# ;/CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

# Petition No. 115/GT/2015

### Coram:

Shri Gireesh. B. Pradhan, Chairperson Shri A.K.Singhal, Member Shri A.S. Bakshi, Member Dr. M.K. Iyer, Member

Date of Order: 9.2.2017

### In the matter of:

Revision of tariff of Mejia Thermal Power Station Extension, Unit 5 and 6 (2 x 250) for the period 2009-14 - Truing-up of tariff determined by order 23.1.2015 in Petition No. 138/GT/2013

# And in the matter of

Damodar Valley Corporation, DVC Towers, VIP Road Kolkata

.....Petitioner

# Versus

- West Bengal State Electricity Distribution Company Limited Block 'DJ' Sector-11, Salt Lake City, Kolkata-700 091
- 2. Jharkhand Bijli Vitran Nigam Limited Engineering Building, HEC, Dhurwa, Ranchi- 834 004
- 3. 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. Anushree Bardhan, Advocate, DVC Shri Subrata Ghosal, DVC Shri Jisnu Dutta, DVC Shri Bishnu Pada Kayal, DVC

# <u>ORDER</u>

This petition has been filed by the petitioner, Damodar Valley Corporation (DVC), for revision of tariff based on actual expenditure of Mejia Thermal Power Station Extension Unit 5 and 6 (2 x 250) (hereinafter referred to as "the generating station") for the period from 1.4.2009 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 generating station with a capacity of 500 MW comprises of two units of 250 MW each and the date of commercial operation of Unit 5 is 29.2.2008 and Unit 6 is 24.9.2008.

3. Petition No. 138/GT/2013 was filed by the petitioner for approval of tariff of the generating station for the period 2009-14 and the Commission vide order dated 23.1.2015 had determined tariff for the said period, based on actual additional capital expenditure for the period 2009-13 and projected additional capital expenditure for the period 2009-13 and projected additional capital expenditure for the period 2009-13 and projected additional capital expenditure for the

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	14239.64	14544.93	14718.09	14839.08	14839.45
Interest on Loan	12802.00	11763.74	10433.37	8959.98	7347.31
Return on Equity	11144.35	11800.23	11952.44	12050.70	12050.99

	2009-10	2010-11	2011-12	2012-13	2013-14
Interest on Working Capital	3150.89	3178.55	3193.60	3195.33	3196.34
O&M Expenses	9100.00	9620.00	10170.00	10755.00	11370.00
Cost of Secondary fuel oil	1091.36	1091.36	1094.35	1091.36	1091.36
Total	51528.24	51998.80	51561.85	50891.45	49895.45

4. Regulation 6(1) 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 16.4.2015 has filed the petition for revision of tariff

based on truing up of actual additional capital expenditure incurred and accordingly,

annual fixed charges claimed by the petitioner for the period 2009-14 is as under:

	-				(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	15887.77	16240.24	16447.14	16571.10	16628.80
Interest on Loan	12718.25	11531.16	9977.88	8217.16	6497.67
Return on Equity	11146.33	11827.30	12002.68	12101.09	12299.97
Interest on Working Capital	3183.54	3209.60	3221.19	3217.00	3221.12
O&M Expenses	9100.00	9620.00	10170.00	10755.00	11370.00
Cost of secondary fuel oil	1091.45	1091.45	1094.44	1091.45	1091.45
Compensation Allowance	0.00	0.00	0.00	0.00	0.00
Special allowance	0.00	0.00	0.00	0.00	0.00
Sub-total	53127.34	53519.75	52913.33	51952.80	51109.00
Share of common office expense	289.29	326.42	201.10	107.61	94.05
Additional O&M	0.00	0.00	0.00	807.36	1010.56
Share of Pension & Gratuity	10279.60	10279.60	5497.72	3473.35	4005.27
Share of sinking fund	0.00	0.00	0.00	687.71	1142.23
Adjustment for secondary fuel oil	34.54	275.17	739.07	901.29	930.58
Sub-Total	10603.44	10881.18	6437.89	5977.32	7182.70
Total	63730.77	64400.93	59351.21	57930.13	58291.71

The Energy Charges as approved in order dated 23.1.2015 in Petition No.
 138/GT/2013 has been claimed by the petitioner.

7. None appeared on behalf of the respondents, the Commission after hearing the matter, reserved orders in the petition, after directing the petitioner to submit certain additional information. In compliance with the direction of the Commission, the petitioner has filed additional information with a copy to the respondents. The respondent, M.P. Power Management Company Ltd. (MPPMCL) has filed its reply in the matter. 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. The last proviso to Regulation 7 of the 2009 Tariff Regulations, as amended on
- 21.6.2011 provides as under:

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

9. Regulation 43(3)(i) of the 2009 Tariff Regulations provides as under:

"43. **Special Provisions relating to Damodar Valley Corporation**. (1) Subject to clause (2), these regulations shall apply to determination of tariff of the projects owned by Damodar Valley Corporation (DVC).

(3) The following special provisions shall apply for determination of tariff of the projects owned by DVC:

(i) Capital Cost: The expenditure allocated to the object 'power', in terms of sections 32 and 33 of the Damodar Valley Corporation Act, 1948, to the extent of its apportionment to generation and inter-state transmission, shall form the basis of capital cost for the purpose of determination of tariff.."

10. The petitioner has considered the capital cost of ₹195397.32 lakh as on 31.3.2009

as determined by Commission's order dated 23.1.2015 in Petition No. 138/GT/2013. The

Order in Petition No. 115/GT/2015

closing capital cost as on 31.3.2012 and opening capital cost as on 1.4.2012 considered by the petitioner is ₹208164.20 lakh. The petitioner was directed to submit Certificate to the effect that all the assets under gross block during 2009-14 are in use for generation of power and that if any asset is taken out from gross block, then the date of taking out of the asset from useful service along with the depreciation recovered till the date of taking out from service. In response, the petitioner has certified that all the assets under gross block during the period 2009-14 are in use for generation of power.

11. The Commission vide order dated 23.1.2015 in Petition No. 138/GT/2013 had considered the opening capital cost of ₹195397.32 lakh as on 1.4.2009 and the same has been considered as the opening capital cost as on 1.4.2009, for the purpose of tariff. There is no change in the claim of the petitioner for additional capital expenditure for the years 2009-10, 2010-11 and 2011-12, as against those approved vide order dated 23.1.2015 in Petition No. 138/GT/2013. Further, the petitioner has submitted revised Form 9 on the basis of additional capital expenditure incurred during the years 2012-13 and 2013-14. The opening capital cost as on 1.4.2012 considered by the Commission in order dated 23.1.2015 in Petition No. 138/GT/2013 is ₹207297.29 lakh and the same has been considered in this order.

# Actual Additional Capital Expenditure

12. 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;

(iv) 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."

13. The actual additional capital expenditure allowed vide order dated 23.1.2015 in

					(₹ in lakh)
		Act	ual		Projection
	2009-10	2010-11	2011-12	2012-13	
Buildings	935.94	722.91	493.13	0.00	0.00
Barrage Gates & Other Civil Works	26.18	147.43	2232.00	0.00	0.00
Canals, Service Roads	2.58	3.80	0.00	0.00	0.00
Power House Plant & Machinery	1259.66	1090.22	623.90	9.24	0.00
Initial Spares	325.38	0.00	0.00	0.00	0.00
Switchgear	7.54	37.85	0.00	0.98	0.00
Construction Equipment	0.00	6.65	0.00	0.00	0.00
Other Assets	134.10	97.86	21.26	0.00	0.00
Total Additional Capital Expenditure allowed	2691.38	2106.72	3370.29	10.22	0.00
Less: Un-discharged liabilities	253.11	875.58	0.00	0.00	0.00
Add: Discharges of liabilities	4623.44	236.84	0.00	0.00	0.00
Total additional capital expenditure allowed	7061.70	1467.98	3370.29	10.22	0.00

Petition No. 138/GT/2013 is as under:-

14. There is no change in the claim of the petitioner for additional capital expenditure for the years 2009-10, 2010-11 and 2011-12, as against those approved vide order 23.1.2015. It is however noticed that as against the actual additional capital expenditure allowed for 2012-13 in order dated 23.1.2015, the petitioner has claimed amount of

₹10.87 lakh (₹0.31 lakh towards boiler and accessories equipment and ₹9.58 lakh towards coal handling plant under Power House Plant & Machinery and ₹0.98 lakh towards switchgear) which is in excess of ₹0.65 lakh. This is only on account of inclusion of initial spares of ₹0.65 lakh which was disallowed earlier. In view of this, the claim for the year 2012-13 has also been considered in this order. The breakup details of the additional capital expenditure (claimed on accrual basis) including initial spares as claimed by the petitioner for the years 2012-13 and 2013-14 are as under:-

					(₹ in lakh)
		2012-	13	201	3-14
S. No.		Additional Capital Expenditure	Initial Spares included	Additional Capital Expenditure	Initial Spares included
1	Barrage, Barrage Gates & Other Civil works				
	005/07 / Ash bund	0.00	0.00	20.96	0.00
2	Power House Plant & Machinery				
	008/01 Boiler & Accs. Equip (V&VI)	0.31	0.00	583.18	583.18
	008/06/02 steam turbine generator (V &VI)	0.00	0.00	9.88	9.88
	008/07/01 station C&I cont (V&VI)	0.00	0.00	17.90	14.40
	008/08/03 misc pumps, RE JT (V&VI) MTPS	0.00	0.00	42.94	42.94
	008/10 Coal Handling Plant (V&VI)	9.58	0.65	1129.15	1129.15
3	Switchgear				
	013/01 kV switch gear( V & VI) MTPS(0111134301)	0.98	0.00	0.00	0.00
4	Other Assets				
	016/05 Office Equip( Comp)(MTPS V & VI)	0.00	0.00	3.51	0.00
	Total	10.87	0.65	1807.52	1779.55

15. The respondent, MPPMCL has submitted that the petitioner had not claimed any projected additional capital expenditure for the period 2013-14 in its earlier Petition No. 138/GT/2013 and had submitted that the same was not claimed due to non-finalization of books of accounts. It has also submitted that such justification is arbitrary as the 2009 Tariff Regulations provides for additional capital expenditure on projection basis. Accordingly, it has submitted that the additional capital expenditure claimed by the petitioner may be disallowed.

16. The Commission in the order dated 23.1.2015 had approved the additional capital expenditure on the basis of audited accounts as furnished by the petitioner for the period from 2009-10 to 2011-12 and had directed the petitioner to submit the year wise reconciliation statement of additional capital expenditure with the audited accounts for each year of the control period at the time of truing up of tariff of the generating station. The petitioner has submitted the year wise reconciliation statement for 2009-10 to 2013-14.

17. The petitioner during the record of proceedings dated 12.1.2016 was directed to submit additional information on the following:

- (i) Reasons for claiming the deferred liabilities under change in law (Regulation 9(2)(ii)) and the reasons as to why these are un-discharged liabilities. Detailed bifurcation of the assets under major head such as boiler and accessories, equipment etc.;
- (ii) Reason for claiming same additional capital expenditure for 2009-10 to 2011-12 as against those allowed in Commission's order dated 23.1.2015 in the Petition No.138/GT/2013;

- (iii) Reasons for variation in the claim during 2013-14 in the additional capital expenditure as against those allowed in Commission's order dated 23.1.2015 in the Petition No.138/GT/2013;
- (iv) Reconciliation statement of actual additional capital expenditure incurred during 2009-14 with the books of accounts along with apportionment of capital cost in different stages/ units duly certified by Auditor;

18. In response, the petitioner, vide affidavit dated 9.2.2016 submitted that it has furnished the reconciliation statement for 2009-14 along with the reasons of deferred liabilities and bifurcation of the assets in Appendix-IV of the petition.

19. It is noticed that the petitioner has not revised its claim of additional capital expenditure during the period 2009-10 to 2011-12 as against those allowed by the Commission in order dated 23.1.2015 in Petition No. 138/GT/2013 since the same was as per audited accounts for the said period. The Commission in its order dated 23.1.2015 had approved the actual additional capital expenditure for 2012-13, however, the petitioner has submitted revised Form 9 on the basis of additional capital expenditure incurred in the years 2012-13 and 2013-14. As regards the variation in the additional capital expenditure claimed during the year 2013-14, the petitioner has submitted that the additional capital expenditure for the year 2013-14 in Petition No. 138/GT/2013 was not claimed due to the non-finalization of book of accounts. It has clarified that the additional capital expenditure claimed for the year 2013-14, is only after finalization of accounts.

20. We examine the asset-wise details and its justification based on its submissions and documents available on record for the additional capital expenditure claimed by the petitioner under various heads for the period 2012-14 on prudence check as under:-

# Actual Additional capital expenditure for 2012-14

21. The petitioner has claimed additional capital expenditure of ₹10.87 lakh in 2012-13 and ₹1807.52 lakh in 2013-14 (which includes initial spares) mainly under following heads:

- Barrage, Barrage Gates & Other Civil works
- Power House Plant & Machinery
- Switchgear
- Other Assets

# Barrage, Barrage Gates & Other Civil works

22. The petitioner has claimed actual additional capital expenditure of ₹20.96 lakh in 2013-14 towards Ash bund under Regulation 9(2)(ii) of the 2009 Tariff Regulations. In justification, the petitioner has submitted that part payment including taxes and duties was made to M/s BHEL for modification including boiler pitching turfin etc. and was kept as a part of CWIP (Construction Work-in-Progress), and not capitalized as the same was not complete. It has further submitted that the modification work was under progress and a major portion of expenditure was already incurred and transferred to fixed assets as on COD. The petitioner has also stated that only left out payment after COD / cut-off date has been transferred from CWIP to this fixed asset vide journal entry of March, 2014. It has further submitted that the claim is within the original scope of work covered in the sanction order.

23. The respondent, MPPMCL has submitted that the petitioner has claimed additional capital expenditure on CWIP transferred to fixed assets in operation during 2012-13 under Regulation 9(2)(ii) of the 2009 Tariff Regulations, which is on account of change in law. The respondent has further submitted that the petitioner has not submitted any incidence of change in law and therefore in the absence of any proper justification, the



additional capital expenditure claimed during the years 2012-13 and 2013-14 may be disallowed.

24. The matter has been examined. The cut-off date of the generating station is 31.3.2010. We notice that the claims of the petitioner for additional capitalization under deferred liabilities is in respect of works within the original scope of work which have been executed within the cut-off-date. It is observed that the additional capital expenditure claimed by the petitioner is towards part payment of the balance amount to M/s BHEL (EPC contractor) which was lying in CWIP and which was transferred to fixed assets on put to use basis, after the cut-off-date by the petitioner. We are of the considered view that these liabilities on assets have been created prior to the cut-off date and the capitalization of the said expenditure has been made for only after these assets have been discharged towards works executed within the cut-off date, we are inclined to allow the same under Regulation 9(2)(viii) of the 2009 Tariff Regulations. We direct accordingly.

#### **Power House Plant & Machinery and Switchgear**

25. The petitioner has claimed actual additional capital expenditure of ₹9.89 lakh (including initial spares of ₹0.65 lakh) in 2012-13 and ₹1783.05 lakh (including initial spares of ₹1779.55 lakh) in 2013-14 towards boiler and accessories equipment, steam turbine generator, station C&I, miscellaneous pumps and coal handling plant under Regulation 9(2)(ii) of the 2009 Tariff Regulations. The petitioner has also claimed additional capital expenditure of ₹0.98 lakh in 2012-13 towards Switchgear under Regulation 9(2)(ii) of the 2009 Tariff Regulations. In justification, the petitioner has submitted that these are the deferred liabilities relating to works/services including initial

spares, and is within the original scope of work. It has also stated that major portion of expenditure was already incurred and transferred to fixed assets as on COD and the balance payment has been made to M/s BHEL (EPC contractor) and then transferred to fixed assets vide journal entry of March' 2014.

26. The respondent, MPPMCL has submitted that the petitioner has claimed additional capital expenditure on CWIP transferred to fixed assets in operation in 2012-13 under Regulation 9(2)(ii) of the 2009 Tariff Regulations. It has further submitted that the petitioner has not submitted any incidence of change in law and therefore in the absence of any proper justification, the said additional capital expenditure incurred during the years 2012-13 and 2013-14 may be disallowed.

27. The matter has been examined. It is observed that the additional capital expenditure is towards part payment of the balance amount to the M/s BHEL (EPC contractor) which was lying in CWIP and which was transferred to fixed assets on put to use basis, after the cut-off-date by the petitioner. We are of the considered view that these liabilities on assets have been created prior to the cut-off date and the capitalization of the said expenditure has been made for only after these assets have been put to use. Since the expenditure incurred is in respect of liabilities which have been discharged towards works executed within the cut-off date, we are inclined to allow the same under Regulation 9(2)(viii) of the 2009 Tariff Regulations. We direct accordingly.

#### **Other Assets**

28. The petitioner has claimed additional capital expenditure of ₹3.51 lakh in 2013-14 towards Office equipment (comp.) under Regulation 9(2)(ii) of the 2009 Tariff Regulations. In justification, the petitioner has submitted that these are the deferred

liabilities relating to works/services including initial spares, which is within the original scope of work.

29. The matter has been examined. It is observed that the additional capital expenditure claimed on these assets are minor in nature and has been incurred after the cut-off date. Accordingly, the capitalization of these assets have not been allowed in terms of the proviso to Regulation 9(2)(ii) of the 2009 Tariff Regulations.

### **Initial Spares**

30. The petitioner was allowed initial spares amounting to ₹2463.76 lakh vide order dated 23.12.2009 in Petition No. 155/2008, ₹363.69 vide order dated 18.2.2014 and 148/GT/2011 and ₹325.38 lakh vide order dated 23.1.2015 in Petition No. 138/GT/2013 respectively. The amount of initial spares allowed towards initial spares works out to ₹3152.83 lakh (₹2463.76 lakh + ₹363.39 + ₹325.38) which is within the permissible limit of 2.5% of the capital cost as on cut-off date, as specified under Regulation 17(i) of the 2004 Tariff Regulations. The petitioner has further capitalized initial spares of ₹0.65 lakh in 2012-13 and ₹1779.55 lakh in 2013-14.

31. The respondent, MPPMCL has submitted that Regulation 9(2) of the 2009 Tariff Regulations do not provide for capitalization of initial spares after cut-off date and hence the claim of the petitioner towards initial spares should be disallowed as decided in Commission's order dated 23.1.2015 in Petition No. 138/GT/2013.

32. The matter has been examined. It is observed that the Commission while determining the tariff of the Feroze Gandhi Unchahar Thermal Power Station, Stage-III of NTPC had disallowed the capitalization of initial spares after the cut-off date of the generating station by order dated 25.5.2012 in Petition No. 279/2009. Aggrieved NTPC,

filed Review Petition R.P. No. 17/2012 seeking review of the order dated 25.5.2012 and the same was rejected by Commission vide order dated 2.4.2013. An appeal (Appeal No. 188 of 2013) filed by NTPC before the Tribunal,, the Tribunal by judgment dated 11.4.2014 had affirmed the order of the Commission. The relevant portion of the judgment of the Tribunal dated 11.4.2014 is extracted as under:

"The learned Central Commission has not committed any illegality or perversity in disallowing in capitalization of spares because the Appellant could not complete the said work within the cut-off date. The capitalization of the spares on the ground of unavoidable or inevitable delays or that the orders were placed prior to the cut-off date, could not be legally claimed by the Appellant-NTPC particularly, when no proper monitoring and appropriate steps were taken by the Appellant for completion of the said work within the cut-off date.

The Appellant cannot legally question or challenge the interpretation of Regulation 7 & 9 of the Tariff Regulations, 2009 which has already been settled or answered by this Appellate Tribunal vide judgment dated 27.1.2014 in Appeal No. 44/2012. This Tribunal in its judgment dated 27.1.2014 has clearly observed that additional capitalization has to be allowed only according to Regulation 9 of Tariff Regulations, 2009 which will apply to both existing and new power projects. We also affirm the same view of this Tribunal as recorded in its judgment dated 27.1.2014 in Appeal No. 44/2012.

The Appellant has contended that the Central Commission should have exercised its "power to relax" under Regulation 44 of the Tariff Regulations, 2009. However, the Appellant neither prayed nor made out any case before the Central Commission to exercise power to relax. We feel that Central Commission has rightly not opted the power to relax as the facts and circumstances of the matter in hand did not warrant the exercise of power to relax by the Central Commission."

33. In line with the above observations and since the provisions of Regulation 9(2) do not permit the capitalization of initial spares after the cut-off date of the generating station, we are not inclined to allow the capitalization of spares amounting to ₹0.65 lakh in 2012-13 and ₹1779.55 lakh in 2013-14. It is also observed that the amount of initial spares allowed towards initial spares works out to ₹3152.83 lakh (₹2463.76 lakh + ₹363.39 + ₹325.38) and the same is within the permissible limit of 2.5% of the capital cost as on cut-off date, as specified under Regulation 17(i) of the 2004 Tariff Regulations. Further, the additional capital expenditure claimed in 2012-13 (excluding initial spares) is ₹10.22 lakh, which is same as that approved by the Commission in

order dated 23.1.2015 in Petition No. 138/GT/2013 and therefore, the same has been considered.

34. Based on the above, the actual additional capital expenditure allowed during 2012-

13 and 2013-14, are as summarized below:

		(₹ in lakh)
	2012-13	2013-14
Barrage, Barrage Gates & Other Civil works	0.00	20.96
Power House Plant & Machinery	9.89	1783.05
Switchgear	0.98	0.00
less: Initial spares	0.65	1779.55
Total additional capital expenditure allowed	10.22	24.46

### Liabilities

35. The Commission vide order dated 23.1.2015 in Petition No. 138/GT/2013 had considered the liabilities as under:-

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Un-discharged liabilities	253.11	875.58	0.00	0.00	0.00
Discharges of liabilities	4623.44	236.84	0.00	0.00	0.00

36. The petitioner in Appendix-IV of the petition has furnished the details of undischarged liabilities and discharge of liabilities as on 31.3.2009 and for the period from 2009-14 and has revised the amount of undischarged liabilities for 2009-11 as under:

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Un-discharged liabilities	182.48	84.70	41.46	0.55	3.71
Discharges of liabilities	4623.44	236.84	46.85	0.00	0.00

37. The petitioner was directed to submit justification as to how the figures for undischarged liabilities have been revised after finalization of annual accounts and audit report and as determined by the Commission in order dated 23.1.2015 in Petition No. 138/GT/2013. In response, the petitioner has submitted that as per the liability statement submitted on 15.11.2011, undischarged liabilities of ₹253.11 lakh and ₹875.58 lakh for

the years 2009-10 and 2010-11, respectively, included provisional amount of ₹70.63 lakh and ₹790.89 lakh respectively. Accordingly, the petitioner has submitted that the liability included in capital cost works out to ₹182.48 lakh and ₹84.70 lakh for the years 2009-10 and 2010-11, respectively. The petitioner has further submitted that the Commission in order dated 23.1.2015 had considered the discharge of liabilities of ₹4623.44 lakh and ₹236.84 lakh during the years 2009-10 and 2010-11, respectively, without considering the above provision. Accordingly, the submissions of the petitioner is accepted and the liability as submitted by the petitioner has been considered for adjustment.

38. Based on the above deliberations, the additional capital expenditure allowed for 2009-14, after adjustment of liabilities, is as under:

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Additional capital expenditure allowed	2691.38	2106.72	3370.29	10.22	24.46
Less: De-capitalization	0.00	0.00	0.00	0.00	0.00
Less: Un-discharged liabilities	182.48	84.70	41.46	0.55	3.71
Add: Discharges of liabilities	4623.44	236.84	46.85	0.00	0.00
Total additional capital expenditure allowed	7132.34	2258.86	3375.69	9.67	20.75

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

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	195397.32	202529.66	204788.52	208164.21	208173.88
Additions Allowed	2691.38	2106.72	3370.29	10.22	24.46
Less: Un-discharged liabilities Add: Discharges of	182.48	84.70	41.46	0.55	3.71
liabilities	4623.44	236.84	46.85	0.00	0.00
Additional Capitalization after adjustment of liability discharges	7132.34	2258.86	3375.69	9.67	20.75

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	2009-10	2010-11	2011-12	2012-13	2013-14
Less: De-capitalization	0.00	0.00	0.00	0.00	0.00
Closing Capital Cost	202529.66	204788.52	208164.21	208173.88	208194.63
Average Capital Cost	198963.49	203659.09	206476.37	208169.04	208184.25

### Debt - Equity

40. 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."

41. The debt-equity ratio of 70:30 as on 1.4.2009 as considered by the Commission in

order dated 23.1.2015 has been considered. The commercial operation of the project is

prior to 1.4.2009 and the debt:equity admitted as on 31.3.2009 is considered as the

opening debt:equity ratio for the period 2009-14. Accordingly, the gross loan and equity

of ₹136778.12 lakh and ₹58619.20 lakh respectively as approved vide order dated

23.1.2015 in Petition No. 138/GT/2013 has been considered as the gross loan and

equity as on 1.4.2009. Further, the additional capital expenditure approved as above has

been allocated in debt-equity ratio of 70:30 in accordance with Regulation 12 of the 2009 Tariff Regulations as under:

						(₹ in lakh)
	As on 31.3	As on 31.3.2009 Additional capital expenditure during 2009-14		As on 31	.3.2014	
	Amount	(%)	Amount	(%)	Amount	(%)
Debt	136778.12	70.00	8960.57	70.00	145736.24	70.00
Equity	58619.20	30.00	3840.25	30.00	62458.39	30.00
Total	195397.32	100.00	12800.82	100.00	208194.63	100.00

# Return on Equity

42. 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."

43. The grossing up of the base rate has been done with respect to the actual tax rate applicable to the petitioner for the period 2009-14. However, it is observed that the petitioner's company as a whole has book loss as per Audited accounts for 2010-11, 2011-12 and 2013-14 and no tax has been paid. Hence, MAT rate is not applicable. The Commission in its order dated 8.2.2016 in Petition No. 198/GT/2013 [NTPC Tamil Nadu Energy Company Ltd (NTPECL) versus AP Discom] had considered the applicable tax rate as 'NIL' as the generating company was incurring losses during the years 2012-13 and 2013-14. The relevant part of the order is extracted as under:

"65. It has been observed from the Annual reports of the petitioner company that no tax has been paid for the years2012-13 and 2013-14. As such, the Return on Equity has not been allowed to be grossed up with the Corporate Tax rate as considered by the petitioner. Return on Equity has not been grossed up as no tax has been paid against the same."

44. In line with the decision of the Commission, similar approach is also followed in the instant case as the petitioner company has incurred losses during the years 2010-11, 2011-12 and 2013-14, the applicable tax rate for these years have been considered as 'NIL'. Return on equity has been worked out on the normative equity as on 1.4.2009 after accounting for the actual additional capital expenditure admitted for the period 2009-14. Accordingly, Return on Equity has been computed as under:

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening notional equity	58619.20	60758.90	61436.56	62449.26	62452.16
Addition due to additional capital expenditure	2139.70	677.66	1012.71	2.90	6.22
Closing Equity	60758.90	61436.56	62449.26	62452.16	62458.39
Average Equity	59689.05	61097.73	61942.91	62450.71	62455.28
Return on Equity (Base Rate )	15.500%	15.500%	15.500%	15.500%	15.500%
Tax rate	16.995%	0.000%	0.000%	20.008%	0.000%



	2009-10	2010-11	2011-12	2012-13	2013-14
Rate of Return on Equity (Pre Tax )	18.674%	15.500%	15.500%	19.377%	15.500%
Return on Equity	11146.33	9470.15	9601.15	12101.07	9680.57

#### Interest on Loan

45. 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."

- 46. Interest on loan has been worked out as under:
  - a. The gross normative loan after adjustment of un-discharged liabilities as on 1.4.2009 has been considered on 1.4.2009. In addition loan component towards additional capital expenditure has been considered as per the approved debt equity ratio.
  - b. Cumulative repayment after adjustment of un-discharged liabilities as on
     1.4.2009 has been considered as cumulative repayment as on 1.4.2009.
  - 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 2009-14. Further proportionate adjustment has been made to the repayments corresponding to discharge of liabilities considered during the respective years on account of cumulative repayment adjusted as on 1.4.2009. Also, proportionate adjustment has been made to the repayments on account of de-capitalizations considered in the admitted capital expenditure approved above.
  - e. The weighted average rate of interest has been considered for the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 based on actual loan portfolio.
    Summary of calculation of interest on loan is given in Annexure 1.

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional Loan for the purpose of tariff in the instant petition	136778.12	141770.76	143351.97	145714.95	145721.72
Cumulative repayment of loan up to previous year	12323.66	28503.03	44758.21	61208.30	77779.37
Net opening loan	124454.46	113267.73	98593.76	84506.65	67942.34
Addition due to additional capital expenditure	4992.64	1581.21	2362.98	6.77	14.52
Repayment of loan during the period	15887.77	16240.24	16447.14	16571.07	16557.84
Add: Repayment adjustment due to de- capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Less: Repayment adjustment due to discharges during the year / period	291.60	14.94	2.96	0.00	0.00
Net Closing Loan	113267.73	98593.76	84506.65	67942.34	51399.03
Average Loan	118861.10	105930.75	91550.20	76224.50	59670.69
Weighted Average Rate of Interest on Loan (%)	10.7001%	10.8856%	10.8988%	10.7802%	10.7828%
Interest on Loan	12718.25	11531.17	9977.88	8217.14	6434.16

47. The calculation for interest on loan is as under:

# Depreciation

48. 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."

49. Regulation 43(3)(iii) of the 2009 Tariff Regulations provides as under:

"43. **Special Provisions relating to Damodar Valley Corporation**. (1) Subject to clause (2), these regulations shall apply to determination of tariff of the projects owned by Damodar Valley Corporation (DVC).

(3) The following special provisions shall apply for determination of tariff of the projects owned by DVC:

(i) . . . . (ii) . . . .

(iii) Depreciation: The depreciation rate stipulated by the Comptroller and Auditor General of India in terms of section 40 of the Damodar Valley Corporation Act, 1948 shall be applied for computation of depreciation of projects of DVC."

50. The weighted average rate of depreciation allowed in order dated 23.1.2015 in

Petition No. 138/GT/2013 is 7.158%. The petitioner has claimed the rate of 7.99%,

7.97%, 7.97%, 7.96% and 7.95% for the years 2009-10, 2010-11, 2011-12, 2012-13 and

2013-14 respectively.

51. The petitioner was directed to furnish copy of the CAG order based on which deprecation rate has been applied along with linkage to the deprecation of each class of assets claimed and in response, the petitioner vide affidavit dated 9.2.2016 has



submitted the copy of the Gazette notification dated 29.3.1994 of Ministry of Power, Gol based on which depreciation rates have been applied by the petitioner.

52. The respondent, MPPCL has submitted that the notification of Ministry of Power (MoP), Gol were in exercise of power conferred in accordance with the Electricity (Supply) Act, 1948 which has no relevance in this case as the Electricity Act, 2003 has been promulgated by Govt. of India. It has further submitted that in accordance with the provisions of the Electricity Act, 2003, tariff has to be determined in accordance with the provisions contained in the regulations framed by the Commission and no other provisions contrary to the tariff regulations can be made applicable. The respondent has further stated that the Tribunal in its judgment dated 1.5.2012 in Appeal No. 40/2011 had held that when there is any conflict between the provisions of the Electricity Act, 2003 and the provisions of any other Act, then the provisions of the Electricity Act, 2003 will prevail. Thus, the respondent has submitted that the petitioner's claim for depreciation rates is highly arbitrary, illogical and without any basis and the depreciation rates in accordance with the rates provided in Appendix-III of the 2009 Tariff Regulations may be allowed.

53. We have considered the submissions. Section 40 of the DVC Act, 1948 provides depreciation as under:-

" 40. Provision for depreciation and reserve and other funds:-

(1) The Corporation shall make provision for depreciation and for reserve and other funds at such rates and on such terms as may be specified by the Auditor General of India in consultation with the Central Government."

54. This issue was considered by,the Tribunal in its judgment dated 23.11.2007 in Appeal No. 273/2006 (DVC v/s CERC and others) wherein it had observed that the rate of depreciation as prescribed by C&AG shall be adopted by the Commission for computation of tariff. The relevant of the order is extracted as under:-

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### "F. Depreciation Rate

F.1 Section 40 of DVC Act provides for the Comptroller and Auditor General of India (C&AG) to prescribe depreciation, reserve and other funds in consultation with the Central Government. The aforesaid provision neither quantifies nor limit the rate of depreciation to be allowed.

F2. The Appellant has claimed depreciation at rate prescribed by the C&AG and submits that all along till the Electricity Act, 2003 came into effect, it has been factoring the prescribed depreciation rate in formulating the tariff. It is relevant to point out that the Act does not make any provision for factoring rate of depreciation in tariff determination. Thus, in our opinion, the DVC Act in so far as the depreciation is concerned is not inconsistent with the Act and shall continue to apply to the corporation.

F3. The depreciation, in respect of useful life of a substantial portion of generation capacity of DVC being aged out and redeemed, leaves little or no impact on the tariff of such plants. However, the impact of depreciation rate on the tariff of the balance generation capacity shall be significant as the rate of depreciation prescribed by the C&AG is higher than what is fixed by the Regulations, 2004. For the aforesaid reason, it is essential for the Central Commission to carryout reasonable assessment of the capital cost of each power plant individually at COD (if the authentication of approved cost is not available/traceable) and apply the prescribed rate of depreciation for each successive year since then to arrive at adjusted fixed cost for each plant for consideration in tariff determination. The depreciation is to be allowed and computed only on aggregate sum of gross capital asset of each plant qualifying for the depreciation and not regardless of it.

F4. We, therefore, direct the Central Commission to adopt rate of depreciation as prescribed by C&AG for computation of tariff for the asset based on the principle outlined above while keeping in view our remarks in respect of Dept-Equity ratio in para 112(A) above."

55. Accordingly, the depreciation rates of 7.985%, 7.974%, 7.966%, 7.960% and 7.953% have been approved for the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively. 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 1.4.2009.

56. The necessary calculations in support of depreciation are as under:

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	195397.32	202529.66	204788.52	208164.21	208173.88
Additional capital expenditure	7132.34	2258.86	3375.69	9.67	20.75
Closing Capital Cost	202529.66	204788.52	208164.21	208173.88	208194.63



	2009-10	2010-11	2011-12	2012-13	2013-14
Average capital cost	198963.49	203659.09	206476.37	208169.04	208184.25
Value of freehold land	38.33	38.33	38.33	38.33	38.33
Depreciable value @90%	179032.64	183258.68	185794.23	187317.64	187331.33
Balance depreciable value	166708.96	154755.64	141017.61	126083.64	109526.26
Depreciation	15887.77	16240.24	16447.14	16571.07	16557.84
Cumulative depreciation at the end of the period (before adjustment)	28211.45	44743.29	61205.37	77779.39	94337.23
Add: Cumulative depreciation adjustment on account of un discharged liabilities	291.60	14.94	2.96	0.00	0.00
Less: Cumulative depreciation adjustment on account of de-capitalization	0.00	0.00	0.00	0.00	0.00
Cumulative depreciation after adjustment (at the end of the period)	28503.05	44758.23	61208.32	77779.39	94337.23

# **Operation & Maintenance Expenses**

57. The petitioner was directed to provide the actual O&M expenses of the generating station during the period from the COD of Unit-I till 2013-14. In response, the petitioner vide affidavit dated 9.2.2016 has submitted that the actual O&M expenses for the generating station are as under:-

		(₹ in lakh)
	2012-13	2013-14
Employees remuneration and benefit	2432	2569
Generation, distribution, administration and other	7346	7623
expenses	7340	7025
Total O&M expenses- direct	9777	10192
Other share including corporate overhead	2942	3084
Total O&M expenses- direct and share	12719	13275

58. 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 Rs Lakh/MW)
Year	200/210/250	300/330/350	500 MW	600 MW and

	MW Sets	MW Sets	Sets	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
33	

59. Accordingly, the O&M expenses allowed by the petitioner in accordance with the above norms are as under:-

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Norms (₹lakh/MW)	18.20	19.24	20.34	21.51	22.74
Capacity (MW)	500	500	500	500	500
Allowed	9100.00	9620.00	10170.00	10755.00	11370.00

60. In addition to above, the petitioner has claimed additional O&M expenses towards Mega insurance, CISF security and Share of subsidiary activity, for the years 2012-13 and 2013-14 as under:-

		(₹ in lakh)
	2012-13	2013-14
Mega insurance	67.10	56.99
CISF security	327.27	457.45
Addl claim of Share of subsidiary activity	412.99	496.12
Total	807.36	1010.56

61. The respondent, MPPMCL has submitted that the claim of petitioner towards additional O&M expenses of mega insurance, CISF and share of subsidiary activities are excessive, unreasonable and beyond the scope of the 2009 Tariff Regulations. It has also submitted that Regulation 29(1)(a) of the 2009 Tariff Regulations provides for allowing normative O&M expenses for thermal generating stations and accordingly the

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claim of petitioner for additional O&M expenses is arbitrary, illogical and without any basis.

62. Taking into consideration the submissions of the parties, we now proceed to examine the additional O&M expenses claimed by the petitioner as under:-

#### Mega Insurance

63. The petitioner has claimed Mega Insurance expenditure of ₹67.10 lakh and ₹56.99 lakh 2012-13 and 2013-14, respectively. The petitioner was directed to provide the details of Mega Insurance along with documentary evidence and in response, the **p**etitioner has submitted that the normative O&M expenses allowed to the generating station in terms of the 2004 Tariff Regulations do not include expenses on insurance. The petitioner has further submitted that in line with the order dated 8.5.2013 in Petition No. 272/2010, the Mega Insurance claimed by the petitioner for the period 2009-14 was allowed as additional O&M expenses in relaxation to the provisions of the 2009 Tariff Regulations.

64. 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 by the petitioner in relaxation of the provisions of the 2009 Tariff Regulations. Accordingly, the Mega Insurance as claimed by the petitioner has been allowed after the truing up.

#### **CISF Security**

65. The petitioner has claimed expenditure of ₹327.27 lakh in 2012-13 and ₹457.45 lakh in 2013-14.

66. The petitioner was directed to provide the reasons for claiming additional O&M expenses towards CISF security along with documentary evidence for requirement of additional CISF security for plant. In response, the petitioner vide affidavit dated 9.2.2016 has submitted that all the thermal and hydro generating stations of DVC, viz. Bokaro TPS, Chandrapura TPS, Mejia TPS, Durgapur TPS, Maithon HEP, Panchet HEP and Tilaiya HEP are located in high alert security zones. DVC vide its affidavit dated 19.4.2013 had submitted the documentary evidences such as correspondence from the Ministry of Power, Govt. of India, wherein direction to take appropriate security arrangements at hydro generating stations, dam, etc., instructions for strengthening the physical security of the various generating stations and for tightening the personal security were given. The petitioner has further submitted that IB inspections were undertaken and recommendations were issued from time to time for improvement of the security arrangements in the generating stations of DVC. It has also submitted that the Commission vide order dated 9.7.2013 in Petition No. 269/GT/2012 had already allowed the claim of additional O&M expenses based on the documentary evidence and considering the location and significant threat perception to the generating station and the personal deployed there. The petitioner has submitted the details of CISF deployed/employed in the generating station for the period from 2011-12 to 2013-14 as under:-

	2011-12	2012-13	2013-14
CISF Deployed (in nos.)	229	246	401



67. The respondent, MPPMCL has submitted that the irrespective of the security personal deployed for the purpose of the security of the plant, the expenditure has to be limited to the normative O&M expenses only and therefore the additional claim of O&M expenses for CISF security may not be allowed.

68. The matter has been examined. It is observed that the actual O&M expenses for this generating station is higher than the normative O&M expenses for the years 2012-13 and 2013-14. The Commission vide order dated 7.8.2013 in Petition No. 276/GT/2012 in respect for determination of tariff for Durgapur Thermal Power Station had allowed the expenditure towards CISF security for the period 2009-14 and has observed as under:-

"69..... The matter has been considered. Based on the documentary evidence and considering the location and significant threat perception to the generating station and the personnel employed there, we consider the matter favorably and allow the claim of the petitioner for additional O&M on this count in relaxation of the provisions of the 2009 Tariff Regulations. However, the petitioner is directed to furnish the generating station-wise CISF personnel deployed/employed in its generating station during the period 2008-09 to 2013-14 at the time of truing up exercise to be undertaken in terms of Regulation 6 of the 2009 Tariff Regulations."

69. In line with the above decision and considering the significant threat perception to the generating station and the personnel employed there, we allow the expenditure towards CISF Security claimed by the petitioner for the period 2009-14, in relaxation of the provisions of the 2009 Tariff Regulations.

70. It is observed that the claim of the petitioner has substantially increased in 2013-14 when compared to 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 2012-13 have then been escalated by 5.72% to derive expenses for 2013-14. Accordingly, the CISF expenses allowed in this order is as under:-

_							
ſ	2009-10	2010-11	2011-12	2012-13	2013-14		
	0.00	0.00	0.00	327.27	345.99		

#### Share of Subsidiary activities

71. The petitioner has claimed expenditure of ₹412.99 lakh and ₹496.12 lakh for 201213 and 2013-14 respectively towards share of subsidiary activity.

72. The petitioner was directed to provide the details of share of subsidiary activities and justification of the subsidiary activities carried out and in response, the petitioner has submitted that the petitioner has been undertaking subsidiary activities in the damodar valley area since its inception. The petitioner has further submitted that there is a need of increasing the subsidiary activities in regard to soil erosion, cultivation of reservoirs, check dam, flood control, afforestation, etc. due to increasing impact of environment. The petitioner has also submitted that there is a need to increase social integration activities by establishing hospitals, schools, drinking water supply, sanitation, public health, training scheme, roads, etc and that the Commission in order dated 9.7.2013 in Petition No. 269/GT/2012 had allowed the expenditure towards subsidiary activities.

73. The respondent, MPPMCL has submitted that the expenses for subsidiary activities 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 submitted that these activities has to be undertaken by the petitioner under its corporate social responsibilities and should be catered from apportion on its return on equity, profit surplus, etc. It has further submitted that such activities are not related to generation of electricity and accordingly is not allowable as pass through in tariff.

74. The matter has been examined. Considering the fact that the normative O&M allowed to the generating station for period 2009-14 does not include revenue expenses on subsidiary activities, we are inclined to allow the additional O&M expenses claimed towards share of subsidiary activities. However, in line with the judgment of Tribunal dated 23.11.2007 in Appeal No. 273/2006, the capital expenditure towards Soil conservation has only been considered. The petitioner has not furnished the Stationwise soil conservation cost but has only submitted the total soil conservation cost for the Petitioner's company as a whole for the years 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.

	2009-10	2010-11	2011-12	2012-13	2013-14	
Claimed	0.00	0.00	0.00	412.99	496.12	
Allowed	0.00	0.00	0.00	215.46	223.47	

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

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Mega insurance	0.00	0.00	0.00	67.10	56.99
CISF security	0.00	0.00	0.00	327.27	345.99



	2009-10	2010-11	2011-12	2012-13	2013-14
Addl claim of Share of subsidiary activity	0.00	0.00	0.00	215.46	223.47
Total	0.00	0.00	0.00	609.83	626.45

#### Interest on working capital

76. 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."

77. 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"



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

# Fuel components in working capital

79. The respondent, MPPMCL has submitted that the petitioner has furnished Form 15, wherein the information of demurrage charges of ₹1276740 for the month of January 2009, ₹1457200 for the month of February 2009 and ₹1774950 for the month of March 2009 have been included in weighted average rate of coal. Accordingly, the respondent has submitted that the same is in contravention to the provisions contained in Regulation 21(7) of the 2009 Tariff Regulations. It has further submitted that by extension, demurrage refers to the charges that is paid to the ship owner for extra use of the vessel and officially, demurrage is a form of liquidated damages for breaching the lay time as it is stated in the governing contract. Thus, the respondent has submitted that the levy of demurrage charges is on account of default on the part of the petitioner and it cannot be loaded on beneficiaries by way of cost of coal. It has also submitted that the demurrage charges are not allowed as pass through in Regulation 21(7) of the 2009 Tariff Regulations and therefore, MPPCL has submitted that the petitioner may be directed to revise the energy charges for the period 2009-14 excluding demurrage charges.

80. We have considered the submission of respondent, MPPCL and have excluded demurrage charges for calculation of energy charges.

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

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of coal for 2 months	7186.65	7186.65	7206.34	7186.65	7186.65
Cost of secondary fuel oil for 2 months	181.91	181.91	182.41	181.91	181.91

82. The fuel components in working capital as approved by the Commission in order dated 23.1.2015 has been considered as under:-

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of coal for 2 months	7186.65	7186.65	7206.34	7186.65	7186.65
Cost of secondary fuel oil for 2 months	181.89	181.89	182.39	181.89	181.89

### **Maintenance Spares**

83. The petitioner has claimed the following maintenance spares in the working capital:

(₹ in lak						
2009-10	2010-11	2011-12	2012-13	2013-14		
1820.00	1924.00	2034.00	2151.00	2274.00		

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

# Receivables

85. The Commission in order dated 23.1.2016 had approved the weighted average price of oil as ₹29313.88/kl on the basis of price for the proceeding three months of January, 2009, February, 2009 and March, 2009. The petitioner has revised the weighted average price of oil as ₹29316.34/kl on the basis of price of secondary fuel oil for the proceeding three months of January, 2009, February, 2009 and March, 2009 and the same has been considered. We have considered the the weighted average price of oil as ₹29313.88/kl as approved by the Commission in order dated 23.1.2016. Receivables have been worked out on the basis of two months of fixed and energy charges as shown below:-

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Variable charges for two Months	7186.65	7186.65	7206.34	7186.65	7186.65



	2009-10	2010-11	2011-12	2012-13	2013-14
Fixed charges for two months	8854.54	8518.90	8410.28	8658.77	8049.61
Total	16041.19	15705.54	15616.61	15845.42	15236.26

86. SBI PLR of 12.25% has been considered in the computation of the interest on working capital. Necessary computations in support of calculation of interest on working capital are given as under:

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of coal – 2 months	7186.65	7186.65	7206.34	7186.65	7186.65
Cost of secondary fuel oil – 2 month	181.89	181.89	182.39	181.89	181.89
O&M expenses – 1 month	758.33	801.67	847.50	896.25	947.50
Maintenance Spares	1820.00	1924.00	2034.00	2151.00	2274.00
Receivables – 2 months	16041.19	15705.54	15616.61	15845.42	15236.26
Total working capital	25988.06	25799.75	25886.84	26261.21	25826.30
Rate of interest (%)	12.25%	12.25%	12.25%	12.25%	12.25%
Interest on working capital	3183.54	3160.47	3171.14	3217.00	3163.72

### Other Elements of Tariff

87. 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

88. 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 and 31.3.2014 for all the Generating stations and T&D system duly certified by the Actuary, Shri Bhudev Chatterjee, towards Pension and Gratuity (P&G) liability for the existing pensioners and employees. The details of Pension & Gratuity liability claimed by the petitioner are as given under:-

	1						(₹ 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 earlier valuation in two instalments	42818.66	42818.66			
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

89. The respondent, MPPMCL has submitted that the claim under pension and gratuity contribution is beyond the scope of the 2009 Tariff Regulations and such expenditure has been already considered in the normative O&M expenses allowed to the petitioner and hence may be disallowed.

90. The petitioner was directed to submit the break-up of the total P&G contribution claimed during the period 2009-14 in respect of the generating station, transmission & distribution system. In response, the petitioner vide its affidavit dated 1.3.2016 submitted the same along with reconciliation statement of P&G Fund paid to the trust as per audited accounts. The Commission also directed the petitioner to submit the basis of

allocation of these P&G liability amongst Irrigation, Flood Control and Power business and also to submit the year wise details of the total number of employees and allocation of employees on different generating stations for the period 2009-14.

91. In response, the petitioner vide affidavit dated 9.6.2016 has submitted that it has apportioned the entire P&G liability to each of the generating stations/T&D systems in proportion to their opening capital cost as on 1.4.2009. The petitioner has also stated that it has allocated the year wise P&G liability towards all the generating stations in proportion to their installed capacity. The petitioner has further submitted that only an insignificant number of employees were engaged in Irrigation and Flood control activities and out of the total number of 11211 employees (as on 31.3.2013), the irrigation and flood control accounts for only 24 employees.

92. The matter has been examined. It is observed that the petitioner has claimed P&G liability as on 31.3.2006 and 31.3.2009 in line with the methodology adopted by the Commission in order dated 7.8.2013 in Petition No. 276/GT/2012 for determination of tariff for Durgapur Thermal Power Station of the petitioner. The petitioner has also claimed P&G liability as on 31.3.2011, 31.3.2012, 31.3.2013 and 31.3.2014 for the period 2009-14. The Commission vide order dated 6.8.2009 in Petition No. 66/2005 had allowed 60% of the P&G liability as on 31.3.2006 to be recovered during the period 2006-09 and balance 40% of the liability during the period 2009-14 in five equal yearly installments. The relevant portion of the order dated 6.8.2009 in Petition No. 66/2005 is as observed as under:-

"69. The Commission in its order dated 3.10.2006 had worked out an amount of Rs. 153449 lakh towards pension and gratuity fund and directed that 60% of the aforesaid amount be recovered from the consumers over a period of three years starting from the year 2006-07 to 2008-09. The balance 40% of the gratuity fund was to be borne by the petitioner as it was allowed a transition period for two years i.e. 2004-05 and 2005-06 and the petitioner was allowed to retain the surplus fund during the years. Though tariff

was allowed to the petitioner from 1.4.2004 due to the transition period, the petitioner was allowed to recover tariff at the rates fixed by it for the period from 1.4.2004 to 31.3.2006 and thereafter at the rates allowed by the Commission by its order dated 3.10.2006. Since the petitioner was allowed to recover tariff at the rates determined by it for 40% of the tariff period and retain the surplus so generated, the Commission took a conscious view that the petitioner should contribute to the extent of 40% of the pension and gratuity fund out of the surplus generated during the years 2004-05 and 2005-06....

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71. It is noticed that the Appellate Tribunal while agreeing with the order of the Commission allowing transition period for two years to the petitioner, has, however rejected the non-allowance of 40% of the pension contribution and observed that the petitioner is entitled to recover the entire amount of pension fund from its consumers, provided that such recovery was staggered and do not create tariff shock to the consumers.

72. It could be observed from the books of accounts of the petitioner that the petitioner had generated a surplus amount of Rs 79487 lakh during the year 2004-05 and Rs. 188634 lakh during the year 2005-06. After adjustments on account of taxes and prior period, the surplus amount was Rs. 69044 lakh for year 2004-05 and Rs.108282 lakh for the year 2005-06. Considering the equity worked out in terms of the direction of the Appellate Tribunal and the additional capitalization allowed, the Return on equity at the rate of interest @ 14% works out to Rs.17700 lakh for 2004-05 and Rs.18000 lakh for 2005-06.

73. Accordingly, in compliance with the directions contained in the judgment of the Appellate Tribunal, it has been decided to stagger the balance 40% of the pension fund over a period of five years during the tariff period 2009-14, without any revision in the pension fund allocated in tariff for the period 2006-09..."

93. The Commission vide order dated 7.8.2013 in Petition No. 276/GT/2012 had

allowed the yearwise P&G liability of this generating station as observed below:-

"87... the Commission had allowed the petitioner to recover 60% of the admitted liability of ₹153449.00 lakh during the period 2006-09 and the balance 40% of liability during the period 2009-14 in compliance of the directions contained in the judgment of the Tribunal. In line with this, the Commission vide its order dated 8.5.2013 in Petition No. 272/2010 had allowed the recovery of an amount of ₹92069.40 lakh, being 60% of ₹153449.00 lakh towards Pension and Gratuity Fund for all its generating stations along with the tariff for the period and 2006-09 and ₹61379.60 lakh, being the balance 40% amount in five equal yearly instalments along with the tariff for the period 2009-14....

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

94. Thus, the Commission in its order dated 7.8.2013 in Petition No. 276/GT/2012 had allowed balance 40% of the liability as on 31.3.2006 to be recovered during the period 2009-14 in terms of the judgment of the Tribunal dated 10.5.2010 in Appeal No. 146/2009. In addition to the above, 40% of difference in P&G liability as on 31.3.2009 and 31.3.2006 was also allowed by the Commission to be recovered in five equal installments during the period 2009-14. The yearly P&G amount allowed for the period 2009-14 was allocated to different generating stations and T&D system of the petitioner on the basis of the capital cost as on 31.3.2009.

95. As the petitioner has submitted the certificate from the Actuary in terms of the Accounting Standard 15 (AS 15), the petitioner was directed to furnish the detailed actuarial valuation report submitted by the Actuary of the petitioner. In response, the petitioner vide affidavit dated 10.6.2016 has submitted the Certificate received from the Actuary and has stated that no separate report has been received from the Actuary to the petitioner.

96. The petitioner was further directed to furnish the complete details of all the elements with assumptions considered by the Actuary for arriving at the Pension & Gratuity fund requirement on year to year basis and also the details of year wise (for each year from 2009-10 to 2013-14) amount deposited in the trust towards P&G fund alongwith reconciliation of P&G fund booked in annual accounts for the respective year. In response, the petitioner vide affidavit dated 23.6.2016 has submitted the details of assumptions considered i.e. mortality, attrition, discount rate, normal age retirement, salary escalation (basis salary and Basic + DA) and the method used for computation of P&G liability.

97. As stated, the Commission in order dated 7.8.2013 in Petition No. 276/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. Also in the said order, the Commission had allocated the same to the generating stations of the petitioner except Mejia Unit 5 & 6. The Commission has also revised the allocation and has also allocated the share of P&G liability to Mejia Unit 5 and 6 on the basis of capital cost of ₹205946.66 lakh admitted 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. Para 20.3 of the Statement of Reasons in support of the 2009 Tariff Regulations provides that O&M cost for purpose of tariff covers expenditure incurred on the employees including gratuity, CPF, medical, education allowances etc. The relevant para of the Statement of Reasons is extracted as under:-

"20.3 The Operation & Maintenance cost for the purpose of tariff covers expenditure incurred on the employees including gratuity, CPF medical, education allowances etc, repair and maintenance expenses including stores and consumables, consumption of capital spares not part of capital cost, security expenses, administrative expenses etc. of the generating stations, corporate expenses apportioned to each generating stations etc. but exclude the expenditure on fuel i.e. primary fuel as well as secondary and alternate fuels."

98. Also, the expenses on account of CPF considered in Public Sector Undertakings take care of pension liability applicable in Government Undertaking.

99. In this background, the additional claim of the petitioner towards P&G liability for the period 2009-14 based on Actuarial valuation is not 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 by taking into consideration this generating station of the petitioner. Therefore, the P&G liability for the generating station

is worked out from the actuarial valuation report of the generating stations of the petitioner as under:-

						(₹ in lakh)
	Total	2009-10	2010-11	2011-12	2012-13	2013-14
40 % of liability as per actuarial valuation as on 31.3.2006	61379.6	12275.92	12275.92	12275.92	12275.92	12275.92
40 % of the difference in liability as per actuarial valuation as on 31.3.2009 and 31.3.2006	52897.69	10579.54	10579.54	10579.54	10579.54	10579.54
Total	114277.29	22855.46	22855.46	22855.46	22855.46	22855.46

100. Further, the above P&G liability has been allocated to the various generating stations of the petitioner as under:-

							(₹ in lakh)
Name of station	Capital cost as on 31.3.2009	Total P&G allocated	2009-10	2010-11	2011-12	2012-13	2013-14
Bokaro TPS	58554.83	11712.05	2342.41	2342.41	2342.41	2342.41	2342.41
Chandrapura TPS	26914.05	5383.31	1076.66	1076.66	1076.66	1076.66	1076.66
Durgapur TPS	19501.48	3900.66	780.13	780.13	780.13	780.13	780.13
Mejia TPS #1 to 3	160713.11	32145.60	6429.12	6429.12	6429.12	6429.12	6429.12
Mejia TPS #5 & 6	205946.66	41193.15	8238.63	8238.63	8238.63	8238.63	8238.63
Maithon HS	5881.05	1176.32	235.26	235.26	235.26	235.26	235.26
Panchet HS	5016.79	1003.45	200.69	200.69	200.69	200.69	200.69
Tilaiya HS	263.80	52.76	10.55	10.55	10.55	10.55	10.55
T&D	88541.73	17709.99	3542.00	3542.00	3542.00	3542.00	3542.00
Total	571333.50	114277.29	22855.46	22855.46	22855.46	22855.46	22855.46

(₹ in lakh)

Mejia Thermal Power Station Units 5 and 6	2009-10	2010-11	2011-12	2012-13	2013-14
Contribution to P&G	8238.63	8238.63	8238.63	8238.63	8238.63

101. As total allocation under this head have been kept same, statement of allocation

comparing mid-term true up and final true up is placed below:-

Order in Petition No. 115/GT/2015

						(₹ in lakh)				
Generating Stations	0000 40		Term Tru		0040 44	0000 40	1	nal True L	•	0040 44
	2009-10	2010-11	2011-12	2012-13	2013-14	2009-10	2010-11	2011-12	2012-13	2013-14
Maithon HPS Mid term true up (271/GT/2012) and Final true up (464/GT/2014)	367.87	367.87	367.87	367.87	367.87	235.26	235.26	235.26	235.26	235.26
Panchet HPS Mid term true up (272/GT/2012) and Final true up (467/GT/2014)	313.81	313.81	313.81	313.81	313.81	200.69	200.69	200.69	200.69	200.69
Thilaiya HPS Mid term true up (273/GT/2012) and Final true up (468/GT/2014)	16.50	16.50	16.50	16.50	16.50	10.55	10.55	10.55	10.55	10.55
Chandrapura unit I to III Mid term true up (275/GT/2012) and Final true up (470/GT/2014)	1683.51	1683.51	1683.51	1683.51	1683.51	1076.66	1076.66	1076.66	1076.66	1076.66
Durgapur unit III and IV Mid term true up (276/GT/2012) and Final true up (471/GT/2014)	1219.84	1219.84	1219.84	1219.84	1219.84	780.13	780.13	780.13	780.13	780.13
Bokaro unit I to III Mid term true up (268/GT/2012) and Final true up (469/GT/2014)	3662.69	3662.69	3662.69	3662.69	3662.69	2342.41	2342.41	2342.41	2342.41	2342.41
Mejia I to III Mid term true up (269/GT/2012) and Final true up (465/GT/2014)	10052.83	10052.83	10052.83	10052.83	10052.83	6429.12	6429.12	6429.12	6429.12	6429.12
T&D Mid term true up (270/TT/2012) and Final true up (547/TT/2014)	5538.41	5538.41	5538.41	5538.41	5538.41	3542.00	3542.00	3542.00	3542.00	3542.00

Generating	Mid Term True Up					Final True Up				
Stations	2009-10	2010-11	2011-12	2012-13	2013-14	2009-10	2010-11	2011-12	2012-13	2013-14
Mejia V and VI Final true up (115/GT/2015)						8238.63				
Total excluding Mejia IV	22855.46	22855.46	22855.46	22855.46	22855.46	22855.45	22855.45	22855.45	22855.45	22855.45
Mejia IV Mid term true up (274/GT/2012) and Final true up (466/GT/2014)	2222.92	2222.92	2222.92	2222.92	2222.92	2222.92	2222.92	2222.92	2222.92	2222.92
Total Including Mejia IV	25078.38	25078.38	25078.38	25078.38	25078.38	25078.37	25078.37	25078.37	25078.37	25078.37

102. Allocation to individual generating stations have undergone change on account of addition of capacity of Mejia V and VI. For the purpose of billing if the beneficiaries are same and entitlement of power to each beneficiary does not change, then above changes are to be handled as adjustment entries, if needed, as it is felt that above sum might have been recovered under individual plants.

103. In case of changes in entitlement of power to beneficiary, then suitable claim/refund is to be made in billing with clear remarks for better understanding of concerned beneficiaries.

# **Contribution to Sinking Fund**

104. 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



105. The petitioner has submitted that 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 DVC is as under:-

					(₹ in lakh)
	4400	Crore	2600	Crore	Total 7000
	bond		bond		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

106. Further, the petitioner has allocated sinking fund contribution and interest for debt

borrowing of ₹3100 crore among the generating stations of the petitioner as under:-

		(₹ in lakh)
Station	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

107. The respondent, MPPMCL has submitted that the petitioner had raised the issue of "(*v*)*Contribution to the Sinking Fund as per provisions of Section 40 of the DVC Act, 1948*" in Appeal No. 40 of 2011 before the Tribunal and the Tribunal in its judgment dated 1.5.2012 had held that the petitioner did not press for the issue of sinking fund and accordingly, the issue was not considered. It has submitted that the petitioner is not legally entitled for getting contribution to sinking fund.

108. The matter has been examined. 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. Further, the contribution towards sinking fund created for redemption of bond was allowed in order dated 22.8.2016 in Petition No. 295/GT/2015 for determination of tariff for Koderma Thermal Power Station, Unit I (500 MW) of the petitioner for the period from 18.7.2013 to 31.3.2014. The relevant portion of the order is extracted as under:

"55. The sinking fund as apportioned to the generating station and claimed by the petitioner with interest in this petition is as under:

		(₹ in lakh)			
	2012-13 2013-				
	7009	9.87			
Contribution to sinking fund with interest	2634.39	4375.48			

56. The claim of the petitioner for the year 2012-13 has not been allowed. Accordingly, in terms of Regulation 43(2)(iv) of the 2009 Tariff Regulations, the contribution towards sinking fund for 2013-14 has been allowed as under;

	(₹ in lakh)
	2013-14
	18.7.2013 to 31.3.2014
Contribution to sinking fund (annualized)	4375.48
Contribution to sinking fund (pro rata)	3080.82

57. This is however subject to the final decision of the Hon"ble Supreme Court in C.A.No.4289/2008."

109. Accordingly, in line with the above decision the sinking fund approved for this generating station is as under:-

(₹ in la							
2009-10	2010-11	2011-12	2012-13	2013-14			
0.00	0.00	0.00	687.71	1142.23			

#### **Cost of Common Offices**

110. 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 the generating stations as well as the



Transmission & Distribution systems. The additional capital expenditure claimed by the petitioner towards various offices is as shown below.

					(₹ 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

111. 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 installed capacity. 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

112. The respondent, MPPMCL has submitted that the component in tariff which are pass through for recovery from beneficiaries does not include share of common office expenditure. Accordingly, MPPCL has submitted that the claim of the petitioner regarding share of common office expenses is highly arbitrary, unreasonable and illogical and should be disallowed as this is beyond the scope of the 2009 Tariff Regulations.

113. The Commission vide RoP of hearing dated 18.5.2016 directed the petitioner to submit the Plant/Unit wise allocation/reconciliation statement duly matching with the audited accounts and certified by the auditor in respect of Common Cost – Director, Central, R&D, IT, Subsidiary, Other Office etc for the period 2009-14. In response, the petitioner vide affidavit dated 15.6.2015 has submitted the reconciliation statement duly matching with audited accounts and certified by the auditor. The Commission also directed the petitioner to clarify the discrepancies in the computation of claims along with the variation under various heads. The Commission also directed the petitioner to submit the methodology followed for allocation of common office expenses. In response, the petitioner vide affidavit dated 9.6.2016 has submitted that it has considered the same methodology, as considered by it for allocation of liability towards P & G fund.

114. It is noticed that the claim of the petitioner for Common offices for the generating station 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 have been worked out by considering as 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.

115. 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.

116. It is observed that the petitioner has procured additional assets in order to meet the increased capacity addition, augmented and upgraded 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 view of this, we 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.

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

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	713.394	836.713	321.563	395.689	452.428
Interest on loan	205.706	243.649	178.771	147.563	141.966
Return on Equity	791.194	730.402	630.543	673.053	558.976
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

	Capital cost as on 1.4.2009	2009-10	2010-11	2011-12	2012-13	2013-14
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

118. The annual fixed charges computed as above has been allocated to each generating stations, (including Mejia Unit 5 & 6) and T&D system in proportion to the admitted capital cost as on 1.4.2009.

119. 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 lakl						
	2009-10	2010-11	2011-12	2012-13	2013-14		
	257.99	273.14	140.37	112.83	87.07		



## Secondary Fuel Oil

120. 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"

121. The petitioner has claimed adjustment in cost of Secondary Fuel Oil in addition to cost of secondary fuel oil for the period 2009-14 allowed vide order dated 23.1.2015 in Petition No. 138/GT/2013.

122. The Commission in its Order dated 23.1.2015 in Petition No. 138/GT/2013 has approved cost toward secondary fuel oil as under:

(₹ in la							
2009-10	2010-11	2011-12	2012-13	2013-14			
1091.36	1091.36	1094.35	1091.36	1091.36			

123. The respondent, MPPMCL has submitted that the petitioner has claimed adjustment for secondary fuel oil which should have been recovered directly from the beneficiaries. It has also 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. Accordingly, the respondent has prayed for direction to the petitioner for furnishing the details of actual secondary fuel oil consumption vis-à-vis saving in this account and its sharing with the beneficiaries. 124. The matter has been examined. It is observed that the petitioner has claimed adjustment on account of variation of weighted average landed price of secondary fuel oil. Also, there is substantial variation in weighted average price of Secondary Fuel Oil in the period 2009-14 as compared to weighted average price of Secondary Fuel Oil considered in order dated 23.1.2015. We have considered the submissions of the petitioner and since the fuel cost is pass through, we have accordingly done the adjustment for Secondary Fuel Oil in addition to cost of Secondary Fuel Oil allowed in order dated 23.1.2015 in Petition No. 138/GT/2013.

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of Secondary Fuel Oil	1091.36	1091.36	1094.35	1091.36	1091.36

(₹ in lakh)

					(
	2009-10	2010-11	2011-12	2012-13	2013-14
Adjustment to cost of Secondary Fuel Oil	34.64	275.26	739.16	901.38	930.68

### Annual Fixed charges

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

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	15887.77	16240.24	16447.14	16571.07	16557.84
Interest on Loan	12718.25	11531.17	9977.88	8217.14	6434.16
Return on Equity	11146.33	9470.15	9601.15	12101.07	9680.57
Interest on Working Capital	3183.54	3160.47	3171.14	3217.00	3163.72
O&M Expenses	9100.00	9620.00	10170.00	10755.00	11370.00
Cost of secondary fuel oil (for coal-based & lignite fired generating stations only)	1091.36	1091.36	1094.35	1091.36	1091.36
Sub-Total	53127.25	51113.38	50461.65	51952.64	48297.64
Common Office Expenditure	257.99	273.14	140.37	112.83	87.07

	2009-10	2010-11	2011-12	2012-13	2013-14
Additional O&M on account of Ash evacuation, Mega insurance, CISF security and Share of subsidiary activities	0.00	0.00	0.00	609.83	626.45
Pension & Gratuity Contribution*	8238.63	8238.63	8238.63	8238.63	8238.63
Sinking Fund Contribution	0.00	0.00	0.00	687.71	1142.23
Adjustment of secondary fuel oil	34.64	275.26	739.16	901.38	930.68
Sub-Total	8531.25	8787.03	9118.16	10550.38	11025.05
Total Annual Fixed Charges	61658.50	59900.41	59579.81	62503.02	59322.70

\*To be billed subject to conditions laid down in Para 102 and 103

126. The difference in the annual fixed charges determined by order dated 23.1.2015 in Petition No. 138/GT/2013 and those determined by this order shall be adjusted in accordance with Regulation 6(6) of the 2009 Tariff Regulations subject to conditions laid down in para 102 and 103.

127. This order disposes of Petition No.115/GT/2015.

Sd/-(Dr. M.K.Iyer) Member

Sd/-(A. S. Bakshi) Member Sd/-(A. K. Singhal) Member Sd/-(Gireesh B. Pradhan) Chairperson



## ANNEXURE-I

#### DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO

	(₹ in lakh)						lakh)	
	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the period 2009-11	Loan deployed as on 1.4.2011	Additions during the period 2011-12	Loan deployed as on 1.4.2012	Additions during the period 2012-14	Total
Loan-1 PFC	7.75%	18000.00	0.00	18000.00	0.00	18000.00	0.00	18000.00
Loan-2 PFC	7.75%	10320.00	0.00	10320.00	0.00	10320.00	0.00	10320.00
Loan-3 PFC	10.75%	84680.00	0.00	84680.00	0.00	84680.00	0.00	84680.00
Loan-4 PFC	11.00%	7000.00	0.00	7000.00	0.00	7000.00	0.00	7000.00
Loan-5 PFC	11.75%	20800.00	0.00	20800.00	0.00	20800.00	0.00	20800.00
Loan-3 Share of Gol Guaranteed DVC Bonds (Series - 14 - Rs. 4,400 Crore)	10.30%	0.00	0.00	12000.00	0.00	12000.00	0.00	12000.00
Loan-3 Share of Gol Guaranteed DVC Bonds (Series - 15 - Rs. 2,600 Crore)	9.69%	0.00	0.00	0.00	0.00	12800.00	0.00	12800.00
Total		140800.00	0.00	152800.00	0.00	165600.00	0.00	165600.00

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

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	140800.00	140800.00	152800.00	165600.00	165600.00
Cumulative Repayment of loan upto previous year	14079.99	23466.99	32855.00	42243.00	51631.00
Net Loan Opening	126720.01	117333.01	119945.00	123357.00	113969.00
Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
Increase/ Decrease due to additional capitalization	0.00	0.00	0.00	0.00	0.00
Repayment during the year	9387.00	9388.01	9388.00	9388.00	9388.00
Net Loan Closing	117333.01	107945.00	110557.00	113969.00	104581.00
Average Loan	122026.51	112639.01	115251.00	118663.00	109275.00
Rate of Interest	10.7001%	10.8856%	10.8988%	10.7802%	10.7828%
Interest	13056.95	12261.40	12560.98	12792.09	11782.88