CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 295/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 Hearing: 16.02.2016
Date of Order: 22.08.2016

In the matter of

Revision of tariff for Koderma Thermal Power Station, Unit No.I (500 MW) for the period from 18.7.2013 to 31.3.2014-Truing-up of tariff determined by order dated 6.7.2015 in Petition No. 219/GT/2013.

And in the matter of

Damodar Valley Corporation,
DVC Towers, VIP Road
Kolkata-700054 **…Petitioner**

Vs

1. 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) North Delhi Power Ltd.,
33 kV Sub-Station Building
Hudson Lane, Kingsway Camp,
New Delhi-110009

2. Haryana Power Generation Corporation Ltd.
Shakti Bhawan, Sector – 6,
Panchkula – 134109 **…Respondents**

Parties present:

For Petitioner: Shri D.K. Aich, DVC
Shri A.Biswas, DVC
Shri B.P.Kazal, DVC

For Respondents: None

ORDER

The petitioner, DVC has filed this petition for revision of tariff of Koderma Thermal Power Station, Unit No. I (500 MW) (‘the generating station’) for the period from 18.7.2013 to 31.3.2014 after truing-up exercise, based on Regulation 6(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (“the 2009 Tariff Regulations”).

2. The project comprises of two units of 500 MW each. Unit No.I had been declared under commercial operation on 18.7.2013 and Unit-II on 14.6.2014. Petition No. 219/GT/2013 was filed by the petitioner for determination of tariff from the COD of Unit-I (18.7.2013) till 31.3.2014 and the Commission by order dated 6.7.2015 approved the capital cost and the annual fixed charges of the generating station as detailed under:

Capital Cost

(₹ in lakh)

	2013-14
Opening Capital cost	232735.98
Additional Capital Expenditure	0.00
Closing Capital cost	**232735.98**
Average Capital cost	**232735.98**

Annual Fixed Charges

(₹ in lakh)

	2013-14
	18.7.2013 to 31.3.2014
Depreciation	16351.56
Interest on Loan	18192.56
Return on Equity	8757.89
Interest on Working Capital	4451.65
O&M Expenses	8120.00
Cost of Secondary fuel oil	1991.60
Total	**57865.26**
Contribution to Sinking fund	2128.42
Total	**59993.68**

3. 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."

4. The petitioner presently seeks revision of the annual fixed charges based on the actual additional capital expenditure incurred for the period from 18.7.2013 to 31.3.2014 in accordance with clause (1) of Regulation 6 of the 2009 Tariff Regulations.

5. The capital cost claimed by the petitioner is as under:

(₹ in lakh)

	18.7.2013 to 31.3.2014
Opening Capital cost	**232735.98**
Actual/projected additional capital expenditure	9014.52
Closing Capital Cost	**241750.50**

6. The annual fixed charges claimed by the petitioner are as under:

(₹ in lakh)

	18.7.2013 to 31.3.2014
Depreciation	12084.19
Interest on Loan	13256.83
Return on Equity	9710.51
Interest on Working Capital	2936.92
O&M Expenses	5717.37
Cost of Secondary fuel oil	1402.31
Total	**45108.13**
Share of Common Office Expenditure	66.22
Share of Pension and Gratuity	2820.15
Contribution & interest on sinking fund	7009.87
Adjustment for secondary fuel oil	257.04
Additional O&M due to CISF Security, Mega Insurance and share of Subsidiary Activities	4477.24
Total	**59738.65**

7. This petition was clubbed with Petition No.296/GT/2015 filed by the petitioner for determination of tariff of Unit Nos. I & II of the generating station for the period 2014-19 and the Commission after directing the petitioner to file additional information reserved its order in these petitions. In compliance with the directions, the petitioner has filed additional information with copy to the respondents. None of the respondents have filed replies in the matter. We now proceed to revise the annual fixed charges of this generating station as claimed in this petition after truing-up exercise based on the submissions and documents available on record as stated in the subsequent paragraphs. The annual fixed charges claimed in Petition No. 296/GT/2015 in respect of this generating station for the period 2014-19 shall however be determined by a separate order.

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. The annual fixed charges claimed by the petitioner is based on opening capital cost of ₹272905.88 lakh as on COD of Unit-I (18.7.2013) as approved by Commission in order dated 6.7.2015 in Petition No.219/GT/2013. Accordingly, the capital cost as on COD Unit-I, after removal of un-discharged liabilities amounting to ₹40169.90 lakh, works out to ₹232735.98 lakh, on cash basis as on 18.7.2013. Further, out of the un-discharged liabilities for ₹40169.90 lakh deducted as on COD of Unit-I, the petitioner has discharged liabilities amounting to ₹8691.356 lakh in 2013-14 and the same is considered as additional capital expenditure.

Actual Additional Capital Expenditure during 2009-14

10. 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."

11. The petitioner in Petition No. 219/GT/2013 had claimed the projected additional capital expenditure of ₹337.165 crore in 2013-14. In response to the directions of the Commission, the petitioner had submitted that the details of the additional capital expenditure will be furnished after the declaration of COD of Unit-II of the generating station. Since no information/documents were filed by the petitioner pursuant to declaration of COD of Unit-II (on 14.6.2014) the additional capital expenditure claimed by the petitioner was not considered in order dated 6.7.2015. However, liberty was granted to the petitioner in the said order to file the details at the time of revision of tariff based

on truing-up exercise for consideration of the Commission. The relevant portion of the order dated 6.7.2015 is extracted as under:

> *"52. The petitioner in Form-9 has claimed the projected additional capital expenditure during 2013-14 for ₹337.165 crore. The petitioner was directed vide letter dated 9.10.2013 to furnish the Form-9 duly complete in all respects indicating the asset-wise breakup of the claim for additional capital expenditure in 2013-14 along with justification against each items claimed. In response, the petitioner vide affidavit dated 13.12.2013 has submitted that the details of the additional capital expenditure will be furnished after the declaration of COD of Unit-II of the generating station. Though Unit-II has achieved commercial operation on 14.6.2014, no information/document pertaining to the details of the additional capital expenditure claimed has been submitted by the petitioner. In the absence of any information /details, the claim of the petitioner for additional capital expenditure has not been considered in this order. The petitioner is however granted liberty to submit Form-9, duly complete in all respects, indicating the asset-wise break-up of the claim for additional capital expenditure duly certified by Statutory auditors, at the time of revision of tariff of the generating station, based on truing up exercise and the same shall be considered in accordance with law.***

12. In terms of the liberty granted by the Commission in order dated 6.7.2015 as stated above, the petitioner in Form -9 of the petition vide affidavit dated 24.11.2015 has claimed the actual additional capital expenditure from 18.7.2013 to 31.3.2014 as under:

(₹in lakh)

	18.7.2013 to 31.3.2014
Works within approved cost	323.17

13. The petitioner in Form-9 of the petition had not furnished the asset-wise break-up of the claim for actual additional capital expenditure. Accordingly, the Commission vide ROP of the hearing dated 16.2.2016 directed the petitioner to furnish the asset-wise break-up of the actual additional capital expenditure claimed in 2013-14 duly certified by Auditors, along with the relevant provision of the regulation under which the claims have been made. In response, the petitioner vide affidavit dated 21.3.2016 has furnished that the actual additional capital expenditure of Rs. 323.17 lakh incurred in 2013-14 duly certified by statutory auditors. The petitioner has also submitted that the expenditure claimed pertains to Coal handling plant /coal yard which are within the original scope of work and within the cut-off date cut-off date of the generating station and is claimed under Regulation 9(1) (i)&(ii) of the 2009 Tariff Regulations.

14. Since the actual additional capital expenditure of ₹323.17 lakh in 2013-14 is in respect of Coal handling plant /coal yard which are within the original scope work and within the cut-off date of the generating station, the expenditure claimed is allowed under Regulation 9(1)(ii)of the 2009 Tariff Regulations.

15. Based on the above discussions, the capital cost considered for the purpose of tariff is as under:

(₹ *in lakh*)

	18.7.2013 to 31.3.2014
Opening Capital cost	232735.98
Admitted additional capital expenditure	323.17
Closing Capital cost	**233059.15**

16. Considering the discharge of liabilities during the 2013-14, the net additional capital expenditure allowed is as under:

(₹ *in lakh*)

	18.7.2013 to 31.3.2014
Admitted additional capital expenditure (excluding discharges)	323.17
Add: Discharges of liabilities (against allowed assets / works)	8691.35
Net additional capital expenditure allowed	**9014.52**

17. Accordingly, the capital cost approved for the purpose of tariff for the period from 18.7.2013 to 31.3.2014 is as under:

(₹ *in lakh*)

	18.7.2013 to 31.3.2014
Opening Capital Cost	232735.98
Add: Additional capital expenditure allowed	9014.52
Closing Capital Cost	**241750.50**
Average Capital Cost	**237243.24**

Debt-Equity Ratio

18. The Commission in its order dated 6.7.2015 in Petition No. 219/GT/2015 had considered the debt-equity ratio of 80.58:19.42 based on details submitted by the petitioner. The petitioner in this petition has not revised the details of the actual loan position and cumulative cash expenditure as submitted earlier. As such, the debt-equity ratio of 80.58:19.42 has been considered for the purpose of tariff.

Return on Equity

19. The petitioner has claimed return on equity considering the base rate of 15.5% and applicable tax rate (MAT) of 19.377%. However, it is observed that no tax has been paid by the petitioner as it had incurred loss in the year 2013-14. Hence, MAT rate is not applicable.

Accordingly, the effective tax rate considered for the year 2013-14 is 0.00%. Based on the above, the rate of ROE works out to 15.50% for the year 2013-14. Accordingly, return on equity has been worked out after accounting for the projected additional capital expenditure as under:

(₹ in lakh)

	18.7.2013 to 31.3.2014
Notional Equity- Opening	45197.33
Addition of Equity due to additional capital expenditure	2704.36
Normative Equity-Closing	47901.68
Average Normative Equity	46,549.51
Return on Equity (Base Rate)	15.500%
Tax Rate for period	0.00
Rate of Return on Equity (Pre Tax)	15.500%
Return on Equity (Pre Tax)-(annualised)	**7215.17**

Interest on loan

20. Interest on loan has been worked out as mentioned below:

(a) The gross normative loan corresponding to 80.58% of the admitted capital cost is ₹187538.65 lakh as on 18.7.2013.

(b) Net loan opening as on 18.7.2013 is same as the gross loan. Hence, cumulative repayment of loan up to previous year/period is 'nil'.

(c) Addition to normative loan on account of approved additional capital expenditure has been considered.

(d) Depreciation allowed for the period has been considered as repayment of normative loan.

21. The necessary calculations for the interest on loan are as under:

(₹ in lakh)

	18.7.2013 to 31.3.2014
Net Loan Opening	187538.65
Addition due to Additional capitalisation	6310.17
Repayment of loan during the year	11882.90
Net Loan Closing	181965.91
Average Loan	184752.28
Weighted Average Rate of Interest on Loan	11.1879%
Interest on Loan	**20669.88**

Depreciation

22. Depreciation has been calculated considering the weighted average rate of depreciation computed on the gross value of asset furnished vide affidavit dated 10.4.2014 at the rates approved by C&AG. Further, the value of freehold land amounting to ₹6337.29 lakh has been

considered while calculating the depreciable value. The necessary calculations in support of depreciation are as shown below:

(₹ in lakh)

	2013-14 18.7.2013 to 31.3.2014
Opening capital cost	232735.98
Additional capital expenditure	9014.52
Closing capital cost	241750.50
Average capital cost	237243.24
Value of freehold land	6337.29
Rate of Depreciation	7.1136%
Depreciable value @ 90%	207815.36
Balance depreciable value	207815.36
Depreciation	11882.90
Depreciation (annualized)	**16876.50**
Cumulative depreciation at the end	11882.90

Normative Annual Plant Availability Factor

23. The Normative Annual Plant Availability factor of 85% as considered in order dated 6.7.2015 has been considered for the purpose of tariff.

O&M expenses

24. The O&M expenses for Unit-I based on the O&M expense norms specified under Regulation 19 of the 2009 Tariff Regulations as allowed in order dated 6.7.2015 is allowed is as under:

(₹ in lakh)

	18.7.2013 to 31.3.2014 (257 days)
O&M Expenses (*annualized*)	8120.00
O&M Expenses (*Pro rata*)	5717.36

25. In addition, the petitioner has claimed additional O&M expenses on Mega insurance, CISF Security and Share of Subsidiary activity as given under and has submitted that the same may be allowed in line with the expenditure allowed by the Commission for other power generating stations of the petitioner during 2009-14.

(₹in lakh)

	2013-14
Mega Insurance	95.96
CISF Security	1592.25
Share of Subsidiary activities	2789.03
Total	**4477.24**

26. In this regard, the Commission vide ROP of the hearing dated 16.2.2016 directed the petitioner to furnish the following additional information:

a) Reasons for not claiming the additional O&M expenses in original tariff petition;
b) Documentary evidence for requirement of additional CISF security for the plant;
c) Details of expenditure on subsidiary activity indicating the name of all subsidiary activities with justification for each activity;
d) Actual O&M expenditure of the generating station for the period from COD of Unit-I to 31.3.2014.

27. In response, the petitioner vide affidavit dated 21.3.2016 has submitted that the additional O&M expenses was not claimed in Petition No. 219/GT/2013 due to non-finalisation of the Audited book of accounts for the year 2013-14. It has also submitted that Unit-I was declared under commercial operation on 18.7.2013 and the claim for additional O&M expenses towards CISF security, Mega insurance & Share of subsidiary activities could not be submitted in the said tariff petition filed on 16.12.2013. Accordingly, the petitioner has submitted that the additional O&M expenses has been claimed for 257 days from 19.7.2013 to 31.3.2014 which was claimed only after the finalization of accounts for 2013-14 in June, 2014.Based on the submissions of the petitioner, we proceed to consider the claims of the petitioner under this head as under:

Mega Insurance

28. The Commission in its order dated 8.5.2013 in Petition No. 272/2010 (determination of tariff of DVC generating stations and inter-state transmission systems for 2006-09) had allowed the claim of the petitioner for additional O&M expenses on account of Mega Insurance observing as under:

> *"142. Considering the location of the generating stations of the petitioner and the security of the generating station against any acts of sabotage/terrorism and keeping in view that the normalized O&M expenses allowed to the generating stations of the petitioner for 2006-09 do not include expenses on insurance on this count, we are inclined to grant the expenses incurred towards mega insurance, as additional O&M expenses, in relaxation of the provisions of the 2004 Tariff Regulations.*

29. Thereafter, in some of the petitions filed by the petitioner for determination of tariff of the generating stations and inter-state transmission systems for the period 2009-14, the petitioner had claimed additional O&M expenses on various heads including Mega Insurance. The Commission, in line with the decision in order dated 8.5.2013 in Petition No. 272/2010 had allowed the additional O&M expenses on account of Mega Insurance for the period 2009-14. The relevant portion of the order dated 9.7.2013 in Petition No. 269/GT/2012 (in respect of Mejia TPS I to III) is extracted as

under:

> "*61.In line with the said order dated 8.5.2013, the Mega Insurance claimed by the petitioner for the period 2009-14, is allowed as additional O&M expenses in relaxation of the provisions of the 2009 Tariff Regulations"*

30. Accordingly, in line with the above decisions, the claim of the petitioner in this petition for additional O&M expenses on account of Mega Insurance of ₹95.96 lakh for 2013-14 (18.7.2013 to 31.3.2014) is allowed in relaxation of the provisions of the 2009 Tariff Regulations.

CISF Security

31. In some of the petitions filed by the petitioner for determination of tariff of the generating stations and inter-state transmission systems for the period 2009-14, the petitioner had claimed additional O&M expenses on various heads including CISF security. The Commission, in line with the decision in order dated 8.5.2013 in Petition No. 272/2010 had allowed the additional O&M expenses on account of Mega Insurance for the period 2009-14. The relevant portion of the order dated 9.7.2013 in Petition No. 269/GT/2012 (in respect of Mejia TPS I to III) is extracted as under:

> *"63. 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. However, the petitioner is directed to furnish the generating station- wise CISF personnel deployed/employed in each of its generating stations 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."*

32. The petitioner has claimed expenditure of Rs 1592.25 lakh for 2013-14 as additional O&M expenses towards deployment of CISF security for this generating station. The petitioner has also submitted the details of the CISF personnel deployed/employed in this generating station during the year 2013-14 as under:

	2013-14
No of CISF Sanctioned	323
No of CISF deployed	289

33. We have examined the matter. Since it is a new station and considering the location and significant threat perception to the generating station and the personnel employed there, we in line with the decision in order dated 9.7.2013 in Petition No. 269/GT/2012 allow the claim of the petitioner for additional O&M on this count in relaxation of the provisions of the 2009 Tariff Regulations.

Share of subsidiary activities

34. The Commission in order dated 9.7.2013 in Petition No.269/GT/2012 had allowed the additional O&M expenses towards the share of subsidiary activities on the ground that the normative O&M expenses for 2009-14 allowed to the generating station do not include revenue expenses on subsidiary activities. However, the said amount was limited to the expenditure required for soil conservation, in terms of the judgment of the Tribunal date 23.11.2007 in Appeal No. 273/2006.

35. The petitioner has claimed expenditure of Rs 2789.03 lakh towards the share of subsidiary activities for 2013-14 as additional O&M expenses. The Commission vide ROP of the hearing dated 16.2.2016 directed the petitioner to submit information on the following:

> *"Details of expenditure on subsidiary activity indicating the name of all subsidiary activities with justification for each activity"*

36. In response, the petitioner vide affidavit dated 21.3.2016 has submitted that it has been undertaking subsidiary activities in the Damodar Valley area since its inception. It has also submitted that in many respects, the need for increasing the subsidiary activities has now arisen particularly in the context of the urgent need in regard to soil erosion, conservation of reservoirs, check dam, flood control, afforestation because of the increasing impact of environment. In addition, the petitioner has stated that there is also a need to increase social integration activities by establishing hospitals, schools, drinking water supply, sanitation, public health, training scheme, roads etc. The petitioner has also pointed out that the Commission had allowed the expenditure towards subsidiary activities in its order dated 9.7.2013 in Petition No.269/GT/2012. The matter has been examined. It is noticed that despite specific direction of the Commissions to submit details of subsidiary activities with justification with each activity, the petitioner has not furnished any detail of the subsidiary activities relating to Soil erosion. In absence of any such details of the subsidiary activities, we are not inclined to consider the claim of the petitioner on this count. Hence, the claim of the petitioner towards share of subsidiary activity for this generating station for 2013-14 has not been considered.

37. Based on the above discussions, the additional O&M expenses claimed and allowed under various heads for the year 2013-14 is summarized as under:

(₹ in lakh)

	Claimed	**Allowed**
CISF Security	1592.25	1592.25
Mega Insurance	95.96	95.96
Share of subsidiary activities	2789.03	0.00
Total	**4477.24**	**1688.21**

38. Accordingly, the additional O&M expenses allowed (over and above the normative O&M expenses) for this generating station is summarised as under:

(₹ in lakh)

	18.7.2013 to 31.3.2014
(a) Normative O&M expenses allowed as per Regulation 19 of the 2009 Tariff Regulations	5717.37
(b) Additional O&M expenses	
(i) CISF Security	1592.25
(ii) Mega Insurance	95.96
(iii) Share of Subsidiary Activity	0.00
Total additional O&M expenses allowed (i to iii)	**1688.21**
Total O&M expenses allowed (a+b)	**7405.58**

39. The additional O&M expenses of ₹1688.21 lakh for 2013-14 allowed as above shall however not be considered in the computation of Maintenance Spares and O&M expenses (for 1 month) in the working capital.

Interest on Working Capital

40. Regulation 18(1)(a) of the 2009 Tariff Regulations provides that the working capital for coal based generating stations shall cover:

> *(i) Cost of coal for 1.5 months for pit-head generating stations and two months for non-pithead generating stations, for generation corresponding to the normative annual plant availability factor;*
>
> *(ii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel oil, cost of fuel oil stock for the main secondary fuel oil;*
>
> *(iii) Maintenance spares @ 20% of operation and maintenance expenses specified in regulation 19.*
>
> *(iv) Receivables equivalent to two months of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor; and*
>
> *(v) O&M expenses for one month.*

41. 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.

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

43. The fuel components in working capital for the year 2013-14 as allowed in order dated 6.7.2015 has been considered as under:

(₹ in lakh)

	2013-14
	18.7.2013 to 31.3.2014
Coal stock for 2 months (annualised)	10723.89
Oil stock for 2 months (annualised)	331.93

Cost of Secondary Fuel Oil

44. The cost of Secondary fuel oil for 2013-14 as allowed in order dated 6.7.2015 has been considered as under:

(₹ in lakh)

	2013-14
	18.7.2013 to 31.3.2014
Cost of Secondary fuel Oil (pro rata)	1402.31
Cost of Secondary fuel Oil (annualised)	1991.60

45. The petitioner has claimed expenditure of ₹257.04 lakh in 2013-14 towards cost of secondary fuel oil and has submitted that expenditure on secondary fuel oil has been claimed as a part of the annual fixed charges in terms of Regulation 20(2) of the 2009 Tariff Regulations.

46. The cost of Secondary fuel oil based on the weighted average price from 18.7.2013 to 31.3.2014 is worked out as Rs 1659.35 lakh. Hence, the secondary fuel price adjustment (1659.35-1402.31) from 18.7.2013 to 31.3.2014 is in order and allowed as under.

(₹ in lakh)

	2013-14
	18.7.2013 to 31.3.2014
Cost of Secondary fuel Oil (pro rata)	257.04
Cost of Secondary fuel Oil (annualised)	365.06

Maintenance Spares

47. The cost of maintenance spares as allowed in order dated 6.7.2015 has been considered as under:

(₹ in lakh)

	2013-14 (18.7.2013 to 31.3.2014)
Cost of Maintenance of spares (pro rata)	1143.47
Cost of Maintenance of spares (annualized)	1624.00

O&M Expenses for 1 month

48. O & M expenses for 1 month claimed by the petitioner as allowed in order dated 6.7.2015 has been considered as under:

(₹ in lakh)

	2013-14 (18.7.2013 to 31.3.2014)
O&M Expenses for 1 month (pro rata)	476.45
O&M Expenses for 1 month (annualised)	676.67

Receivables

49. Receivables on the basis of two months of fixed and energy charges (based on primary fuel only) have been worked out as under:

(₹ in lakh)

	2013-14
	18.7.2013 to 31.3.2014
Variable Charges -2 months	10723.89
Fixed Charges - 2 months	9892.94
Total	**20616.83**

50. SBI Base Rate plus 350 basis points as on 1.4.2013 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)

	2013-14
	18.7.2013 to 31.3.2014
Cost of coal – 2 months	10723.89

Cost of secondary fuel oil – 2 months	331.93
O&M expenses – 1 month	676.67
Maintenance Spares	1624.00
Receivables – 2 months	20616.83
Total working capital	**33973.32**
Rate of interest	13.200%
Interest on working capital	**4484.48**

Operational Norms

51. The following norms of operation as considered in order dated 6.7.2015 has been considered as under:

Gross Station Heat Rate (kCal/kWh)	2443
Auxiliary Power Consumption (%)	6.0
Specific Fuel Oil Consumption (ml/kWh)	1.0

52. In addition to the above, the petitioner has claimed additional items as part of the annual fixed charges as detailed under:

	2013-14 18.7.2013 to 31.3.2014
Share of Common Office Expenditure	66.22
Share of Pension and Gratuity	2820.15
Contribution & Interest on sinking fund	7009.87
Adjustment for secondary fuel oil	257.04
Additional O&M expenses allowed	**4477.24**

Contribution to Sinking Fund

53. 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. Regulation 43(2)(iv) of the 2009 Tariff Regulations provides as under:

> ***"Funds under Section 40 of the Damodar Valley Corporation Act, 1948****: The Fund(s) established in terms of section 40 of the Damodar Valley Corporation Act, 1948 shall be considered as items of expenditure to be recovered through tariff*."

54. As per judgment of the Appellate Tribunal for Electricity (Tribunal) dated 23.11.2007 in Appeal No. 273/2006, sinking fund, established with the approval of Comptroller and Accountant General of India vide letter dated December 29, 1992 under the provision of Section 40 of the DVC Act, 1948 is to be taken as an item of expenditure to be recovered through tariff. Accordingly, the contribution towards sinking fund created for redemption of bond was allowed in order dated 6.7.2015 in Petition No. 219/GT/2014. The relevant portion of the order is extracted as under:

"87. It emerges from the above that the funds are being managed outside and the interest which accrues on the investment are being credited to the fund annually. Hence the claim of the petitioner towards interest on sinking fund cannot be considered as there is no actual cash outlay towards interest. Accordingly, the amount allowed towards contribution to the sinking fund has been worked out as under"

(₹ in lakh)

	18.7.2013 to 31.3.2014
Contribution to sinking fund (pro rata)	1498.64
Contribution to sinking fund (annualized)	2128.42

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	**2013-14**
	7009.87	
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.

Pension & Gratuity Contribution

58. The Commission while determining the tariff of the generating & transmission systems of the petitioner in its order dated 3.10.2006 in Petition No. 66/2005 had allocated an amount of ₹14952 lakh towards the pension and gratuity contribution of Mejia, TPS, Unit-IV of the petitioner out of the total admitted claim of ₹169015 lakh allocated towards 'power business'. Subsequently, in order dated 6.8.2009 in Petition No. 66/2005, the Commission had allowed the petitioner to recover 60% of the said 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 ₹14952 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.

59. The petitioner, in this petition has claimed expenditure of ₹2820.15 lakh towards share of Pension & Gratuity liability for this generating station. The petitioner has also submitted the actuarial valuation 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, towards Pension and Gratuity (P&G) liability for its existing pensioners and existing employees. The matter has been examined. It is observed that the normative O&M expenses allowed for 500 MW capacity generating stations had considered the impact of pension and gratuity under the 2009 Tariff Regulations applicable for the period 2009-14. In this regard, the Statement of Reasons for the O&M expense norms specified under the 2009 Tariff Regulations is referred 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."*

60. Accordingly, the petitioner's claim towards the share of Pension & Gratuity liability for this generating station cannot be considered separately. These expenses shall be met from the normative O&M expenses allowed to the generating station under the 2009 Tariff Regulations.

Cost of Common Offices

61. The petitioner has claimed expenses pertaining to Common offices such as Director Office, Central office, R&D, IT centre, Subsidiary activities, Other offices etc. in respect of each of the generating stations as well as the Transmission & Distribution systems. The petitioner has computed the Return on Equity, Interest on Loan and Depreciation on the Common Assets for the period 2009-14 based on the capacity of the generating stations. The details of the total Common office expenditure with regard to the generating station and T&D system for 2009-14 as submitted by the petitioner is as under:

(₹in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	885.31	1007.38	685.81	363.72	426.94
Interest on loan	235.67	253.75	168.39	158.26	149.43
Return on equity	791.20	896.44	761.21	634.67	665.82
Total of Generating Station and T&D systems	**1912.18**	**2157.57**	**1615.41**	**1156.66**	**1242.18**

62. Accordingly, the petitioner has claimed the total amount of ₹1242.18 lakh for generating stations and T&D systems during 2009-14 which includes an amount of ₹1073.91 lakh for the generating stations and ₹168.27 lakh for T&D systems for 2009-14. The petitioner has apportioned the amount of ₹1073.91 lakh for all generating stations on the basis of capacity of the generating stations and accordingly for this generating station (with a capacity of 500 MW), the petitioner has claimed ₹66.22 lakh in 2013-14 (18.7.2013 to 31.3.2014) towards Common office expenditure.

63. It is observed that the O&M expense norms specified under the 2009 Tariff Regulations applicable for the period 2009-14 do cover the expenditure incurred on corporate expenses apportioned to each of the generating stations. The commission has considered O&M norms for Koderma TPS as specified in 2009 Tariff Regulations for 500 MW unit size which does not include component on account of ROE of corporate office expenses. Hence, the element on account of ROE only has been considered separately in the case of Koderma.

64. The petitioner for the year 2013-14 under the head of cost of common offices has claimed an amount of ₹665.82 lakh as the Return on Equity element to be considered for allocation to its different generating stations and T&D system. The ratio of allocation between Generation and T&D as claimed is 86.45:13.55 {1073.91/1242.18 and 168.27/1242.18}. Accordingly, the amount towards Return on Equity element to be considered for allocation to its different generating stations works out to ₹575.63 lakh. Further, the allocation to this generating station on the basis of generation capacity in operation during 2013-14 i.e 500 MW and on the basis of number of days of operation gets worked out as ₹35.49 lakh [(500/5709)*(257/365)* 575.63]. As has been noted in para 19 above, the claim of petitioner towards return on equity element is after consideration of base rate of 15.5% and grossed up rate of 19.377% with applicable tax rate i.e. MAT rate.

Also noted is the fact that the petitioner has not paid any tax in the FY 2013-14 as it has incurred loss. Accordingly the allowable amount towards Return on Equity element for allocation to this generating station under the head of cost of common offices is ₹28.39 lakh (35.49*15.5/19.377) for the period 18.07.2013 to 31.03.2014. On annualized basis this figure would be ₹40.32 lakh (28.39*365/257).

Annual Fixed Charges

65. The annual fixed charges for the generating station for the period from 18.7.2013 to 31.3.2014 are approved as under:

(₹ in lakh)

	2013-14
	18.7.2013 to 31.3.2014
Depreciation	16876.50
Interest on Loan	20669.88
Return on Equity	7215.17
Interest on Working Capital	4484.48
O&M Expenses	8120.00
Cost of Secondary Fuel Oil	1991.60
Total	**59357.63**
Share of Common Office Expenditure	40.32
Share of Pension and Gratuity	0.00
Contribution & interest on sinking fund	4375.48
Adjustment for secondary fuel oil	365.06
Additional O&M due to CISF Security, Mega Insurance and share of Subsidiary Activities	2397.65
Total	**66536.15**

***Note:** 1) All figures are on annualized basis. 2) All the figures under each head have been rounded. The figure in total column in each year is also rounded. Because of rounding of each figure the total may not be arithmetic sum of individual items in columns.*

66. The Energy Charge Rate of 183.858 paise/kWh allowed vide order dated 6.7.2015 remain unchanged. The Energy charge on month to month basis shall be billed by the petitioner as per Regulation 21 (6) (a) of the 2009 Tariff Regulations.

67. The difference between the tariff determined by this order and the tariff already recovered from the respondents/consumers shall be adjusted in accordance with the Regulation 6(6) of the 2009 Tariff Regulations.

68. The tariff approved above is subject to the outcome of the Civil Appeals pending before the Hon’ble Supreme Court relating to the determination of tariff of the generating stations of the petitioner for 2006-09.

69. Petition No. 295/GT/2015 is disposed of in terms of the above.

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