CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No.270/TT/2012

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

Date of Hearing: 2.4.2013 Date of Order: 27.9.2013

In the matter of

Determination of tariff of Transmission & Distribution system activities of DVC network for the period from 1.4.2009 to 31.3.2014.

And in the matter of

Damodar Valley Corporation, Kolkata

.....Petitioner

Vs

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

....Respondents

Parties present:

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

Shri P.Jena. DVC

Shri D.K.Aich, DVC

Shri P.Bhattacharya, DVC

Shri A. Biswas, DVC

Shri R.B.Sharma, Advocate, JSEB

Ms. Sugandha Somani, Advocate, Jai Balaji Industries Ltd

Shri Rajiv Shankar Dwivedi, Advocate, SAIL-BSL

Ms. Tulika Mukherji, Advocate, SAIL-BSL

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

Shri Sagar Bandhopadhyay, Advocate

Shri Tapas Saha, Advocate

Shri Hiren Dasan, Advocate

Shri M.Prahladka, BSAL

ORDER

This petition has been filed by the petitioner, Damodar Valley Corporation (DVC) for determination of tariff for composite Transmission and Distribution (T&D) activities of DVC network for the period from 1.4.2009 to 31.3.2014 in compliance with the directions contained in the order of the Commission dated 23.6.2011 in Petition No.240/2009 and based on the

provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff)
Regulations, 2009 ('the 2009 Tariff Regulations').

2. The petitioner is a statutory body established by the Central Government under the Damodar Valley Corporation Act, 1948 (hereinafter referred to as the 'DVC Act') for the development of the Damodar Valley, with three participating Governments, namely, the Central Government, the Government of West Bengal and the Government of Jharkhand.

Background

- 4. Petition No. 66/2005 was filed by the petitioner for approval of the revenue requirements and for determining the tariff for electricity related activities, that is, the generation, transmission and distribution of electricity, undertaken by it for the period from 1.4.2004 to 31.3.2009. The Commission by its order dated 3.10.2006 determined tariff in respect of the generating stations and inter-state transmission systems of the petitioner, after allowing a special dispensation to the petitioner to continue with the prevailing tariff till 31.3.2006.
- 5. Against the Commission's order dated 3.10.2006, the petitioner filed Appeal No.273/2006 before the Appellate Tribunal for Electricity (hereinafter referred to as "the Tribunal") on various issues. Similarly, appeals were also filed before the Tribunal by some of the objectors / consumers, namely, Maithon Alloys Ltd and others (Appeal No.271/2006), Bhaskhar Shrachi Alloys Ltd and others (Appeal No 272/2006), State of Jharkhand (Appeal No.275/2006) and the West Bengal State Electricity Regulatory Commission (Appeal No.8/2007) challenging the order of the Commission dated 3.10.2006 on various grounds. The Tribunal by its judgment dated 23.11.2007 disposed of the said appeals by remanding the matter to the Commission for *de novo* consideration of the tariff order dated October 3, 2006 in terms of the findings and observations made therein and in accordance with law.
- 6. Against the judgment dated 23.11.2007, some of the parties namely, the Central Commission (Civil Appeal No.4289/2008), 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 for consideration of the Court. 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 for the generating stations and inter-state transmission systems of the petitioner for the period 2006-09 were re-determined by Commission's 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 No.146/2009 before the Tribunal on various issues, including the question of non-consideration of the different elements for tariff.

- 7. While so, the petitioner filed Petition No. 240/2009 during October, 2009 for determination of tariff for generating stations and inter-state transmission systems of the petitioner for the period 1.4.2009 to 31.3.2014, without considering the additional capital expenditure during 2009-14. Thereafter, by affidavit dated 12.2.2010, the petitioner revised the tariff filing forms taking into consideration the proposed additional capital expenditure for the period 2009-14. The petitioner had 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 also served copies of the tariff petition on the respondents/HT consumers.
- 8. Thereafter, 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 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 for consideration of the Court.

- 9. Pursuant to the above, the petitioner filed Petition No. 272/2010 for determination of deferred elements of tariff for generating stations and inter-State transmission systems 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 23.11.2007 of the Tribunal. Similarly, a 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 also 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 stations and transmission systems/other assets of the petitioner (except for Mejia TPS, Unit Nos. V and VI), the Commission by its order dated 23.6.2011 granted provisional tariff for the period 2009-14 pending determination of final tariff in exercise of its power under Clause 4 of Regulation 5 of the 2009 Tariff Regulations. Against the order dated 23.6.2011, some of the HT consumers of the petitioner in the States of West Bengal and Jharkhand, filed several Writ Petitions before the Hon'ble High Court of Calcutta (W. P. No.15077 (W) of 2011 [(Jai Balaji Industries Ltd-v-UOI & ors) with 46 connected petitions)[and Hon'ble High Court of Jharkhand [(W.P (C) No. 4097 of 2011 (Gautam Ferro Alloys-v-UOI & ors) with 48 connected petitions)], challenging amongst others, the constitutional validity of Regulation 5(4) of the 2009 Tariff Regulations and the provisional tariff order dated 23.6.2011.
- 11. During the pendency of the above writ petitions before the High Courts of Calcutta and Jharkhand, the petitioner, in terms of the directions 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. However, 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 for the period 1.4.2006 to 31.3.2009. The annual fixed charges determined by the Commission for the Transmission and Distribution (T&D) system for the period 2006-09 by the said order is as under:

| | | (`ii | n lakh) |
|--|----------|----------|----------|
| | 2006-07 | 2007-08 | 2008-09 |
| Depreciation | 6140.87 | 6693.02 | 6883.85 |
| Interest on Loan | 856.71 | 683.10 | 236.61 |
| Return on Equity | 3944.47 | 4241.37 | 4343.98 |
| Interest on Working Capital | 384.50 | 405.34 | 412.20 |
| O & M Expenses including transmission | 4917.00 | 5114.00 | 5318.00 |
| Sub-Total Sub-Total | 16243.54 | 17136.83 | 17194.65 |
| Additional Charges on account of ROE, IOL, Depreciation | 187.26 | 177.58 | 170.17 |
| of Direction/Central/other offices and subsidiary activities | | | |
| Grand Total | 16430.81 | 17314.42 | 17364.81 |

14. The annual fixed charges claimed by the petitioner for the period 2009-14 in respect of the Transmission and Distribution (T&D) system for the period 2009-14 are as under:

| | | | | (| `in lakh) |
|-----------------------------------|----------|----------|----------|----------|-----------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | 7744.48 | 8413.17 | 9289.11 | 9964.15 | 10329.00 |
| Interest on Loan | 5597.33 | 6268.55 | 7436.74 | 7502.29 | 2942.12 |
| Return on Equity | 6398.23 | 7130.03 | 7789.02 | 8291.46 | 8563.03 |
| Interest on working capital | 1575.86 | 1718.74 | 1880.29 | 1988.26 | 2076.45 |
| O & M expenses | 15879.92 | 16787.54 | 17747.00 | 18767.68 | 19840.04 |
| Total | 37195.82 | 40318.03 | 44142.15 | 46513.84 | 43750.64 |
| Share of Other office expenditure | 512.20 | 616.00 | 765.48 | 820.98 | 675.59 |
| Share of Additional claims | 17245.21 | 19746.77 | 22342.22 | 23774.36 | 29501.32 |
| Total | 54953.23 | 60680.80 | 67249.85 | 71109.19 | 73927.55 |

- 15. The petitioner vide its affidavits dated 25.4.2012, 22.2.2013, 19.4.2013 and 17.6.2013 respectively has filed additional submissions in compliance with the directions of the Commission. The petitioner has also served copies of the additional submissions on the respondents/HT consumers. The instant petition along with the tariff petitions in respect of other generating stations and transmission 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.
- 16. 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.
- 17. 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

- 18. Regulation 7 (1) (a) of the 2009 Tariff Regulations provides as under:
 - "7. Capital Cost. (1) Capital cost for a project shall include: (a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount

of loan in the event of the actual equity less than 30% of the funds deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;"

19. The last proviso to Regulation 7 of the 2009 Tariff Regulations, as amended on 21.6.2011 provides as under:

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

- 20. The Commission in its order dated 8.5.2013 in Petition No. 272/2010 has approved the closing capital cost of `88541.73 lakh as on 31.3.2009. The same is considered as the opening capital cost as on 1.4.2009. Accordingly, the capital cost as on 1.4.2009, after removal of undischarged liabilities of `4.53 lakh, works out to `88537.20 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.
- 21. 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 `3.80 lakh during 2009-10 and `0.72 lakh during 2010-11. Accordingly, in line with the above provision, this discharge of liabilities has been allowed during the year 2009-10 and 2010-11 in addition to the admitted additional capital expenditure.
- 22. The opening capital cost as on 1.4.2009 based on the admitted capital cost as per order dated 8.5.2013 in Petition No. 272/2010 is subject to the final decision in the petition (Dock No. 081/2013) filed by the petitioner in respect of tariff for inter-state transmission system of DVC for the period 2006-09.

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 petitioner vide affidavit dated 17.6.2013 has filed item-wise details of the additional capital expenditure considering the expenditure on Replacement Works and New Works which are required for augmentation of the existing / new sub-stations.
- 25. The petitioner has submitted that pooled power to all consumers is supplied through its integrated and composite T&D network and specific consumer or a specific group of consumers cannot be identified with reference to any particular transmission segment, sub-station or R/S for sale of power to consumers located in two States namely the State of West Bengal and the State of Jharkhand. It has also submitted that the benefit of strengthening the system either by adding substation/transmission line or by augmentation of the existing sub-stations are shared by all the consumers of DVC and as such the entire grid network of DVC may be considered as a single T&D system. It has also pointed out that the Commission has already considered this aspect in its order dated 8.5.2013 in Petition No.272/2010.
- 26. The petitioner has pointed out that additional works/services along with additional expenditure and O&M expenditure with consequential effect of additional bay, line etc. have been prepared in a consolidated manner. It has further submitted that power supply to some consumers located near the thermal power generating stations is made from the switchyard of the respective station for meeting the load growth in the valley area at 33 kV and above. However, it has pointed out that additional capital expenditure and O&M expenditure for construction of bays and lines from the power house switchyard itself are booked under the T&D head of account as per the approval of DVC authority right from the inception of the Damodar Valley Corporation since 1948.
- 27. The petitioner has claimed actual additional capital expenditure for the period 2009-12 in respect of the categories as under:

| | | | (`in lakh) |
|----------------------------|----------|----------|------------|
| | 2009-10 | 2010-11 | 2011-12 |
| Transmission A-N Stage | 10518.61 | 13876.06 | 9865.04 |
| Transmission Main Division | 606.33 | 968.30 | 948.07 |
| Transmission CE stores | 17.12 | 17.76 | 0.00 |
| Total | 11142.06 | 14862.12 | 10813.11 |

28. The respondent, JSEB and some of the Objectors have pointed out in their replies that claims for capitalization of "Other assets" are not allowable in terms of the 2009 Tariff Regulations, being minor in nature. It has also been pointed out that the expenses claimed under the head 'Buildings' are adhoc expenses and provide no additional benefits to the consumers in terms of efficiencies, cost, etc. They have further pointed out that significant capital works which have been undertaken through consumer contribution and deposit works, for which cost of the assets have been recovered from the respective customers, the depreciation on such assets should not be allowed. It has been submitted that some of the adhoc and frivolous expenses and expenses appear to be created out of deposit works for 2009-10 and 2010-11 should not be allowed. Taking into consideration the submissions of the parties and the documents available on record, we now examine the claim of the petitioner under each of the categories for the period 2009-12 as under:

(A) Transmission A-N Stage

<u>2009-10</u>

(i) Replacement Work

29. The petitioner has claimed additional capital expenditure of `1398.10 lakh for this year which includes `1369.50 lakh towards sub-stations and `28.60 lakh towards transmission lines. Out of this, expenditure for `1386.71 lakh is considered necessary for efficient operation of the transmission system and is allowed in terms of Regulation 9(2)(v) of 2009 Tariff Regulations. The capitalization of expenditure of `11.39 lakh has been disallowed as the petitioner has not submitted proper justification for the replacement of items such as infrastructure in existing substation for power supply to Bokaro Steel Plant and transformer at Giridih sub-station. Since capitalization of the above assets has not been allowed, out of the gross block of old assets (de-

capitalization) claimed for `208.77 lakh, only `1.71 lakh has not been allowed. Accordingly, the de-capitalization of `207.06 lakh is allowed.

(ii) New work

- As stated, the petitioner has submitted that the benefit of strengthening the system either by adding sub-station/ transmission lines or augmentation of the existing sub-stations are shared by all the consumers of DVC and as such, the entire grid network of DVC may be considered as a single T&D system. The petitioner has also submitted that the Commission has recognized the same in its order dated 8.5.2013 in Petition No. 272/2010. It has also been submitted that due to increased load in the same geographical area, some of the sub-stations/ receiving sub-stations have been augmented and new transmission lines and bays has been added to transmit/ distribute the increased power to the consumers. The objectors have submitted that the petitioner should clarify as to whether the expenditure incurred on service line for power supply to consumers are to be borne by them. In response, the petitioner has submitted that additional capital expenditure for construction of bays and lines from the power house switchyard itself are booked under the T&D head of account as per approval of the DVC authority since inception of DVC. Considering the submissions of the petitioner and keeping in view that augmentation of existing sub-stations/ receiving sub-stations has become necessary to strengthen the composite T&D system of DVC, we allow the capitalization of expenditure incurred under Regulation 9(2)(v) of the 2009 Tariff Regulations.
- 31. The petitioner has claimed expenditure of `9120.51 lakh during the year which includes `6489.12 lakh towards Sub-stations, `2638.72 lakh towards Transmission lines and (-) `7.33 lakh as adjustment for 'other assets'. For the reasons stated in para 30 above and on prudence check, the claim of the petitioner for `9086.54 lakh has been allowed under this head. An expenditure of `33.97 lakh has not been allowed as the details of infrastructure development at Sub-stations/ Transmission lines for power supply to various companies has not been furnished by the petitioner. Similarly, expenditure on 'other assets' such as Office furniture like tables, chairs, almirahs have been disallowed as these are minor in nature.

2010-11

(i) Replacement Work

32. The petitioner has claimed expenditure of `2422.62 lakh for the year which includes `1597.45 lakh towards Sub-stations and `825.17 lakh towards Transmission lines. Out of this, an expenditure of `1916.11 lakh which are considered necessary for efficient operation of the transmission system and is allowed in terms of Regulation 9(2)(v) of 2009 Tariff Regulations. The additional capitalization of `506.51 lakh has been disallowed as the 25 MVA Railway Transformers at Ramkalani and Patherdih which were commissioned during 1995-96 and thus not having completed the normal life, have been replaced by the petitioner. Since capitalization of the above assets has not been allowed, out of the gross block of old assets (de-capitalization) claimed for `363.37 lakh, only `75.98 lakh has not been allowed. Accordingly, the decapitalization of `287.39 lakh is allowed.

(ii) New work

33. The petitioner has claimed expenditure of `11453.44 lakh in respect of items which has been added to the system. This includes `2968.45 lakh on account of Sub-stations and `8482.66 lakh on account of Transmission lines and `2.33 lakh towards 'Other assets'. The petitioner has claimed `956.53 lakh for cost of land for sub-stations which *inter alia* includes `3.89 lakh for 220 kV Koderma sub-station, `53.41 lakh for 220 kV Gola sub-station and `381.21 lakh for 220 kV Gola Petenwar line to Ramgarh. It is however observed that during the year 2011-12, the petitioner has adjusted /indicated the cost of Koderma sub-station as (-) `3.89 lakh, the cost of land for Gola sub-station as (-) `80.78 lakh and the cost of land for 220 kV Gola petenwar line to Ramgarh as (-) `295.42 lakh, thereby amounting to a total of (-) `380.09 lakh. It appears that the cost of these sub-stations were estimated during 2010-11 and could not be fully utilized for the purpose of purchase of land and has thus been shown as a negative figure in the claim for additional capitalization during 2011-12. Since the petitioner has not furnished any reason/justification for the adjustment of the land cost, the expenditure of `380.09 lakh on this count has not been allowed. However, the petitioner is at liberty to claim this amount on

submission of detailed justification, at the time of truing-up. On prudence check, an expenditure for `105.54 lakh claimed on account of infrastructure development for power supply to various companies has not been allowed as the details of the same has not been provided. Moreover, some of the items like tables, chairs, almirahs have also been disallowed as these are minor in nature.

2011-12

(i) Replacement Work

34. The petitioner has claimed expenditure of `1431.03 lakh for the year which includes `1419.68 lakh towards Sub-stations and `11.35 lakh towards Transmission lines. Out of this, only an expenditure of `1381.85 lakh is considered necessary for efficient operation of the transmission system and is allowed in terms of Regulation 9(2)(v) of 2009 Tariff Regulations. The additional capitalization of `49.18 lakh has been disallowed as the 80 MVA Transformer at MTPS and 25 MVA Railway Transformers at Patherdih which were commissioned during 1995-96 and thus having not completed the normal life, have been replaced by the petitioner. Since capitalization of the above assets has not been allowed, out of the gross block of old assets (decapitalization) claimed for `215.14 lakh, only `7.33 lakh has not been allowed. Accordingly, the de-capitalization of `207.77 lakh is allowed.

(ii) New Work

35. The petitioner has claimed expenditure of `8434.01 lakh in respect of items which has been added to the system. This includes `7537.76 lakh on account of Sub-stations and `896.25 lakh on account of Transmission lines. It is observed that the petitioner has adjusted (-) `380.09 lakh towards cost of land for sub-stations. However, justification for the same has not been provided by the petitioner. In view of this and since the said amount of (-) `380.09 lakh has already been considered for the year 2010-11, the same has not been considered for the year 2011-12. An expenditure of `63.17 lakh claimed on account of augmentation of sub-station for power supply to various utilities has not been allowed in the absence of any details furnished by the petitioner as regards the augmentation work undertaken.

(B) Transmission Main Division

<u>2009-10</u>

(i) Replacement Work

36. Expenditure of `152.06 lakh has been claimed by the petitioner for the year which includes an adjustment of `4.45 lakh. Thus, the net expenditure claimed for capitalization is `147.61 lakh. Out of this, on prudence check, expenditure of `51.20 lakh on assets like circuit breaker with terminal connector and 132 kV outdoor C.T. terminal connector etc. which are considered necessary for successful and efficient operation of the system has been allowed under Regulation 9(2)(v) of the 2009 Tariff Regulations. The capitalization of an expenditure of `96.41 lakh has not been allowed as the justification for replacement of the items like grounding transformer, protection metering clamps etc. has not been furnished and also some of the items commissioned during the period 1999-2000 have been replaced without providing proper justification for the same. Since capitalization of the above assets has not been allowed, out of the gross block of old assets (de-capitalization) claimed for `53.44 lakh, only `45.86 lakh has not been allowed. Accordingly, the de-capitalization of `7.58 lakh is allowed.

(ii) New work

37. Out of the expenditure of `458.72 lakh claimed by the petitioner, an expenditure of `363.81 lakh towards assets like LV/HV side bushing, earthing transformer etc., has been allowed for the year, on prudence check. Similarly, the expenditure for `94.91 lakh towards assets/items like office furniture including chair, table and almirah etc., have not been allowed as they are minor in nature.

<u>2010-11</u>

(i) Replacement Work

38. Expenditure of `714.98 lakh has been claimed by the petitioner for the year which includes an adjustment of `11.60 lakh. Thus, the net expenditure claimed for capitalization is `703.38 lakh. Out of this, on prudence check, expenditure of `522.83 lakh on assets like battery charger,

tariff metering equipments, transformers etc. which are considered necessary for successful and efficient operation of the system has been allowed under Regulation 9(2)(v) of the 2009 Tariff Regulations. The capitalization of an expenditure of `180.55 lakh has not been allowed as the justification for replacement of the items lightening arrestor, auxiliary grounding transformer C.T. etc has not been furnished and also some of the items commissioned during the period 1998 to 2004 have been replaced without providing proper justification for the same. Moreover, capitalization of expenditure towards stolen items has also not been allowed. Since capitalization of the above assets has not been allowed, out of the gross block of old assets (decapitalization) claimed for `136.53 lakh, only `86.52 lakh has not been allowed. Accordingly, the de-capitalization of `50.01 lakh is allowed.

(ii) New work

39. Out of the expenditure of `264.92 lakh claimed by the petitioner, an expenditure of `174.81 lakh towards assets like tariff metering equipments, distance & back up relays etc. has been allowed for the year, on prudence check. Similarly, expenditure for `90.11 lakh has not been allowed as some of the items form part of the normative O&M expenses and some of the assets like office furniture which include tables, chairs, Laptop computers and almirahs etc., are minor in nature.

<u>2011-12</u>

(i) Replacement Work

40. Expenditure of `798.09 lakh has been claimed by the petitioner for the year which includes an adjustment of `0.54 lakh. Thus, the net expenditure claimed for capitalization is `797.55 lakh. Out of this, on prudence check, expenditure of `761.10 lakh on assets like 220 kV P.T with connector outdoor type, 25 kV SF6 outdoor breaker with T/C etc., which are considered necessary for successful and efficient operation of the system has been allowed under Regulation 9(2)(v) of the 2009 Tariff Regulations. The capitalization of an expenditure of `36.45 lakh has not been allowed as the justification for replacement of the items lightening arrestors, outdoor type CT etc., has not been furnished and also some of the items commissioned during

the period 1999 to 2003 have been replaced without providing proper justification. Since capitalization of the above assets has not been allowed, out of the gross block of old assets (decapitalization) claimed for `256.01 lakh, only `15.46 lakh has not been allowed. Accordingly, the de-capitalization of `240.55 lakh is allowed

(ii) New work

41. Out of the expenditure of `150.52 lakh claimed by the petitioner, an expenditure of `89.36 lakh towards assets like store-yard construction, PT, CT etc., has been allowed for the year, on prudence check. Similarly, expenditure for `61.16 lakh has not been allowed as some of the assets form part of the normative O&M expenses and some of the items like office furniture which include tables, chairs, Laptop computers and almirahs etc., are minor in nature.

(C) Transmission C.E. Store

2009-10

New Work

42. The petitioner has claimed capitalization of `17.12 lakh for the year under Regulation 9(2)(v) of the 2009 Tariff Regulations in respect of minor items like Office furniture which includes tables, chairs, almirahs and other assets which have not been specified. The claim of the petitioner is not justified and hence expenditure is not allowed.

2010-11

New Work

43. The petitioner has claimed capitalization of `17.76 lakh for the year under Regulation 9(2)(v) of the 2009 Tariff Regulations towards the building constructed for the office of Junior Engineer. This has been allowed.

2011-12

- 44. The petitioner has not claimed any additional capital expenditure for this year.
- 45. Based on the above, the additional capital expenditure claimed by the petitioner and allowed by the Commission for the period 2009-12 under the categories mentioned are summarized as follows:

(`in lakh) 2009-10 2010-11 2011-12 Transmission A-N Stage (A) Replacement Work 1398.10 2422.62 1431.03 Claimed Disallowed 11.39 506.51 49.18 Allowed 1386.71 1916.11 1381.85 Gross value of asset (De-Capitalization) 207.06 287.39 207.77 allowed **Net Additional Capital Expenditure** 1179.65 1628.72 1174.08 allowed (B) New Work Claimed 9120.51 11453.44 8434.01 Adjustment of land cost 0.00 380.09 (-) 380.09 Disallowed 33.97 105.54 63.17 8750.93 Allowed 9086.54 10967.81 **Transmission Main Division** (A) Replacement Work Claimed 152.06 714.98 798.09 Adjustment 4.45 11.60 0.54 Disallowed 96.41 180.55 36.45 51.20 522.83 761.10 Allowed Gross value of asset (De-Capitalization) 7.58 50.01 240.55 allowed **Net Additional Capital Expenditure** 43.62 472.82 520.55 allowed (B) New Work

458.72

94.91

363.81

17.12

17.12

10673.62

0.00

264.92

90.11

174.81

17.76

17.76

13261.92

0.00

150.52

61.16

89.36

0.00

0.00

0.00

10534.92

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

- 46. The petitioner has projected the capitalization of expenditure of `5183.99 lakh for 2012-13 and `4159.16 lakh for 2013-14 and has also submitted the de-capitalization value of `1227.56 lakh and `997.17 lakh respectively towards replacement of the old assets. Since the details of the asset/work have not been furnished under this head, the expenditure claimed on projected basis has not been allowed for the said years.
- 47. Based on the above discussions, the additional capital expenditure allowed for the period 2009-14 after considering the de-capitalization is summarized as under:

| | | | | (`in lakh) |
|---------|---------|---------|---------|------------|
| 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |

Claimed

Allowed

Disallowed

Disallowed

Allowed

allowed

(A) New Work
Claimed

Transmission C.E. Stores

Total Additional Capital Expenditure

| Additional Capital | 10673.63 | 13261.92 | 10534.93 | 0.00 | 0.00 |
|---------------------|----------|----------|----------|------|------|
| Expenditure allowed | | | | | |

48. The year-wise additional capital expenditure allowed for the period 2009-14 after adjustment of liabilities, are as under:

(`in lakh)

| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|--|----------|----------|----------|---------|---------|
| Net additional capital expenditure allowed * | 10673.63 | 13261.92 | 10534.93 | 0.00 | 0.00 |
| Less : Un-discharged liabilities | 88.67 | 139.47 | 0.00 | 0.00 | 0.00 |
| Less . On-discharged habilities | 00.07 | 139.41 | 0.00 | 0.00 | 0.00 |
| Add: Discharge of liabilities | 3.80 | 89.39 | 0.00 | 0.00 | 0.00 |
| Total Additional capital expenditure allowed | 10588.76 | 13211.84 | 10534.93 | 0.00 | 0.00 |

^{*} after rounding off errors

Capital Cost for 2009-14

49. 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 | 88537.20 | 99125.96 | 112337.80 | 122872.73 | 122872.73 | | |
| Additional Capital | 10588.76 | 13211.84 | 10534.93 | 0.00 | 0.00 | | |
| Expenditure | | | | | | | |
| Closing Capital cost | 99125.96 | 112337.80 | 122872.73 | 122872.73 | 122872.73 | | |
| Average Capital cost | 93831.58 | 105731.88 | 117605.27 | 122872.73 | 122872.73 | | |

Debt-Equity Ratio

- 50. 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.

51. Accordingly, gross loan and equity amounting to `57390.39 lakh and `31151.34 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 `4.53 lakh included in the capital cost as on 31.3.2009 has been adjusted to debt and equity in the ratio of 70:30 as these liabilities pertains to the period 2004-09. As such, the gross normative loan and equity as on 1.4.2009 is revised to `57387.22 lakh and `31149.98 lakh respectively. Further, the additional expenditure approved as above has been allocated in debtequity 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

- 52. 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.

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

(`in lakh)

| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|--------------------------------------|----------|----------|----------|----------|----------|
| Notional Equity- Opening | 31149.98 | 34326.61 | 38290.16 | 41450.64 | 41450.64 |
| Addition of Equity due to Additional | 3176.63 | 3963.55 | 3160.48 | 0.00 | 0.00 |
| Capital Expenditure | | | | | |
| Normative Equity-Closing | 34326.61 | 38290.16 | 41450.64 | 41450.64 | 41450.64 |
| Average Normative Equity | 32738.30 | 36308.38 | 39870.40 | 41450.64 | 41450.64 |
| 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)- | 6113.55 | 7028.58 | 7725.69 | 8031.89 | 8031.89 |
| (annualised) | | | | | |

Interest on Loan

- 54. 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 refinancing.
- (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.

- 55. The interest on loan has been worked out as under:
 - (a) As stated above, the gross normative loan of `57387.22 lakh has been considered as on 1.4.2009.
 - (b) Cumulative repayment as on 31.3.2009 works out to `57390.39 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 `57387.22 lakh.
 - (c) Accordingly, the net normative opening loan as on 1.4.2009 works out to `nil'.
 - (a) Addition to normative loan to the tune of 70% of the admissible additional capital expenditure has been considered on year to year basis.
 - (b) 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 on account of de-capitalization considered in the additional capital expenditure approved above.
 - (c) The rate of interest has been calculated considering the actual loan portfolio.
- 56. 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 | 57387.22 | 64799.35 | 74047.64 | 81422.09 | 81422.09 |
| Cumulative repayment of loan up to previous year | 57387.22 | 64481.10 | 72405.29 | 81167.67 | 81422.09 |
| Net Loan Opening | 0.00 | 318.25 | 1642.35 | 254.42 | 0.00 |
| Addition due to Additional capitalisation | 7412.13 | 9248.29 | 7374.45 | 0.00 | 0.00 |
| Repayment of loan during the year | 7241.46 | 8159.87 | 9076.20 | 254.42 | 0.00 |
| Less: Repayment adjustment on account of de-capitalization | 150.25 | 236.18 | 313.82 | 0.00 | 0.00 |
| Add: Repayment adjustment on account of discharges of liabilities | 2.66 | 0.51 | 0.00 | 0.00 | 0.00 |
| Net Repayment | 7093.88 | 7924.19 | 8762.38 | 254.42 | 0.00 |
| Net Loan Closing | 318.25 | 1642.35 | 254.42 | 0.00 | 0.00 |
| Average Loan | 159.13 | 980.30 | 948.39 | 127.21 | 0.00 |
| Weighted Average Rate of Interest on Loan | 8.8451% | 8.8202% | 8.6980% | 8.6720% | 8.7430% |
| Interest on Loan | 14.07 | 86.46 | 82.49 | 11.03 | 0.00 |

Depreciation

57. 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."
- 58. The cumulative depreciation of `57921.31 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 `57918.35 lakh. Accordingly, the balance depreciable value (before providing depreciation) for the year 2009-10 works out to `25117.49 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 the same works out to 7.72%. The total value of freehold land is `1569.54 lakh as on 1.4.2009. The rates claimed by petitioner is 7.81% based on the composite weighted average depreciation rate as per Commission's order dated 6.8.2009 in Petition No. 66/2005, which is not in line with the 2009 Tariff Regulations and the judgment of the Tribunal dated 23.11.2007. The necessary calculations for depreciation are as under:

| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|----------------------|----------|----------|-----------|-----------|-----------|
| Opening capital cost | 88537.20 | 99125.96 | 112337.80 | 122872.73 | 122872.73 |

| Closing capital cost | 99125.96 | 112337.80 | 122872.73 | 122872.73 | 122872.73 |
|--|----------|-----------|-----------|-----------|-----------|
| Average capital cost | 93831.58 | 105731.88 | 117605.27 | 122872.73 | 122872.73 |
| Depreciable value @ 90% | 83035.84 | 93486.71 | 103910.43 | 108648.21 | 108648.21 |
| Balance depreciable value | 25117.49 | 28517.59 | 31084.63 | 27149.69 | 17666.98 |
| Depreciation (annualized) | 7241.46 | 8159.87 | 9076.20 | 9482.71 | 9482.71 |
| Cumulative depreciation at the end of the year | 65159.81 | 73128.99 | 81901.99 | 90981.23 | 100463.94 |
| Less: Cumulative depreciation adjustment on account of discharges of liabilities | (-)2.49 | (-)0.47 | 0.00 | 0.00 | 0.00 |
| Less: Cumulative depreciation adjustment on account of decapitalization | 193.17 | 303.67 | 403.48 | 0.00 | 0.00 |
| Cumulative depreciation (at the end of the period) | 64969.12 | 72825.80 | 81498.52 | 90981.23 | 100463.94 |

Operation & Maintenance expenses

59. In terms of sub-clause (i) of clause (g) of Regulation 19 of Regulation of the 2009 Tariff Regulations, the norms for O&M expenses for transmission system of the petitioner considered are as under:

| Element | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|---|---------|---------|---------|---------|---------|
| 220 kV bays (`in lakh per bay) | 36.68 | 38.78 | 41.00 | 43.34 | 45.82 |
| 132kV and below bays (` in lakh per bay) | 26.20 | 27.70 | 29.28 | 30.96 | 32.73 |
| 132 KV and Below S/C single conductor Transmission line (`in lakh per km) | 0.179 | 0.189 | 0.220 | 0.212 | 0.224 |
| 132 KV and Below D/C single conductor Transmission line (`in lakh per km) | 0.269 | 0.284 | 0.301 | 0.318 | 0.336 |

60. Sub-clause (ii) of clause (g) of Regulation 19 of Regulation of the 2009 Tariff Regulations provides as under:

Bays

61. The status of sub-station bays as on 31.3.2009 submitted by the petitioner is as under:

| | No. of bays | | |
|-------------------------------------|----------------------------|-----|--|
| | Above 132 kV 132 kV and be | | |
| As on 31.3.2004 | 37 | 417 | |
| Additions during the period 2004-09 | 30 | 53 | |
| As on 31.3.2009 | 67 | 470 | |

[&]quot;(ii) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of bays and kms of line length with the applicable norms for the operation and maintenance expenses per bay and per km respectively"

62. As per Commission's orders dated 3.10.2006 and 6.8.2009 in Petition 66/2005, the details of bays are as under:

| | No. of bays |
|-----------------------|-------------|
| 132 kV and above | 250 |
| Below 132 kV | 204 |
| Total as on 31.3.2004 | 454 |

63. Since the details of additional bays during 2004-09 was not submitted by the petitioner in the petition relating to the period 2004-09, the addition of 83 bays (30+53) during the said period has not been considered for calculation of O&M expenses during the period 2009-14. In view of this, only 454 bays are only considered for the purpose of tariff.

Transmission Lines as on 31.3.2009

64. The details of the transmission lines as submitted by petitioner are as under:

(i) S/C single conductor T/ line: 1600.24 km(ii) D/C single conductor T/line: 2293.57 km

65. In this regard, the Commission in its order in Petition No. 66/2005, has observed as under:

"76. DVC has not furnished bifurcation of number of employees employed for maintenance of substations and transmission lines. The ratio of line (Ckt.-Km)/bay (nos) in DVC is 4538/250=18.15. To arrive at fair estimate of division of total O&M expenses between sub-stations and lines, the following graph is plotted between line (Ckt.-Km)/bay (nos) and % of employees in sub-stations in case of different regions of PGCIL."

66. Further the Commission in its order dated 6.8.2009 in Petition No. 66/2005, has observed as follows:

"68. In order to arrive at O&M norms for lines and bays for inter-State transmission system below 132 kV, the total number of bays and total ckt-km of lines considered are 204 and 1147.6 respectively, as submitted by the petitioner."

67. As stated, the petitioner has claimed O&M expenses in respect of 1600.24 km s/c and 2293.57 km d/c transmission lines. In line with the orders of the Commission as referred above, we have considered 1147.6 km s/c and 2269 km D/C (4538/2) as base figure, for calculation of O&M expenses. Accordingly, the bays / transmission lines have been considered as on 1.4.20009 as under:

| Status of bays/ Transmission lines as on 1.4.2009 | | | | |
|---|----|------|--|--|
| 220 kV bays | 37 | Bays | | |

| Below 132 kV bays | 417 | |
|--|---------|----|
| Total bays as on 31.3.2009 | 454 | |
| S/C single conductor Transmission line | 1147.60 | km |
| D/C single conductor Transmission line | 2269.00 | |
| Total Transmission lines as on 31.3.2009 | 3416.60 | |

68. The bays / transmission lines added by the petitioner during the period 2009-14 are as under:

| Year | Bays 132 kV and below | Transmission line D/c |
|---------|-----------------------|-----------------------|
| 2009-10 | 32 | 50.39 km |
| 2010-11 | 9 | 94.23 km |
| 2011-12 | 32 | 172.76 km |
| 2012-13 | 45 | 0.15 km |
| 2013-14 | Nil | 90.00 km |
| Total | 118 | 408.53 km |

69. Accordingly, for the calculation of O&M expenses allowable during the period 2009-14, the commissioning of the assets during the year, pro-rata O&M applicable for the period has been considered. According the O&M expenses allowed as per the provisions of the 2009 Tariff Regulations in respect of bays and transmission lines are as under:

(A) Bays

(`in lakh)

| | | | | | | | , |
|-------------|----------------|------|----------|----------|----------|----------|----------|
| | | Bays | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| As on | 220 kV | 37 | 1357.16 | 1434.86 | 1517.00 | 1603.58 | 1695.34 |
| 31.3.2009 | 132 kV & below | 417 | 10925.40 | 11550.90 | 12209.76 | 12910.32 | 13648.41 |
| 2009-10 | | 32 | 285.14 | 952.88 | 1007.28 | 1065.00 | 1125.90 |
| 2010-11 | | 9 | 205.23 | 249.30 | 263.52 | 278.64 | 294.57 |
| 2011-12 | | 32 | 735.35 | 1063.68 | 1124.48 | 1188.80 | 1256.80 |
| 2012-13 | | 45 | 1017.87 | 1457.02 | 1540.28 | 1628.42 | 1721.56 |
| 2013-14 | | Nil | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total O&M a | llowed | 572 | 14526.15 | 16708.64 | 17662.32 | 18674.76 | 19742.58 |

(B)Transmission Lines

(`in lakh)

| | Length | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|---------------------------------|---------|---------|---------|---------|---------|---------|
| 2004-09 (S/C Transmission line) | 1147.60 | 205.42 | 216.90 | 229.52 | 243.29 | 257.06 |
| 2004-09 (D/C Transmission line) | 2269.00 | 610.36 | 644.40 | 682.97 | 721.54 | 762.38 |
| 2009-10 | 50.39 | 6.30 | 13.08 | 13.86 | 14.65 | 15.48 |
| 2010-11 | 94.23 | 16.74 | 24.01 | 25.44 | 26.90 | 28.42 |
| 2011-12 | 172.76 | 35.01 | 48.32 | 51.33 | 54.23 | 57.30 |
| 2012-13 | 0.15 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| 2013-14 | 90.00 | 24.21 | 25.56 | 27.09 | 28.62 | 30.24 |
| Total O&M allowed | 3824.13 | 898.07 | 972.29 | 1030.24 | 1089.26 | 1150.92 |

70. Based on the above, the total O&M expenses allowed for Bays and Transmission lines for the period 2009-14 is summarized as under:

(`in lakh)

| 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|---------|---------|---------|---------|---------|

| 15424.22 | 17680.93 | 18692.56 | 19764.02 | 20893.50 |
|----------|----------|----------|----------|----------|
|----------|----------|----------|----------|----------|

Interest on Working Capital

- 71. Regulation 18(1)(c) of the 2009 Tariff Regulations provides that the working capital for transmission systems shall cover:
 - (i) Receivables equivalent to two months of fixed cost;
 - (ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation
 - (iii) O&M expenses for one month.
- 72. Clause (3) of Regulation 18 of the 2009 Tariff Regulations as amended on 21.6.2011 provides as under:

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

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

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

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

Maintenance spares

74. The expenses for maintenance spares claimed has been allowed as under:

| | | | | (` in lakh) |
|---------|---------|---------|---------|-------------|
| 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| 2313.63 | 2652.14 | 2803.88 | 2964.61 | 3134.03 |

Receivables

75. Receivables equivalent to two months of fixed cost is allowed as shown below:

| | | | | (` in lakh) |
|---------|---------|---------|---------|-------------|
| 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| 4973.91 | 5692.10 | 6143.96 | 6440.60 | 6636.38 |

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 as under:

| | | | | | (` in lakh) |
|-------------------|---------|---------|---------|---------|-------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| O & M for 1 month | 1285.35 | 1473.41 | 1557.71 | 1647.00 | 1741.13 |

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 |
| O&M Expenses – 1 month | 1285.35 | 1473.41 | 1557.71 | 1647.00 | 1741.13 |
| Maintenance Spares | 2313.63 | 2652.14 | 2803.88 | 2964.61 | 3134.03 |
| Receivables – 2 months | 4973.91 | 5693.10 | 6143.98 | 6440.60 | 6636.38 |
| Total working capital | 8572.90 | 9818.65 | 10505.58 | 11052.20 | 11511.53 |
| Rate of interest | 12.25% | 12.25% | 12.25% | 12.25% | 12.25% |
| Interest on working capital | 1050.18 | 1202.79 | 1286.93 | 1353.90 | 1410.16 |

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

80. The P&G liability of `3200.94 crore also include annual liability of `60.00 crore for the year 2009-10. However, as certified by the Actuary, P&G liability as on 31.3.2009 excluding `90.06 crore towards leave encashment works out to `3140.94 crore. The Commission while determining the tariff of the generating & transmission systems of the petitioner in its order dated 3.10.2006 in Petition No. 66/2005 had allocated an amount of `14952 lakh towards the pension and gratuity contribution of Mejia, TPS, Unit-IV of the petitioner out of the total admitted claim of `169015 lakh allocated towards 'power business'. Subsequently, in order dated 6.8.2009 in Petition No. 66/2005, the Commission had allowed the petitioner to recover 60% of the admitted liability of `153449.00 lakh during the period 2006-09 and the balance 40% of liability during the period 2009-14 in compliance of the directions contained in the judgment of the Tribunal. In line with this, the Commission vide its order dated 8.5.2013 in Petition No. 272/2010 had allowed the recovery of an amount of `92069.40 lakh, being 60% of `153449.00 lakh towards Pension and Gratuity Fund for all its generating stations along with the tariff for the period and 2006-09 and `61379.60 lakh, being the balance 40% amount in five equal yearly instalments along with the tariff for the period 2009-14. The details are as under:

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

81. The petitioner, in this petition, has claimed `116710.68 lakh towards Pension & Gratuity liability for all its generating stations, excluding Mejia, TPS, Unit-IV based on the actuarial valuation as on 31.3.2009. The respondent, JSEB has submitted that no provisions for claiming such type of expenses exist under the 2009 Tariff Regulations and hence the claim is liable to be rejected. The objector, Jai Balaji Inds and MAL have submitted that the claim towards P&G contributions are already covered under the normative O&M expenses specified by the Commission under the 2009 Tariff Regulations and hence further claim is not admissible. The objector's have also submitted that the petitioner should deduct the interest earned on P&G fund from the ARR. The petitioner has clarified that the Fund is invested by a trust constituted for its administration in the approved securities and the income accrued is used on the welfare activities of the employees. The clarification of the petitioner merits acceptance and accordingly, the submissions of the objectors is rejected. After considering the documents available on record and the previous orders of the Commission, the P&G liability of the generating stations of the petitioner for the period 2009-14 has been worked out as detailed below.

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

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

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

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

(`in lakh)

| | Total | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|--|-----------|----------|----------|----------|----------|----------|
| P&G contribution staggered from previous tariff period | 61379.60 | 12275.92 | 12275.92 | 12275.92 | 12275.92 | 12275.92 |
| P&G contribution allowed as per actuarial valuation as on 31.3.2009 | 52897.69 | 10579.54 | 10579.54 | 10579.54 | 10579.54 | 10579.54 |
| Total | 114277.29 | 22855.46 | 22855.46 | 22855.46 | 22855.46 | 22855.46 |
| Share of T&D activities | 27692.05 | 5538.41 | 5538.41 | 5538.41 | 5538.41 | 5538.41 |

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 orders dated 8.5.2013 and 22.4.2013 in Petition Nos. 272/2010 and 279/2010 respectively and the amount considered for the T&D activities is allowed as under:

| | | | | (`iı | n lakh) |
|------------------------------|---------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Contribution to Sinking fund | 2001.15 | 2113.10 | 5451.68 | 5833.30 | 6241.63 |

- 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 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."

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

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

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 54 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 petitioner has claimed expenses pertain to Common offices such as Direction office, Central office, R&D, IT centre, Subsidiary activities, other offices etc., catering services in respect of each of the generating stations as well as the Transmission & Distribution systems.

The petitioner has computed the Return on Equity, Interest on Loan and Depreciation on the Common Assets for the period 2009-14 based on the opening capital cost as on 1.4.2009 for different offices and has apportioned them to each of the productive generating stations/T&D systems in proportion to the capital cost based on the opening capital cost as on 1.4.2009. The annual fixed charges claimed towards Common Assets are as under:

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

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

| | | | | | | (`in lakh) |
|-----------------------------|------------|-------------|------------|-----------|------------|------------|
| | Capital | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| | cost as on | | | | | |
| | 1.4.2009 | | | | | |
| Bokaro TPS | 59008 | 315.6119589 | 379.572104 | 471.67749 | 505.8761 | 416.288628 |
| Chandrapura TPS | 28137 | 150.4944023 | 180.992752 | 224.9117 | 241.218747 | 198.500426 |
| Durgapur TPS (III &IV) | 20096.43 | 107.4883684 | 129.271357 | 160.63981 | 172.28687 | 141.77595 |
| Mejia TPS Units I, II & III | 161070 | 861.5038338 | 1036.09136 | 1287.505 | 1380.85452 | 1136.31388 |
| Mejia TPS, Unit-IV | 72403 | 387.2568578 | 465.736155 | 578.74975 | 620.711552 | 510.787444 |
| Maithon HS | 6684 | 35.75024291 | 42.9951861 | 53.428219 | 57.3019905 | 47.1541687 |
| Panchet HS | 5077 | 27.1549945 | 32.658073 | 40.582745 | 43.5251654 | 35.8171326 |
| Tilaiya HS | 289 | 1.54575407 | 1.8590079 | 2.310107 | 2.47759953 | 2.03883225 |
| T&D system | 95763.50 | 512.2035288 | 616.003816 | 765.48074 | 820.981323 | 675.590699 |
| TOTAL | 448527.93 | 2399.009941 | 2885.17981 | 3585.2855 | 3845.23387 | 3164.267 |

91. 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.

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

(`in lakh)

| | | | | | (III IGINII) | • |
|--------|------------------|---------|---------|---------|---------------|---------|
| Centra | al Office | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| 1 | Depreciation | 205.00 | 205.00 | 205.00 | 205.00 | 205.00 |
| | 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 |
| Direct | tion Office | | | | | |
| 1 | Depreciation | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | Interest on Loan | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 | Return on Equity | 32.53 | 33.72 | 33.76 | 33.76 | 33.76 |

| Ī | Total | 32.53 | 33.72 | 33.76 | 33.76 | 33.76 |
|-------|------------------|---------|---------|--------|--------|--------|
| Other | Office | | | | | |
| 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 |
| Subsi | diary Activity | | | | | |
| 1 | Depreciation | 401.80 | 312.90 | 0.00 | 0.00 | 0.00 |
| 2 | Interest on Loan | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 | Return on Equity | 247.00 | 256.05 | 256.30 | 256.30 | 256.30 |
| | Total | 648.80 | 568.94 | 256.30 | 256.30 | 256.30 |
| Total | | | | | | |
| 1 | Depreciation | 606.81 | 517.90 | 205.00 | 205.00 | 205.00 |
| 2 | Interest on Loan | 50.27 | 50.13 | 49.44 | 49.29 | 49.69 |
| 3 | Return on Equity | 561.70 | 582.27 | 582.84 | 582.84 | 582.84 |
| | Total | 1218.78 | 1150.30 | 837.28 | 837.13 | 837.53 |

93. The capital cost as on 31.3.2009 allowed in respect of T&D system as per order dated 8.5.2013 in Petition No. 272/2010 is `88541.73 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 |
| 246.50 | 232.65 | 169.34 | 169.31 | 169.39 |

- 94. 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
- 95. We agree with submissions of the respondents/objectors that the expenses on Common Assets are required to be apportioned to all the operating units/ generating stations of the petitioner. In this view, we direct that the Common Office expenditure as allowed by this order would be subject to truing-up in terms of Regulation 6 of the 2009 Tariff Regulations and would be apportioned to all the units/generating stations and Transmission & Distribution systems of

the petitioner which would be under operation during 2009-14. This according to us would address the concerns of the respondents/objectors.

Annual Fixed Charges

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

|--|

| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|-----------------------------|----------|----------|----------|----------|----------|
| Depreciation | 7241.46 | 8159.87 | 9076.20 | 9482.71 | 9482.71 |
| Interest on Loan | 14.07 | 86.46 | 82.49 | 11.03 | 0.00 |
| Return on Equity | 6113.55 | 7028.58 | 7725.69 | 8031.89 | 8031.89 |
| Interest on Working Capital | 1050.18 | 1202.79 | 1286.93 | 1353.90 | 1410.16 |
| O&M Expenses | 15424.22 | 17680.93 | 18692.56 | 19764.04 | 20893.50 |
| Sub Total | 29843.48 | 34158.62 | 36863.87 | 38643.57 | 39818.27 |
| Pension & Gratuity | 5538.41 | 5538.41 | 5538.41 | 5538.41 | 5538.41 |
| Contribution | | | | | |
| Sinking fund Contribution | 2001.15 | 2113.10 | 5451.68 | 5833.30 | 6241.63 |
| Common office expenditure | 246.50 | 232.65 | 169.34 | 169.31 | 169.39 |
| Total | 37629.54 | 42042.78 | 48023.29 | 50184.58 | 51767.69 |

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.

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

Application fee and the publication expenses

- 98. 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.
- 99. 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.
- 100. The tariff approved above is subject to truing up and is also subject to the outcome of the Civil Appeals pending before the Hon'ble Supreme Court relating to the determination of tariff of

the generating stations of the petitioner for 2006-09 as stated in the relevant paragraphs of this order.

101. This order disposes of Petition No.270/TT/2012.

Sd/ [M.Deena Dayalan] Member Sd/-[V.S.Verma] Member