CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 467/GT/2014

Coram:

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

Date of Hearing : 11.7.2016
Date of Order : 29.7.2016

In the matter of:

Revision of tariff of Panchet Hydel Power Station Unit-I &II (2x40 MW) for the period 2009-14 after truing-up exercise- Truing-up of tariff determined by order dated 7.8.2013 in Petition No. 272/GT/2012.

And in the matter of:

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

Versus

1. West Bengal State Electricity Distribution Company Limited
Block 'DJ' Sector-11, Salt Lake City,
Kolkata-700 091

2. Jharkhand BijliVitran Nigam Limited
Engineering Building, HEC, Dhurwa,
Ranchi- 834 004 **……….Respondents**

Damodar Valley Power Consumers Association (DVPCA) **.......Objector**

Parties present:
For Petitioner: Shri M. G. Ramachandran, Advocate, DVC
Mrs Poorva Saigal, Advocate, DVC
Shri D. K. Aich, DVC
Shri A. Biswas, DVC
Shri Subrata Ghosal, DVC

For Respondents Shri Sanjay Sen, Sr. Advocate, Damodar Valley Power Consumers' Association (DVPCA)
Shri Ruth Elwn, Advocate, DVPCA
Shri Rajiv Yadav, Advocate, DVPCA

ORDER

This petition has been filed by the petitioner, Damodar Valley Corporation (DVC), for revision of tariff based on actual expenditure in respect of Panchet Hydel Power Station, Units I & II (2 x 40 MW) (hereinafter referred to as "the generating station") for the period from 1.4.2009 to 31.3.2014, in terms of Clause (1) of Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations").

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

Unit-I	December, 1959
Unit-II	March, 1991

3. The Commission vide order dated 3.10.2006 in Petition No. 66/2005 had determined tariff in respect of the generating stations and inter-state transmission systems of the petitioner, after allowing a special dispensation to the petitioner to continue with the prevailing tariff till 31.3.2006. Against the Commission's order dated 3.10.2006, the petitioner filed Appeal No. 273/2006 before the Appellate Tribunal for Electricity (Tribunal) on various issues. Similarly, appeals were also filed before the

Tribunal by some of the objectors/consumers challenging the order dated 3.10.2006. The Tribunal by its Judgment dated 23.11.2007 disposed of the said appeals on various grounds and remanded the matter to the Commission for de novo consideration of the tariff order dated 3.10.2006 in terms of the findings and observations made therein and according to the law. Against the Judgment dated 23.11.2007, some of the parties namely, the Central Commission (Civil Appeal No. 4289/2008) and few others filed Civil Appeals before the Hon'ble Supreme Court which are pending. Therefore, in terms of the direction contained in the judgment of the Tribunal dated 23.11.2007 in Appeal No. 273/2006, the tariff for the period 2006-09 in Petition No. 66/2005 was re-determined by the Commission vide order dated 6.8.2009, subject to the final outcome of the said Civil Appeals pending before the Hon'ble Supreme Court. Against the Commission's order dated 6.8.2009, the petitioner filed Appeal (Appeal No. 146/2009) before the Tribunal on various issues, including the question of non-consideration of different elements of the tariff.

4. Thereafter petitioner filed Petition No. 240/2009 for determination of tariff of the generating stations and inter-state transmission system for the period 2009-14. Where so the tribunal by its judgment dated 10.5.2010 in Appeal No.146/2009 rejected the prayers of the petitioner and upheld the order of the Commission dated 6.8.2009 in Petition No. 66/2005. Against the judgment of the Tribunal dated 10.5.2010, the petitioner has filed appeal (Civil Appeal No. 4881/2010) before the Hon'ble Supreme Court and the Court by its interim order dated 9.7.2010 stayed the directions of the Tribunal for refund off excess amount billed, until further orders. The Civil Appeals filed before the Hon'ble Supreme Court are still pending.

5. Pursuant to the above, the petitioner filed Petition No. 272/2010 for determination of deferred elements of tariff for generation and inter-State transmission systems of the petitioner for the period 2006-09 in terms of the provisions of the 2004 Tariff Regulations and the Judgment dated 13.6.2007 of the Tribunal. Subsequently, in Petition No. 240/2009 filed by the petitioner for approval of tariff for 2009-14, the Commission, by its order dated 23.6.2011 has granted provisional tariff for the period 2009-14, pending determination of the final tariff as per Regulation 5(3) of the 2009 Tariff Regulations. Against the said order dated 23.6.2011, some of the HT consumers of the petitioner in the States of West Bengal and Jharkhand, filed several Writ Petitions before the Hon'ble High Court of Calcutta (W. P. No. 15077 (W) of 2011) challenging amongst others, the constitutional validity of the Clause 4 of Regulation 5 of the 2009 Tariff Regulations and the provisional tariff order dated 23.6.2011.

6. During the pendency of the above Writ Petitions before the High Courts of Calcutta and Jharkhand, the petitioner, in terms of the direction contained in the order of the Commission dated 23.6.2011 in Petition No. 240/2009, filed separate petitions for determination of tariff for the period 2009-14. The High Court of Jharkhand by its judgment dated 23.3.2012 in W.P. 4097/2011 upheld the Constitutional validity of Regulation 5(4) of the 2009 Tariff Regulations and the provisional tariff order dated 23.6.22011 and the High Court of Calcutta by its judgment dated 7.12.2012 in W.P. No. 15077/2011 and others, declared Regulation 5(4)of the 2009 Tariff Regulations as ultra vires the Constitution and the Electricity Act, 2003 and set aside the same along with the provisional tariff order dated 23.6.2011. Against the Judgment of the High Court of Jharkhand, some of the HT Consumers/objectors have filed SLPs [SLP (c) 10945/2012 (GFL-v- UOI &ors) and other connected petitions] before the Hon'ble Supreme Court of

India. Similarly, against the judgment of the High Court of Calcutta, SLPs have been filed by Central Commission in SLP(c) No. 12929-12961/2013(CERC-v- BSAL & others) and the petitioner, DVC in SLP (C) No 13167-13212/2013 before the Hon'ble Supreme Court and the same are pending. Thereafter, the Commission by its order dated 8.5.2013 in Petition No. 272/2010 determined the deferred elements of tariff for generating stations and inter-state transmission system of the petitioner the period 2006-09, which included this generating station also.

7. Thereafter in Petition No. 272/GT/2012 filed by the petitioner for different items of the period 2009-14, the Commission vide order dated 7.8.2013 wherein the Commission has done true-up for the years 2009-10 and 2010-11 only and has determined the annual fixed charges for this generating station as summarized under :-

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	88.85	45.75	15.38	11.28	-
Interest on Loan	-	-	0.03	0.03	-
Return on Equity	465.28	484.17	485.48	486.09	486.09
Interest on Working Capital	69.61	72.43	75.34	78.97	82.66
O&M Expenses	1,160.77	1,227.16	1,297.36	1,371.57	1,450.02
Sub-Total	**1,784.52**	**1,829.52**	**1,873.59**	**1,947.95**	**2,018.78**
Pension & Gratuity Contribution	313.81	313.81	313.81	313.81	313.81
Sinking Fund contribution	113.39	119.73	308.89	330.52	353.65
Common Office Expenditure	13.97	13.18	9.59	9.59	9.60
Additional O&M	74.57	78.83	83.34	88.11	93.15
Sub-Total	515.74	525.55	715.63	742.03	770.21
Total AFC	**2,300.24**	**2,355.07**	**2,589.23**	**2,689.97**	**2,788.98**

8. 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."

9. The petitioner vide affidavit dated 11.11.2014 has filed the petition for revision of tariff based on truing up of actual expenditure in terms of Regulation 6(1) of the 2009 Tariff Regulations. Accordingly, the annual fixed charges claimed by the petitioner for the period 2009-14 in respect of the generating station is as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	100.23	76.86	28.34	6.83	4.52
Interest on Loan	-	-	-	-	-
Return on Equity	496.04	518.33	520.62	521.09	527.68
Interest on Working Capital	70.49	73.79	76.34	79.61	83.62
O&M Expenses	1,160.77	1,227.16	1,297.36	1,371.57	1,450.02
Sub-Total	**1,827.54**	**1,896.14**	**1,922.66**	**1,979.11**	**2,065.84**
Pension & Gratuity Contribution	1,644.74	1,644.74	879.63	555.74	640.84
Sinking Fund Contribution	112.94	109.14	104.44	103.86	111.13
Common Office Expenditure	46.29	52.23	32.18	17.22	15.05
Additional O&M	74.57	78.83	204.71	51.60	258.24
Sub-Total	**1,878.53**	**1,884.94**	**1,220.96**	**728.41**	**1,025.27**
Total AFC	**3,546.84**	**3,619.70**	**3,007.01**	**2,586.44**	**2,964.93**

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

Capital cost

11. 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."*

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

> *"43. **Special Provisions relating to Damodar Valley Corporation**. (1) Subject to clause (2), these regulations shall apply to determination of tariff of the projects owned by Damodar Valley Corporation (DVC).*
>
> *(3) The following special provisions shall apply for determination of tariff of the projects owned by DVC:*
>
> *(i) Capital Cost: The expenditure allocated to the object 'power', in terms of sections 32 and 33 of the Damodar Valley Corporation Act, 1948, to the extent of its apportionment to generation and inter-state transmission, shall form the basis of capital cost for the purpose of determination of tariff:"*

13. The petitioner has considered the capital cost of ₹5016.79 lakh, as on 31.3.2009 as determined by order dated 7.8.2013 in Petition No. 272/GT/2012.

14. The objector, DVPCA vide affidavit dated 25.8.2014 has submitted that the petitioner in its various filings has stated that accounts are duly audited by C& AG and does not contain provision for separating the expenses relating to distribution/retail business. The objector, DVPCA has further, submitted that the accounts of DVC does not contain any provision for bifurcation of expenses between the two States as regards the distribution of energy, sale of energy etc. and allocation of expenses for each functional area. Hence, the objector has submitted that the petitioner should prepare separate accounts in respect of its activities under "Power business".

15. The petitioner vide letter dated 15.9.2015 has filed Form-9A (statement of capital cost) & 9B (statement of CWIP) along with reconciliation/allocation statement for the 2009-14 tariff period duly matching with audited accounts certified by Auditor for gross fixed assets, CWIP and depreciation. In response vide affidavit dated 15.9.2015 the petitioner has submitted above forms.

16. The Commission vide order dated 7.8.2013 in Petition No. 272/GT/2012 admitted the capital cost as on 31.3.2009 as ₹5016.79 lakh to the extent its apportionment to generating station covered in the instant petition. As per Regulation 7 of the 2009 Tariff Regulations, the capital cost of ₹5016.79 lakh is to be considered as the opening capital cost as on 1.4.2009. Accordingly, admitted capital cost of ₹5016.79 lakh has been considered as the opening capital cost as on 1.4.2009 for the purpose of tariff.

Actual Additional Capital Expenditure during 2009-14

17. 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."

18. The actual additional capital expenditure allowed vide order dated 7.8.2013 in Petition No. 272/GT/2012 is as under:-

(₹ in lakh)

Particulars	Capital cost as on 31.3.2009	Additional Capital Expenditure						Capital Cost as on 31.3.2014
		2009-10	2010-11	2011-12	2012-13	2013-14	Total	
Approved in order 272/GT/2012								
Panchet Hydel	5016.79	55.76	7.87	20.93	-	-	**84.56**	**5101.35**
Share of Panchet Dam		-	-	-	-	-	**-**	
Total Additional Capitalization		**55.76**	**7.87**	**20.93**	**-**	**-**	**84.56**	

19. There is no change in the claim of the petitioner for 2009-10 and 2010-11 respectively as approved in order dated 7.8.2013 in Petition No. 272/GT/2012. For 2011-12 and 2013-14, the petitioner has not claimed any additional capitalization for Panchet hydel station and for 2012-13 the petitioner has revised its claim to₹4.47 lakh. The petitioner has also claimed additional capitalization towards share of dams i.e. Panchet and Konar dam.

20. The additional capital expenditure claimed for the years 2009-14 are as under:

(₹ in lakh)

Particulars	Capital cost as on 31.3.2009	Additional Capital Expenditure						Capital Cost as on 31.3.2014
		2009-10	2010-11	2011-12	2012-13	2013-14	Total	
Claimed in this order								
Panchet Hydel	5016.79	55.76	7.87	0.00	4.47	0.00	**68.10**	**5165.49**
Share of Panchet Dam		23.79	42.63	0.51	3.55	0.00	**70.47**	
Share of Konar Dam		1.51	1.19	5.41	1.25	0.77	**10.13**	
Total Additional Capitalization		**81.05**	**51.69**	**5.91**	**9.27**	**0.77**	**148.70**	

21. The petitioner was directed vide ROP dated 18.5.2016, to submit the allocation of share of Panchet dam. In response the petitioner vide affidavit dated 23.6.2016, submitted that, allocation of share of Panchet dam is 28:28:44 instead of 33:33:34 amongst power, irrigation and flood control. Thereafter, the petitioner revised its submissions as stated under:

(₹ in lakh)

Particulars	Capital cost as on 31.3.2009	Additional Capital Expenditure						Capital Cost as on 31.3.2014
		2009-10	2010-11	2011-12	2012-13	2013-14	Total	
Claimed in this order								
Panchet Hydel	5016.79	55.76	7.87	0.00	4.47	0.00	68.10	**5154.81**
Share of Panchet Dam		20.18	36.17	0.43	3.01	0.00	59.79	
Share of Konar Dam		1.51	1.19	5.41	1.25	0.77	10.13	
Total Additional Capitalization		**77.45**	**45.23**	**5.84**	**8.73**	**0.77**	**138.02**	

Additional Capitalization Panchet Hydel

22. There is no change in the claim of the petitioner for additional capitalization for the years 2009-10 and 2010-11for Panchet Hydel as against those approved vide order dated 7.8.2013. The petitioner has however, revised its claim for additional capital expenditure for the year 2012-13 and which is analysed in this order. For 2013-14, no additional capitalization has been claimed for Panchet Hydel.

23. The objector, DVPCA submitted that, the petitioner has not furnished any details of investments undertaken by it and hence the same should be disallowed. However, the petitioner has submitted the breakup of the additional capital expenditure claimed by them for the years 2012-13 as under:-

	2012-13
Land	0.00
Buildings	0.00
Power House Plant & Machinery	0.00
Other Assets	26.69
Accounting Adjustment	(-)22.23
Total	**4.47**

24. The petitioner vide letter dated 28.5.2015 was directed to submit the following:

a) Allocation/Reconciliation statement (Plant/unit wise) for the period 2009-14 duly reconciled with audited accounts and certified by the Auditor for Gross Fixed Assets and Depreciation;

b) Details of de-capitalization for the period 2012-14.

c) Details of liabilities for 2009-14 tariff period.

The petitioner vide affidavit dated 14.9.2015 has submitted the above details.

25. As the petitioner has claimed the same additional capitalization as approved in order dated 7.8.2013 in Petition No. 272/GT/2012 for the 2009-11 tariff period, for Panchet Hydel, the same is allowed. After examining the asset-wise details and justification submitted by the petitioner, the replies and rejoinders filed by the parties, on prudence check, the admissibility of the additional capital expenditure claimed by the petitioner under various categories for the period 2011-12 to 2013-14 is discussed as under:-

Actual capital expenditure for the period 2011-12 to 2013-14

26. The petitioner has not claimed any additional capital expenditure for 2011-12 and 2013-14. For 2012-13, the additional capitalization claimed is ₹4.47 lakh under Panchet Hydel as shown below:

(₹ in lakh)

Sl No	Particulars	2012-13
1	Power Plant & Machinery (Adjustment Entries)	-22.23
2	Other Assets	26.69
Total Claimed		**4.47**

27. The petitioner vide letter dated 25.8.2016 was directed to submit the details of ₹26.69 lakh claimed in 2012-13. In response the petitioner submitted the details vide affidavit dated 14.9.2016 as follows:

(₹ in lakh)

Other Assets	**2012-13**
Office Equipment, items of Bosch conference system international range CCS800 series	3.21
Table T8 Teak	1.26
Table T9	0.33
Steel locker base	1.26
Chair	1.76
12 kV CVT alongwith terminal connector	1.26
Godrej Table T8	0.53
Godrej Steel Rack 6 panels	0.43
Table T9	0.33
Upgradation of office establishments	1.81
Visitors chairs	1.23
Executive type plain telephone	0.32
Desktop computers laser jet printers	9.88
HP Laserjet	0.07
System Controller	1.26
Wireless handheld microphone	1.76
Total	**26.69**

28. As regards expenditure towards 'Office equipment' and 'Other Assets', these include expenditures on furniture, telephone, printer etc. Since this expenditure is minor nature, it should be met from the operational expenditure allowed by the Commission. In view of this, the capitalization of expenditure towards other assets under Regulation 9(2) of 2009 Tariff Regulations have not been allowed.

Reversal of provision

29. The Commission approves this reversal of provision of ₹ (-) 22.23 lakh for the year 2012-13 as adjustment under plant and machinery as per Regulation 9(2)(iv) of the 2009 Tariff Regulations.

Additional Capital Expenditure towards share of Panchet dam

30. In addition to above the petitioner has also claimed additional capitalization for Panchet dam for the 2009-14 tariff period.

31. The Commission in its Order dated 7.8.2013 in Petition No. 272/GT/2012 had not considered the additional capitalization of Panchet dam since no asset wise details were submitted. The relevant extract of the Order is as follows:-

> *"The petitioner has claimed additional capital expenditure of ₹20.18 lakh and ₹36.17 lakh during the years 2009-10 and 2010-11 respectively towards the 28% share of dam allocated to Panchet power generating station. Since, no asset wise details along with justification have been submitted by the petitioner, the claim has not been considered."*

32. However, the petitioner in its current petition has submitted the asset wise details for Panchet dam. The additional capitalization claimed for the 2009-14 tariff period is as under:-

(₹ in lakh)

	Claimed					
	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**Total**
Buildings	24.17	105.64	0.00	0.00	0.00	129.81
Dyke	32.64	0.00	0.00	0.00	0.00	32.64
Other Assets	15.27	23.54	1.53	10.76	0.00	51.10
Total Add-cap	**72.08**	**129.18**	**1.53**	**10.76**	**0.00**	**213.55**
Allocation among power, irrigation and flood control						
Power (28%)	20.18	36.17	0.43	3.01	0.00	59.79
Irrigation (28%)	20.18	36.17	0.43	3.01	0.00	59.79
Flood control (44%)	31.71	56.84	0.67	4.73	0.00	93.96

Buildings

33. The additional capitalization is claimed for new residential buildings built for employees, construction of damaged roads. These assets are a necessity for construction owing to the vintage of the plant and hence allowed.

Dyke

34. The additional capital expenditure claimed under dyke is under Regulation 9(2)(iv) of the 2009 Tariff Regulations. Since the additional capitalization is necessary for efficient operation of the plant the additional capitalization corresponding to dyke is allowed.

Other Assets

35. The additional capital expenditure towards 'Office equipment' and 'Other Assets', include expenditures on furniture, telephone, printer etc. Since these are in the nature of minor assets, it should be met from the operational expenses allowed by the Commission. In view of this, the capitalization of expenditure towards other assets under Regulation 9(2) of 2009 Tariff Regulations have not been allowed.

36. The additional capitalization allowed in Panchet dam is as follows:

	Approved in this order					
	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**Total**
Buildings	24.17	105.64	-	-	-	129.81
Dyke	32.64	-	-	-	-	32.64
Other Assets	0.00	-	-	-	-	0.00
Total Add-cap	**56.81**	**105.64**	**-**	**-**	**-**	**162.45**
Allocation among power, irrigation and flood control						
Power (28%)	15.91	29.58	-	-	-	45.48
Irrigation (28%)	15.91	29.58	-	-	-	45.48
Flood Control (44%)	25.00	46.48	-	-	-	71.48
Total	**56.81**	**105.64**	**-**	**-**	**-**	**162.45**

Additional Capital Expenditure towards share of Konar Dam

37. The additional capital expenditure claimed for the years 2009-14 towards share of Konar Dam are as under:

(₹ in lakh)

	Additional Capital Expenditure towards share of Konar Dam					
	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**Total**
Approved in order dated 7.8.2013 in Petition No. 272/GT/2012	0.00	0.00	0.00	0.00	0.00	0.00
Claimed	1.51	1.19	5.41	1.25	0.77	10.13

38. From the details of the additional capital expenditure it is observed that the assets proposed to be capitalized during the period 2009-14 are mainly of following nature:

- Sub-station buildings
- Other Assets

39. The asset class wise additional capitalization for Konar Dam as submitted by the petitioner is as shown in the table below:

(₹ in lakh)

	Claimed					
	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**Total**
Sub-station buildings (Accounting adjustment)	0.00	0.00	17.73	0.00	0.00	17.73
Office furniture, office equipments, pumps and other miscellaneous assets etc.	10.15	8.05	18.74	8.40	5.19	68.27
Total Additional capitalization	**10.15**	**8.05**	**36.47**	**8.40**	**5.19**	**68.27**
Allocation among power, irrigation and flood control						
Power (33%)	3.35	2.66	12.03	2.77	1.71	22.53
Irrigation (33%)	3.35	2.66	12.03	2.77	1.71	22.53
Flood control (34%)	3.45	2.74	12.40	2.86	1.77	23.21

40. Thereafter, the petitioner has allocated additional capitalization of Konar Dam (Power) amongst hydel power stations in the ratio of capital cost as follows:

(₹ in lakh)

	Capital cost as on 31.3.2009	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**Total**
Share of Addl Cap of Konar Dam for Maithon Dam	5881.05	1.77	1.40	6.34	1.46	0.90	11.87
Share of Addl Cap of Konar Dam for Panchet	**5016.79**	**1.51**	**1.19**	**5.41**	**1.25**	**0.77**	**10.13**
Share of Addl Cap of Konar Dam for Tilaiya Dam	263.80	0.08	0.06	0.28	0.07	0.04	0.53
Total	11161.64	3.35	2.66	12.03	2.77	1.71	22.53

Sub-station Building

41. The additional capital expenditure amounting to ₹17.73 lakh for 2009-14 towards sub-station building is claimed under Regulation 9(2)(iv) of the 2009 Tariff Regulations as an accounting adjustment. Since, this is necessary for plant operation the corresponding additional capital expenditure is allowed.

Office furniture, office equipment, pumps and other miscellaneous assets

42. The additional capital expenditure on Office/furniture steel, Office Furniture-Wood, pumps etc. amounting to ₹68.27 lakh for the period 2009-14 is disallowed since these are of minor nature and to be met from operational expenses.

43. The additional capitalization for Konar Dam considered in this order for the 2009-14 tariff period is as follows:

(₹ in lakh)

	Additional Capitalization for Konar Dam					
	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**Total**
Claimed	10.15	8.05	36.47	8.40	5.19	68.27
Allowed	0.00	0.00	17.73	0.00	0.00	17.73
Allocation among power, irrigation and flood control						
Power (33%)	**0.00**	**0.00**	**5.85**	**0.00**	**0.00**	**5.85**
Irrigation (33%)	0.00	0.00	5.85	0.00	0.00	5.85
Flood control (34%)	0.00	0.00	6.03	0.00	0.00	6.03

44. Further, we have allocated approved additional capitalization of Konar Dam (Power) amongst hydel power stations in the ratio of capital cost as follows:

(₹ in lakh)

	Capital cost as on 31.3.2009 (in	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**Total**
Share of Addl Cap of Konar Dam for Maithon Dam	5881.05	0.00	0.00	3.08	0.00	0.00	3.08
Share of Addl Cap of Konar Dam for	**5016.79**	**0.00**	**0.00**	**2.63**	**0.00**	**0.00**	**2.63**

Panchet							
Share of Addl Cap of Konar Dam for Tilaiya Dam	263.80	0.00	0.00	0.14	0.00	0.00	0.14
Total	11161.64	0.00	0.00	5.85	0.00	0.00	5.85

45. Thus, the additional capitalization towards share of Konar Dam as approved by the Commission in this Order is as shown in the table below:

(₹ in lakh)

	Additional Capital Expenditure towards share of Konar Dam					
	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**Total**
Allowed in this order	0.00	0.00	2.63	0.00	0.00	**2.63**

46. Accordingly, the capital cost and additional capitalization (Panchet Hydel, Panchet dam and Konar dam) considered for the purpose of tariff for the period 2009-14 is as under:

(₹ in lakh)

	Capital cost as on 31.3.2009	**Additional Capital Expenditure**						**Capital Cost as on 31.3.2014**
		2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**Total**	
Approved in order 272/GT/2012								
Panchet Hydel	5016.79	55.76	7.87	20.93	0.00	0.00	**84.56**	**5101.35**
Share of Panchet Dam		0.00	0.00	0.00	0.00	0.00	**0.00**	
Total Additional Capitalization		**55.76**	**7.87**	**20.93**	**0.00**	**0.00**	**84.56**	
Claimed in this order								
Panchet Hydel	5016.79	55.76	7.87	0.00	4.47	0.00	68.10	**5154.81**
Share of Panchet Dam		20.18	36.17	0.43	3.01	0.00	59.79	
Share of Konar Dam		1.51	1.19	5.41	1.25	0.77	10.13	
Total Additional Capitalization		**77.45**	**45.23**	**5.84**	**8.73**	**0.77**	**138.02**	
Approved in this order								
Panchet Hydel	5016.79	55.76	7.87	0.00	(-)22.23	0.00	**41.40**	**5106.31**
Share of Panchet Dam		15.91	29.58	0.00	0.00	0.00	**45.48**	
Share of Konar Dam		0.00	0.00	2.63	0.00	0.00	**2.63**	
Total Additional Capitalization		**71.67**	**37.45**	**2.63**	**(-)22.23**	**0.00**	**89.52**	

Capital cost for 2009-14

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

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital cost	5016.79	5088.46	5125.90	5128.53	5106.31
Additional capital expenditure allowed	71.67	37.45	2.63	(-)22.23	0.00
Closing Capital cost	5088.46	5125.90	5128.53	5106.31	5106.31
Average Capital cost	5052.62	5107.18	5127.22	5117.42	5106.31

Debt: Equity

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

"(a) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Explanation.- The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.

49. The commercial operation of the project covered under the petition is prior to 1.4.2009 and hence, the debt:equity admitted as on 31.3.2009 is to be considered as opening capital cost for the tariff as per Regulation 12 of the 2009

Tariff Regulations. Accordingly, admitted gross loan and equity of ₹2533.55 lakh and ₹2483.24 lakh respectively as on 31.3.2009 as considered in the order dated 7.8.2013 in Petition No.272/GT/2012 has been considered as the gross loan and equity as on 1.4.2009. The debt-equity ratio of 70:30 has been considered for additional expenditure allowed in this order in accordance with Regulation 12 of the 2009 Tariff Regulations.

(₹ in lakh)

Asset	**As on 31.3.2009**		**Net Additional capitalization during 2009-14**		**As on 31.3.2014**	
	Amount	(%)	Amount	(%)	Amount	(%)
Debt	2,533.55	50.50%	62.66	70.00%	2,596.21	50.84%
Equity	2,483.24	49.50%	26.86	30.00%	2,510.10	49.16%
Total	**5,016.79**	**100.00%**	**89.52**	**100.00%**	**5106.31**	**100.00%**

<u>Return on Equity</u>

50. 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."

51. The petitioner vide letter dated 3.3.2016 was directed to submit relevant forms claiming the applicable rate of return on equity. In response the petitioner vide affidavit dated 8.4.2016, submitted that, applicable tax rate for grossing up of ROE as claimed in 2009-14 is based on applicable MAT rate for the period as per Income Tax Act. Income tax has been assessed for DVC as a whole include power, irrigation and flood control. Individual station wise tax assessment has never been done since ROE was a positive figure on notional basis. As per the submission of the petitioner, during years 2010-12 and 2013-14 tax liability is NIL on overall composite assessment. However, for 2009-10 and 2012-13 DVC has paid income tax on MAT rate. Applicable MAT rate considered is 16.995% and 20.009% respectively.

52. The grossing up of the base rate has been done with respect to the actual tax rate applicable to the petitioner for the period 2009-14. However, since the petitioner's company as a whole has book loss as per Audited accounts for 2010-11 and 2013-14 and no tax has been paid. Therefore applicable tax rate for these years have been considered as 'NIL'. Return on equity has been worked out on the normative equity as on 1.4.2009 after accounting for the admitted actual additional capital expenditure for the period 2009-14 as above. Return on Equity has been computed as under:-

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Opening notional equity	2483.24	2504.74	2515.97	2516.76	2510.10

Addition due to Additional Capitalization	21.50	11.23	0.79	(-)6.67	0.00
Closing Equity	2504.74	2515.97	2516.76	2510.10	2510.10
Average Equity	2493.99	2510.36	2516.37	2513.43	2510.10
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Tax rate	16.995%	0.000%	20.009%	20.009%	0.000%
Rate of Return on Equity (Pre Tax)	18.674%	15.500%	19.377%	19.377%	15.500%
Return on Equity	**465.73**	**389.11**	**487.60**	**487.03**	**389.06**

Interest on Loan ("IOL")

53. 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.

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

a. The gross normative loan as on 1.4.2009has been considered as on 1.4.2009. In addition loan component towards additional capitalization has been considered as per the approved debt equity ratio.

b. Cumulative repayment has been considered as on 1.4.2009.

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

d. Depreciation allowed has been considered as repayment of normative loan during the respective year of the tariff period 2009-14. Further proportionate adjustment has been made to the repayments corresponding to discharge of liabilities considered during the respective years on account of cumulative repayment adjusted as on 1.4.2009. Also, proportionate adjustment has been made to the repayments on account of de-capitalizations considered in the additional capital expenditure approved above.

e. The weighted average rate of interest of has been considered for the years 2011-12 to 2013-14 based on actual loan portfolio. Summary of calculation of interest on loan is given in Annexure 1.

55. The petitioner vide affidavit dated 14.9.2015 has submitted the Form-7 & 8 and Form-13 with reconciliation of loan details as per audited accounts. It has further stated that there are no project specific loans and corporate loans for additional capitalization for existing generating stations of the petitioner. Accordingly, the calculations for interest on loan has been worked out in accordance with the 16 of the 2009 Tariff Regulations as under:-

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional Loan for the purpose of tariff in the instant petition	2533.55	2583.72	2609.93	2611.77	2611.77
Cumulative Repayment of Loan upto previous year	2533.55	2597.03	2625.12	2626.96	2626.96
Net opening loan	-	-	-	-	-
Addition due to Additional Capitalization	50.17	26.21	1.84	-	-
Repayment of Loan during the period	63.48	28.09	1.84	-	-
Add: Repayment adjustment on a/c of de-capitalization during the year / period	13.31	1.88	-	-	-
Less: Repayment adjustment due to discharges during the year / period	-	-	-	-	-
Net Closing Loan	-	-	-	-	-
Average Loan	-	-	-	-	-
Weighted Average Rate of Interest on Loan (%)	8.8451%	8.8202%	8.6980%	9.3203%	9.6428%
Interest on Loan	**-**	**-**	**-**	**-**	**-**

Depreciation

56. 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."

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

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

(3) The following special provisions shall apply for determination of tariff of the projects owned by DVC:
(i)….
(ii)….
(iii) Depreciation: The depreciation rate stipulated by the Comptroller and Auditor General of India in terms of section 40 of the Damodar Valley Corporation Act, 1948 shall be applied for computation of depreciation of projects of DVC."

58. The rate of depreciation has been arrived by taking the weighted average of depreciation computed on the gross value of asset as on 31.3.2009 at the rates approved by C&AG and it works out to 6.0200%. Further, the proportionate adjustment has been made to the cumulative depreciation corresponding to discharges of liabilities considered during the respective years on account of cumulative depreciation adjusted

as on 1.4.2009. The cumulative depreciation has been adjusted on account of de-capitalization considered during the period 2009-14 for the purpose of tariff. The necessary calculations in support of depreciation are as under:-

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	5016.79	5088.46	5125.90	5128.53	5106.31
Additional Capitalization (Panchet Hydel)	55.76	7.87	0.00	(22.23)	0.00
Additional Capitalization (Share of Dams)	15.91	29.58	2.63	0.00	0.00
Closing Capital Cost	5088.46	5125.90	5128.53	5106.31	5106.31
Average capital cost	5052.62	5107.18	5127.22	5117.42	5106.31
Value of freehold land	-	-	-	-	-
Balance depreciable value	113.13	51.52	18.04	0.00	0.00
Depreciation (annualized)*	**113.13**	**51.52**	**18.04**	**0.00**	**0.00**
Cumulative depreciation at the end of the period (before adjustment)	4547.36	4596.46	4614.50	4614.50	4614.50
Less: Cumulative depreciation adjustment on account of de-capitalization	2.42	0.00	0.00	0.00	0.00
Cumulative depreciation after adjustment (at the end of the period)	4544.94	4596.46	4614.50	4614.50	4614.50

*Revised on account of rectification of treatment of de-capitalization in cumulative depreciation approved for 2009-10 to 2011-12 vide order dated 7.8.2013

Operation &Maintenance Expenses ("O&M Expenses")

59. The Operation & Maintenance expenses considered for the purpose of tariff in accordance to Regulation 19(f)(i),(ii) and(iii)for hydro generating stationas approved in order dated 7.8.2013 and Petition No. 272/GT/2012 is summarizedas under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Allowed	1160.77	1227.16	1297.36	1371.57	1450.02

Additional O&M Expenses

60. The Commission vide order dated 7.8.2013 in Petition No. 272/GT/2012 had allowed additional O&M expenses for the period 2009-14 and observed as under:

*"**O&M expenses allowed for contribution to pension, gratuity & leave encashment***
75. As stated above, the O&M expenses allowed for the period 2009-14 is based on normalization of O&M expenses for 2003-08 in terms of provisions of the regulations. Has been worked out after excluding the expenditure towards pension/gratuity fund and leave encashment incurred during the period 2003-08…..

……

For the purpose of considering recurring expenditure towards contribution of pension, gratuity and leave encashment of the existing employees in O&M and for transfer of actuarial fund, a factor of 30.41% of the employee cost (Basic Pay+DA) had been considered by the Commission in its order dated 3.10.2006 in Petition No.66/2005 pertaining to the period 2006-09……

….

Accordingly, in terms of the provisions of Regulation 19(f) as stated above, the additional O&M expenses have been worked out for the period 2009-14 as under:

(a) Average Basic Pay + D.A for the year 2007-08 based on the data for the period 2003-08= ₹146.26 lakh

(b) The above figure for the year 2007-08 has been escalated @ 5.72% per annum to arrive at the figure for the year 2009-10 (without salary hike), which is further escalated by 50% to account for the increase in the employee cost.

(₹ in lakh)

Year	2007-08	2008-09	2009-10 (without salary hike)	2009-10 (with salary hike of 50%)
Basic Pay +D.A	146.26	146.26x1.0572 =154.62	154.62x1.0572 =163.47	163.47x1.5 =245.20

(c) Contribution for pension, gratuity & leave encashment for actuarial fund for the year 2009-10 = 30.41% of ₹245.20 lakh =₹74.57 lakh

(d) The figure so allowed for the year 2009-10 is escalated @ 5.72% per annum to arrive at the permissible expenses for the respective years of the tariff setting 2009-14. Accordingly, based on the above methodology, the following expenditure representing liability towards pension, gratuity and leave encashment of existing employees of the generating station has been allowed as additional O&M expenses for the period 2009-14 in relaxation of the provisions of the 2009 Tariff Regulations as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Liability towards Pension, Gratuity & leave encashment of existing employees	74.57	78.83	83.34	88.11	93.15

...

...

CISF Security

78. The petitioner has submitted that all its Thermal and Hydro Power generating stations of namely, are located in high alert security zones and in the support of its claim, the petitioner has submitted documentary evidences like the correspondence from the Ministry of Power, Govt. of India directing petitioner to take appropriate security arrangements at hydro power plants, dams etc., with instructions to strengthen the physical security of the various plants and tightening the security of the personnel working there. It has also submitted that there has been IB inspection and recommendations from time to time for improvement in security arrangements in the generating stations and the significant threat to the generating station, dam and *the personnel employed, cannot be ignored. We have examined the matter. Since, the petitioner's claim for O&M expenses towards CISF security, in Form-15B of the petition has already been considered in the O&M expenses allowed to the generating station, the additional O&M expenses claimed on this count has been rejected.*

Share of subsidiary activities

79. Since, the petitioner's claim for O&M expenses towards share of subsidiary activity in Form-15B of the petition has already been considered in the O&M expenses allowed to the generating station, the additional O&M expenses claimed on this count has been rejected."

61. In addition to O&M expenses, the petitioner has claimed additional O&M Expenses as follows.

(₹ in lakh)

	2011-12
Operation Expenses	257.79
Repair & Maintenance Expenses	154.64
Miscellaneous Expenses	0.68
Stores Expenses	4.52
Insurance	6.90
Staff Welfare	15.45
Colony Services	40.68
Administrative Expenses	320.35
Loss on Stores/Assets	-
Excise Duty	-
Proportionate Share of Dams	612.83
Proportionate Share of Direction & Other Offices	4.51
Proportionate share of overhead charges	47.68
Share of Operating expenses of Subsidiary Activities	36.04
Total O&M Claimed	**1,502.07**
As allowed by CERC for O&M Exp. Vide Order Dt. 07.08.13	1297.36
Addl. O&M Claimed	**204.71**

(₹ in lakh)

	2012-13	**2013-14**
Employees Remuneration & Benefit (A)	378.80	402.20
Consumption of Stores and Spare Parts (B)	24.45	43.04
Total of Administration & Other General Overhead(C)	10.74	24.78
Other Operation & Maintenance Expenses (D)	56.17	127.42
Total Revenue Expenditure- Direct (E= A+B+C+D)	**470.17**	**597.43**
(a)-Employees Remuneration & Benefits (Share)	590.55	680.18
(b)-Employees Remuneration & Benefits (Share)	362.45	430.66

Grand Total of (E+a+b) Revenue Expenditure-(Direct & Share)	**1423.17**	**1708.26**
O&M Expenses Approved in order dated 7.8.2013	1,371.57	1,450.02
Additional O&M Claimed	**51.60**	**258.24**

62. It is observed that the petitioner has not submitted the detailed break up of additional O&M claimed for Panchet Hydel station. The petitioner was directed to submit the same. However, the information has not been submitted. Hence, in the absence of relevant information, the additional O&M as approved in order dated 7.8.2013 is considered in this order.

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Additional O&M Allowed	74.57	78.83	83.34	88.11	93.15

<u>Interest on working capital("IWC")</u>

63. Regulation 18 (1) (c) of the 2009 Tariff Regulations provides that the working capital for hydro generating stations shall cover:

> *"(c) in case of hydro generating station and transmission system.*
> *(i) Receivables equivalent to two months of fixed cost.*
> *(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 19;*
> *(iii) Operation and maintenance expenses for one month.*

64. *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

Maintenance Spares

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

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	174.12	184.07	194.60	205.74	217.50

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

Receivables

66. Receivables have been worked out on the basis of two months of fixed charges as shown below:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Capacity Charges for two months	301.63	289.73	313.07	322.89	319.95

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

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
O & M expenses	96.73	102.26	108.11	114.30	120.84
Maintenance Spares	174.12	184.07	194.60	205.74	217.50
Receivables	301.63	289.73	313.07	322.89	319.95
Total Working Capital	**572.47**	**576.06**	**615.79**	**642.93**	**658.29**
Rate of Interest	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%
Total Interest on Working capital	**70.13**	**70.57**	**75.43**	**78.76**	**80.64**

Other Elements

68. 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

69. 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..."

70. The Commission vide order dated 7.8.2013 in Petition No. 272/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:"

71. The petitioner with the petition 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, 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 as on		**Claimed**	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**
31.3.2006	169015	40% of total valuation in five instalments	13521.20	13521.20	13521.20	13521.20	13521.20
31.3.2009	314093	40% of difference with earlier valuation in five instalments	11606.32	11606.32	11606.32	11606.32	11606.32

Valuation as on		**Claimed**	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**
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

72. The objector, DVPCA vide affidavit dated 1.12.2014 and 1.3.2016 has submitted as under::-

a) The petitioner has not submitted the activity linked segregation of its employees as its employees are engaged in multifarious activities and is not specific to its power generation and transmission business.

b) To direct the petitioner to submit details of employees in each of its specific activities and employees engaged in assets servicing the command area and those in respect whereof petitioner has signed PPAs with licensees outside the command area.

c) The P&G liability towards employees in construction of assets should be capitalized and not charged through the ARR.

d) The past allowance of Pension and Gratuity liability of employees engaged in DVC's under-construction projects has resulted in advance recovery of such liability from command area consumers that may not even be the beneficiaries of such projects.

e) The advance recovery of Pension and Gratuity has excessively/ disproportionately burdened the command area consumers.

f) Such advance recovery from command area consumers in the past has resulted in petitioner claiming relatively small increase in its liability towards contribution to Pension and Gratuity fund in subsequent controls periods.

g) The interest earned on investments from its Pension and Gratuity Fund has not been accounted for either by reducing the annual provision for such Fund by the amount of interest earned or by reducing the Annual Revenue Requirement.

h) Whether it is appropriate for the actuary to issue a certificate/ actuarial report based on projected salary data instead of actual salary data.

i) The contribution to pension and gratuity fund are essentially O&M expenses, recoverable as part of capacity charges and therefore recovery should be linked with achievement of Target Normative Annual Plant Availability Factor (NAPAF).

j) The annual increase of 6.35% in contribution towards P&G liability submitted by the petitioner would be off-set by the income earned out of the P&G fund investments. The current interest rate on government bonds/securities is around 8% per annum.

73. In response, the petitioner vide rejoinder dated 17.5.2016 has submitted that the claim for Pension contribution for the existing employees is admissible as per the judgment of the Tribunal dated 23.11.2007 in Appeal No. 271, 272, 273 etc of 2007. The petitioner has also submitted that the claim for additional pension contribution is not covered under the normative O&M expenditure and it has correctly claimed as per the actuarial valuation to the extent admissible. It has further, submitted that the Pension

and Gratuity fund has been entrusted to a Trust independent of the petitioner's management and interest earned thereon is taken care by the trust. The petitioner has submitted that out of total number of work force of petitioners company, both employees and workmen, 98.90% is engaged in power business, and the remaining is engaged in Irrigation, Flood control as on 31.3.2006 and the amount decided as contribution to be made as per the actuarial valuation as on 31.3.2006 was allocated to 'Power business' in proportion to the above percentage of employees. The petitioner has also submitted that out of the total no. of 11211 employees and workmen (as on 31.3.2013), the Irrigation and flood control accounts for only 24 employees and in terms of the findings of the Tribunal in judgment dated 23.11.2007 in Appeal no. 271, 272, 273 etc of 2007, the employees in the subsidiary activities are to be accounted for in "Power related activities". The petitioner has further submitted that no part of the amount related to Pension and Gratuity contribution is used by the petitioner for its business activities in any of the years commencing from 1.4.2006.

74. The Commission directed the petitioner to submit the break-up of the total P&G contribution claimed during the period 2009-14 with respect of the generating station, transmission & distribution system. In response, the petitioner vide its affidavit dated 31.3.2016 submitted the same along with reconciliation statement of P&G Fund paid to the trust as per audited accounts

75. The Commission further directed the petitioner to submit the basis of allocation of these P&G liability amongst Irrigation, Flood Control and Power business and also to submit the year wise details of the total number of employees and allocation of employees on different generating stations for the period 2009-14. In response, the petitioner vide affidavit dated 9.6.2016 submitted that it has apportioned the entire P&G

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

76. It is observed that the petitioner has claimed P&G liability as on 31.3.2006 and 31.3.2009 in line with the methodology adopted by the Commission in order dated 7.8.2013 in Petition No. 272/GT/2012. The petitioner has also claimed the P&G liability as valued on 31.3.2011, 31.3.2012, 31.3.2013 and 31.3.2014 during the period 2009-14.

77. Thus, the Commission in its order dated 7.8.2013 in Petition No. 272/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.

78. As the petitioner has submitted the Certificate from the Actuary as per the Accounting Standard -15 (AS-15) the Commission directed the petitioner to furnish the detailed actuarial valuation report submitted by the Actuary to the petitioner. In response the petitioner vide affidavit dated 10.6.2016 has submitted only the Certificate received

from the Actuary has been furnished to the Commission and no separate report has been received from the Actuary to the petitioner.

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

80. As stated, the Commission in order dated 7.8.2013 in Petition No. 272/GT/2012 had allowed the recovery of 40% of the difference in liability as per Actuarial valuation 31.3.2009 and 31.3.2006 in five equal installments. The Commission in the said order had allocated the same on petitioners generating stations except Mejia Unit 5 & 6. The Commission has revised the allocation and has also allocated share of P&G liability to Mejia Unit 5 and 6 on the basis of capital cost of ₹205946.66 lakh admitted by it as on 31.3.2009. It is observed that the O&M expenses norms specified by the Commission under the 2009 Tariff Regulations applicable for the period 2009-14 had taken into consideration the P&G liability as part of O&M expenses. The statement of reason of the 2009 Tariff Regulations, at para 20.3 clearly states that O&M cost for purpose of tariff covers expenditure incurred on the employees including gratuity, CPF, medical, education allowances etc. The expenses on account of CPF considered in Public Sector Undertakings take care of pension liability applicable in Government Undertaking.

81. In this background, the additional claim of the petitioner towards P&G liability for the period 2009-14 based on Actuarial valuation is not admissible. However, the allocation of P&G liability pertaining to period 2004-09 has been revised by re-allocating the total P&G liability approved in order dated 7.8.2013 taking into consideration Mejia Unit 5 & 6. Therefore, the P&G liability for the generating station has been worked out from the actuarial valuation report of DVC generating stations as under:-

(₹ in lakh)

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

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

(₹ in lakh)

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

(₹ in lakh)

Panchet HPS	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**
P&G contribution Allowed	200.69	200.69	200.69	200.69	200.69

Contribution to Sinking Fund

82. The Commission vide order dated 7.8.2013 in Petition No. 272/GT/2014 has allowed the contribution towards sinking fund for 2009-14 is as hereunder:-

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Sinking Fund	113.39	119.73	308.89	330.52	353.65

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

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Sinking Fund	112.94	109.14	104.44	103.86	111.13

84. The objector,DVPCA has made following submissions:

(a) Contribution towards sinking fund is liable to be disallowed as interest on working capital has been allowed for working capital borrowings for debt financing of the capital investment.

(b) Such bonds were towards the new generating station for selling power to licensees outside the command area under PPAs executed by the petitioner with such licensees and thus are outside the purview of the petition.

(c) In the absence of evidence from the petitioner that the relevant bonds have been issued for meeting the cost requirements of old plants, the petitioner is not justified in seeking Sinking Fund contribution from all of its generating stations in proportion to their capital cost.

(d) In order to be consistent with cost plus regime to tariff determination under the Electricity Act, 2003, the petitioner cannot be allowed both contributions to Sinking Fund, as well as interest on loan by treating the funds realised through bond issue as normative loan.

85. In response the petitioner vide rejoinder dated 17.5.2016 has submitted that the Contribution and interest payment for sinking Fund is to be allowed in terms of Section 40 of the DVC Act read with the decision of the Tribunal dated 23.11.2007 in Appeal No. 271/2006. It has also submitted that the provisions for the Sinking Fund have been made by the petitioner and approved by Comptroller and Auditor General of India and the same has been specified under Regulation 43(2)(iv) of the 2009 Tariff Regulations. The petitioner also submitted that it has floated Market Bond (Corporate Bond) of ₹64000 lakh in the year 2009-10 pertaining to existing projects only and as a consequence there is an increase in the contribution during 2009-14 towards Sinking fund.

86. The petitioner has further submitted that the Sinking Fund liability is accounted for in the revenue requirement of the respective generating station or transmission projects for which the bonds are issued and therefore, charged to tariff with respect to each of the generating stations and transmission assets. The petitioner has submitted that in case a generating station is established not for the purpose of generation and supply of electricity in the command area, no part of the tariff element including the sinking fund contribution pertaining to the generating station is recovered from the HT consumers. It has reiterated that its Sinking Fund contribution forms part of the fixed component of tariff of the concerned generating station or transmission asset and would be recovered only from those procurers/consumers for whom the generating station or transmission asset is operated and maintained.

87. The petitioner has further submitted in its application for the determination of ARR before the Jharkhand State Electricity Regulatory Commission, a part of Fixed Charges has been claimed commensurate with the supply from the new units in DVC command area of consumers. The petitioner has also submitted that the balance power

from new power stations after supplying power to outside valley as per bilateral PPA, was utilized for meeting the demand of valley consumers and therefore the Sinking Fund for the new Bonds is partly charged to DVC command area consumers and the balance to export consumers.

88. Accordingly, the petitioner has submitted that the 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.

89. The matter has been examined. The Tribunal in its judgment dated 23.11.2007 in Appeal No. 271/ 2006 has decided as under. The relevant portion of the judgment is as extracted as under:-

> *"E.15 As regards sinking funds which is 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 is to be taken as an item of expenditure to be recovered through tariff,…"*

90. The Commission vide ROP of the hearing dated 18.5.2016 has directed the petitioner to file the methodology of allocation of sinking fund into irrigation, power (Generation and T&D) and flood control and further provide allocation of power (Generation) component into different generating stations and reconciliation of the same with Audited Accounts. In response, the petitioner vide affidavit dated 9.6.2016 has submitted that since the bonds were taken for financing power projects and therefore the entire contribution to sinking fund has been allocated to "Power" business". The petitioner has also submitted that bonds issued against the existing generating stations have been allocated within the existing stations on the basis of MW capacity. The

petitioner in this petition has allocated the contribution to sinking fund among generating stations and T&D system on the basis of capital cost as on 31.3.2009.

91. The Commission vide ROP of the proceeding dated 18.5.2016, however, directed the petitioner to submit the details of which bonds were taken for existing projects and also to confirm whether that the contribution to sinking fund towards redemption of such bonds have been claimed by the petitioner. The petitioner vide rejoinder dated 9.6.2016 has clarified that the following bonds have been considered:-

(i) 12th Series (3.1.2003) 7.70% DVC Public Sector Bond for ₹12000 lakh

(ii) 13th Series (10.2.2010) 8.95% DVC Bonds for ₹64000 lakh

(iii) 11.50% DVC Bond for ₹2500 lakh (30.7.1990)

(iv) 11.50% DVC Bond for ₹2500 lakh (20.9.1990)

(v) 11.50% DVC Bond for ₹2500 lakh (11.9.1991)

(vi) 12.00% DVC Bond for ₹2500 lakh (3.12.1991)

92. We have considered the submissions of the parties. From the submissions of the petitioner, it is observed that the Sinking Fund liability is accounted for in the revenue requirement of the respective generating station / transmission assets of the petitioner for which the bonds have been issued and the same is charged to tariff with respect to each of the generating stations and transmission assets. Accordingly, we conclude that redemption of bonds claimed for the sinking fund are only for existing generating stations of the petitioner and does not include new generating stations/under construction generating stations. Accordingly we consider the bonds.

93. Based on the above discussions, the contribution towards sinking fund created for redemption of bond has been allowed. The total contribution to sinking fund has been allocated among all the generating stations /T&D system of the petitioner, based on the

proportion of capital cost as on 31.3.2009. Further sinking fund has not been allocated to Mejia Units- 5&6 with capital cost as on 1.4.2009 of ₹205946.66 lakh as the bond does not pertain to Mejia Unit-5 &6. Accordingly, the amount approved for this generating station is as under:-

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Total amount of Sinking Fund allocated among Generating stations and T&D system	9851.61	9520.41	9110.34	9059.69	9693.87

(₹ in lakh)

Station	Capital cost as on 1.4.2009*	2009-10	2010-11	2011-12	2012-13	2013-14
Bokaro TPS	58552.09	1318.45	1274.13	1219.25	1212.47	1297.34
Chandrapura TPS	26909.82	605.94	585.57	560.35	557.23	596.24
Durgapur TPS	19403.26	436.91	422.23	404.04	401.79	429.92
Mejia TPS #1 to 3	160372.63	3611.20	3489.80	3339.48	3320.91	3553.38
Mejia TPS #4	72302.61	1628.08	1573.34	1505.58	1497.21	1602.01
Maithon HS	5881.05	132.43	127.97	122.46	121.78	130.31
Panchet HS	**5016.79**	**112.97**	**109.17**	**104.47**	**103.89**	**111.16**
Tilaiya HS	263.8	5.94	5.74	5.49	5.46	5.85
T&D	88805.81	1999.69	1932.46	1849.23	1838.95	1967.67
Total	**437507.86**	**9851.61**	**9520.41**	**9110.34**	**9059.69**	**9693.87**

*Excluding un-discharged liabilities on cash basis

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Contribution to sinking fund	112.97	109.17	104.47	103.89	111.16

Cost of Common Offices

94. In order dated 8.5.2013, the claim of the petitioner for Direction Office, Central office, other office and subsidiary activities were not allowed due to absence of asset-wise details and justification. The relevant portion of the order is observed as under:-

> *"109. In terms of the observations of the Tribunal in its judgment dated 23.11.2007 in Appeal Nos. 271, 272, 273, 275 of 2006 & Appeal No.8 of 2007, the return on equity, interest on loan and depreciation of the common assets has been calculated and the amount so calculated has been apportioned to each of the productive generating*

stations/transmission system of the petitioner, in proportion to the capital cost allocated as on 31.3.2004 to Direction office, Other office, Central office and Subsidiary activities. 111. The petitioner has not furnished the nature of assets and proper justification in respect of its claim for additional capital expenditure for the period 2006-09. Hence, in the absence of asset-wise details and justification, the additional capital expenditure for Direction Office, Central office, other office and subsidiary activities have not been allowed."

95. Further in order dated 7.8.2013 in Petition No. 275/GT/2012, the petitioner's claim for two new offices, namely, IT and R&D offices was 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:-

"86. The matter has been examined. 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…
…

89. 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."

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

(₹ in lakh)

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

97. The petitioner has computed the Return on Equity, Interest on Loan and Depreciation on the Common Assets for the period 2009-14 based on the opening capital cost as on 1.4.2009 for different offices and has apportioned them to each generating stations and T&D system in proportion to the capital cost approved as on 31.3.2009. Further, the petitioner has allocated the cost of common offices among Generating stations on the basis of installed capacity. The annual fixed charges claimed towards Common Assets are as under:-

(₹ in lakh)

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

98. The objector, DVPCA vide affidavits dated 1.12.2014 and 1.3.2016 has submitted that the petitioner has claimed the Return on Equity, Interest on Loan and Depreciation on the common assets namely Direction Office, Subsidiary Activities, Other Offices, R&D, IT Centre and Central Office and has claimed such expenses under the head “Share of other office expenditure”. Therefore, the contribution to subsidiary fund is not allowable as the Return on Equity, Interest on Loan and Depreciation on the common assets is being claimed separately in terms of “Share of other office expenditure”.

99. The Commission vide ROP of hearing dated 18.5.2016 directed the petitioner to submit the Plant/Unit wise allocation/reconciliation statement duly matching with the audited accounts and certified by the auditor in respect of Common Cost – Director, Central, R&D, IT, Subsidiary, Other Office etc for the period 2009-14. In response, the petitioner vide affidavit dated 15.6.2015 has submitted the reconciliation statement duly matching with audited accounts and certified by the auditor

100. The Commission vide ROP of hearing dated 18.5.2016 also directed the petitioner to clarify the discrepancies in the computation of claims along with the variation under various heads. The Commission also directed the petitioner to submit the methodology followed for allocation of common office expenses. In response, the petitioner vide affidavit dated 9.6.2016 has submitted that it has considered the same methodology, as considered by it for allocation of liability towards P & G fund.

101. 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 as the admitted opening capital

cost as on 1.4.2009. The annual fixed charges of Common offices as worked out have been apportioned to generating stations / T&D systems as considered as on 31.3.2009. This is in line with the decision of the Commission order dated 8.5.2013 in Petition No. 272/2010.

102. 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.

103. It is observed that the petitioner has procured additional assets in order to meet the increased capacity addition, augmented and upgraded Central testing laboratory in order to take care of generation relays and metering equipment installed in power stations. It has also incurred expenditure to equip the existing relay testing laboratory, procured testing equipments for Dissolved Gas Analysis (DGA), High Accuracy meter testing facility with state of the art technology for accreditation by the National Accreditation Board for Testing and Calibration Laboratories (NABL).In view of this, we allow the expenditure towards common office viz. Central office, Subsidiary activity,

Other office, Direction office, IT and R&D for this generating station as claimed by the petitioner.

104. The fixed charges have been computed as per the admitted capital cost and have been allocated to various stations as under.

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	713.394	836.713	321.563	395.689	452.428
Interest on loan	205.706	243.649	178.771	147.563	141.966
Return on Equity	791.194	730.402	788.261	673.053	558.976
Total	**1710.29**	**1810.76**	**1288.59**	**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	1110.75	1048.44	994.19
T&D	88805.81	236.04	249.91	177.84	167.87	159.18
Total	**643454.52**	**1710.29**	**1810.76**	**1288.59**	**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	201.53	142.16	109.71
Chandrapura TPS	390	201.23	213.05	124.76	88.00	67.91
Durgapur TPS	350	180.59	191.20	111.96	78.98	60.95
Mejia TPS #1 to 3	630	325.07	344.16	201.53	142.16	109.71
Mejia TPS #4	210	108.36	114.72	67.18	47.39	36.57
Mejia TPS #5 & 6	500	257.99	273.14	159.95	112.83	87.07
Maithon HS	63.2	32.61	34.53	20.22	14.26	11.01
Panchet HS	**80**	**41.28**	**43.70**	**25.59**	**18.05**	**13.93**
Tilaiya HS	4	2.06	2.19	1.28	0.90	0.70
Total	**2857.2**	**1474.25**	**1560.85**	**914.00**	**644.74**	**497.54**
Chandrapura TPS #7 & 8	500	-	-	90.27	112.83	87.07
Mejia TPS 7 & 8	1000	-	-	106.48	183.30	174.14
Durgapur Steel TPS # 1 & 2	1000	-	-	-	107.57	174.14
Koderma TPS	500	-	-	-	-	61.31
Total	**3000**	-	-	**196.76**	**403.70**	**496.65**

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

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

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Common Office Expenditure	41.28	43.70	25.59	18.05	13.93

Annual Fixed charges for 2009-14

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

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	113.13	51.52	18.04	-	-
Interest on Loan	-	-	-	-	-
Return on Equity	465.73	389.11	487.60	487.03	389.06
Interest on Working Capital	70.13	70.57	75.43	78.76	80.64
O&M Expenses	1160.77	1227.16	1297.36	1371.57	1450.02
Sub-Total	**1809.76**	**1738.35**	**1878.43**	**1937.36**	**1919.73**
Pension & Gratuity Contribution	200.69	200.69	200.69	200.69	200.69
Sinking Fund Contribution	112.97	109.17	104.47	103.89	111.16
Common office expenditure	41.28	43.70	25.59	18.05	13.93
Additional O&M Expenses	74.57	78.83	83.34	88.11	93.15
Sub-Total	**429.50**	**432.39**	**414.09**	**410.74**	**418.93**
Total	**2239.26**	**2170.75**	**2292.51**	**2348.09**	**2338.65**

108. The difference in the annual fixed charges determined by order dated 7.8.2013 and those determined by this order shall be adjusted in accordance with Regulation 6(6) of the 2009 Tariff Regulations.

109. This order disposes of Petition No.467/GT/2014.

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

Annexure-1

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

(₹ in lakh)

	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the period	Total
Loan-1 SLR Bonds	10.68%	44000.00	0.00	44000.00
Loan-2 PSU Bonds	3.41%	22019.00	0.00	22019.00
Loan-3 PFC	5.87%	8451.11	0.00	8451.11
Loan 5 GOI RVP	9.00%	500.00	0.00	500.00
Loan 6 US EXIM $ Loan#	2.00%	5409.77	0.00	5409.77
Loan-6 REC Loan	0.00%	0.00	0.00	0.00
Total		**80380.00**	**0.00**	**80380.00**

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

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	80380.00	144380.00	144380.00	144380.00	184380.00
Cumulative Repayment of loan upto previous year	47520.00	54950.00	64148.00	73251.00	78513.00
Net Loan Opening	33626.00	89827.00	80610.00	71129.00	105867.00
Additions during the year	64000.00	0.00	0.00	40000.00	23500.00
Increase/ Decrease due to FERV	(-)369.00	(-)19.00	0.00	154.00	220.00
Increase/ Decrease due to additional capitalization	0.00	0.00	0.00	0.00	0.00
Repayment during the year	7430.00	9198.00	9102.00	5262.00	465.00
Net Loan Closing	89827.00	80610.00	71508.00	106021.00	129122.00
Average Loan	61542.00	85209.00	76059.00	88575.00	117494.50
Rate of Interest	**8.8500%**	**8.8200%**	**8.7000%**	**9.3209%**	**9.6430%**
Interest	3003.00	7524.00	7357.00	8256.00	11330.00