CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 181/GT/2015

Coram:

Shri A.S. Bakshi, Member
Dr. M.K. Iyer, Member

Date of Order : 09.02.2017

In the matter of:

Revision of tariff of Chandrapura Thermal Power Station Units 7 and 8 (2x250 MW) for the period 2009-14 after truing-up exercise- Truing-up of tariff determined by order dated 12.3.2015 in Petition No. 196/GT/2013.

And in the matter of:

Damodar Valley Corporation,
DVC Towers, VIP Road
Kolkata ………**Petitioner**

Versus

1. Delhi Transco Limited

    a. BSES Rajdhani Power Ltd.
    PMG Office, 2nd Floor, B- Block, BSES Bhawan
    Nehru Place, New Delhi- 110 019

    b. BSES Yamuna Power Ltd.
    2nd Floor, A- Block, Shakti Kiran Building,
    Karkardooma, Delhi- 110 0092

    c. Tata Power Delhi Distribution Ltd.
    (Erstwhile North Delhi Power Ltd.)
    Grid Substation Building, Hudson Lines,
    Kingsway Camp, Delhi- 110 009

2. M.P. Power Management Company Ltd.,
Shakti Bhawan, MPSEB Colony, Rampur,
Jabalpur, Madhya Pradesh-482008 **……….Respondents**

Parties present:

For Petitioner:	Shri M.G.Ramachandran, Advocate, DVC Ms. Poorva Saigal, Advocate, DVC Ms. Anushree Bardhan, Advocate, DVC Shri Subrata Ghosal, DVC Shri Pulak Bhattacharya, DVC
For Respondents	Shri S. Lazaris, MPPMCL Shri Rajiv Yadav, Advocate, DVPCA

ORDER

This petition has been filed by the petitioner, Damodar Valley Corporation (DVC), for revision of tariff based on actual expenditure of Chandrapura Thermal Power Station, Units 7 and 8 (2x250 MW) (hereinafter referred to as "the generating station") for the period from their respective dates of commercial operation (COD) to 31.3.2014, in terms of clause 1 of Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "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. The dates of commercial operation of the different units of this generating station is as under:-

Unit - 8 :	July 15, 2011
Unit - 7 :	November 2, 2011

3. The petitioner had filed Petition No. 196/GT/2013 to determine tariff for the period from the dates of commercial operation of Units 7 and 8 of the generating station to 31.3.2014 and the Commission vide order dated 12.3.2015 had determined the annual fixed charges of the generating station for the said period as summarized under:-

(₹ in lakh)

	Unit-8	**Units-7 and 8**		
	15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
Depreciation	7226.57	14295.37	14545.69	14755.86
Interest on Loan	7228.92	14934.72	14138.2	12832.06
Return on Equity	6148.17	12162.11	12375.08	12553.89
Interest on Working Capital	1582.35	3479.37	3498.51	3513.36
O&M Expenses	5085.00	10170.00	10755.00	11370.00
Cost of Secondary fuel oil	665.53	1947.26	1941.94	1941.94
Total	**27936.54**	**56988.83**	**57254.41**	**56967.11**

4. The first proviso to Regulation 6 of the 2009 Tariff Regulations provides as under:

"6. Truing up of Capital Expenditure and Tariff
(1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up.

Provided that the generating company or the transmission licensee, as the case may be, may in its discretion make an application before the Commission one more time prior to 2013-14 for revision of tariff."

5. The petitioner vide affidavit dated 7.7.2015 has filed the petition for revision of tariff based on truing up of expenditure in terms of Regulation 6(1) of the 2009 Tariff Regulations. Accordingly, the annual fixed charges claimed by the petitioner for the period 2009-14 in respect of the generating station is as under:

(₹ in lakh)

	Unit-8	Units-7 and 8		
	15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
Depreciation	2295.02	6233.08	15525.76	16291.50
Interest on Loan	2170.79	6112.88	13943.15	12393.74
Return on Equity	1847.81	5017.70	12378.92	13077.85
Interest on Working Capital	477.99	1441.20	3514.27	3545.75
O&M Expenses	1528.28	4195.82	10755.00	11370.00
Cost of secondary fuel oil	200.02	803.38	1941.94	1941.94
Compensation Allowance	0.00	0.00	0.00	0.00
Special allowance	0.00	0.00	0.00	0.00
Sub-total	**8519.92**	**23804.07**	**58059.05**	**58620.77**
Share of common office expense	30.30	83.20	107.61	94.05
Additional O&M	251.32	689.98	1357.40	1438.72
Share of Pension & Gratuity	828.42	2274.40	3473.35	4005.27
Share of sinking fund	0.00	0.00	1247.87	2072.60
Adjustment for secondary fuel oil	70.57	110.35	95.78	-50.50
Sub-Total	**1180.61**	**3157.93**	**6282.00**	**7560.14**
Total	**9700.53**	**26961.99**	**64341.05**	**66180.91**

6. The Energy Charges as approved in order dated 12.3.2015 in Petition No. 196/GT/2012 has been claimed by the petitioner.

7. In compliance with the direction of the Commission, the petitioner has filed additional information with a copy to the respondents. The respondent, MPPMCL vide affidavit dated 3.10.2016 has filed its response to the petition and the petitioner vide its affidavit dated 20.10.2016 has filed its rejoinder to the same. Taking into consideration the submissions of the parties and the documents available on record, we now proceed to consider the claims of the petitioner and revise the tariff in respect of this generating station for the period 2009-14 after truing-up exercise. This is however subject to the final outcome of the Civil Appeal pending before the Hon'ble Supreme Court.

Capital cost

8. Regulation 7(1), (2) of the 2009 Tariff Regulations, provides as follows:

"(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;
(b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and
(c) additional capital expenditure determined under regulation 9:
Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.

(2) The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff:"

9. The petitioner has considered the capital cost of ₹105764.08 lakh as on COD of Unit-8 (15.7.2011) and ₹208631.55 lakh as on COD of Unit-7 /Generating Station (2.11.2011) as per order dated 12.3.2015 in Petition No. 196/GT/2013.

10. As regards claim of the petitioner for rotor, the Commission in the said order observed as under:-

"42. It is observed that the cost of damaged Rotor for ₹548.00 lakh (on notional basis as the contract to BHEL was on EPC basis) has also been included in the capital cost as on COD of Unit No. 7. The petitioner has submitted that the actual value of the new TG Rotor could be ascertained after settlement of the salvage value of damaged Rotor and the insurance claim as per contract placed on M/s BHEL and the same shall be submitted at the time of truing up of tariff of the generating station. In consideration of the submissions of the petitioner, the cost of new Rotor has not been considered in the capital cost, in this order, since the cost of damaged rotor has already been included in the EPC cost of the project. However, the cost of new Rotor shall be considered (in place of damaged rotor) at the time of truing-up of tariff of the generating station subject to the petitioner submitting the details of the actual gross block of the damaged rotor, insurance proceeds etc., recovered from the contractor/vendor, as the case may be. Based on this, the capital cost, after excluding the cost of bulldozer and new TG rotor, is worked out as under:"

11. In terms of the liberty granted on above, the petitioner vide affidavit dated 12.9.2016 has submitted that the actual gross block of the damaged rotor of Unit-7 of generating

station was ₹548 lakh based on billing breakup of the EPC contractor, viz., BHEL and the price of the new rotor was ₹1294 lakh including taxes & duties, freight, insurance etc. The petitioner has further submitted that the price of the old damaged rotor would be recovered from M/s BHEL from the outstanding amount payable to them. It has further submitted that during the construction period insurance was handled by the EPC contractor and therefore, there is no scope for the petitioner to recover any insurance claim on account of the damaged rotor.

12. The petitioner was directed to furnish the certificate to the effect that (a) all assets of the gross block for which tariff has been claimed were in service from COD to 31.3.2014 and (b) in case any asset has been taken out from service, the same should be indicated along with the date of putting the asset in use, the date of taking out the asset from service and the gross block of such asset. In response, the petitioner vide affidavit dated 12.9.2016 has certified that all assets of the gross block as on 1.4.2014 are in service.

13. We have examined the matter. In our view, the actual price of the rotor is required to be worked out considering the insurance amount and the amount recovered from the old damaged rotor by the petitioner. Considering the fact that the recovery of price from the damaged rotor is yet to be recovered from BHEL, the capital cost as on COD as determined by order dated 12.3.2015 in Petition No. 196/GT/2013 has been considered. Accordingly, in terms of Regulation 7 of the 2009 Tariff Regulations, the capital cost of ₹105764.08 lakh as on COD of Unit-8 (15.7.2011) and ₹208631.55 lakh as on COD of Unit-7 /Generating Station (2.11.2011) has been considered as the opening capital cost as on respective dates of commercial operation of the units for the purpose of tariff.

Actual Additional Capital Expenditure during 2011-14

14. Clause (2) of 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 kilometers of the power station if, the generating company does not intend to meet such expenditure as part of its Corporate Social Responsibility."

15. The actual additional capital expenditure for the period 2011-13 allowed vide order dated 12.3.2015 in Petition No. 196/GT/2013 is as under:-

(₹ in lakh)

	Unit-8	**Units-7 and 8**			**Total**
	15.07.2011 to 1.11.2011 (actual)	**2.11.2011 to 31.03.2012 (actual)**	**2012-13 (actual)**	**2013-14 (projected)**	
Total Additional Capital Expenditure allowed vide order dated 12.3.2015	0.00	1175.00	6152.04	0.00	7327.04

16. The petitioner has not claimed any additional capital expenditure for Unit No.8 of the generating station for the period from 15.7.2011 to 2.11.2011. However, for the period from 2.11.2011 to 31.3.2014, the breakup details of the projected additional capital expenditure claimed by the petitioner for Units 7 and 8 are as under:

(₹ in lakh)

	Units- 7 and 8		
	2.11.2011 to 31.03.2012	**2012-13**	**2013-14**
Additional capital expenditure Claimed	1175.00	6152.04	2527.48
Less: Liabilities addition	722.12	554.40	392.91
Add: Discharges of liabilities	788.28	5564.84	509.55
Additional Capital expenditure claimed after adjustment of liability discharges	1241.17	11162.49	2644.13

17. The petitioner has claimed additional capital expenditure of ₹1175.00 lakh and ₹6152.04 lakh in 2011-12 and 2012-13, respectively, as under:-

(₹ in lakh)

S.No.		2011-12 (02.11.2011 to 31.03.2012)	2012-13	Remarks
1.	002/01 Power House Building- Ut.7&8	188.86	456.62	Major portion of Expenditure was already incurred and transferred as on COD. Only residual payment after COD transferred to Fixed Assets.
2	002/02 Sub-Stn. Building- Ut 7&8	1.77	19.62	same as above
3	002/04 Office Building- Ut. 7&8	25.78	53.19	
4	002/06 Store Building- Ut 7&8 CTPS	2.09	4.08	
5	002/07 Steel Structure- Ut. 7&8	(-)26.08	133.06	
6	002/08 Cable Trenchs & Acc.- Ut 7&8	2.06	18.46	
7	002/21 Hospital Building- Ut 7&8 CTPS	0.00	0.00	
8	002/24 Other Building- Ut. 7&8	6.26	13.50	
9	002/25 Ty Other Office Building- Ut 7&8 CTPS	(-)0.01	22.32	
10	002/32 Director's Bunglow- Ut. 7&8	(-)0.18	3.45	
11	002/34 Residential Bldg- Ut 7&8 CTPS	(-)0.21	118.06	Adjustment made
12	002/61 Fencing- Ut. 7&8	(-)1.70	9.42	
13	002/62 Sewerage &Sanitary Sys(Ext.)- Ut. 7&8	13.16	1.90	
14	002/63 Water Works & Water Supply Sys- Ut 7&8 CTPS	(-)4.54	206.93	

S.No.		2011-12 (02.11.2011 to 31.03.2012)	2012-13	Remarks
15	002/65 HT/OT/LT Disb. Line & St. Light- Ut 7&8 CTPS	1.48	14.34	
16	002/69 Plantation (Colony)- Ut. 7&8	(-)0.20	20.78	
17	002/70 Colony Roads- Ut 7&8 CTPS	114.96	29.93	
18	003/01 Access Roads- Ut. 7&8	(-)200.41	(-)78.30	
19	003/05 Railway Sidings- Ut. 7&8	(-)1.66	298.25	
20	005/01 Barrage- Ut 7&8 CTPS	(-)0.28	2.02	
21	005/07 Drainage & Sewage (PH)- Ut. 7&8	43.23	7.44	Major portion of Expenditure was already incurred and transferred as on COD. Only residual payment after COD transferred to Fixed Assets.
22	005/08 Cooling Tower & Circu. W.Sys.- Ut. 7&8	38.63	172.98	
23	008/01 Boiler & Accs. Equip- Ut. 7&8	185.80	1224.22	
24	008/02 Boiler Feed Pump- Ut. 7&8	25.31	169.07	
25	008/03 Feed Water Heater (HP)- Ut. 7&8	3.04	27.27	
26	008/04 Deaerator- Ut. 7&8	0.10	0.88	
27	008/05 Piping Valve & Insul.- Ut. 7&8	8.84	79.21	
28	008/06 Turbo Generator & Accs.- Ut. 7&8	87.37	785.64	
29	008/07 Accessory Elec. Equip.- Ut. 7&8	83.98	288.05	
30	008/08 Accessory Mech. Equip.- Ut.7&8	0.61	200.65	
31	008/09 Transformer & HT Motors- Ut. 7&8	25.90	144.22	
32	008/10 Coal Handling Plant- Ut.7&8	162.71	390.46	
33	008/11 Ash Handling Euquip.- Ut. 7&8	62.15	103.56	
34	008/12 Oil Equipment- Ut. 7&8	3.72	277.32	
35	008/13 Misc. Power Plant Equip.- Ut. 7&8	14.48	3224.60	
36	013/02 Switch Gear- Ut. 7&8	26.85	89.98	
37	013/03 KV Gen. Bus Dust (S/gear)- Ut. 7&8	29.46	62.71	

S.No.		2011-12 (02.11.2011 to 31.03.2012)	2012-13	Remarks
38	014/02 Conductor with Accs.- Ut. 7&8	29.22	37.93	
39	014/03 Ground Wire with Accs.- Ut. 7&8	4.96	22.13	
40	014/04 Insulators with Headware- Ut. 7&8	30.98	41.78	
41	014/05 Tower Earthing Sets Etc- Ut. 7&8	78.46	94.75	
42	016/02 Office Furniture- Ut. 7&8	(-)0.08	18.81	Adjustment made
43	016/04 Residential Furniture- Ut. 7&8	12.57	0.17	Expenditure incurred for Assets of Guest House/ Director's Bunglow after COD transferred to Fixed Assets.
44	016/05 Office Equipment- Ut. 7&8	1.38	0.20	
45	016/13 Scientific/Lab. Instrument- Ut. 7&8	74.78	10.98	
46	016/17 Pump- Ut. 7&8	2.16	203.16	
47	016/18 Air Conditioning Plant- Ut. 7&8	1.31	16.07	
48	016/20 Internal Telephone Sys.- Ut. 7&8	4.89	(-)36.75	
49	016/21 Refrigerators & Ice Box- Ut. 7&8	(0.00)	0.00	Adjustment made
50	016/23 Precision Tools- Ut. 7&8	0.44	0.01	Major portion of Expenditure was already incurred and transferred as on COD. Only residual payment after COD transferred to Fixed Assets.
51	016/24 Cranes Ut. 7&8	2.65	53.82	
52	016/25 Personal Computer- Ut. 7&8	(-)0.05	2.01	Adjustment made
53	016/38 Bull Dozer Ut. 7&8	(-)0.45	3.15	
54	016/41 Air Compressor Ut. 7&8	2.33	26.42	Major portion of Expenditure was already incurred and transferred as on COD. Only residual payment after COD transferred to Fixed Assets.
55	016/55 Hospital Equp- Ut 7&8 CTPS	0.00	8.84	
56	016/99 Misc.- Ut. 7&8	6.09	(-)2947.33	
	Total	**1,175.00**	**6152.04**	

18. The cut-off date of the generating station is 31.3.2014 and petitioner has claimed additional capital expenditure after COD (2.11.2011) of the generating station till 31.3.2014 (cut-off date).

Additional Capital Expenditure in the years 2011-12 and 2012-13

19. The petitioner has claimed additional capital expenditure of ₹1175.00 lakh and ₹6152.04 lakh in 2011-12 and 2012-13, respectively, under Regulation 9(1)(ii) of the 2009 Tariff Regulations for works deferred for execution relating to works/services within the original scope of work as per sanction order and comprises of assets listed in S.No. 1 to 56 of the above table and includes power house building, sub-station building, residential building, plants and machinery, ash handling equipments, coal handling equipments, cable trenches, tools and tackles, hospital equipments, office furniture etc. In justification, the petitioner has submitted that major portion of expenditure was already incurred and capitalized earlier and only residual payment has been transferred to fixed assets.

20. The petitioner was directed to submit the nature and details of the negative adjustments of ₹(-) 26.08 lakh pertaining to steel structure (S. No. 5) and ₹(-) 200.41 lakh pertaining to access roads (S. No. 18) in the additional capital expenditure claimed for the year 2011-12 and ₹(-) 2947.33 lakh pertaining to miscellaneous assets (S.No. 56) in the additional capital expenditure claimed for the year 2012-13. In response, the petitioner vide affidavit dated 26.10.2016 has submitted that the negative entries for adjustments in respect of the years 2011-12 and 2012-13 relate to rectification journal entries for booking of assets in the appropriate code and occurred in the same financial year itself. It has also mentioned that corresponding debit entries against the negative entry for ₹26.08 lakh in 2011-12 have been made to the asset codes representing “power house building”, “sub-station building”, “stores building”, “office building”, “other building”, “colony roads”, etc. The petitioner has further submitted that corresponding debit entries against the negative entry for ₹200.41 lakh in 2011-12 have been made to the asset codes representing “power house building”, “sub-station building”, “stores building”,

"office building", "other building", "colony roads", "access roads", "sewerage and sanitary system", "HT/OT/LT distribution lines" and "street lighting", etc. The petitioner has submitted the copy of the journal voucher report of March, 2013 and has submitted that corresponding debit entries against the negative entry for ₹2947.33 lakh in 2012-13 have been made to the asset codes representing "power house building", "sub-station building", "stores building", "office building", "other building", "colony roads", "access roads", "sewerage and sanitary system", "HT/OT/LT distribution lines and street lighting", etc.

21. The petitioner was also directed to submit details of additional capital expenditure as (i) works approved/allowed in the original scope, (ii) works completed which was approved, (iii) works completed which was not approved (not falling within scope of work) and (iv) balance works to be completed. In response, the petitioner vide affidavit dated 12.9.2016 has submitted that the additional capital expenditure claimed during the period from COD to 31.03.2014 were approved in the original scope of work and the details of the same have been submitted with the petition.

22. The respondent, MPPMCL has submitted that the petitioner may be directed to furnish itemwise detail of original scope of work as per Form 5B of 2009 Tariff Regulations for prudence check of the claim of the petitioner and in case of non-availability of Form 5B the claim of the petitioner is liable to be rejected. MPPMCL has further submitted that the additional capital expenditure claimed in case of office furniture, office equipment etc. needs prudence check by the Commission.

23. As regards total additional capital expenditure of ₹1175.00 lakh claimed by the petitioner for assets listed in S.No. 1 to 56 during 2011-12, the respondent, MPPMCL has submitted that Regulation 9(1)(i) to 9(1)(v) of the 2009 Tariff Regulations provides

for additional capital expenditure of assets/works within original scope of work. It has further submitted that the petitioner has claimed additional capital expenditure of the above amount under Regulation 9(1)(ii) which provides for works deferred for execution subject to the proviso that the details of works included in the original scope of work along with estimates of expenditure, undischarged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff.

24. As regards the additional capital expenditure of ₹114.96 lakh claimed for colony roads pertaining to S. No. 17 of above table in 2011-12, the respondent MPPMCL has further submitted that an amount of ₹2094.28 lakh has already been claimed under this head. There is no information about original estimated expenditure and thus it is beyond the scope of the original estimate and is liable to be rejected since the Regulation 9(1)(i) to 9(1)(v) provides for additional capital expenditure within the original scope of the work. Thus, this expense is beyond the scope of original work and MPPMCL has prayed to disallow the same.

25. The respondent, MPPMCL has further submitted that the major claim of ₹162.71 lakh in 2011-12 is under the head of "Coal Handling Plant" pertaining to S. No. 32 of the above table. The respondent has further submitted that an amount of ₹19616.58 lakh had already been incurred under the head and the same is in excess of original scope of work and therefore, the additional capital expenditure claimed in 2011-12 is beyond the original scope of work. It has further submitted that as per original estimate submitted by the petitioner, no breakup details of the capital cost for coal based project has been provided in Form 5B and therefore, assessment of item wise capital cost cannot be ascertained. Accordingly, MPPMCL has requested that the petitioner may be directed to

submit breakup of original scope of work for prudence check of the claimed additional capital expenditure or else the same is liable to be rejected.

26. As regards total additional capital expenditure of ₹6152.04 lakh claimed by the petitioner during 2012-13, the respondent, MPPMCL submitted that such additional capital expenditure has been claimed as CWIP transferred to fixed assets in operation during 2012-13. MPPMCL further submitted that the petitioner has claimed additional capital expenditure of ₹456.62 lakh under the head powerhouse building and has not provided work-wise original estimate and thus the claim of the petitioner is not within the original scope of work and liable to be rejected.

27. As regards the additional capital expenditure of ₹133.06 lakh in 2012-13 claimed towards steel structure, the respondent MPPMCL has further submitted an amount of ₹9486 lakh has already been capitalized under this head. Further, as regards the additional capital expenditure of ₹118.06 lakh in 2012-13 claimed towards residential buildings and ₹3.45 lakh in 2012-13 claimed towards director's bungalow, the respondent has further submitted an amount of ₹5290 lakh towards residential buildings and ₹90 lakh towards director’s bungalow have already been capitalized, respectively. As regards the additional capital expenditure of ₹206.93 lakh in 2012-13 claimed towards water works and water supply system, MPPMCL further submitted that an amount of ₹4850.62 lakh has already been capitalized under this head. Thus, MPPMCL has submitted that all these expenses have exceeded the original scope of work and thus are beyond the scope of the original estimate and are liable to be disallowed.

28. The respondent, MPPMCL has further submitted that that petitioner may be directed to furnish the certificate that the asset are being capitalized during FY 2012- 13 to 2013-

14 have been put to use and are in service for the purpose of generation of electricity from instant generating station.

29. In response to the comments raised by the respondent MPPMCL, the petitioner vide its affidavit dated 20.10.2016 has clarified that all the information has been filed and it has furnished additional capital expenditure on actual basis strictly in accordance with the 2009 Tariff Regulations.

30. We have examined the matter. The cut-off date of the generating station is 31.3.2014 and petitioner has claimed additional capital expenditure after COD (2.11.2011) of the generating station till 31.3.2014 (cut-off date). It is observed that there is no change in the claim of the petitioner for net additional capital expenditure for the years 2011-12 and 2012-13 vis-à-vis that approved by the Commission in its Order dated 12.3.2015 in Petition No. 196/GT/2013.

31. It is noted that the petitioner in Petition No. 196/GT/2013 had claimed projected additional expenditure of ₹1175.00 lakh in 2011-12 and ₹6152.04 lakh in and 2012-13 in respect of undischarged liabilities and works deferred for execution under Regulation 9(1) of the 2009 Tariff Regulations and the Commission had allowed the total projected additional capital expenditure claimed by the petitioner in its order dated 12.3.2015 as under:-

> *"52. The additional capital expenditure for the years 2011-12 and 2012-13 have been claimed under Regulation 9(1)(i)-(un-discharged liabilities) and Regulation 9(1)(ii) – (Works deferred for execution) of the 2009 Tariff Regulations. It is observed that the expenditure claimed mainly pertain to deferred works under the original scope of work and comprises of power house building, residential building, guest house, plants and machinery, ash handling equipments, coal handling equipments, cable trenches, tools and tackles, hospital equipments, office furniture etc. On prudence check of the asset-wise justification furnished by the petitioner, the projected expenditure claimed towards balance work/ balance payments for works under original scope of the project are found to be in order. Hence, the total claim of the petitioner for ₹7327.04 lakh for 2011-13 has been allowed under Regulation 9(1)(i) and 9(1)(ii) of the 2009 Tariff Regulations."*

32. The petitioner in this petition has claimed the same amount as actual additional capital expenditure in the years 2011-12 and 2012-13 and has submitted that these expenditures relate to deferred works and balance payments for works already completed and forming part of original scope of work. Accordingly, as the above additional capital expenditure of ₹1175.00 lakh and ₹6152.04 lakh in 2011-12 and 2012-13 pertain to deferred works and balance payments for works already completed and forming part of original scope of work and have been incurred within cut-off date, therefore, we have considered the additional capital expenditure as claimed by the petitioner for 2011-12 and 2012-13 under Regulation 9(1)(ii) of the 2009 Tariff Regulations and allowed the same.

Additional capital expenditure in 2013-14

33. The petitioner has claimed additional capital expenditure of ₹2527.48 lakh in 2013-14 under Regulation 9(1)(ii) –(Works deferred for execution) of the 2009 Tariff Regulations as under:-

(₹ in lakh)

S. No.		Additional capital expenditure in 2013-14	Remarks
1.	Power House Building - Ut. 7&8	725.85	Major portion of Expenditure was already incurred and transferred as on COD. Only residual payment after COD transferred to Fixed Assets.
2	Sub Station Building - Ut. 7&8	60.36	
3	Office Building - Ut. 7&8	92.80	
4	Store Building - Ut. 7&8	33.98	
5	Steel Structure - Ut. 7&8	309.02	
6	Cable Trenches & Acc. - Ut. 7&8	(-)7.73	
7	Hospital Building - Ut 7&8	-	
8	Other building - Ut. 7&8	72.81	
9	Ty. Other Office building - Ut. 7&8	42.64	
10	Director Banglow - Ut. 7&8	(-)0.12	
11	Residential Building - Ut. 7&8	0.43	Adjustment made
12	fencing - Ut. 7&8	53.09	
13	Sewerage & sanitary	2.29	

S. No.		Additional capital expenditure in 2013-14	Remarks
	Systems(Ext.) - Ut. 7&8		
14	Water works & water supply system - Ut. 7&8	135.78	
15	HT/OT/LT Line/ & St. Leighting - Ut. 7&8	103.14	Major portion of Expenditure was already incurred and transferred as on COD. Only residual payment after COD transferred to Fixed Assets.
16	Plantation Colony - Ut. 7&8	(-)0.02	Adjustment made
17	Colony Road - Ut. 7&8	(-)2.86	
18	Access Road - Ut. 7&8	136.35	
19	Railway Siding - Ut. 7&8	135.34	
20	Barrage - Ut. 7&8	(-)0.19	
21	Ash Bund	141.58	Major portion of Expenditure was already incurred and transferred as on COD. Only residual payment after COD transferred to Fixed Assets.
22	Drainage & sewarwge (PH) - Ut. 7&8	38.21	
23	Cooling Tower& circulating system - Ut. 7&8	38.14	
24	Boiler & Accs. Equipment - Ut. 7&8	152.34	
25	Boiler Feed Pump - Ut. 7&8	57.43	
26	Feed Water Heater (HP Heater) - Ut. 7&8	(-)11.42	
27	Deaerator - Ut. 7&8	(-)0.37	
28	Piping Valve & Insul. - Ut. 7&8	(-)33.16	
29	Turbo Generator & Accs. - Ut. 7&8	(-)327.27	
30	Accessory Electrical Equipment - Ut. 7&8	44.77	
31	Accessary Mech. Equipment - Ut. 7&8	25.01	
32	Transformer & & H T Motors - Ut. 7&8	(-)46.35	
33	Coal Handling Plant - Ut. 7&8	223.42	
34	Coal handling Yard - CTps Ut. 7&8	16.09	
35	Ash Handling Equipment - Ut. 7&8	30.45	
36	Oil Equipment - Ut. 7&8	51.92	
37	Misc. Power Plant Equipment - Ut. 7&8	80.49	
38	Switch Gear - Ut. 7&8	(-)11.37	Adjustment made
39	K V Gen. Bus Duct (S/Gear) - Ut. 7&8	5.91	
40	Conductor with Acces. - Ut. 7&8	(-)8.89	
41	Ground Were with Accs. - Ut.	(-)9.27	

S. No.		Additional capital expenditure in 2013-14	Remarks
	7&8		
42	Insulater with Hardware - Ut. 7&8	(-)8.30	
43	Tower Earthing Sets Etc. - Ut. 7&8	(-)16.25	Expenditure incurred for Assets of Guest House/ Director's Bunglow after COD transferred to Fixed Assets.
44	Office Furniture - Ut. 7&8	12.56	
45	Residential Furniture- Ut 7&8	(-)0.02	
46	Office Equipment - Ut. 7&8	12.15	
47	Scientific / Lab Instrument - Ut. 7&8	(-)3.55	
48	Pumps (O/Assets) - Ut. 7&8	(-)1.64	
49	Air Conditioning Plant (O/Assets) - Ut. 7&8	85.96	Adjustment made
50	Internal Telephone Sys. (Other Assts) - Ut. 7&8	1.42	Major portion of Expenditure was already incurred and transferred as on COD. Only residual payment after COD transferred to Fixed Assets.
51	Refrigerators - Ut. 7&8	(-)0.00	
52	Precision Tools- Ut 7&8	(-)0.00	Adjustment made
53	Cranes (Other Assets) - Ut. 7&8	(-)5.41	
54	Personal Computer - Ut. 7&8	57.20	Major portion of Expenditure was already incurred and transferred as on COD. Only residual payment after COD transferred to Fixed Assets.
55	Buldozer - Ut. 7&8	(-)0.30	
56	Air Compressor (Other Assets) - Ut. 7&8	(-)2.16	
57	Hospital Equipment - Ut. 7&8	(-)0.01	
58	Misc.(other Assets) - Ut. 7&8	45.23	
	TOTAL	**2527.48**	

34. The petitioner was directed to submit the nature and details of the following negative adjustments in the additional capital expenditure in 2013-14 as under:-

(₹ in lakh)

	Adjustments made in 2013-14
Turbo Generator & Accs. - Ut. 7&8	(-)327.27
Transformer & & H T Motors - Ut. 7&8	(-)46.35
Switch Gear - Ut. 7&8	(-)11.37

35. In response, the petitioner has submitted a copy of the journal voucher report of March, 2014 and has clarified that the corresponding debit entries against the negative entry for ₹327.27 lakh, ₹46.35 lakh and ₹11.37 lakh in 2013-14 have been made to the asset codes representing “boiler and accessories equipment”, “kV generator bus duct”,

"miscellaneous power plant equipment", "coal handling plant", "oil equipment", "ash handling equipment", "accessories mechanical equipment", power house building", "sub-station building", "stores building", "office building", "residential building", "access roads", "sewerage and sanitary system", "HT/OT/LT distribution lines and street lighting", "water works and water supply system", etc. In this regard, the petitioner has submitted the copy of the journal voucher report of March, 2014 for the aforesaid transaction.

36. The respondent, MPPMCL has submitted that no projected additional capital expenditure was allowed to the petitioner in 2013-14 in order dated 12.3.2015 in Petition No. 196/GT/2013 and as against this, the petitioner has claimed additional capital expenditure of ₹2527.48 lakh and the same is gross violation of the objective and spirit of the 2009 Tariff Regulations, which clearly states that the projected additional capital expenditure are being allowed to ensure that the petitioner may be aware of allowable limit of additional capital expenditure during a financial year and should be within that allowed limit. It has further submitted that since the claim of the petitioner is exceeding enormously over and above that allowed by the Commission in 2013-14, no additional capital expenditure may be allowed in 2013-14. In response, the petitioner vide affidavit dated 20.10.2016 has clarified that Regulation 6(1) of the 2009 Tariff Regulations itself provides for truing up of the tariff on the basis of actual expenditure after prudence check, and accordingly, the tariff order dated 12.3.2015 allowed on projection basis is required to be trued-up based on actuals.

37. We have examined the matter. It is observed that the expenditure claimed by the petitioner pertains to deferred works comprising of power house building, residential building, guest house, plants and machinery, ash handling equipments, coal handling equipments, cable trenches, tools and tackles, hospital equipments, office furniture,

fencing, etc, which are within the original scope of work of the project. On prudence check of the asset- wise justification furnished by the petitioner, it is observed that the expenditure claimed is towards balance work/ balance payments for works under the original scope of the project. Accordingly, the claim of ₹2527.48 lakh in 2013-14 of the petitioner in respect of deferred works within the original scope of project and within the cut-off date of the generating station is allowed to be capitalized under Regulation 9(1)(ii) of the 2009 Tariff Regulations.

Liabilities

38. The petitioner in Petition No. 196/GT/2013 had not submitted any details of the liabilities included in the additional capital expenditure for the period 2011-14. Accordingly, the Commission by order dated 12.3.2015 had directed as under:-

> *"53.... Accordingly, we direct the petitioner to furnish the asset-wise and party-wise liabilities included in the capital cost as on COD of both the units and in the additional capital expenditure claimed, along with discharge of liabilities, if any, at the time of truing-up of tariff of the generating station in terms of Regulation 6 of the 2009 Tariff Regulations."*

39. In line with above direction, the petitioner vide affidavit dated 7.7.2015 in the petition has submitted the asset-wise and party-wise liabilities included in the capital cost as on COD of both the units and in the additional capital expenditure claimed from COD to 31.3.2014 along with discharge of liabilities. Further, the petitioner has submitted the liability flow statement for the generating station.

40. It is observed that the above asset-wise and party-wise liabilities submitted by the petitioner as in Form 9A (statement of capital cost) are different from that as claimed in the petition. Accordingly, the submissions made as under prescribed Form 9A have been adopted.

41. The additional capital expenditure and de-capitalization considered as per Form 9A for the years 2011-12, 2012-13 and 2013-14 are as follows:

(₹ in lakh)

	Units- 7 and 8		
	2.11.2011 to 31.3.2012	**2012-13**	**2013-14**
Additions Claimed by the petitioner	1175.00	6152.04	2527.48
Add: Net discharges of liabilities	13.41	5018.39	-
Less: Net undischarged liabilities	-	-	409.65
Additional Capitalization claimed after adjustment of liability discharges	1188.41	11170.43	2117.83

42. Accordingly, the capital cost considered for the purpose of tariff for the period 2011-14 is as under:

(₹ in lakh)

	15.07.2011 to 1.11.2011	2.11.2011 to 31.03.2012	2012-13	2013-14
Opening Capital Cost	105764.08	208631.55	209819.96	220990.40
Additional Capitalization after adjustment of liability discharges	0.00	1188.41	11170.43	2117.83
Closing Capital Cost	105764.08	209819.96	220990.40	223108.23
Average Capital Cost	**105764.08**	**209225.76**	**215405.18**	**222049.31**

Debt: Equity

43. Regulation 12 of the 2009 Tariff Regulations provides that:-

"(a) 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."

44. The Commission by its order dated 12.3.2015 in Petition No. 196/GT/2013 had approved debt:equity ratio of 70:30 as on COD of Units 7 and 8 of this generating station.

45. The petitioner has claimed debt equity ratio of 70:30 as on COD of the generating station. Further, the petitioner has submitted that the additional capital expenditure for the period from 2011-12 to 2013-14 has been funded through debt equity ratio of 70:30. The commercial operation of the project is 2011-12. As decided by the Commission in its order dated 12.3.2015 in Petition No. 196/GT/2013, the debt-equity ratio of 70:30 as on COD has been considered. Accordingly, the gross loan and equity amounting to ₹74034.86 lakh and ₹31729.22 lakh, respectively, as on COD of Unit-8 (15.7.2011) and ₹146042.09 lakh and ₹62589.47 lakh as on COD of Unit-7 (2.11.2011) of the generating station as approved vide order dated 12.3.2015 in Petition No. 196/GT/2013 has been considered as the gross loan and equity as on COD. The debt equity ratio for additional capital expenditure has been considered as claimed by the petitioner, as under:-

(₹ in lakh)

	Unit-8				**Units- 7 and 8**					
	As on COD of Unit-8 (15.7.2011)		**Additional capitalization during period from 15.7.2011 to 1.11.2011**		**As on Generating Station COD (2.11.2011)**		**Additional capitalization during period from 2.11.2011 to 31.3.2014**		**As on 31.3.2014**	
	Amount	**(%)**	**Amount**	**(%)**	**Amount**	**(%)**	**Amount**	**(%)**	**Amount**	**(%)**
Debt	74034.86	70.00	0.00	0.00	146042.09	70.00	10133.67	70.00	156175.76	70.00

	Unit-8				Units- 7 and 8					
	As on COD of Unit-8 (15.7.2011)		Additional capitalization during period from 15.7.2011 to 1.11.2011		As on Generating Station COD (2.11.2011)		Additional capitalization during period from 2.11.2011 to 31.3.2014		As on 31.3.2014	
	Amount	(%)	Amount	(%)	Amount	(%)	Amount	(%)	Amount	(%)
Equity	31729.22	30.00	0.00	0.00	62589.47	30.00	4343.00	30.00	66932.47	30.00
Total	**105764.08**	**100.00**	**0.00**	**0.00**	**208631.55**	**100.00**	**14476.68**	**100.00**	**223108.23**	**100.00**

Return on Equity

46. 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."

47. The grossing up of the base rate has been done with respect to the actual tax rate applicable to the petitioner for the period 2011-14. However, since the petitioner's company as a whole has book loss as per Audited accounts for the years 2011-12 and 2013-14 as no tax has been paid and therefore applicable tax rate for the years 2011-12 and 2013-14 have been considered as 'NIL'. Return on equity has been worked out on the normative equity as on COD of the Units 7 and 8 of this generating station after accounting for the admitted actual additional capital expenditure for the period 2011-14 as above. Return on Equity has been computed as under:

(₹ in lakh)

	Unit-8	**Units- 7 and 8**		
	15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
Opening notional equity	31729.22	62589.47	62945.99	66297.12
Addition due to Additional +Capitalisation	0.00	356.52	3351.13	635.35
Closing Equity	31729.22	62945.99	66297.12	66932.47
Average Equity	31729.22	62767.73	64621.55	66614.79
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%
Tax rate	0.000%	0.000%	20.008%	0.000%
Rate of Return on Equity (Pre Tax)	15.500%	15.500%	19.377%	15.500%
Return on Equity (Pre Tax)-Annualised	**4918.03**	**9729.00**	**12521.72**	**10325.29**

Interest on Loan

48. Regulation 16 of the 2009 Tariff Regulations provides that:

"(1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered

from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project.
Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered.
Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

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

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

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

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute.
Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan."

49. Interest on loan has been worked out as under:

a) The gross normative loan after adjustment of un-discharged liabilities as on COD has been considered on respective CODs of units 7 and 8 of this generating station.

b) Cumulative repayment has been considered as 'nil' as on COD of Unit-8.

c) Addition to normative loan on account of additional capital expenditure approved above has been considered on year to year basis as per the approved debt equity ratio.

d) Depreciation allowed has been considered as repayment of normative loan during the respective year of the period 2011-14.

e) The weighted average rate of interest of has been considered for the years 2011-12, 2012-13 and 2013-14 respectively based on actual loan portfolio as enclosed in Annexure 1 of this order.

50. Interest on loan has been worked out as under:

(₹ in lakh)

	Unit-8	**Units- 7 and 8**		
	15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
Gross Notional Loan for the purpose of tariff in the instant petition	74034.86	146042.09	146873.97	154693.28
Cumulative repayment of loan up to previous year	0.00	2295.02	8527.32	24049.57
Net opening loan	74034.86	143747.06	138346.65	130643.71
Addition due to Additional Capitalisation	0.00	831.89	7819.30	1482.48
Less: Repayment of Loan during the period	2295.02	6232.30	15522.25	16268.93
Net Closing Loan	71739.83	138346.65	130643.71	115857.26
Average Loan	72887.34	141046.86	134495.18	123250.49
Weighted Average Rate of Interest on Loan (%)	9.9096%	10.5052%	10.4174%	10.3727%
Interest on Loan - Annualised	**7222.82**	**14817.18**	**14010.91**	**12784.37**

Depreciation

51. 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."

52. The petitioner has claimed depreciation in accordance with the rate of depreciation stipulated by the Comptroller and Auditor General of India in terms of Section 40 of Damodar Valley Corporation Act, 1948 as under:-

(₹ in lakh)

Unit-8	**Units- 7 and 8**		
15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
2295.02	6233.08	15525.76	16291.50

53. The respondent, MPPMCL has submitted that petitioner has considered a rate of 8% for depreciation of buildings. Similarly, power house and plant has been depreciated @ 7.6%. The respondent has further submitted that by applying these rates of depreciation, the plant will be fully depreciated in less than 14 years which is grossly arbitrary, illogical and incomprehensible. It has further submitted that this will result in front loading of depreciation on the consumer as the plant will be fully depreciated in about 12.5 years only. It has further submitted that the consumer availing electricity supply during initial 12.5 years of the plant will have to pay the annual fixed charges at higher rate in comparison to the consumers availing supply in later part of the useful life. Accordingly, the respondent has submitted that this is grossly unreasonable, illogical and

without any basis and as prayed that depreciation in accordance with the rate prescribed in Appendix-III of the 2009 Tariff Regulations may be allowed.

54. In response, the petitioner vide its affidavit dated 20.10.2016 has clarified that it has been decided by the Appellate Tribunal that the rate of depreciation stipulated by the Comptroller and Auditor General of India in terms of Section 40 of Damodar Valley Corporation Act, 1948 should be applied for computation of depreciation for the projects of the petitioner.

55. The matter has been examined. The rate of depreciation has been arrived by taking into consideration, the weighted average of depreciation computed on the gross value of asset as on COD of this generating station and on 1st April of the years 2012-13 and 2013-14 at the rates approved by C&AG. Further, the value of freehold land as on 31.3.2012 is 'nil' as per books of account and accordingly, the same has been considered. Further, the proportionate adjustment has been made to the cumulative depreciation corresponding to discharges of liabilities considered during the respective years on account of cumulative depreciation adjusted as on COD of this generating station. The necessary calculations in support of depreciation are as under:

(₹ in lakh)

	Unit-8	**Units- 7 and 8**		
	15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
Opening Capital Cost	105764.08	208631.55	209819.96	220990.40
Additional Capitalization	0.00	1188.41	11170.43	2117.83
Closing Capital Cost	105764.08	209819.96	220990.40	223108.23
Average capital cost	105764.08	209225.76	215405.18	222049.31
Value of freehold land	0.00	0.00	0.00	0.00
Depreciable value	95187.67	188303.18	193864.66	199844.38
Balance depreciable value	95187.67	186008.16	185337.34	175794.81
Depreciation	**2295.02***	**6232.30**	**15522.25**	**16268.93**
Depreciation (annualized)	**7636.17**	**15106.10**	**15522.25**	**16268.93**

	Unit-8	Units- 7 and 8		
	15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
Cumulative depreciation at the end of the period (before adjustment)	2295.02	8527.32	24049.57	40318.50
Cumulative depreciation after adjustment (at the end of the period)	**2295.02**	**8527.32**	**24049.57**	**40318.50**

** On pro-rata basis*

Operation & Maintenance Expenses

56. Regulation 19(a) of the 2009 Tariff Regulations provides as under:

*"**19. Operation and Maintenance Expenses:***
Normative operation and maintenance expenses shall be as follows, namely:
(a) Coal based and lignite fired (including those based on CFBC technology) generating stations, other than the generating stations/units referred to in clauses (b) and (d):

(in ₹lakh/MW)

Year	*200/210/250 MW Sets*	*300/330/350 MW Sets*	*500 MW Sets*	*600 MW and above sets*
2009-10	*18.20*	*16.00*	*13.00*	*11.70*
2010-11	*19.24*	*16.92*	*13.74*	*12.37*
2011-12	*20.34*	*17.88*	*14.53*	*13.08*
2012-13	*21.51*	*18.91*	*15.36*	*13.82*
2013-14	*22.74*	*19.99*	*16.24*	*14.62*

Provided that the above norms shall be multiplied by the following factors for additional units in respective unit sizes for the units whose COD occurs on or after 1.4.2009 in the same station:

200/210/250 MW	Additional 5th& 6th units	0.90
	Additional 7th& more units	0.85

…"

57. Regulation 19(a) of the 2009 Tariff Regulations provides the year-wise O&M expense norms for the generating station of the petitioner as under:

(₹ in lakh)

	Unit-8	Units- 7 and 8		
	15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
Norms (₹lakh/MW)	20.34	20.34	21.51	22.74
Capacity (MW)	250	500	500	500

	Unit-8	Units- 7 and 8		
	15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
O&M Expenses (Pro rata)	1528.28	4195.82	10755.00	11370.00
O&M Expenses - Annualised	5085.00	10170.00	10755.00	11370.00

58. The petitioner was directed to furnish the actual O&M expenditure of the generating station during the period 2011-14 and in response, the petitioner vide affidavit dated 12.9.2016 has submitted the actual O&M expenditure of the generating station as under:-

(₹ in lakh)

	2011-12 CTPS Unit-8 (15.7.2011 to 1.11.2011) and CTPS Units 7 and 8 (2.11.2011 to 31.3.2012)	**2012-13**	**2013-14**
O&M expenditure - Direct			
Employees Remuneration and benefit	1361	5412	5779
Generation, distribution, administration and other expenses	3712	9157	8280
Total O&M expenses- Direct	**5073**	**14569**	**14058**
Share of revenue expenditure - allocated			
Employees Remuneration and benefits (share)	1559	2424	3741
Operation Maintenance and General Adm. (share)	30	72	346
Total O&M expenses- share	**1589**	**2496**	**4087**
Total O&M expenditures- Direct+share	**6662**	**17065**	**18145**

59. In respect to additional O&M expenses, the petitioner has submitted that significant amount of expenditure over and above the normative O&M expense allowed for the generating station had to be incurred towards successful operation of the plant during the years 2011-12, 2012-13 and 2013-14. The petitioner has also claimed additional O&M expenses towards Mega insurance, CISF security and Share of subsidiary activity. Accordingly, the additional O&M expenses claimed by the petitioner for the years 2011-12, 2012-13 and 2013-14 are as under:-

(₹ in lakh)

	Unit-8	Units- 7 and 8		
	15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
Mega insurance	25.40	69.73	62.19	62.19
CISF security	160.99	441.99	948.94	1226.24
Addl claim of Share of subsidiary activity	64.93	178.26	346.27	150.30
Total	**251.32**	**689.98**	**1357.40**	**1438.72**

60. The respondent, MPPMCL has submitted that O&M expenses may be allowed in accordance with the provision contained in Regulation 19 of the 2009 Tariff Regulations which states that normative O&M expenses has to be allowed as indicated in (a) for thermal generating stations and accordingly the claim of the petitioner for additional O&M expenses is arbitrary, illogical and without any basis and is strongly opposed. In response, the petitioner vide its affidavit dated 20.10.2016 has submitted that it has claimed only such items of expenditure like CISF, Share of Subsidiary Activities, Mega Insurance etc. as additional O&M expenses which are not covered by the normative O&M Expenses and has requested the Commission to allow such expenditure after necessary prudent check in terms of the 2009 Tariff Regulations.

61. Taking into consideration the submissions of the parties and documents on record, we now proceed to examine the additional O&M expenses by the petitioner as under:-

Mega Insurance

62. The petitioner has claimed Mega Insurance amount of ₹95.13 lakh, ₹62.19 lakh and ₹62.19 lakh for the years 2011-12, 2012-13 and 2013-14, respectively. The petitioner was directed to provide justification for undertaking Mega Insurance along with a copy of Mega insurance taken for plant. In response, the petitioner vide affidavit dated 12.9.2016 has submitted that this generating station of the petitioner is situated at a remote place and is also disturbed prone in nature. It has further submitted that establishment of a

thermal power station involves a huge amount of investment comprising of high cost plant and machineries. The petitioner has also submitted that considering the financial involvement of replacement of assets in case of unforeseen damage or accident of the plant or any part thereof, idea for obtaining a comprehensive insurance plan has been envisaged which would act as a shield to safeguard the financial health of the Corporation. The petitioner has further submitted that this expenditure cannot be incurred out of the normative O&M expenditure allowed by the Commission in terms of the 2009 Tariff Regulations and has therefore prayed to allow such expenditure in addition to the normative O&M expense as per the regulations. The petitioner has submitted a copy of the Mega insurance policy for 2013-14 (along with journal entry for mega insurance for 2012-13 & 2013-14 in support of the said claim.

63. The matter has been examined. Considering the location of the generating stations of the petitioner, the expenses towards security for the generating station against any acts of sabotage/terrorism will not be commensurate with the other generating stations. This kind of specific aspects was not considered while arriving the operation and maintenance expenses. We are of the view that the petitioner’s claim of additional operation and maintenance expenses on account of Mega Insurance is applicable to the specific generating station as prayed for by the petitioner in relaxation of the provisions of the 2009 Tariff Regulations. Accordingly, prayer of the petitioner is allowed as under:-

(₹ in lakh)

Unit-8	**Units- 7 and 8**		
15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
25.40	69.73	62.19	62.19

CISF Security

64. The petitioner has claimed CISF security expenditure of ₹602.98 lakh, ₹648.94 lakh and ₹1226.24 lakh for the years 2011-12, 2012-13 and 2013-14 respectively, as under:

(₹ in lakh)

	Unit-8	Units- 7 and 8		
	15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
Claimed	160.99	441.99	948.94	1226.24

65. The petitioner has submitted that this generating station is located in high alert security zones. The petitioner was directed to provide the generating station-wise additional CISF personnel deployed/employed in the generating station during the period 2011-14. In response, the petitioner vide affidavit dated 12.9.2016 has submitted the year-wise number of CISF deployed at this generating station during 2011-14 as under:

	2011-12	2012-13	2013-14
No. of CISF deployed at CTPS for all the units	379	395	415
No. of CISF deployed at CTPS Units 7 and 8 on the basis of capacity (MW)	213	222	233

66. It is observed that the claim of the petitioner has substantially increased in 2013-14 when compared to the claim for the year 2012-13. The Commission has therefore considered the escalation rate of 5.72% as considered by the Commission for the norms for O&M expenses during 2009-14. The CISF expenses for the year 2012-13 has been escalated by 5.72% in order to work out expenses for the year 2013-14. The Commission has then considered the minimum of such derived expenses and petitioner's claim.

(₹ in lakh)

Unit-8	Units- 7 and 8		
15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
160.99	441.99	948.94	1003.22

Share of subsidiary activities

67. The petitioner has claimed additional expenditure towards Share of subsidiary activity, as under:-

(₹ in lakh)

Unit-8	Units- 7 and 8		
15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
64.93	178.26	346.27	150.30

68. The petitioner was directed to provide the details of subsidiary expenses (limited to soil conservation) along with reconciliation with the audited balance sheet for the period 2011-14. In response, the petitioner vide affidavit dated 12.9.2016 has submitted the details of subsidiary expenses along with reconciliation with the audited accounts for the period 2011-14.

69. The respondent, MPPMCL has submitted that the subsidiary activities being claimed by the petitioner are related to soil erosion, cultivation of reservoirs, flood control, afforestation, social activities like establishing hospitals, schools, drinking water, sanitation, public health, training schemes etc. It has also submitted that these activities has to be undertaken by the petitioner under its Corporate Social Responsibilities (CSR activities) and should be apportioned from the return on equity, profit surplus etc. It has further submitted that these activities in no manner, are related to generation of electricity and accordingly is not allowable as pass through in tariff.

70. The matter has been examined. The Commission vide order dated 29.7.2016 in Petition No. 471/GT/2014 had allowed the expenditure towards Share of subsidiary activity for the period 2009-14 as under:-

> *"78. Considering the fact that the normative O&M allowed to this generating station for period 2009-14 does not include revenue expenses on subsidiary activities, we allow the additional O&M expenses for Share of subsidiary activities limited to the expenditure required for soil conservation…."*

71. The petitioner has not submitted the station-wise soil conservation cost but has only submitted the total soil conservation cost for the petitioners company as a whole for the year 2012-13 and 2013-14. Accordingly, the expenditure towards soil conservation activities has been worked out by considering the total soil conservation expenditure and

the same has been allocated to each of the generating stations (including Mejia Unit 5 & 6) and T&D system of the petitioner in proportion to the admitted capital cost as on 1.4.2009. Further, the expenditure towards soil conservation activities worked out above pertaining to generating stations has been allocated to different units on the basis of installed capacity. Accordingly, the share of subsidiary activities limited to the expenditure towards soil conservation activities has been allowed as additional O&M expenses in relaxation of the provisions of the 2009 Tariff Regulations.

(₹ in lakh)

Unit-8	**Units- 7 and 8**		
15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
0.00	0.00	215.46	223.47

72. Based on the above discussions, the total additional O&M expenses allowed for the generating station is as under:-

(₹ in lakh)

	Unit-8	**Units- 7 and 8**		
	15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
Mega insurance	25.40	69.73	62.19	62.19
CISF security	160.99	441.99	948.94	1003.22
Addl claim of Share of subsidiary activity	0.00	0.00	215.46	223.47
Total	**186.39**	**511.72**	**1226.59**	**1288.87**

Interest on working capital

73. Regulation 18 (1) (a) of the 2009 Tariff Regulations provides that the working capital for Coal-based/lignite-fired thermal generating stations shall cover:-

"(i) Cost of coal or lignite and limestone, if applicable, for 1½ months for pithead generating stations and two months for non-pit-head 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 secondary 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 charges and energy charges for sale of electricity calculated on the normative annual plant availability factor, and

(v) Operation and maintenance expenses for one month."

74. 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"

75. The respondent, MPPMCL has submitted that petitioner has claimed an amount of ₹3388 lakh during 2013-14 towards bus unit in calculation of interest on working capital which is against the provision of the Regulation 18 of the 2009 Tariff Regulations and hence may be disallowed. In response, the petitioner vide affidavit dated 20.10.2016 has submitted that the respondent has misinterpreted that the units of measurement for electricity (Bus Unit in MU) and the amount in rupees lakh. Accordingly, working capital has been calculated considering the following elements:

Fuel components in working capital

76. The petitioner has claimed the following cost of fuel component in working capital on pro-rata basis based on price and GCV of coal & secondary fuel oil procured and

burnt for the proceeding three months of January, 2009, February, 2009 and March, 2009.

(₹ in lakh)

	Unit-8	Units- 7 and 8		
	15.07.2011 to 1.11.2011*	**2.11.2011 to 31.03.2012***	**2012-13**	**2013-14**
Cost of coal for 2 months	1090.84	3487.75	8430.65	8430.65
Cost of secondary fuel oil for 2 months	33.34	133.90	323.66	323.66

** On pro-rata basis*

77. The respondent, MPPMCL has submitted that the petitioner has furnished Form 15 wherein the information of weighted average cost of coal and weighted average GCV of coal for the month of April, May & June 2011 and August, September and October 2011 have been provided. It has also submitted that it is observed that in April, May & June 2011 for higher GCV of coal the petitioner has paid about ₹1720 per MT in comparison to the rates of ₹1843 per MT for lower GCV in August, September and October 2011. It has thus submitted that for lower GCV of coal of 300 kCal/kg more than ₹100 per MT has been paid. In response, the petitioner vide its affidavit dated 20.10.2016 has submitted that the GCV and price of coal for the last three months prior to COD of the respective units were submitted based on the actual figure recorded at plant level. It has stated that coal is procured from different collieries and price of the coal are based on the grades of coal and the power utilities have no control over the fixation of price which is solely determined by the coal companies. The petitioner has further submitted that data furnished is based on actual measurement as well as value of the coal bills paid by the petitioner. The fuel components in working capital (on annualised basis) as approved by the Commission in order dated 12.3.2015 has been considered as under:

(₹ in lakh)

	Unit-8	Units- 7 and 8		
	15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
Cost of coal for 2 months	3629.51	8453.74	8430.64	8430.64
Cost of secondary fuel oil for 2 months	110.92	324.54	323.66	323.66

Maintenance Spares

78. The petitioner has claimed maintenance spares on pro-rata basis in the working capital as under:

(₹ in lakh)

Unit-8	Units- 7 and 8		
15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
305.66*	839.16*	2151.00	2274.00

** On pro-rata basis*

79. The maintenance spares (on annualised basis) as approved in order dated 12.3.2015 has been considered as under:

(₹ in lakh)

Unit-8	Units- 7 and 8		
15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
1017.00	2034.00	2151.00	2274.00

Receivables

80. Receivables (on annualized basis) have been worked out on the basis of two months of fixed and energy Charges as under:-

(₹ in lakh)

	Unit-8	Units- 7 and 8		
	15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
Variable charges for two Months	3629.51	8453.74	8430.64	8430.64
Fixed charges for two months	4515.56	9202.36	9711.70	9364.77
Total	**8145.08**	**17656.10**	**18142.34**	**17795.41**

81. SBI PLR of 11.75% as on 1.4.2011 has been considered in the computation of the interest on working capital. Necessary computations in support of calculation of interest on working capital on annualized basis are given as under:

(₹ in lakh)

	Unit-8	Units- 7 and 8		
	15.07.2011 to 1.11.2011	2.11.2011 to 31.03.2012	2012-13	2013-14
Cost of coal – 2 months	3629.51	8453.74	8430.64	8430.64
Cost of secondary fuel oil – 2 month	110.92	324.54	323.66	323.66
O&M expenses – 1 month	423.75	847.50	896.25	947.50
Maintenance Spares	1017.00	2034.00	2151.00	2274.00
Receivables – 2 months	8145.08	17656.10	18142.34	17795.41
Total working capital	13326.26	29315.88	29943.89	29771.21
Rate of interest (%)	11.75%	11.75%	11.75%	11.75%
Interest on working capital	**1565.84**	**3444.62**	**3518.41**	**3498.12**

Other Elements

82. In addition, the petitioner has claimed expenditure towards Pension and Gratuity contribution, contribution to sinking fund created for redemption of bond and cost of common offices. The same has been discussed as follows.

Pension and Gratuity Contribution

83. The petitioner has submitted the actuarial valuation certificate as on 31.3.2006, 31.3.2009, 31.3.2011, 31.3.2012, 31.3.2013 & 31.3.2014 for all the Generating stations and T&D system duly certified by the Actuary and Shri Bhudev Chatterjee, towards Pension and Gratuity (P&G) liability for the existing pensioners and employees. The details of Pension & Gratuity liability claimed are as given below:-

(₹ in lakh)

Valuation as on		Claimed	2009-10	2010-11	2011-12	2012-13	2013-14
31.3.2006	169015	40% of total valuation in five instalments	13521.20	13521.20	13521.20	13521.20	13521.20
31.3.2009	314093	40% of difference with earlier valuation in five instalments	11606.32	11606.32	11606.32	11606.32	11606.32
31.3.2011	399731	Difference with	42818.66	42818.66			

Valuation as on		Claimed	2009-10	2010-11	2011-12	2012-13	2013-14
		earlier valuation in two instalments					
31.3.2012	418765	Difference with earlier valuation in 2011-12			19034.00		
31.3.2013	430971	Difference with earlier valuation in 2012-13				12206.00	
31.3.2014	458744	Difference with earlier valuation in 2013-14					27773.00
			67946.18	67946.18	44161.52	37333.52	52900.52

84. The respondent, MPPMCL has submitted that the claim under Pension and Gratuity contribution is beyond the scope of the 2009 Tariff Regulations. It has also submitted that such expenditure is already considered in normative O&M expenses being allowed to the petitioner and hence may be disallowed. In response, the petitioner vide its affidavit dated 20.10.2016 has submitted that the normative O&M expenses include only the contribution part of the contributory provident fund which cannot be equated with the pension and liability. It has also submitted that while liability of the employer in case of CPF ceases with making contribution for a particular year itself, liability for pension is evaluated by an actuarist considering the past services and other various factors, likely to be continued till the death of an employee and even beyond that up to the death of the spouse.

85. The matter has been examined. The Commission in order dated 29.7.2016 in Petition No. 471/GT/2014 had considered the claim of the petitioner and had observed as under:-

> *"101. As stated, the Commission in order dated 7.8.2013 in Petition No. 275/GT/2012 had allowed the recovery of 40% of the difference in liability as per Actuarial valuation 31.3.2009 and 31.3.2006 in five equal installments. The Commission in the said order had allocated the same on its generating stations except Mejia Unit 5 & 6. The Commission has revised the allocation and has also allocated share of P&G liability to Mejia Unit 5 and 6 on the basis of capital cost of ₹205946.66 lakh admitted by it as on 31.3.2009. It is observed that the O&M expenses norms specified by the Commission under the 2009 Tariff Regulations applicable for the period 2009-14 had taken into consideration the P&G liability as part of O&M expenses. The statement of reason of the 2009 Tariff Regulations, at para 20.3 clearly states that O&M cost for purpose of tariff covers expenditure incurred on the employees including gratuity, CPF, medical, education allowances etc. The expenses on account of CPF considered in Public Sector Undertakings take care of pension liability applicable in Government Undertaking.*
>
> *102. In this background, the additional claim of the petitioner towards P&G liability for the period 2009-14 based on Actuarial valuation cannot be allowed. However, the allocation of P&G liability pertaining to period 2004-09 has been revised by re-allocating the total P&G liability approved in order dated 7.8.2013 taking into consideration Mejia Unit 5 & 6.".*

86. In line with the above decision, the claim of the petitioner towards P&G liability for the period 2009-14 based on Actuarial valuation has been not allowed.

Contribution to Sinking Fund

87. Section 40 of the DVC Act provides that the petitioner shall make provision for depreciation and for reserve and other funds at such rates and on such terms as may be specified by the C&AG in consultation with the Central Government. The petitioner has claimed the contribution towards sinking fund as hereunder:-.

(₹ in lakh)

2012-13	2013-14
687.71	1142.23

88. The petitioner was directed to provide the reconciliation statement for sinking fund the period 2011-14 with audited accounts and the petitioner vide affidavit dated 12.9.2016 has submitted that the total debt borrowing is ₹7000 crore out of which actual

allocation to generating stations of the petitioner is ₹3100 crore. Accordingly, the actual allocation of debt borrowing of ₹3100 crore among the generating stations of the petitioner is as under:-

(₹ in lakh)

.	**₹4400 crore bond**	**₹2600 crore bond**	**Total ₹7000 crore bond**
Mejia TPS Units 5 and 6	120	128	248
Chandrapura TPS Units 7 and 8	**300**	**150**	**450**
Mejia TPS B	400	0	400
Durgapur TPS	530	342	872
Koderma TPS	650	300	950
Raghunathpur TPS-I	0	180	180
Total	**2000**	**1100**	**3100**

90. Further, the petitioner has allocated sinking fund contribution and interest for debt borrowing of ₹3100 crore among the generating stations as under:-

(₹ in lakh)

	2012-13	**2013-14**
Total contribution and interest for debt borrowing	**8596.43**	**14277.89**
Mejia TPS Units 5 and 6	687.71	1142.23
Chandrapura TPS Units 7 and 8	**1247.87**	**2072.60**
Mejia TPS B	1109.22	1842.31
Durgapur TPS	2418.09	4016.23
Koderma TPS	2634.39	4375.48
Raghunathpur TPS-I	499.15	829.04
Total	**8596.43**	**14277.89**

91. It is observed that the sinking funds have been created only for redemption of bonds. Further, the book of accounts for the years 2012-13 and 2013-14 show figures/entries regarding the contribution to sinking fund against PFC loans. Accordingly, the sinking fund approved for this generating station is as under:-

(₹ in lakh)

	Unit-8	**Units- 7 and 8**		
	15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**15.07.2011 to 1.11.2011**	**2.11.2011 to 31.03.2012**
Sinking Fund Contribution	0.00	0.00	1247.87	2072.60

Cost of Common Offices

92. The Commission in order dated 8.5.2013 in Petition No. 272/2010 had not allowed the claim of the petitioner for Direction Office, Central office, other office and subsidiary activities due to absence of asset-wise details and justification. The relevant portion of the order is extracted as under:-

> *"109. In terms of the observations of the Tribunal in its judgment dated 23.11.2007 in Appeal Nos. 271, 272, 273, 275 of 2006 & Appeal No.8 of 2007, the return on equity, interest on loan and depreciation of the common assets has been calculated and the amount so calculated has been apportioned to each of the productive generating stations/transmission system of the petitioner, in proportion to the capital cost allocated as on 31.3.2004 to Direction office, Other office, Central office and Subsidiary activities. 111. The petitioner has not furnished the nature of assets and proper justification in respect of its claim for additional capital expenditure for the period 2006-09. Hence, in the absence of asset-wise details and justification, the additional capital expenditure for Direction Office, Central office, other office and subsidiary activities have not been allowed."*

93. Thereafter, in order dated 7.8.2013 in Petition No. 276/GT/2012, the petitioner's claim for two new offices, namely, IT and R&D offices was also not allowed since no justification for the same was submitted by the petitioner. However, the Commission in the said order had specified that the capital expenditure towards these new offices (IT and R&D) will be considered at the time of truing up subject to prudence check based on the justification of such expenditure. The relevant portion of the order has been extracted as under:-

> *"99. 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…

…

102. 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."

94. The petitioner has claimed expenses pertaining 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 its generating stations and the Transmission & Distribution systems. The additional capital expenditure claimed by the petitioner towards various offices is as under.

(₹ in lakh)

	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Direction office	44.59	35.46	1.11	67.21	74.93
Subsidiary activities	1196.54	(-) 292.64	(-) 4372.76	7.13	0.00
Other offices	7.28	3.54	(-) 6.86	155.87	126.29
R&D	1914.05	125.13	0.00	0.00	5.99
IT	0.00	0.00	0.00	0.00	230.90
Central Office	89.89	45.47	166.55	18.03	199.21
Total expenditure	**3252.35**	**209.60**	**167.66**	**248.24**	**637.32**

95. 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 generating stations and T&D system in proportion to the capital cost approved as on 31.3.2009. Further, the petitioner has allocated the cost of common offices among generating stations on the basis of the installed capacity. Accordingly, the annual fixed charges claimed towards Common Assets are as under:-

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Direction office	70.39	85.34	74.62	84.00	112.66
Subsidiary activities	559.31	562.75	560.41	561.71	565.56
Other offices	40.86	42.29	38.17	75.07	111.80

R&D	1082.23	1138.39	612.80	107.72	107.92
IT	0.00	0.00	0.00	0.00	19.87
Central Office	159.38	328.79	329.40	328.16	324.38
Total expenditure	**1912.18**	**2157.57**	**1615.41**	**1156.66**	**1242.18**

96. It is noticed that the claim of the petitioner is in line with the Commission's order dated 6.8.2009 in Petition No. 66/2005. Accordingly, the annual fixed charges for Common offices has been worked out by considering the admitted opening capital cost as on 1.4.2009. The annual fixed charges of Common offices as worked out have been apportioned to generating stations / T&D systems as considered as on 31.3.2009. This is in line with the decision of the Commission order dated 8.5.2013 in Petition No. 272/2010.

97. The petitioner has submitted the justification for additional capitalization for Common office along with the breakup of expenditure towards common office duly certified by the auditor as under:-

i. **Direction Office**: Principal Chief Engineer-Director Project, Chief Engineer-O&M, Commercial Engineering, Staff Quarter Electricity Department.

ii. **Other Office**: Central electrical Test lab, CMSF shop, Central Service Organization, Central Load Dispatch,

iii. **Subsidiary activity**: Afforestation, Soil Conservation, use of land, Agricultural development, Industrial development, Research, Public health and sanitation, navigation.

iv. **Central Office:** Administration office, central work shop service, other office.

98. The respondent, MPPMCL has submitted that petitioner has claimed share of common office expenditure as a pass through in Annual Fixed Charges. It has also submitted that the components of tariff which are pass through for recovery from

beneficiaries does not include this kind of expenditure and hence the claim of the petitioner is beyond the scope of the Regulation.

99. It is observed that the petitioner has procured additional assets in order to meet the increased capacity addition and has incurred expenditure to augment and upgrade the Central Testing Laboratory in order to take care of generation relays and metering equipment installed in power stations. It has also incurred expenditure to equip the existing relay testing laboratory, procured testing equipments for Dissolved Gas Analysis (DGA), High Accuracy meter testing facility with state of the art technology for accreditation by the National Accreditation Board for Testing and Calibration Laboratories (NABL). In consideration of this, we are inclined to allow the expenditure towards Common office viz. Central office, Subsidiary activity, Other office, Direction office, IT and R&D for this generating station as claimed by the petitioner.

100. The fixed charges have been computed as per the admitted capital cost and has been allocated to various generating stations of the petitioner as under.

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	713.39	836.71	321.56	395.69	452.43
Interest on loan	205.71	243.65	178.77	147.56	141.97
Return on Equity	791.19	730.40	630.54	673.05	558.98
Total	**1710.29**	**1810.76**	**1130.88**	**1216.31**	**1153.37**

(₹ in lakh)

	Capital cost as on 1.4.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Entire generating station	554648.71	1474.25	1560.85	974.80	1048.44	994.19
T&D	88805.81	236.04	249.91	156.08	167.87	159.18
Total	**643454.52**	**1710.29**	**1810.76**	**1130.88**	**1216.31**	**1153.37**

(₹ in lakh)

	Capacity (MW)	2009-10	2010-11	2011-12	2012-13	2013-14
Bokaro TPS	630	325.07	344.16	176.87	142.16	109.71
Chandrapura TPS	390	201.23	213.05	109.49	88.00	67.91
Durgapur TPS	350	180.59	191.20	98.26	78.98	60.95
Mejia TPS #1 to 3	630	325.07	344.16	176.87	142.16	109.71
Mejia TPS #4	210	108.36	114.72	58.96	47.39	36.57
Mejia TPS #5 & 6	500	257.99	273.14	140.37	112.83	87.07
Maithon HS	63.2	32.61	34.53	17.74	14.26	11.01
Panchet HS	80	41.28	43.70	22.46	18.05	13.93
Tilaiya HS	4	2.06	2.19	1.12	0.90	0.70
Total	**2857.2**	**1474.25**	**1560.85**	**802.13**	**644.74**	**497.54**
Chandrapura TPS #7 & 8	**500**	**0.00**	**0.00**	**79.22**	**112.83**	**87.07**
Mejia TPS 7 & 8	1000	0.00	0.00	93.45	183.30	174.14
Durgapur Steel TPS # 1 & 2	1000	0.00	0.00	0.00	107.57	174.14
Koderma TPS	500	0.00	0.00	0.00	0.00	61.31
Total	**3000**	**0.00**	**0.00**	**172.67**	**403.70**	**496.65**

101. The annual fixed charges computed as above has been allocated to each generating stations, (including Mejia Unit 5 & 6) and T&D system of the petitioner in proportion to the admitted capital cost as on 1.4.2009. Further, the annual fixed charges worked out above pertaining to generating stations have been allocated to different units on the basis of installed capacity. The cost of common offices apportioned for this generating station for 2009-14 tariff period is as under:-

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Common Office Expenditure	0.00	0.00	79.22	112.83	87.07

102. Further, the common office expenditure during 2011-12 have been apportioned on the basis of number of days of operation as under:-

(₹ in lakh)

	Unit-8	Units- 7 and 8		
	15.07.2011 to 1.11.2011	2.11.2011 to 31.03.2012	2012-13	2013-14
Common office expenditure (pro-rata)	21.15	58.07	112.83	87.07

	Unit-8	Units- 7 and 8		
	15.07.2011 to 1.11.2011	2.11.2011 to 31.03.2012	2012-13	2013-14
Common office expenditure (annualised)	70.38	140.75	112.83	87.07

Secondary Fuel Oil

103. The secondary fuel oil as considered in order dated 12.3.2015 in Petition No. 196/GT/2013 is as under.

(₹ in lakh)

	Unit-8	Units- 7 and 8		
	15.07.2011 to 1.11.2011	2.11.2011 to 31.03.2012	2012-13	2013-14
Cost of secondary fuel oil (Pro-rata)	200.02	803.38	1941.94	1941.94
Cost of secondary fuel oil (annualised)	665.53	1947.26	1941.94	1941.94

104. Regulation 20 of the 2009 Tariff Regulations specifies:-

"20. Expenses on secondary fuel oil consumption for coal-based and lignite-fired generating station.

(2) The secondary fuel oil expenses shall be subject to fuel price adjustment at the end of the each year of tariff period as per following formula:

SFC x NAPAF x 24 x NDY x IC x 10 x (LPSFy – LPSFi)
Where,
SFC – Normative Specific Fuel Oil consumption in ml/kWh
NAPAF – Normative Annual Plant Availability Factor in percentage
NDY – Number of days in a year
IC - Installed Capacity in MW.
LPSFi – Weighted Average Landed Price of Secondary Fuel in Rs./ml considered initially
LPSFy = The weighted average landed price of secondary fuel oil for the year in Rs. /ml"

105. The petitioner has claimed adjustment in cost of Secondary Fuel Oil in addition to cost of secondary fuel oil allowed vide order dated 12.3.2015 in Petition No. 196/GT/2013 in accordance with above regulation for the period 2009-14. The petitioner has claimed adjustment on account of variation of weighted average landed price of secondary fuel oil. It is further observed that there is substantial variation in the weighted average price of Secondary Fuel Oil in the period 2009-14 as compared to weighted average price of Secondary Fuel Oil considered in said order dated 7.8.2013.

106. The respondent, MPPMCL has submitted that Regulation 25 (3) of the 2009 Tariff Regulations provides that saving on account of secondary fuel oil consumption in relation to norms shall be shared with beneficiaries in the ratio of 50:50 in accordance with the formula given in Regulation at end of the year. Accordingly, it has submitted that the petitioner may be directed to furnish the detail of actual secondary fuel oil consumption vis-a-vis saving in this account and it's sharing with the beneficiaries for proper implementation of Regulation 25(3) of 2009 Tariff Regulations. The respondent has further submitted that adjustment for secondary fuel oil cannot be claimed through true up petition and has to be settled with the beneficiaries in accordance with Regulation 25(3) of the 2009 Tariff Regulations. In response, the petitioner vide affidavit dated 20.10.2016 has clarified that it has duly furnished all the data in this regard at Page-19 (Annexure-C) along with the true-up tariff petition and has adjusted the share with beneficiaries in fixed charge.

107. We have considered the submissions of the parties. Since the fuel cost is pass through, the adjustment for Secondary Fuel Oil in addition to cost of Secondary Fuel Oil as allowed in order dated 12.3.2015 in Petition No. 196/GT/2013 has been considered as under:-

(₹ in lakh)

	Unit-8	Units- 7 and 8		
	15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
Cost of secondary fuel oil (annualised)	665.53	1947.26	1941.94	1941.94

(₹ in lakh)

	Unit-8	Units- 7 and 8		
	15.07.2011 to 1.11.2011	**2.11.2011 to 31.03.2012**	**2012-13**	**2013-14**
Adjustment to cost of Secondary	70.57	110.35	95.78	(-)50.50

	Unit-8	Units- 7 and 8		
	15.07.2011 to 1.11.2011	2.11.2011 to 31.03.2012	2012-13	2013-14
Fuel Oil (pro rata)				
Adjustment to cost of Secondary Fuel Oil (annualised)	234.80	267.48	95.78	(-)50.50

Annual Fixed charges for 2009-14

108. Based on the above discussions, the annual fixed charges on annualized basis allowed for the period 2009-14 in respect of the generating station are summarized as under:-

(₹ in lakh)

	Unit-8	Units- 7 and 8		
	15.07.2011 to 1.11.2011	2.11.2011 to 31.03.2012	2012-13	2013-14
Depreciation	7636.17	15106.10	15522.25	16268.93
Interest on Loan	7222.82	14817.18	14010.91	12784.37
Return on Equity	4918.03	9729.00	12521.72	10325.29
Interest on Working Capital	1565.84	3444.62	3518.41	3498.12
O&M Expenses	5085.00	10170.00	10755.00	11370.00
Cost of secondary fuel oil (for coal-based & lignite fired generating stations only)	665.53	1947.26	1941.94	1941.94
Sub-Total	**27093.38**	**55214.16**	**58270.22**	**56188.65**
Common Office Expenditure	70.38	140.75	112.83	87.07
Additional O&M on account of Mega insurance, CISF security and Share of subsidiary activities	186.39	511.72	1226.59	1288.87
Pension & Gratuity Contribution	0.00	0.00	0.00	0.00
Sinking Fund Contribution	0.00	0.00	1247.87	2072.60
Adjustment of secondary fuel oil	234.80	267.48	95.78	(50.50)
Sub-Total	**491.56**	**919.96**	**2683.06**	**3398.04**
Total Annual Fixed Charges	**27584.94**	**56134.11**	**60953.28**	**59586.68**

Note: All figures are on annualized basis.

109. The difference in the annual fixed charges determined by order dated 12.3.2015 in Petition No. 196/GT/2013 and those determined by this order shall be adjusted in accordance with Regulation 6(6) of the 2009 Tariff Regulations.

110. Petition No.181/GT/2015 is disposed of in terms of the above.

Sd/-	**Sd/-**
(Dr. M. K. Iyer)	**(A.S. Bakshi)**
Member	**Member**

Annexure-1

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2009-14)

(₹ in lakh)

	Interest Rate (%)	Unit-8: Loan deployed as on 15.7.2011	Unit-8: Additions during the period 2011-12 from 15.07.2011 to 1.11.2011	Units-7&8: Loan deployed as on 2.11.2011	Units-7&8: Additions during the period 2011-12 from 2.11.2011 to 31.3.2012	Units-7&8: Loan deployed as on 1.4.2012	Units-7&8: Additions during the period 2012-14	Total
Loan-1 (PFC)	11.00%	50000.00	0.00	50000.00	0.00	50000.00	0.00	50000.00
Loan-2 (CONSORTIUM OF BANKS & FI)	9.25%	87800.00	0.00	87800.00	0.00	87800.00	0.00	87800.00
Loan-3 (Corprate Loan from SBI)	10.70%	0.00	0.00	0.00	0.00	0.00	32500.00	32500.00
Loan-4 Share of GoI Guaranteed DVC Bonds (Series - 14 - Rs. 4,400 Crore)	10.30%	0.00	0.00	0.00	30000.00	30000.00	0.00	30000.00
Loan-5 Share of GoI Guaranteed DVC Bonds (Series - 15 - Rs. 2,600 Crore)	9.69%	0.00	0.00	0.00	0.00	0.00	15000.00	15000.00
Total		137800.00	0.00	137800.00	30000.00	167800.00	47500.00	215300.00

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR PERIOD 2009-14

(₹ in lakh)

	15.07.2011 to 1.11.2011	2.11.2011 to 31.03.2012	2012-13	2013-14
Gross Opening Loan	137800.00	137800.00	167800.00	182800.00
Cumulative Repayment of loan upto previous year	31950.00	35811.66	41035.00	53148.33
Net Loan Opening	105850.00	101988.34	126765.00	129651.67
Increase/ Decrease due to additional capitalization	0.00	30000.00	30000.00	32500.00
Repayment during the year	3861.67	5223.33	12113.33	44571.67
Net Loan Closing	101988.34	126765.00	129651.67	117580.00
Average Loan	103919.17	129376.67	135708.34	123615.84
Rate of Interest	**9.9096%**	**10.5052%**	**10.4174%**	**10.3727%**
Interest	10297.94	10518.15	12707.69	12784.10