liability during 2006-09 and the balance liability of 40% in tariff for the period 2009- 14 in compliance with the decision contained in the judgment of the

Tribunal dated 23.11.2007. In line with this order, the Commission vide its order dated 22.4.2013 in Petition No. 279/2010 had allowed the recovery of an amount of ₹8791 lakh for this generating station (which is 60% of ₹14952 lakh towards P&G Fund along with the tariff for the period and 2006-09) and ₹5981 lakh, as balance 40% in five equal yearly instalments along with the tariff to be determined for the period 2009-14. The details are as under:

| (₹in l | lakh) |
|--|-----------|
| | Amount |
| Orders dated 3.10.2006 & 6.8.2009 in Petition No. 66/2005 | |
| Actuarial Valuation as on 31.3.2006 | 170900.00 |
| Amount allocated to power business | 169015.00 |
| Liability pertaining to Distribution System | 614.00 |
| Liability pertaining to this generating station (Mejia TPS, Unit-IV) | 14952.00 |
| Net Amount | 153449.00 |
| Recoverable in 2006-09 (60%) | 92069.40 |
| Recoverable in 2009-14 (40%) | 61379.60 |
| | |
| Total admitted Claim | 14952.00 |
| Recoverable in 2006-09 (60%) | 8971.20 |
| Recoverable in 2009-14 (40%) | 5980.80 |

54. The petitioner, in this petition, has claimed P&G liability for an amount of ₹2265.384 lakh every year 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 31.03.2009 | 314093.69 |
| Liability as per Actuarial Valuation as on 31.03.2006 | 169015.00 |
| Difference | 145078.69 |
| Recoverable in 2009-14 (40%) | 58031.48 |
| Share of this generating station (Mejia TPS, Unit-IV) in | 5133.78 |
| the proportion as allowed earlier | |
| Share of Other generating stations | 52897.69 |

55. The amount calculated as above is recoverable by the petitioner in five annual equal instalments 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 | 5980.80 | 1196.16 | 1196.16 | 1196.16 | 1196.16 | 1196.16 |
| from previous tariff period | | | | | | |
| P&G contribution allowed as per actuarial valuation as on 31.3.2009 | 5133.78 | 1026.76 | 1026.76 | 1026.76 | 1026.76 | 1026.76 |
| Total | 11114.58 | 2222.92 | 2222.92 | 2222.92 | 2222.92 | 2222.92 |

Contribution to sinking fund

56. 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 Unit-IV) is as under:

| | | | | (₹ in laki | h) |
|------------------------------|---------|---------|---------|--------------------|------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Contribution to Sinking fund | 1636.39 | 1727.93 | 4457.97 | 4770.03 | 5103.93 |

Interest on Capital as per Section 38 of DVC Act

57. 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."

- 58. 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. 146/20009 (against Commission's order dated 6.8.2009) had confirmed that the interest on Government capital is not to be allowed separately, if the capital deployed is getting fully serviced either through return on equity or interest on loan. The relevant portion of the judgment is extracted as under:
 - "(7) In regard to the issue relating to the aspect of Revenues to be allowed under section 38 of the DVC Act, 1948, the Tribunal in the Remand order directed the Central Commission to ensure that the capital deployed in financing operating assets is getting fully serviced either through Return on Equity or interest on loan. In compliance with the said order, the Central Commission allowed Debt Equity Ratio on the total capital employed and provided return @ of 14% on normative equity capital and also provided interest on loan of the normative

type. The revised Debt Equity Ration and depreciation was considered in line with the direction of the Tribunal. The Appellant itself had admitted in the earlier appeal that the Appellant is required to pay interest on the amount of capital under section 38 of the DVC Act, but the same was retained by the Appellant in view of the obligation of participating Governments and as such the retained interest is ploughed back as capital to the creation of capital assets relating to power. Thus, the Appellant enjoyed the perpetual moratorium on it and never repaid the loans. So the question of adjustment of depreciation for the loan does not arise."

59. 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%

60. 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

61. The respondent, JSEB has sought clarification from the petitioner as to the offices which can be classified under the category of head office, regional office, administrative and technical centres whose expenses can be allocated to the object 'power' from the six offices mentioned. It has also submitted that the subsidiary activities office cannot be the center whose expenses can be legitimately be allocated to the object 'power'. The objector, M/s Jai Balaji Industries as submitted that the petitioner has taken into account the capital cost allegedly as per its accounts whereas the same should be considered at the levels

considered in the last tariff order. Accordingly, it has been submitted that the difference in the allowable share of other office expenditure may be scaled down. In response, the petitioner has clarified that the details of other offices are well defined in the annual accounts of the petitioner company duly audited by the C&AG. It has also submitted that the expenditure on other offices/common offices are to be serviced through tariff as per decision of the Tribunal dated 23.11.2007.

62. 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. As there is no capital cost as on 31.3.2009 against R&D and IT as per balance sheet as on 31.3.2009, the same has not been considered presently for the computation of tariff. The same will be considered at the time of truing-up. 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)

| 0 0 1 1 1 1 1 | | | | | | (, |
|---------------|------------------|---------|---------|---------|---------|---------|
| 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)

| | | | | | | (\ III Iakii) |
|-------|--------------|---------|---------|---------|---------|----------------|
| 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

| 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) | ₹ | in | la | kŀ | 1) |
|-----------|---|----|----|----|----|
|-----------|---|----|----|----|----|

| 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

| · III IGNII) | ₹ | 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 | 1,218.78 | 1,150.30 | 837.28 | 837.13 | 837.53 |

63. 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. 279/2010 is ₹72402.68 lakh. Based on this capital cost, the cost of common offices apportioned to this generating station for 2009-14 is as under:

| | | | | (₹ın lakn) |
|---------|---------|---------|---------|------------|
| 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| 201.56 | 190.24 | 138.47 | 138.45 | 138.51 |

- 64. The petitioner vide its affidavit dated 19.4.2013 has furnished the Cumulative depreciation recovered as on 31.3.2009 in Common Assets. The respondents and the objectors have submitted that the petitioner is exporting power from its newly commissioned generating stations at lesser tariff at the cost of the beneficiaries/consumers of the DVC command area. Accordingly, they have submitted that the petitioner should be directed to apportion the total cost of Common Assets, expenses towards subsidiaries activities and contribution to sinking fund and apportionment thereof to all the units including the units meant for export on the basis of installed capacity in MW, namely:
 - (i) Chandrapura TPS- Unit Nos. 7&8
 - (ii) Chandrapura TPS Extension unit nos.1&2

- (iii) Mejia TPS Phase-II- Unit Nos. 1 & 2
- (iv) Koderma TPS Unit Nos. 1&2
- (v) Durgapur Steel TPS Unit Nos. 1 & 2
- 65. We agree with submissions of the respondents/objectors that the expenses on Common Assets are required to be apportioned to all the operating units/ generating stations of the petitioner. In this view, we direct that the Common Office expenditure as allowed by this order would be subject to truing-up in terms of Regulation 6 of the 2009 Tariff Regulations and would be apportioned to all the units/generating stations and Transmission & Distribution systems of the petitioner which would are in operation during 2009-14. This according to us, would address the concerns of the respondents/objectors.

Contribution to subsidiary fund

- 66. 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.
- 67. 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

68. 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.

Annual Fixed Charges

69. 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 | 5109.87 | 5111.31 | 5112.84 | 5112.96 | 5112.96 |
| Interest on Loan | 2410.56 | 1954.25 | 1483.85 | 1036.13 | 597.59 |
| Return on Equity | 4056.16 | 4205.91 | 4211.30 | 4211.40 | 4211.40 |
| Interest on Working | 1218.52 | 1224.46 | 1229.88 | 1232.29 | 1237.69 |
| Capital | | | | | |
| O&M Expenses | 3822.00 | 4040.40 | 4271.40 | 4517.10 | 4775.40 |
| Cost of Secondary fuel oil | 884.38 | 884.38 | 886.81 | 884.38 | 884.38 |
| Contribution to Sinking | 1636.39 | 1727.93 | 4457.97 | 4770.03 | 5103.93 |
| fund | | | | | |
| P &G liability | 2222.92 | 2222.92 | 2222.92 | 2222.92 | 2222.92 |
| Cost of Common Offices | 201.56 | 190.24 | 138.47 | 138.45 | 138.51 |
| Total | 21562.37 | 21561.80 | 24015.44 | 24125.66 | 24284.78 |

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.

70. 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)

71. 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.

72. 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 | 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 | ₹/KI | 29313.88 | |
| Weighted average price of coal | ₹/MT | 1780.84 | |
| Rate of energy charge ex-bus | Paise/kWh | 126.755 | |

73. 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

74. 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.

75. 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.

76. The tariff approved above is subject to truing-up in terms of Regulation 6 of the 2009

Tariff Regulations and is also subject to the outcome of the Civil Appeal No 4881/2010 filed

by the petitioner before the Hon'ble Supreme Court and the Civil Appeal Nos. 971-973/2008

filed by the HT consumers arising out of the Tribunal's judgment dated 23.11.2007.

77. This order disposes of Petition No.274/GT/2012.

Sd/-[M.Deena Dayalan] Member

Sd/-[V.S.Verma] Member