# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

## Petition No. 204/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 : 27.2.2017

#### In the matter of:

Revision of tariff of Durgapur Steel Thermal Power Station Unit-I &II (2x500 MW) for the period from 15.5.2012 to 31.3.2014 - Truing-up of tariff determined by order dated 20.4.2015 in Petition No. 66/GT/2012.

#### And in the matter of:

Damodar Valley Corporation, DVC Towers, VIP Road Kolkata

.....Petitioner

#### Versus

 Delhi Transco Ltd. Shakti Sadan, Kotla Road, New Delhi – 110002

> (a) BSES-Rajdhani Power Ltd. BSES Bhawan, Nehru Place, New Delhi – 110019

> (b) BSES-Yamuna Power Ltd., Shakti Kiran Building, Karkardooma, Delhi- 110092



- (c) Tata Power Delhi Distribution Company Ltd., (Erstwhile North Delhi Power Ltd.)
   33 kV Sub-Station Building Hudson Lane, Kingsway Camp, New Delhi-110009
- 2. Punjab State Power Corporation Ltd Interstate Billing, Shed No. TI-A, Patiala,
- Madhya Pradesh Power Trading Co Ltd, Shakti Bhawan, Vidyut Nagar, Jabalpur -482008

.....Respondents

Parties present:

For Petitioner:

Shri Subrata Ghosal, DVC Shri Jisnu Dutta, DVC Shri Bishnu Pada Kayal, DVC

For Respondents: None

#### <u>ORDER</u>

This petition has been filed by the petitioner, Damodar Valley Corporation (hereinafter referred to as DVC), for revision of tariff based on actual capital expenditure of Durgapur Steel Thermal Power Station, Units I & II (2x500 MW) (hereinafter referred to as "the generating station") for the period from 15.5.2012 to 31.3.2014, in terms of clause 1 of Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations").

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

Jharkhand. The dates of commercial operation of the two units of this generating station as approved in the order dated 20.4.2015 in Petition No. 66/GT/2012 is as under:-

Units	Scheduled COD as per LOA	Actual COD	Time Overrun allowed (months)
I	26.7.2010	15.5.2012	13
	26.9.2010	5.3.2013	13

3. The Commission vide order dated 20.4.2015 in Petition No. 66/GT/2012 had determined the tariff in respect of the generating station from the respective dates of their commercial operation till 31.3.2014. The annual fixed charges for this generating station as approved in the said order are as under:-

			(₹ in lakh)
	201	2-13	
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	2013-14
Depreciation	17071.81	36002.61	36962.48
Interest on Loan	18259.03	38389.34	36821.35
Return on Equity	10240.36	21790.43	22530.07
Interest on Working Capital	6011.93	11823.74	11881.46
O&M Expenses	7680.00	15360.00	16240.00
Cost of secondary fuel oil (for coal-based & lignite fired generating stations only)	2667.35	4438.63	4438.63
Sub-Total	61930.48	127804.75	128873.99
Contribution to Sinking Fund	1460.24	1460.24	1562.46
Annual Fixed Charges	63390.72	129264.99	130436.45

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

"6. Truing up of Capital Expenditure and Tariff

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

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

5. In accordance with above, the petitioner has filed the petition for revision of tariff based on truing up of actual capital expenditure for the period 2012-14 in terms of Regulation 6(1) of the 2009 Tariff Regulations. Accordingly, the annual fixed charges claimed by the petitioner for the period 2012-14 is as under:

	-		(₹ in lakh)
	201	2-13	2013-14
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	2013-14
Depreciation	14025.37	2768.01	36810.72
Interest on Loan	15624.19	3043.23	41096.25
Return on Equity	8428.10	1644.90	22894.33
Interest on Working Capital	4874.04	909.08	12344.25
O&M Expenses	6186.08	1136.22	16240.00
Cost of secondary fuel oil (for coal-based & lignite fired generating stations only)	2148.50	328.34	4438.63
Sub-Total	51286.28	9829.78	133824.18
Share of common office expense	86.68	15.92	188.10
Additional O&M	2442.51	448.62	4396.85
Share of Pension & Gratuity	2797.71	513.87	8010.55
Share of sinking fund	2042.87	375.22	4016.23
Adjustment for secondary fuel oil	(248.88)	(1.07)	(149.80)
Sub-Total	7120.89	1352.57	16461.93
Total	58407.17	11182.34	150286.11

6. In compliance to the direction of the Commission, the petitioner has filed additional information with copy to the respondents. The respondents, namely Delhi Transco Limited and Madhya Pradesh Power Management Corporation Limited (MPPMCL) have filed their replies and the petitioner has filed in rejoinder to the replies of MPPMCL. Taking into consideration the submissions made by 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 2012-14 after truing-up

exercise. This is however, subject to the final outcome of the Civil Appeals pending

before the Hon'ble Supreme Court.

## Capital cost

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

*"(1)* Capital cost for a project shall include:

(a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan - (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;

(b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and (c) additional capital expenditure determined under regulation 9:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.

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

8. The Commission in order dated 20.4.2015 in Petition No. 66/GT/2012 had approved

the capital cost for the period of 2012-14 as under:-

			(₹ in lakh)
	2012-13	2012-13	2013-14
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	
Opening Capital Cost	220553.01	479791.81	481337.25
Additional Capital	10779.71	1545.44	23902.00
Expenditure			
Closing Capital Cost	231332.72	481337.25	505239.25
Average Capital Cost	225942.86	480564.53	493288.25

9. The petitioner in this petition has considered the capital cost of ₹220553.01 lakh as on 15.5.2012 in accordance with order dated 20.4.2015. Accordingly, the said Capital Cost approved by the Commission has been considered as on COD of the respective units. 10. The petitioner vide affidavit dated 9.2.2016 has also submitted the list of deferred works under original scope of work as on COD of the generating station, the details of works within the original scope of work which were not completed during the period 2012-14 and factors which prevented the completion of these works during 2012-14 after COD of the generating station. The petitioner has also furnished the reconciliation statement of actual additional capital expenditure incurred during the period 2012-14 with the books of accounts along with apportionment of capital cost in different stages/ units duly certified by Auditor. The petitioner has also submitted certificate to the effect that all the assets under gross block during 2009-14 are in use for generation of power.

#### Actual Additional Capital Expenditure during 2012-14

11. Regulation 9 of the 2009 Tariff Regulations, as amended on 21.6.2011 and

31.12.2012, provides as under:

"9. Additional Capitalisation. (1) The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

(i) Un-discharged liabilities;

(ii) Works deferred for execution;

(iii) Procurement of initial capital spares within the original scope of work, subject to the provisions of regulation 8;

(iii) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and

(v) Change in law

Provided that the details of works included in the original scope of work along with estimates of expenditure, un-discharged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff.

(2) The capital expenditure incurred or projected to be incurred on the following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:



*(i)* Liabilities to meet award of arbitration or for compliance of the order or decree of a court;

(ii) Change in law;

(iii) Deferred works relating to ash pond or ash handling system in the original scope of work;

(iv) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) including due to geological reasons after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation; and

(v) In case of transmission system any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system:

Provided that in respect sub-clauses (iv) and (v) above, any expenditure on acquiring the minor items or the assets like tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2009.

(vi) In case of gas/liquid fuel based open/ combined cycle thermal generating stations, any expenditure which has become necessary on renovation of gas turbines after 15 year of operation from its COD and the expenditure necessary due to obsolescence or non-availability of spares for successful and efficient operation of the stations.

Provided that any expenditure included in the R&M on consumables and cost of components and spares which is generally covered in the O&M expenses during the major overhaul of gas turbine shall be suitably deducted after due prudence from the R&M expenditure to be allowed.

(vii) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receipt system arising due to nonmaterialisation 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."

12. The additional capital expenditure allowed by the Commission in order dated20.4.2015 after adjustment of liabilities is as under:

			(₹ in lakh)
	2012-13	2012-13	2013-14
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	
Additional Capital expenditure allowed	10779.71	2813.89	23902.00
Less: Un-discharged liabilities	0.00	2851.76	0.00
Add: Discharge of Liabilities	0.00	1583.31	0.00
Total	10779.71	1545.44	23902.00

13. The Commission in order dated 20.4.2015 in Petition No. 66/GT/2012 had allowed an expenditure of ₹10779.71 lakh as against ₹20624.10 lakh claimed by the petitioner as additional capital expenditure for the period from 15.5.2012 to 4.3.2013 towards discharge of liability. The Commission had also allowed additional capital expenditure of ₹2813.89 lakh and ₹23902.00 lakh for the years 2012-13 (5.3.2013 to 31.3.2013) and 2013-14 respectively under Regulation 9(1)(i) & 9(1)(ii) of the 2009 Tariff Regulations which mainly pertains to deferred works under the Original scope of work comprising Land, R&R, Plant & Equipment, Coal Handling Plant, Railway, Infrastructure, Water System, Garland Drain, Office Furniture etc,.

14. Accordingly, we consider the claims of the petitioner for additional capital expenditure in this petition as stated in the subsequent paragraphs.

15. The additional capital expenditure claimed by the petitioner in this petition for 2012-14 period is provided as under:

	2012	(₹ in lakh)	
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	2013-14
Add: Addition due To Add Cap	10779.71	2813.89	13841.07
Less: Liabilities included In Cap Cost	0.00	2851.76	12809.64
Add: Liabilities discharged during the Year	9844.39	1583.31	20052.13

# Additional Capital Expenditure during the period from 15.2.2012 to 4.3.2013 i.e., COD of Unit 2

16. It is noticed that the petitioner has claimed additional capital expenditure of ₹10779.71 under Regulation 9(1)(ii) of the 2009 Tariff Regulations for the period as allowed by the Commission in order in Petition No. 66/GT/2012.

17. In addition to the above, the petitioner has also claimed an amount of ₹9844.39 lakh towards liabilities discharged during the said period. The Commission vide ROP dated 12.1.2016 had directed the petitioner to furnish details of the claim towards provision for other liabilities. In response, the petitioner vide affidavit dated 9.2.2016 has submitted that the "Other Liabilities" considered in liabilities statement were provisions for Annual Liabilities i.e. work done but 'Bill' not received or the amount not paid as on the end of the financial year. The petitioner has further submitted that the same provision was reversed on the beginning of the next financial year and the item liabilities include the provision items and has been deducted from additional capitalization. The petitioner has also submitted that it has followed similar approach for discharge of liabilities which includes the provision amounts while adding the additional capitalization in the subsequent years.

18. The respondent No. 3, MPPMCL vide affidavit dated 9.9.2016 has submitted that the additional capitalization claimed by the petitioner during the period is over and above

the estimated expenditure and thus the same is beyond the scope of the original estimate and is liable to be rejected.

19. In response, the petitioner has submitted as under:-

- i. The capital expenditure is booked in "capital work in progress" on the progressive payment basis till the work is completed and is transferred thereafter to the fixed assets code as and when the asset is put to use and during the transition period some un-discharged / unspent amount is required to be paid to the contractors/suppliers.
- ii. The petitioner has also submitted that the capital expenditure incurred for expenses relating to supply of materials such as electrical, mechanical and erection of the particular assets are booked into that assets and the common costs such as bulk civil engineering works, part of Non-EPC costs, IDC, overhead etc. are apportioned on the basis of capital cost arrived up to the date of COD and
- iii. During the construction period, all revenue expenditures are also required to be capitalized.
- iv. Regulations itself provide for truing up of the tariff on the basis of actual expenditure after prudence check as the earlier tariff order was on projection basis. The petitioner has submitted its true up petition accordingly along with the details in terms of the 2009 Tariff Regulations.

20. We have examined the submissions of the parties. It is observed that out of the total additional capital expenditure of ₹10779.71 lakh allowed for the period, an amount of

₹ 10449.03 lakh has been incurred towards 'bills' passed but not paid within the date. The petitioner has claimed balance additional capital expenditure towards outstanding payments in respect of deferred works which form part of the original scope of work and made within the cut-off date of the generating station. Accordingly, the additional capital expenditure claimed by the petitioner has been allowed under Regulation 9(2)(viii) of the 2009 Tariff Regulation.

21. As regards discharge of liabilities of ₹9844.39 lakh, the Commission in order dated 20.4.2015 had not considered the additional capital expenditure in the absence of any justification and had directed the petitioner to submit the details/justification as regards the nature of discharge for ₹9844.39 lakh, at the time of truing-up of tariff for the period 2012-14. In compliance with the above, the petitioner has submitted that it has incurred such expenditure towards discharge of liabilities against provision of coal of ₹6756.38 lakh and towards provision for other liabilities of 3088.00 lakh. As regards liabilities towards provisioning claimed by the petitioner we are of the view that provisions made are in respect of future liabilities in respect of unutilized assets and therefore does not form part of the additional capital expenditure and hence the claim of the petitioner is not allowed.

#### Additional Capital Expenditure for the period from 5.3.2013 to 31.3.2013

22. The petitioner has claimed additional capital expenditure of ₹2813.89 lakh excluding liabilities of ₹2851.76 lakh for the period. In addition to this, the petitioner has discharged liability amounting to ₹1583.31 lakh. The additional capital expenditure claimed by the petitioner includes an amount of ₹2613.50 lakh towards power house Plant & Machinery, ₹67.69 lakh towards construction of building, ₹97.91 lakh towards barrage, gates etc.,

₹38.61 lakh towards other assets like office furniture, personal computer etc., ₹1.56 lakh towards land and land rights.

23. We have examined the matter. The cut-off date of the generating station is 31.3.2016. It is noticed that the additional capital expenditure claimed by the petitioner is in respect of works deferred for execution and is within original scope of work and within the cutoff date of the generating station. Moreover, the additional capital expenditure in respect of these work have been approved by the Commission in order dated 20.4.2015. In this background, we are inclined to approve such capital expenditure in terms of proviso to Regulation 9 (1) (ii) of the 2009 Tariff Regulations.

#### Additional capital expenditure for the period from 1.4.2013 to 31.3.2014

24. The petitioner has claimed additional capital expenditure of ₹13841.07 lakh including liabilities of ₹12809.64 lakh for the said period as against the expenditure of ₹23902.00 lakh allowed by the Commission in order dated 20.4.2015. In addition, the petitioner has discharged liability of ₹20052.13 lakh during the said period. The Commission vide ROP of the hearing dated 21.1.2016 directed the petitioner to submit the list of deferred works within the original scope of work along with the factors which had prevented the completion of these works during the said period. In response, the petitioner vide affidavit dated 9.2.2016 has submitted as under:

a. Land: As per original scheme, Ash pond Lagoon-2 was to be constructed at DSP land after its transfer from M/s DSP-SAIL. M/s SAIL did not take/communicate any decision for transfer of the said land (126.15 acre) till 28.08.2014. This prevented the petitioner to make payment against land premium with other

charges and construction of ash pond lagoon-2 with associated boundary wall etc.

- b. Execution of Works: Construction of ash pond lagoon-2 with associated boundary wall, patrol road, security watch towers lighting etc. in DSP land could not be taken up due to delay in getting physical possession of 126.15 acres of land from DSP-SAIL. Completion of those works was not in control of DVC. Further, construction of approach road from NH-2 to Power house could not be completed due to local dispute/ legal issue. Other pending works under the scope EPC vendor delayed due extensive theft of material and its replenishment lead time which was also beyond its control.
- c. CHP Package: Work is completed. Payment deferred due to fund crunch of DVC.
- d. **Plant Water System Package:** Work is completed. Payment deferred due to fund crunch of DVC.
- e. **Cost towards R&D**: Development of R&D activity was conceived centrally and apportioned cost has been considered against DSTPS Unit#1&2.
- f. **Cost towards DSTPS Dispensary**: This work was planned centrally from corporate health services though the implementation got delayed.
- g. Township: DVC submitted acquisition proposal of 100 acres of land to Govt. of West Bengal for township construction. But due to the various disputes during process of acquisition, DVC had to withdraw the acquisition proposal. This prevented the petitioner to take up the township for DSTPS. DVC could not find

any suitable alternative and finally planned to purchase 6.40 acres of land at Sujalam Sky City near Anda from Bengal Aerotropolis Projects Limited.

- h. Greenbelt Development: Work has been taken through Forest Dept., Govt. of West Bengal and implementation is being done accordingly. Delay in implementation was beyond control of DVC.
- i. **Computerization & Networking including Taxes & Duties:** This involved total networking with other formations of DVC with detailed scheme, comprehensive requirement finalisation of which has been delayed.
- Furniture for office, laboratory, Administration building, Technical building,
  Main Plant building, etc. This could not be utilised due to fund crunch.
- k. Garland Drain: Work executed but final payment delayed.
- R&R Compensation: Implementation of R&R package delayed due to nonsubmission of R&R policy by State Government.
- m. **Development of ITI:** Delayed due to additional requirement of ITI authority and dispute raised by the contractor.
- n. **Social Development Works:** Implementation delayed due to delay in finalisation and approval of schemes by local body of Govt. West Bengal.
- Railway Infrastructure: Balance of payment to RITES including requisite fee deferred due to fund crisis.
- p. **Contingency**: Miscellaneous development work not directly affecting the operation could not be completed due to paucity of fund.

25. We have examined the matter. The cut-off date of the generating station in terms of Regulation 3(ii) of the 2009 Tariff Regulations is 31.3.2016. It is observed that the additional capital expenditure claimed by the petitioner during the period pertains to undischarged liabilities and in respect of works which form part of original scope of work and deferred for execution within the cut-off date of the generating station. It is noticed that, an amount of ₹244.50 lakh has been deducted towards provision against loss of fixed assets. Also, the additional capital expenditure claimed by the petitioner is allowed after deduction of the provisions against loss of fixed assets for 2013-14 and approves the same in terms of Regulation 9(1) (i) & 9(1) (ii) of the 2009 Tariff Regulations.

26. In addition to the above, the petitioner has claimed additional capital expenditure of  $\overline{12809.64}$  lakh towards discharge of liabilities out of which the petitioner has claimed an amount of  $\overline{11737.91}$  lakh towards works executed prior to the cutoff date and which form part of the original scope of work and accordingly the same has been allowed under Regulation 9(1)(i) and 9(1)(ii) of the 2009 Tariff Regulations. The petitioner has also claimed amount of  $\overline{1071.72}$  lakh towards discharge of liabilities for 'provision' made towards other liabilities. As regards liabilities towards 'provisioning' claimed by the petitioner, we are of the view that the provisions made are amount that recognizes future liabilities and are unutilized assets and therefore cannot form part of additional capital expenditure and hence cannot be allowed.

27. Based on the above, the year-wise additional capital expenditure allowed for the period 2012-14 after adjustments of liabilities, is as under:-

	2012	2-13						
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	2013-14					
Additions Allowed	10779.71	2813.89	13596.57					
De-capitalization	0.00	0.00	0.00					
Less: Liabilities included in additional capital expenditure	0.00	2851.76	11737.92					
Add: Discharge of liabilities	0.00	1583.31	20052.13					
Net Additional capitalization	10779.71	1545.44	21910.78					

## Capital Cost for 2012-14

28. Accordingly, the capital cost considered for the purpose of tariff is as under:-

			(₹ in lakh)
	2012	-13	
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	2013-14
Opening Capital cost	220553.01	479791.81	481337.25
Additional capital expenditure allowed	10779.71	1545.44	21910.78
Closing Capital cost	231332.72	481337.25	503248.04
Average Capital cost	225942.87	480564.53	492292.64

## Debt: Equity

29. Regulation 12 of the 2009 Tariff Regulations provides as under:-

(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."

30. The Commission by order dated 20.4.2015 in Petition No. 66/GT/2012 had approved the debt:equity ratio of 76.61:23.39 for the period up to COD.

31. The petitioner has claimed debt equity ratio of 76.61:23.39 as on COD of the generating station. Further, the petitioner has submitted that the additional capital expenditure for 2012-13 has been funded through debt equity ratio of 76.61:23.39 for the additional capital expenditure incurred during 15.5.2012 to 4.3.2013 and 70:30 for additional capital expenditure incurred during 5.3.2013 to 31.3.2013 and for the year 2013-14. Accordingly, gross loan and equity amounting to ₹168965.66 lakh and ₹51587.35 lakh respectively for Unit-I and ₹190344.51 lakh and ₹58114.58 lakh respectively for Unit-II as approved vide order dated 20.4.2015 in Petition No. 66/2012 has been considered as the gross loan and equity as on COD. The debt equity ratio for additional capital expenditure has been considered as claimed by the petitioner.

										(₹	₹ in lakh)		
	As on COD of Unit-l 15.5.2012		capitalizatio	on during n COD of COD of	Debt Ec Contribution II	for Unit-			Additional capitalization		As on 31.3.2014		
	Amount	(%)	Amount	(%)	Amount	(%)	Amount	(%)	Amount	(%)	Amount	(%)	
Debt	168965.66	76.61%	8258.34	76.61%	190344.51	76.61%	1081.81	70.00%	15337.55	70.00%	383987.86	76.30%	
Equity	51587.35	23.39%	2521.37	23.39%	58114.58	23.39%	463.632	30.00%	6573.24	30.00%	119260.17	23.70%	
Total	220553.01	100.00%	10779.71	100.00%	248459.09	100.00%	1545.44	100.00%	21910.78	100.00%	503248.04	100.00%	

#### Return on Equity

32. 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."

33. It is observed from the audited account furnished by the petitioner for the period

2013-14 that the petitioner has not paid any tax. The Commission vide ROP of the

hearing dated 21.1.2016 had directed the petitioner to submit justification for claiming tax

for the period 2013-14 and in response, the petitioner has submitted that the Income Tax

Order in Petition No. 204/GT/2015

has been assessed for DVC as a whole on composite manner including Power, Irrigation and Flood control. It has stated that the individual station-wise tax assessment has never been done since the Return on Equity was positive figure on notional basis.

34. In view of the above, the base rate has been grossed up with respect to the actual tax rate applicable to the petitioner for the period 2012-14. However, since the petitioner's company as a whole has book loss as per audited accounts for 2013-14 and no tax has been paid, the applicable tax rate for the year 2013-14 has been considered as 'Nil'. However, for 2012-13 the petitioner has paid income tax on MAT rate. Applicable MAT rate considered as 20.008%. Return on equity has been worked out on the normative equity as on COD after accounting for the admitted actual additional capital expenditure for the period 2012-14 as under:-

			(₹ in lakh)	
	2012	-13		
	15.5.2012 to	5.3.2013 to	2013-14	
	4.3.2013	31.3.2013		
Opening notional equity	51587.35	112223.31	112686.94	
Addition due to Additional Capitalisation	2521.37	463.63	6573.24	
Closing Equity	54108.72	112686.94	119260.17	
Average Equity	52848.04	112455.12	115973.56	
Return on Equity (Base Rate )(%)	15.500	15.500	15.500	
Tax rate(%)	20.008	20.008	0.000	
Rate of Return on Equity (Pre Tax )(%)	19.377	19.377	15.500	
Return on Equity (annualized)	10240.36	21790.43	17975.90	

#### Interest on Loan

35. 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."

- 36. Interest on loan has been worked out as under:
  - a. The gross normative loan corresponding to 76.61% of the admitted capital cost is

₹168965.66 lakh as on 15.5.2012 (COD of Unit-I) and ₹367568.51 lakh as on

5.3.2013 (COD of Unit-II/ generating station).

b. Net loan opening as on 15.5.2012 is same as gross loan. Hence, cumulative

repayment of loan up to previous year/period is "nil".

- 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 tariff period 2012-14. Further proportionate adjustment has been made to the repayments corresponding to discharge of liabilities considered during the respective years on account of cumulative repayment adjustment. Also, proportionate adjustment has been made to the repayments on account of de-capitalizations considered in the additional capital expenditure approved above.
- e. The weighted average rate of interest has been considered for the year 2012-14 based on actual loan portfolio and calculations are enclosed as Annexure-I of the order.

37	Accordingly,	the c	alculations	for	interest	on	loan	aro	26	undor:-
57.	Accordingly,	the c	aiculations	101	IIIIeiesi	OII	IUali	ale	as	unuer

			(₹ in lakh)
	2012	2-13	2013-14
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	
Gross Notional Loan for the purpose of tariff in the instant petition	168965.66	367568.51	368650.32
Cumulative Repayment of Loan up to previous year	0.00	13,726.34	16,438.78
Net Opening Loan	168965.66	353842.17	352211.53
Addition due to Additional Capitalisation	8258.34	1,081.81	15,337.55
Repayment of Loan during the period	13726.34	2,712.45	36,118.80
Add: Repayment adjustment due to de- capitalisation during the year / period	0.00	0.00	0.00
Less: Repayment adjustment due to discharges during the year / period	0.00	0.00	0.00
Net Closing Loan	163497.66	352211.53	331430.28
Average Loan (Net)	166231.66	353026.85	341820.90
Weighted Average Rate of Interest on Loan	11.4201%	11.4201%	11.7966%

	201	2012-13	
	15.5.2012 to 5.3.2013 to		
	4.3.2013	31.3.2013	
Interest on Loan (annualized)	18,983.82	40,316.01	40,323.37

#### **Depreciation**

38. 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."

#### 39. Regulation 43 of the 2009 Tariff Regulations provides that:

"(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, 1948shall be applied for computation of depreciation of projects of DVC."

40. The respondent No. 3, MPPMCL vide affidavit dated 9.9.2016 has submitted that the petitioner has considered a rate of 8% for depreciation of buildings, 7.6% for power house and plant. It has further submitted that by applying these rates of depreciation the plant will be fully depreciated in less than 14 years which is arbitrary, illogical and incomprehensible. In view of above, the respondent has requested that depreciation may only be allowed in accordance with the rates provided in Appendix-III of the 2009 Tariff Regulations.

41. In response, the petitioner has submitted that the rate of depreciation stipulated by the Comptroller and Auditor General of India in terms of Section 40 of Damodar Valley Corporation Act, 1948 should be applicable for computation of depreciation for the projects of DVC.

42. The matter has been examined. Depreciation has been calculated by considering the weighted average rate of depreciation computed on the gross value of asset as per Auditor Certificate as on respective dates of COD and at the rates approved by C&AG. Further, the value of freehold land of ₹7476.00 lakh and ₹15241.00 lakh has been considered on COD of Units-I & II respectively. The Necessary calculation in support of depreciation are as under:

			(₹ in lakh)
	2012	-13	
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	2013-14
Opening Capital Cost	220553.01	479791.81	481337.25
Additional Capitalization	10779.71	1545.44	21910.78
Closing Capital Cost	231332.72	481337.25	503248.04
Average capital cost	225942.87	480564.53	492292.64
Value of freehold land	7476.00	15241.00	15241.00
Depreciation rate	7.54%	7.63%	7.34%
Depreciable value	196620.18	418791.18	429346.48
Balance depreciable value	196620.18	405064.84	412907.70
Depreciation*	13726.34	2712.45	36118.80

	2012-13		
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	2013-14
Depreciation (annualized)	17041.20	36668.25	36118.80
Cumulative depreciation at the end of the period (before adjustment)	13726.34	16438.78	52557.59
Add: Cumulative depreciation adjustment on account of un discharged liabilities	0.00	0.00	0.00
Less: Cumulative depreciation adjustment on account of de- capitalization	0.00	0.00	0.00
Cumulative depreciation after adjustment (at the end of the period)	13726.34	16438.78	52557.59

\* On pro-rata basis

## **Operation & Maintenance Expenses**

43. The Operation & Maintenance expenses considered for the purpose of tariff in accordance to Regulation 19(a) for 500 MW set of coal based generating station is as under:-

			(₹ in lakh)
	2012-13        15.5.2012 to      5.3.2013 to        4.3.2013      31.3.2013		
			2013-14
Norms (₹lakh/MW)	15.36	15.36	16.24
Capacity (MW)	500	1000	1000
O&M Expenses (pro-rata)	6186.08	1136.22	16240.00
O&M Expenses (annualized)	7680.00	15360.00	16240.00

44. In addition, the petitioner has claimed additional O&M expenses towards Mega insurance, CISF security and Share of Subsidiary activity in line with the expenditure allowed by the Commission for other power stations of the petitioner during the period 2009 – 14. The petitioner has claimed additional O&M for the years 2012-13 and 2013-14 as under:

(₹	in	lakh)

	2012-13		
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	2013-14
Mega Insurance	158.31	29.08	121.66
CISF Security	353.47	64.92	825.99
Share of Subsidiary Activity	1930.72	354.62	3449.20
Total	2442.51	448.62	4396.85

45. In response to the ROP of the hearing dated 12.1.2016, the petitioner has submitted the actual O&M expenditure of the generating station since the COD of Unit-I (i.e. 15.5.2012) as under:-

		(₹ in lakh)
SI. No.	Particulars	Amount
	2012-13	
Α.	Revenue Expenditure:	
1	Employees Remuneration	670.57
2	General, Distn, Administration and Other Exp	1299.81
	Revenue Expenditure of (A)	1970.38
В.	Share of Revenue Expenditure-allocated	
	Total Share of (B)	1390.05
	Total : Rev Expenditure+Share (A+B)	3360.43
C.	Other Direction Office Expenses	509.52
	Total : Rev Expenditure+Share (A+B+C)	3869.95
	2013-14	
Α.	Revenue Expenditure	
1	Employees Remuneration & Benefit	2597.69
2	Generation, Distribution, Administration and Other Expenses	7495.44
	Revenue Expenditure of (A)	10093.13
В.	Share of Revenue Expenditure-allocated	
3	Other Share including Corporate Overhead	4387.45
	Total Share of (B)	4387.45
	Total : Rev Expenditure+Share (A+B)	14480.58

46. The respondent No.3, MPPMCL has submitted that the additional O&M expenses claimed by the petitioner towards Mega Insurance, CISF and share of subsidiary activities are beyond the scope of the 2009 Tariff Regulation and should be borne by the petitioner without passing on the same to the beneficiaries.

47. In response, the petitioner has submitted that it has claimed only such items of expenditure which are not covered by the normative O&M Expenses and requested the Commission to allow such expenditure after necessary prudent check in terms of the Regulations.

48. The matter has been examined. It is noticed that the actual O&M expenses incurred for the generating station for the period 2012-14 are within the normative O&M expenses allowed to the generating station in terms of the regulations as specified by the Commission. In view of this, we find no reason to allow the additional O&M expenses as the normative O&M expenses are adequate to meet the additional O&M expenses incurred by the petitioner. Accordingly the claim of the petitioner for additional O&M expenses has not been allowed.

#### Interest on working capital

49. 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."



50. 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"

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

#### Fuel components in working capital

52. The petitioner has claimed the following cost of fuel component in working capital based on price and GCV of coal & secondary fuel oil procured and burnt for the preceding three months of December 2011, January 2012 and February 2012.

			(₹ in lakh)
	2012-13		2013-14
	15.5.2012 to	5.3.2013 to	
	4.3.2013*	31.3.2013*	
Cost of coal for 2 months	12722.76	2359.50	31896.89
Cost of secondary fuel oil for 2 months	358.08	54.72	739.77
* On nra rata basis			

\* On pro-rata basis

53. The matter is examined. The fuel component in working capital (on annualized basis) as approved by the Commission in order dated 20.4.2015 in Petition No. 66/GT/2012 has been considered as under:-

			(₹ in lakh <u>)</u>
	2012-13		
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	2013-14
Cost of coal for 2 months	15795.26	30595.35	30595.35
Cost of secondary fuel oil for 2 months	444.56	739.77	739.77

#### **Maintenance Spares**

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

3.00
8

\* On pro-rata basis

55. The maintenance spares (on annualised basis) as approved in order dated 20.4.2015 has been considered as under:

2012-13		2013-14
15.5.2012 to	5.3.2013 to	
4.3.2013	31.3.2013	
1536.00	3072.00	3248.00

#### Receivables

56. Receivables (on annualised basis) have been worked out on the basis of two months of fixed and energy charges as under:-

			(₹ in lakh)
	2012-13		2013-14
	15.5.2012 to	5.3.2013 to	
	4.3.2013	31.3.2013	
Variable charges for two Months	15795.26	30595.35	30595.35
Fixed charges for two months	10440.11	21742.79	21155.75
Total	26235.37	52338.14	51751.10



#### **Rate of Interest**

57. 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:

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, isdeclared under commercial operation, whichever is later, for the unit or station whose date of commercial operation falls on or before 30.06.2010.

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."

58. Accordingly, SBI base rate plus 350 basis points as on 1.4.2012 has been

considered on all the above components of working capital for the purpose of calculating

interest on working capital on annualized basis as under:-

			(₹ in lakh)
	2012	-13	2013-14
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	
Cost of coal – 2 months	15795.26	30595.35	30595.35
Cost of secondary fuel oil – 2 month	444.56	739.77	739.77
O&M expenses – 1 month	640.00	1280.00	1353.33
Maintenance Spares	1536.00	3072.00	3248.00
Receivables – 2 months	26235.37	52338.14	51751.10
Total working capital	44651.19	88025.26	87687.55
Rate of interest (%)	13.50%	13.50%	13.50%
Interest on working capital	6027.91	11883.41	11837.82

#### Other Elements of tariff

59. 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**

60. The Commission vide its 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....

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..."

61. The Commission vide order dated 29.7.2013 in Petition No. 268/GT/2012 had

allowed the year wise P&G liability of this generating station as stated below:-

"74.....Subsequently, in order dated 6.8.2009 in Petition No. 66/2005, the Commission had allowed the petitioner to recover 60% of the admitted liability 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 22.4.2013 in Petition No. 272/2010 had allowed the recovery of an amount of ₹92069.40 lakh, being 60% of ₹153449 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....

•••

76. The amount calculated as above is recoverable by the petitioner in five annual equal installments during the period 2009-14 in addition to the staggered P&G contribution amount allowed by the Commission for the period 2006-09. Based on the capital cost of ₹58554.83 lakh as on 31.3.2009, the year wise expenditure allowed for this generating station subject to truing-up is as under:"

62. The petitioner has submitted the actuarial valuation certificate as on 31.3.2006,

31.3.2009, 31.3.2011, 31.3.2012, 31.3.2013 & 31.3.2014 for all the Generating stations

and T&D system duly certified by the Actuary Shri Bhudev Chatterjee, towards Pension

and Gratuity (P&G) liability for the existing pensioners and employees. The details of

Pension & Gratuity liability claimed are as under:-

							(₹ in lakh)
Valuation		Claimed	2009-10	2010-11	2011-12	2012-13	2013-14
as on							
		40% of					
		total					
31.3.2006	169015	valuation in	13521.20	13521.20	13521.20	13521.20	13521.20
		five					
		instalments					



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

63. Thus, the Commission in order dated 29.7.2013 in Petition No. 268/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 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.

64. The respondent No. 3, MPPMCL has submitted that this kind of expenditures are already considered in normative O&M expenses being allowed to the petitioner and hence the same should not be allowed separately.

65. In response, the petitioner has submitted that the normative O&M expense includes only the contribution part of the Contributory Provident Fund which cannot be equated with the Pension liability, while liability of the employer in case of CPF ceases with making contribution for a particular year itself, liability for Pension is evaluated by an actuary considering the past services and other various factors, likely to be continued till the death of an employee and even beyond that up to the death of the spouse. In view of this the petitioner has submitted that the submission of the respondent is not tenable.

66. The matter has been examined. It is observed that the O&M expenses norms specified by the Commission under the 2009 Tariff Regulations and applicable for the period 2009-14 had taken into consideration the P&G liability as part of O&M expenses. In this background, the additional claim of the petitioner towards P&G liability for the period 2012-14 based on Actuarial valuation is not allowed.

#### **Contribution to Sinking Fund**

*67.* The Commission vide order dated 20.4.2015 in Petition No. 66/GT/2012 had allowed the Contribution towards Sinking fund annualized for 2012-14 as under:-

		(₹ in lakh)
2012	2013-14	
15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	
1460.24	1460.24	1562.46

68. The petitioner has submitted that the total debt borrowing is ₹7000 crore out of which the actual allocation to the generating stations of the petitioner is ₹3100 crore.

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

						(₹ in lakh)
	4400	Crore	2600	Crore	Total	7000
	bond		bond		Crore I	bond
Mejia TPS Units 5 and 6		12000		12800		24800
Chandrapura TPS Units 7 and 8		30000		15000		45000
Mejia TPS B		40000		00		40000
Durgapur TPS		53000		34200		87200
Koderma TPS		65000		30000		95000
Raghunathpur TPS-I		00		18000		18000
Total		200000		110000		310000

69. Further, the petitioner has allocated sinking fund contribution and interest for debt borrowing of ₹3100 Crore among the generating stations of DVC 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

70. The petitioner has claimed the contribution towards sinking fund (annualized) as hereunder:-

		(₹ in lakh)
2012	-13	
15.5.2012 to	5.3.2013 to	2013-14
4.3.2013	31.3.2013	
2042.87	375.22	4016.23

71. The respondent No. 3, MPPMCL has submitted that APTEL vide its judgment dated1.5.2012 had held that the petitioner did not press for the issue of sinking fund and

accordingly, the issue was not considered. The respondent has submitted that, therefore, the petitioner is not legally entitled for getting contribution to sinking fund and also as per Regulations, interest and contribution on sinking fund is not allowed as pass through in annual fixed charges and accordingly, it has prayed that the same maybe disallowed in the interest of justice.

72. In response, the petitioner has submitted that Regulation 53 (2) (iv) of Regulation 2014 categorically provides that the funds created under section 40 of the Damodar Valley Corporation Act, 1948 shall be considered as item of expenditure to be recovered through tariff and therefore, the comments of the respondent is misconceived and devoid of any merit.

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

			(₹ in lakh)
	2012	2013-14	
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	
Sinking fund Contribution (pro-rata)	2042.87	375.22	4016.23
Sinking fund Contribution (annualised)	2536.22	5072.44	4016.23



## **Cost of Common Offices**

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

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

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

"99. We have examined the matter. We notice that the claim of the petitioner is in accordance with the Commission order dated 6.8.2009 in Petition No. 66/2005 which was based on the judgment of the Tribunal dated 23.11.2007. Accordingly, the annual fixed cost for common offices has been worked out by taking the capital cost admitted by the Commission as on 31.3.2009 as the opening capital cost as on 1.4.2009. The annual fixed charges of Common offices so computed are then apportioned to each of the productive generating stations/T&D system of the petitioner in proportion to the capital cost of generating stations/T&D systems as admitted by the Commission as on 31.3.2009 in order dated 8.5.2013 in the Petition No. 272/2010. In the common office expenditure, the petitioner has claimed expenses for another two offices viz. R&D Centre and Information Technology (IT)

for the period 2009-14 in addition to Direction Office, Central Office, Other Offices and for Subsidiary activities. Since no justification has been submitted by the petitioner for inclusion of expenditure of these new offices (IT and R&D) in the common office expenditure, the expenditure on IT and R&D have not been considered at this stage. However, the same would be considered at the time of truing up, subject to prudence check based on the justification of such expenditure. Further, no justification has been submitted by the petitioner for additional capitalization on different offices during 2009-14 and the same will be considered at the time of truing up, subject to prudence check based on the justification of such expenditure...

. . .

102. We agree with submissions of the respondents/objectors that the expenses on Common Assets are required to be apportioned to all the operating units/ generating stations of the petitioner. In this view, we direct that the Common Office expenditure as allowed by this order would be subject to truing-up in terms of Regulation 6 of the 2009 Tariff Regulations and would be apportioned to all the units/generating stations and Transmission & Distribution systems of the petitioner which would are in operation during 2009-14."

76. The petitioner has claimed expenses pertaining to Common offices such as Direction office, Central office, R&D, IT centre, Subsidiary activities, Other offices etc. catering services in respect of each of its generating stations and the Transmission & Distribution systems. The additional capital expenditure claimed by the petitioner towards various offices is as under.

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

77. The petitioner has computed the Return on Equity, Interest on Loan and Depreciation on the Common Assets for the period 2009-14 based on the opening capital cost as on 1.4.2009 for different offices and has apportioned them to each generating stations and T&D system in proportion to the capital cost approved as on

31.3.2009. Further, the petitioner has allocated the cost of common offices among generating stations on the basis of the installed capacity. Accordingly, the annual fixed charges claimed towards Common Assets are as under:-

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Direction office	70.39	85.34	74.62	84.00	112.66
Subsidiary activities	559.31	562.75	560.41	561.71	565.56
Other offices	40.86	42.29	38.17	75.07	111.80
R&D	1082.23	1138.39	612.80	107.72	107.92
IT	0.00	0.00	0.00	0.00	19.87
Central Office	159.38	328.79	329.40	328.16	324.38
Total expenditure	1912.18	2157.57	1615.41	1156.66	1242.18

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

79. 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.

80. The respondent No. 3, MPPMCL has submitted that the component of tariff which are pass through for recovery from beneficiaries does not include this kind of expenditure and hence cannot be considered. Accordingly, it has prayed to disallow the claim of the petitioner.

81. In response, the petitioner has submitted that the first proviso to Regulation 53 (2)(i) provides that the capital expenditure incurred on Head office, Regional offices, Administrative and Technical centres of DVC shall also form part of the capital cost and thus, the comments of the respondent is devoid of any merit.

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

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

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

(₹ in lakh)

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

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

84. The annual fixed charges computed as above has been allocated to each generating stations, (including Mejia Unit 5 & 6) and T&D system of the petitioner in

proportion to the admitted capital cost as on 1.4.2009. Further, the annual fixed charges worked out above pertaining to generating stations have been allocated to different units on the basis of installed capacity. The cost of common offices apportioned for this generating station for 2009-14 tariff period is as under:-

_					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
	0.00	0.00	0.00	107.57	174.14

85. Further, the Common office expenditure in 2012-13 has been apportioned on the basis of number of days of operation as under:-

			(₹ in lakh)
2012-13		2013-14	
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	
Common office expenditure (pro-rata)	90.88	16.69	174.14
Common office expenditure (annualised)	112.83	225.65	174.14

#### **Secondary Fuel Oil**

86. 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

Order in Petition No. 204/GT/2015

LPSFy = The weighted average landed price of secondary fuel oil for the year in Rs. /ml"

87. The Commission in order dated 20.4.2015 has approved the cost of secondary fuel oil (annualised) as under:

		(₹ in lakh)
2012-13		2013-14
15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	
2667.35	4438.63	4438.63

88. The petitioner has claimed adjustment in cost of Secondary Fuel Oil in addition to cost of secondary fuel oil allowed vide order dated 20.4.2015 in Petition No. 66/GT/2012 for the period 2012-14. The petitioner has claimed adjustment on account of variation of weighted average landed price of secondary fuel oil. It is further observed that there is substantial variation in the weighted average price of Secondary Fuel Oil in the tariff period 2012-14 as compared to weighted average price of Secondary Fuel Oil in the tariff considered in said order dated 20.4.2015. We have considered the submissions of the parties. Since the fuel cost is pass through, the adjustment for Secondary Fuel Oil in addition to cost of Secondary Fuel Oil as allowed in order dated 20.4.2015 has been considered as under:

			(₹ in lakh)
	2012	2013-14	
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	
Cost of Secondary Fuel Oil (annualised)	2667.35	4438.63	4438.63



			(₹ in lakh)
	2012	2012-13	
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	
Adjustment to cost of Secondary Fuel Oil (pro rata)	(-)248.88	(-)1.07	(-)149.80
Adjustment to cost of Secondary Fuel Oil (annualised)	(-)301.37	(-)14.41	(-)149.80

## Annual Fixed charges for 2012-14

89. The annual fixed charges allowed for the period 2012-14 in respect of the generating station are summarized as under:-

			(₹ in lakh)
	2012		
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	2013-14
Depreciation	17041.20	36668.25	36118.80
Interest on Loan	18983.82	40316.01	40323.37
Return on Equity	10240.36	21790.43	17975.90
Interest on Working Capital	6027.91	11883.41	11837.82
O&M Expenses	7680.00	15360.00	16240.00
Cost of secondary fuel oil (for coal-based & lignite fired generating stations only)	2667.35	4438.63	4438.63
Sub-Total	62640.65	130456.73	126934.52
Share of Common Office Expenses	112.83	225.65	174.14
Additional O&M on account of Ash Evacuation, Mega Insurance, CISF Security and Share of subsidiary activities	0.00	0.00	0.00
Pension & Gratuity Contribution	0.00	0.00	0.00
Share of Sinking Fund	2536.22	5072.44	4016.23
Adjustment of secondary fuel oil	(-)301.37	(-)14.41	(-)149.80
Sub-Total	2347.68	5283.68	4040.57
Total Annual Fixed Charges	64988.32	135740.40	130975.09

Note: All figures are on annualized basis.

90. The difference in the annual fixed charges determined by order dated 20.4.2015 and those determined by this order shall be adjusted in accordance with Regulation 6(6) of the 2009 Tariff Regulations.

91. Petition No. 204/GT/2015 is disposed of in terms of the above.

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

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2012	Additions during the period	Total	
Loan (REC)	11.72%	312000.00	0.00	312000.00	
GOI Guaranteed Bond (Series 14)	10.30%	53000.00	0.00	53000.00	
GOI Guaranteed Bond (Series 15)	9.69%	0.00	30000.00	30000.00	
Total		365000.00	30000.00	395000.00	

# CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR TARIFF PERIOD 2012-14

		(₹ in lakh)
	2012-13	2013-14
Gross Ioan - Opening	3,65,000.00	3,95,000.00
Cumulative repayments of Loans upto previous year	20,800.00	41,600.00
Net Ioan - Opening	3,44,200.00	3,53,400.00
Add: Drawl(s) during the Year	30,000.00	-
Less: Repayment (s) of Loans during the year	20,800.00	20,800.00
Net loan – Closing	3,53,400.00	3,32,600.00
Average Net Loan	3,48,800.00	3,43,000.00
Weighted average Rate of Interest on Loans	11.42%	11.80%
Interest on loan	38,407.67	40,462.46

