CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 205/GT/2015

Coram:

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

Date of Order : 17.03.2017

In the matter of:

Approval of tariff of Durgapur Steel Thermal Power Station, Units I and II (1000 MW) for the period 2014-19

And in the matter of:

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

Versus

1. BSES-Rajdhani Power Ltd.
   PMG Offie, 2nd Floor, B-Block
   BSES Bhawan, Nehru Place,
   New Delhi – 110019

2. BSES-Yamuna Power Ltd.,
   2nd floor, A Block
   Shakti Kiran Building,
   Karkardooma, New Delhi- 110092

3. Tata Power Delhi Distribution Ltd.,
   (erstwhile North Delhi Power Ltd.)
   1st Floor, CENNET SCADA Building,
   Near PP-3 Grid, Pitampura
   New Delhi – 110 034

4. Punjab State Power Corporation Ltd
   Shed No. TI-A, Patiala – 147 001

5. Madhya Pradesh Power Management Co. Ltd.
(erstwhile Madhya Pradesh Power Trading Co. Ltd.)
Shakti Bhawan, Vidyut Nagar,
Jabalpur -482008

4. Tata Steel Ltd.
PGP Works, General Office (W-175)
Jamshedpur – 831 001 **……….Respondents**

Parties present:

For Petitioner: Shri Subrata Ghosal, DVC
Shri Jisnu Dutta, DVC
Shri Bishnu Pada Kayal, DVC

For Respondents:None

ORDER

This petition has been filed by the petitioner, Damodar Valley Corporation (hereinafter referred to as DVC), for approval of tariff for Durgapur Steel Thermal Power Station, Units I & II (2x500 MW)(hereinafter referred to as "the generating station") for the period 2014-19, in terms of the provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff)Regulations, 2014 ("the 2014 Tariff Regulations").

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

Units	Actual COD
I	15.5.2012
II	5.3.2013

3. The petitioner has entered into Power Purchase Agreements (PPAs) with the respondents Delhi Transco Ltd., PSEB, and MP Power Trading Company Ltd. on 24.8.2006, 7.11.2006 and 14.5.2007 respectively. As per order of Delhi Electricity Regulatory Commission dated 31.3.2007 and consequent to the directions issued vide letter dated 28.6.2006 by Government of National Capital Territory (GNCT) of Delhi, the PPA with DTL dated 24.8.2006 has been reassigned to three Distribution Companies of Delhi namely, BSES-BPL, BSES-BYPL and TPDDL with effect from 1.4.2007.

4. In Petition No. 66/GT/2012 filed by the petitioner for determination of tariff of the generating station for the period from dates of commercial operation of Unit I and II to 31.3.2014, the Commission vide order dated 20.4.2015 had determined the annual fixed charges of the generating station based on actual additional capital expenditure incurred upto COD of unit-I for the years 2012-13 and projected additional capital expenditure from COD of unit-II to 31.3.2014 as stated under:

(₹ in lakh)

	2012-13		**2013-14**
	15.5.2012 to 4.3.2013	**5.3.2013 to 31.3.2013**	
Depreciation	17071.81	36002.61	36962.48
Interest on Loan	18259.03	38389.34	36821.35
Return on Equity	10240.36	21790.43	22530.07
Interest on Working Capital	6011.93	11823.74	11881.46
O&M Expenses	7680.00	15360.00	16240.00
Cost of secondary fuel oil (for coal-based & lignite fired generating stations only)	2667.35	4438.63	4438.63
Sub-Total	**61930.48**	**127804.75**	**128873.99**
Contribution to Sinking Fund	1460.24	1460.24	1562.46
Grand Total	63390.72	129264.99	130436.45

5. The Commission vide order dated 20.4.2015 in Petition No. 66/GT/2012 has granted liberty to the petitioner to submit the details of reconciliation statement at the time of truing up of tariff.

6. In view of the transmission charges, the Commission in order dated 20.4.2015 in Petition No. 66/GT/2012 had directed that the tariff for the transmission asset shall have to be borne by the petitioner till COD of Unit – I of the generating station and thereafter, to be shared by the respondents in accordance with the Central Electricity Regulatory Commission (Sharing of Inter - State Transmission Charges & Losses) Regulations, 2009.

7. Thereafter, the Commission, vide order dated 27.2.2017 in Petition No. 204/GT/2015, had revised the annual fixed charges of the generating station for the period 2009-14 after truing-up exercise in terms of Regulation 6(1) of the 2009 Tariff Regulations, as summarized under:-

(₹ in lakh)

	2012-13		**2013-14**
	15.5.2012 to 4.3.2013	**5.3.2013 to 31.3.2013**	
Depreciation	17041.20	36668.25	36118.80
Interest on Loan	18983.82	40316.01	40323.37
Return on Equity	10240.36	21790.43	17975.90
Interest on Working Capital	6027.91	11883.41	11837.82
O&M Expenses	7680.00	15360.00	16240.00
Cost of secondary fuel oil (for coal-based & lignite fired generating stations only)	2667.35	4438.63	4438.63
Sub-Total	**62640.65**	**130456.73**	**126934.52**
Share of Common Office Expenses	112.83	225.65	174.14
Additional O&M on account of Ash Evacuation, Mega Insurance, CISF Security and Share of subsidiary activities	0.00	0.00	0.00
Pension & Gratuity	0.00	0.00	0.00

	2012-13		2013-14
	15.5.2012 to 4.3.2013	5.3.2013 to 31.3.2013	
Contribution			
Share of Sinking Fund	2536.22	5072.44	4016.23
Adjustment of secondary fuel oil	(-)301.37	(-)14.41	(-)149.80
Sub-Total	**2347.68**	**5283.68**	**4040.57**
Total Annual Fixed Charges	**64988.32**	**135740.40**	**130975.09**

8. Before we proceed to determine the tariff of the generating station for the period of 2014-19, we intend to rectify an inadvertent clerical error in the tables regarding cost of common office expenses in paras 83, 84 and 85, approved vide order dated 27.2.2017 in Petition No. 204/GT/2015.

9. Regulation 103(A) of the Central Electricity Regulatory Commission (Conduct of Business) Regulation, 1999, as amended from time to time (Conduct of Business Regulation) provides as under: -

> *"Clerical or arithmetical mistakes in the orders or errors arising therein from any accidental slip or omission may at any time be corrected by the Commission either of its own motion or on the application of any of the parties."*

10. The above provision enables the Commission to correct any accidental omission or error in an order at any time on its own motion. Hence, we consider it appropriate to correct the inadvertent clerical errors in the cost of common office expenses of this generating station as approved in tables in paras 83, 84 and 85 of order dated 27.2.2017 in Petition No. 204/GT/2015. Accordingly, in exercise of our power under Regulation 103(A) of Conduct of Business Regulations, tables in para 83 are revised as under:-

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on loan	0.00	0.00	0.00	0.00	0.00

	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	791.19	730.40	630.54	673.05	558.98
Total	**791.19**	**730.40**	**630.54**	**673.05**	**558.98**

(₹ in lakh)

	Capital cost as on 1.4.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Entire generating station	554648.71	682.00	629.60	543.52	580.16	481.83
T&D	88805.81	109.20	100.81	87.02	92.89	77.15
Total	**643454.52**	**791.19**	**730.40**	**630.54**	**673.05**	**558.98**

(₹ in lakh)

	Capacity (MW)	2009-10	2010-11	2011-12	2012-13	2013-14
Bokaro TPS	630	150.38	138.82	98.61	78.67	53.17
Chandrapura TPS	390	93.09	85.94	61.05	48.70	32.91
Durgapur TPS	350	83.54	77.12	54.79	43.70	29.54
Mejia TPS #1 to 3	630	150.38	138.82	98.61	78.67	53.17
Mejia TPS #4	210	50.13	46.27	32.87	26.22	17.72
Mejia TPS #5 & 6	500	119.35	110.18	78.27	62.43	42.20
Maithon HS	63.2	15.09	13.93	9.89	7.89	5.33
Panchet HS	80	19.10	17.63	12.52	9.99	6.75
Tilaiya HS	4	0.95	0.88	0.63	0.50	0.34
Total	**2857.2**	**682.00**	**629.60**	**447.24**	**356.77**	**241.13**
Chandrapura TPS #7 & 8	500	0.00	0.00	44.17	62.43	42.20
Mejia TPS 7 & 8	1000	0.00	0.00	52.11	101.43	84.39
Durgapur Steel TPS # 1 & 2	**1000**	**0.00**	**0.00**	**0.00**	**59.53**	**84.39**
Koderma TPS	500	0.00	0.00	0.00	0.00	29.71
Total	**3000**	**0.00**	**0.00**	**96.28**	**223.39**	**240.70**
Grand Total		**682.00**	**629.60**	**543.52**	**580.16**	**481.83**

11. The cost of common offices approved to this generating station in table in Para 84 in order dated 27.2.2017 in Petition No. 204/GT/2015 is revised as under:-

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Common Office Expenditure	0.00	0.00	0.00	59.53	84.39

12. Further, the common office expenditure during 2012-13 apportioned on the basis of number of days of operation in table in Para 85 in order dated 27.2.2017 in Petition No. 204/GT/2015 is revised as under:-

(₹ in lakh)

	2012-13		2013-14
	15.05.2012 to 04.03.2013	05.03.2013 to 31.03.2013	
Common office expenditure (pro-rata)	50.29	9.24	84.39
Common office expenditure (annualised)	62.43	124.87	84.39

13. Accordingly, the Annual Fixed Charges approved in table in para 89 in order dated 27.2.2017 in Petition No. 204/GT/2015 are revised as under:

(₹ in lakh)

	2012-13		2013-14
	15.05.2012 to 04.03.2013	05.03.2013 to 31.03.2013	
Depreciation	17041.20	36668.25	36118.80
Interest on Loan	18983.82	40316.01	40323.37
Return on Equity	10240.36	21790.43	17975.90
Interest on Working Capital	6027.91	11883.41	11837.82
O&M Expenses	7680.00	15360.00	16240.00
Cost of secondary fuel oil (for coal-based & lignite fired generating stations only)	2667.35	4438.63	4438.63
Sub-Total	**62640.65**	**130456.73**	**126934.52**
Share of Common Office Expenses	62.43	124.87	84.39
Additional O&M on account of Ash Evacuation, Mega Insurance, CISF Security and Share of subsidiary activities	0.00	0.00	0.00
Pension & Gratuity Contribution	0.00	0.00	0.00
Share of Sinking Fund	2536.22	5072.44	4016.23
Adjustment of secondary fuel oil	(-)301.37	(-)14.41	(-)149.80
Sub-Total	**2297.28**	**5182.89**	**3950.82**
Total Annual Fixed Charges	**64937.93**	**135639.62**	**130885.34**

Note: All figures are on annualized basis.

14. The petitioner vide affidavit dated 18.8.2015 has filed this petition for approval of tariff of the generating station in accordance with the provisions of the 2014 Tariff

Regulations. Accordingly, the capital cost and the annual fixed charges claimed by the petitioner are as under:

Capital Cost

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	512265.20	536901.20	539401.20	539401.20	539401.20
Add: Addition during the year / period	24,636.00	2,500	0.00	0.00	0.00
Closing Capital Cost	536901.20	539401.20	539401.20	539401.20	539401.20
Average Capital Cost	524583.20	538151.20	539401.20	539401.20	539401.20

Annual Fixed Charges

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	38487.91	39483.38	39575.09	39575.09	39575.09
Interest on Loan	37900.94	34409.05	29752.50	25073.69	20426.19
Return on Equity	24515.02	25313.25	25386.79	25386.79	25386.79
Interest on Working Capital	11393.95	11571.03	11545.69	11522.05	11501.29
O & M Expenses	16000.00	17010.00	18080.00	19220.00	20430.00
Share of Common Office Expenditure	208.76	194.64	248.00	363.90	412.33
Share of P&G & impact of pay revision	5760.59	12037.25	12037.25	12037.25	12037.25
Share of Additional O&M due to mega insurance , CISF expenditure & expenditure for subsidiary activity	636.41	725.59	863.25	977.00	1038.46
Interest & Contribution on Sinking Fund (As per section 40, Part IV of DVC Act)	4297.37	4598.18	4920.06	5264.46	5632.97
Total	**139200.95**	**145342.37**	**142408.62**	**139420.23**	**136440.37**

15. In compliance with the directions of the Commission, the petitioner has filed additional information with copy to the respondents. The respondent namely Delhi Transco Limited and Madhya Pradesh Power Management Corporation Limited

(MPPMCL) have also made their submission in regard to the instant petition. Taking into consideration the submissions made by the parties and the documents available on record, we now proceed to consider the claims of the petitioner and determine the tariff in respect of this generating station for the period 2014-19.

Capital cost

16. Clause (1) of Regulation 9 of the 2014 Tariff Regulations provides that the capital cost as determined by the Commission after prudence check in accordance with the regulation shall form the basis of determination of tariff for existing and new projects. Clause (3) of Regulation 9 provides as under:

> *"9(3) The Capital cost of an existing project shall include the following:*
> *(a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;"*

17. The closing capital cost considered by the Commission as on 31.3.2014 in order dated 27.2.2017 in Petition No. 204/GT/2015 is ₹503248.04 lakh. The same has been considered as the opening capital cost as on 1.4.2014 for computation of tariff for the period 2014-19.

Projected Additional Capital Expenditure for the period 2014-19

18. Regulation 14 (3) of the 2014 Tariff Regulations, provides as under:

> "*14.(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may 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 of law;*
> *(ii) Change in law or compliance of any existing law;*
> *(iii)Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;*
> *(iv) Deferred works relating to ash pond or ash handling system in the original scope of work;*

(v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such un-discharged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;
(vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;
(vii) Any additional capital expenditure which has become necessary for efficient operation of generating station other than coal / lignite based stations or transmission system as the case may be. The claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;
(viii) 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) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;
(ix) 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 due to obsolesce of technology, replacement of switchyard equipment due to increase of fault level, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system; and
(x) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receiving system arising due to non-materialization of coal supply corresponding to full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station:
Provided that any expenditure on acquiring the minor items or the assets including tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, computers, 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. 1.4.2014
Provided further that any capital expenditure other than that of the nature specified above in (i) to (iv) in case of coal/lignite based station shall be met out of compensation allowance:
Provided also that if any expenditure has been claimed under Renovation and Modernisation (R&M), repairs and maintenance under (O&M) expenses and Compensation Allowance, same expenditure cannot be claimed under this regulation."

19. The projected additional capital expenditure claimed by the petitioner for the period 2014-19 are as under:

(₹ in lakh)

					Justification
2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	
24636.00	2500.00	0.00	0.00	0.00	Balance works under approved Cost

20. The petitioner has claimed projected additional capital expenditure of ₹24636.00 lakh and ₹2500.00 lakh for 2014-15 and 2015-16 respectively under Regulation 14(1)(i) and 14(1)(ii) of the 2014, Tariff Regulations. The petitioner has submitted that the Board of the petitioner's corporation had approved the sanction cost of the project as ₹647674 lakh vide order dated 18.03.2015 superseding the earlier sanction order dated 30.03.201. The petitioner has further submitted that some of the works for which orders were placed during the period 2012-14 could not be completed and the assets could not be put to use during the period 2012-14 due to uncontrollable factors and same shall be capitalized and put to use during the period 2014-19. However, the petitioner has not submitted any details in respect of the additional capital expenditure claimed during the years 2014-15 and 2015-16. It has also not claimed any projected additional capital expenditure for the period 2016-19.

21. Accordingly, the petitioner was directed vide ROP of the hearing dated 12.1.2016 to submit the details of additional capital expenditure along with justification for additional capital expenditure claimed during the year 2014-15 and 2015-16. It was also directed to furnish approval of the competent authority for the additional capital expenditure proposed to be incurred during the period 2014-19 along with a note on the procedure adopted for approval of such proposals. In response, the petitioner vide affidavit dated 9.2.2016 has submitted that the projected additional capital expenditure are based on Budgetary Expenditure (BE) and Revised Expenditure (RE) approved by the Petitioner Corporation. The petitioner has also clarified that an additional capital expenditure

committee was constituted with the representatives from all generating stations & HQ-Operations Service of the petitioner for projections of additional capital expenditure to be incurred for the period 2014-19. The petitioner has further submitted that the station wise capital expenditure from BE and RE were relooked & examined by the Project Engineering group in association with the additional capital expenditure committee and based on their recommendations, the proposed additional capital expenditure has been claimed in the petition, which was duly approved by the Project head and the Head of the Plant. As regards the details of the additional capital expenditure incurred during 2014-19, the petitioner has submitted that the actual additional capital expenditure of ₹7163 lakh has been incurred in 2014-15 towards works / services within the original scope of work and deferred for execution. (Sl. No. 3, 4, 6 & 7 of Revised Sanction Order No. 405 dated 18.03.2015) in terms of the Regulation 14(1)(i) & 14(1)(ii) of the 2014 Tariff Regulations. The petitioner has also submitted that the details of additional capitalization incurred for the period 2015-16 along with the justification shall be submitted after finalization of accounts for the year 2015-16 and the additional capitalization for the balance period (i.e. 2016-19) shall be submitted at the time of truing up of tariff in terms of Regulation 8 of the 2014, Tariff Regulations. Accordingly, the details of the actual additional capital expenditure incurred for the year 2014-15 as submitted by the petitioner vide affidavit dated 9.2.2016 is as under:

2014-15

(₹ in lakh)

Head of work / Equipment	Regulation under which claimed	Amount	Justification
Land	14(1)(i) & 14(1)(ii)	69.80	Payment made for acquisition of land and kept in CWIP within the original scope of work under Sl. No. 2 of Revised Sanction Order No. 405 Dt.18.03.2015, transferred to Fixed Assets.
Building		1248.29	Works deferred for execution relating to works/services within the original scope of work under Sl. No. 3, 4, 6 & 7 of

Head of work / Equipment	Regulation under which claimed	Amount	Justification
			Revised Sanction Order No. 405 Dt.18.03.2015. Transfer from CWIP and payment directly booked in A/cs.
Roads, Bridges & Railway Sidings		1341.81	Works deferred for execution relating to works/services within the original scope of work under Sl. No. Sl. No. 3, 4, 6 & 7 of sanction order. Transfer from CWIP.
Barrage & Barrage Gates		1462.97	Works deferred for execution relating to works/services within the original scope of work under Sl. No. Sl. No. 3, 4, 6 & 7 of sanction order. Transfer from CWIP.
Plant and Machinery		2967.57	Works deferred for execution relating to works/services within the original scope of work under Sl. No. Sl. No. 3, 4, 6 & 7 of sanction order. Transfer from CWIP.
Switch gears		249.60	Works deferred for execution relating to works/services within the original scope of work under Sl. No. Sl. No. 3, 4, 6 & 7 of sanction order. Transfer from CWIP.
Other Assets		22.41	Works deferred for execution relating to works/services within the original scope of work under Sl. No. Sl. No. 3, 4, 6 & 7 of sanction order. Transfer from CWIP and payment directly booked in A/cs.
Total		**7362.46**	

22. The respondent No.3 MPPMCL has submitted as under :-

a. The petitioner has not indicated the relevant regulation under which the capitalization is claimed and has also not submitted information justifying the capitalization for the year 2014-15 and 2015-16. The petitioner has not indicated the amount of initial spares allowable as per norms contained in Regulation 13 of the 2014 Tariff Regulations.

b. The petitioner has not claimed any projected additional capital expenditure during the period 2016-19 and hence such expenditure is liable to be rejected if claimed during truing up of tariff.

23. We have examined the matter. It is observed that the petitioner in the petition had claimed total additional capital expenditure of ₹24636 lakh in 2014-15 and ₹2500 lakh in year 2015-16 in respect of works which are within the original scope of work and up to cut-off date of the generating station (31.3.2016). However, the petitioner vide affidavit dated 9.2.2016 has revised the claim based on the actual additional expenditure of ₹7163.00 lakh incurred in 2014-15. On prudence check of the details of the additional capital expenditure incurred in 2014-15, it is observed that the actual additional capital expenditure of ₹7362.46 lakh in 2014-15 pertains to un-discharged liabilities and Works which form part of the original scope of work and deferred for execution within the cut-off date of the generating station. As the additional capital expenditure incurred by the petitioner is within in respect of works deferred for execution, discharge of liabilities for works and is covered under the original scope of work of the project. We are inclined to allow the capitalization of ₹7362.46 lakh for 2014-15 in terms of Regulation 14(1)(i) & (ii) of the 2014 Tariff Regulations. Further, the petitioner has submitted the additional capital expenditure of ₹2500 lakh has not been finalized and the same will be claimed at the time of truing-up. Hence it may be indicated that the additional capital expenditure for the year 2015-16 has not been considered in view of the submission of the petitioner that it shall file the details after the finalization of the accounts. Accordingly, the additional capital expenditure for the year 2015-16 to 2018-19 shall be considered at the time of truing up of tariff in terms of Regulation 8 of the 2014 Tariff Regulations.

24. Based on the above discussions, the capital expenditure allowed for the period 2014-19 is as under:

(₹ in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Opening Capital Cost	503248.04	510610.50	510610.50	510610.50	510610.50
Additional Capital Expenditure	7362.46	0.00	0.00	0.00	0.00

Closing Capital Cost	510610.50	510610.50	510610.50	510610.50	510610.50
Average Capital Cost	506929.27	510610.50	510610.50	510610.50	510610.50

Debt: Equity

25. Regulation 19 of the 2014 Tariff Regulations provides as under:

> *"19. Debt-Equity Ratio*
>
> *(1) For a project declared under commercial operation on or after 1.4.2014, the debt - equity ratio would be considered as 70:30 as on COD. 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:*
>
> *i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:*
>
> *ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:*
>
> *iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt : equity ratio."*

26. Accordingly, the gross loan and equity amounting to ₹383987.87 lakh and ₹119260.17 lakh respectively as on 31.3.2014 as considered in order dated 27.2.2017 in Petition No. 204/GT/2015 has been considered as the gross normative loan and equity as on 1.4.2014. Hence, the normative debt equity ratio of 70:30 has been considered in the case of additional capital expenditure.

(₹ in lakh)

	As on 1.4.2014		**Net additions for Additional capitalization during period from 1.4.2014 to 31.3.2019**		**As on 31.3.2019**	
	Amount	**(%)**	**Amount**	**(%)**	**Amount**	**(%)**
Debt	383987.86	76.30%	5153.72	70.00%	389141.59	76.21%
Equity	119260.17	23.70%	2208.74	30.00%	121468.91	23.79%
Total	503248.03	100.00%	7362.46	100.00%	510610.50	100.00%

Return on Equity

27. Regulation 24 of the 2014 Tariff Regulations provides as under:

> *"**24. Return on Equity:** (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.*
>
> *(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:*
>
> *Provided that:*
> *i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 %shall be allowed, if such projects are completed within the timeline specified in Appendix-I:*
>
> *ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:*
>
> *iii) additional RoE of 0.50% has been allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:*
>
> *iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:*
>
> *v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:*
>
> *vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers."*

28. Regulation 25 of the 2014 Tariff Regulations provides as under:

> "***Tax on Return on Equity:***
> *(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non*

generation or non transmission business, as the case may be) shall not be considered for the calculation of "effective tax rate".

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where "t" is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2014-15 to 2018-19 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee as the case may be. Any under -recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term transmission customers/DICs as the case may be on year to year basis".

29. The petitioner has claimed return on equity considering the base rate of 15.50% and effective tax rate of 19.610%.

30. The respondent No.3 MPPMCL has submitted that the petitioner has considered an effective rate of 19.610% for calculating rate of return on equity as per Regulation 25 computed on the basis of Minimum Alternative Tax @ 20.96%. The respondent has also submitted that the present MAT rate is 18.5% excluding surcharge and cess and the 2014 Tariff Regulations provides for MAT only and thus surcharge and cess cannot be included in MAT for calculation of rate of return on equity. In view of the same the respondent has requested that the MAT rate of 18.5% may only be considered for computation of rate of return on equity.

31. We have examined the matter. Since, no tax has been paid by the petitioner for the year 2014-15; the effective tax rate of 0.00% has been considered for the years from 2014-15 to 2018-19. This is subject to truing up. Accordingly, Return on Equity has been computed as under:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening notional equity	119260.17	121468.91	121468.91	121468.91	121468.91
Addition due to Additional Capitalisation	2208.74	0.00	0.00	0.00	0.00
Closing Equity	**121468.91**	**121468.91**	**121468.91**	**121468.91**	**121468.91**
Average Equity	120364.54	121468.91	121468.91	121468.91	121468.91
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Tax rate	0.000%	0.000%	0.000%	0.000%	0.000%
Rate of Return on Equity (Pre Tax)	15.500%	15.500%	15.500%	15.500%	15.500%
Return on Equity	**18656.50**	**18827.68**	**18827.68**	**18827.68**	**18827.68**

<u>Interest on Loan</u>

32. Regulation 26 of the 2014 Tariff Regulations provides that:

> *"**26. Interest on loan capital**: (1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.*
>
> *(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.*
>
> *(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of Decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalization of such asset.*
>
> *(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 depreciation allowed for the year or part of the year.*

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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 beneficiaries or the long term transmission customers /DICs shall not with hold 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."

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

a. The gross normative loan amounting to ₹383987.86 lakh has been considered as on 1.4.2014.

b. Cumulative repayment of ₹52557.59 lakh as on 31.3.2014 has been considered as on1.4.2014.

c. Accordingly, the net normative opening loan as on 1.4.2014 works out to ₹331430.28 lakh.

d. Addition to normative loan on account of approved additional capital expenditure has been considered.

e. Depreciation allowed for the period has been considered as repayment of normative loan during the respective years.

f. In line with the provisions of the regulation, the weighted average rate of interest has been calculated applying the actual loan portfolio existing as on 1.4.2014 along with subsequent additions during the period 2014-19, if any, for the generating station. In case of loans carrying floating rate of interest the rate of interest as provided by the petitioner has been considered for the purpose of tariff.

34. Accordingly, the calculations for interest on loan as approved in this order are as under:-

(₹ in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Gross Opening Loan	383987.86	389141.58	389141.58	389141.58	389141.58
Cumulative Repayment of Loan up to previous year	52557.59	89750.25	127213.01	164675.76	202138.52
Net Opening Loan	331430.28	299391.33	261928.58	224465.82	187003.07
Addition due to Additional Capitalisation	5153.72	0.00	0.00	0.00	0.00
Repayment of Loan during the period	37192.67	37462.75	37462.75	37462.75	37462.75
Add: Repayment adjustment due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Less: Repayment adjustment due to discharges during the year / period	0.00	0.00	0.00	0.00	0.00
Net Closing Loan	299391.33	261928.58	224465.82	187003.07	149540.31
Average Loan (Net)	315410.80	280659.95	243197.20	205734.44	168271.69
Weighted Average Rate of Interest on Loan (%)	11.602%	11.579%	11.507%	11.450%	11.383%
Interest on Loan	**36595.49**	**32498.09**	**27985.26**	**23557.29**	**19154.33**

Depreciation

35. Regulation 27 of the 2014 Tariff Regulations provides that:

> ***"27. Depreciation:*** *(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.*
>
> *Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.*
>
> *(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. 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.*
>
> *(3) 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 station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:*
>
> *Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long term power purchase agreement at regulated tariff:*
>
> *Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.*
>
> *(4) 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.*

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in ***Appendix-II*** *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 12years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.
(6) In case of the existing projects, the balance depreciable value as on1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets.

(7) The generating company or the transmission license, as the case may be, shall submit the details of proposed capital expenditure during the fag end of the project (five years before the useful life) along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure during the fag end of the project.

(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services."

36. The respondent, MPPMCL has submitted that petitioner has considered the depreciation at a weighted average rate of 7.3369% which is exorbitant and without any basis. It has also submitted that no justification or detailed calculation has been provided by the petitioner for claiming such an exorbitant rate. The respondent has further submitted that the justification provided by the petitioner for claiming such an exorbitant rate is based on the notification issued by the Ministry of Power dated 29.03.1994 and the same is baseless and arbitrary. It has further submitted that the Tribunal in its judgment dated 1.5.2012 in Appeal no. 40/2011 (DVC vs Central Electricity Regulatory Commission) had held that when there is any conflict between the provisions of Electricity Act, 2003 and the provisions of any other Act then the provisions of Electricity Act will prevail. Thus, the respondent has submitted that the claim of the petitioner is highly arbitrary, illogical and without any basis.

37. The matter has been examined. The rate of depreciation has been arrived at by considering the weighted average rate of depreciation computed on the gross value of asset as on 31.3.2014 and at the rates approved by C&AG which works out to 7.337% for 2013-14. The same has been considered for the period 2014-19. The necessary calculations in support of depreciation are as under:-

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	503248.04	510610.50	510610.50	510610.50	510610.50
Additional Capitalization	7362.46	0.00	0.00	0.00	0.00
Closing Capital Cost	510610.50	510610.50	510610.50	510610.50	510610.50
Average capital cost	506929.27	510610.50	510610.50	510610.50	510610.50
Value of freehold land	15241.00	15241.00	15241.00	15241.00	15241.00
Depreciation rate	7.337%	7.337%	7.337%	7.337%	7.337%
Depreciable value	442519.44	445832.55	445832.55	445832.55	445832.55
Balance depreciable value	389961.85	356082.29	318619.54	281156.78	243694.03
Depreciation	**37192.67**	**37462.75**	**37462.75**	**37462.75**	**37462.75**
Cumulative depreciation at the end of the period (before adjustment)	89750.25	127213.01	164675.76	202138.52	239601.27
Add: Cumulative depreciation adjustment on account of un discharged liabilities	0.00	0.00	0.00	0.00	0.00
Less: Cumulative depreciation adjustment on account of de-capitalization	0.00	0.00	0.00	0.00	0.00
Cumulative depreciation after adjustment (at the end of the period)	89750.25	127213.01	164675.76	202138.52	239601.27

Operation & Maintenance Expenses

38. Regulation 29 (1) (a) of the 2014 Tariff Regulations provides the year-wise O&M expense norms for the generating station as under:-

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Norms (₹lakh/MW)	16.00	17.01	18.08	19.22	20.43
Capacity (MW)	1000	1000	1000	1000	1000

O&M Expenses (annualized)	16000	17010	18080	19220	20430
O&M Expenses	**16000.00**	**17010.00**	**18080.00**	**19220.00**	**20430.00**

39. Accordingly, the normative O&M expense claimed by the petitioner in terms of the said regulation is in order and allowed.

Water Charges

40. Regulation 29(2) of the 2014 Tariff Regulations provide as under:

> *"29.(2) The Water Charges and capital spares for thermal generating stations shall be allowed separately: Provided that water charges shall be allowed based on water consumption depending upon type of plant, type of cooling water system etc., subject to prudence check. The details regarding the same shall be furnished along with the petition: Provided that the generating station shall submit the details of year wise actual capital spares consumed at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance or special allowance or claimed as a part of additional capitalisation or consumption of stores and spares and renovation and modernization"*

41. In terms of the above Regulation, water charges are to be allowed based on water consumption depending upon type of plant, type of cooling water system etc., subject to prudence check of the details furnished by the petitioner. The petitioner has submitted that at present water charges have not been claimed for the generating station. However, it has sought liberty to approach the Commission as and when the same is billed by the Authority and paid by the petitioner. In view of the above submission, we grant liberty to the petitioner to claim water charges at the time of truing up and the same will be considered in accordance with law.

Capital spares

42. The petitioner has not claimed capital spares on projection basis during the period 2014-19. Accordingly, the same has not been considered in this order. The claim of the

petitioner, if any, at the time of truing-up of tariff, shall be considered on merits, after prudence check.

Operational Norms

43. The operational norms in respect of the generating station claimed by the petitioner are as under:

Target Availability (%)	83.00
Heat Rate (kcal/kWh)	2443
Auxiliary Energy Consumption (%)	5.25
Specific Oil Consumption (ml/ kWh)	0.50

44. The operational norms claimed by the petitioner are discussed as under:

Normative Annual Plant Availability Factor (NAPAF)

45. Regulation 36 (A) (a) of the 2014 Tariff Regulations provides as under:

> *"(a) All Thermal generating stations, except those covered under clauses (b) (c) (d) & (e)- 85%.*
>
> *Provided that in view of the shortage of coal and uncertainty of assured coal supply on sustained basis experienced by the generating stations, the NAPAF for recovery of fixed charges shall be 83% till the same is reviewed.*
>
> *The above provision shall be reviewed based on actual feedback after 3 years from 01.04.2014."*

46. The petitioner has considered the target availability norm of 83% during 2014-19.

47. The Commission has specified norms for plant availability factor as 83% for the period 2014-17. Regarding the plant availability factor for the year 2017-18 and 2018-19, the same shall be 85%.

Heat Rate (kCal/kWh)

48. Regulation 36(C) (c) of the 2014 Tariff Regulatio*n*s as under:

"36 (C) Gross Station Heat Rate:-
c) Thermal Generating Station having COD on or after 1.4.2009 till 31.3.2014
(i) Coal-based and lignite-fired Thermal Generating Stations = 1.045 x Design Heat Rate (kCal/kWh)

Where the Design Heat Rate of a generating unit means the unit heat rate guaranteed by the supplier at conditions of 100% MCR, zero percent make up, design coal and design cooling water temperature/back pressure:

Provided that the heat rate norms computed as per above shall be limited to the heat rate norms approved during FY 2009-10 to FY 2013-14"

49. The petitioner has claimed Gross Station Heat Rate (GSHR) of 2443 kCal/kWh. The petitioner has submitted the guaranteed design gross turbine cycle heat rate of 1944.50 kCal/kWh and boiler efficiency of 83.23% in Form-2 of the petition.

50. The respondent No.3 MPPMCL has submitted that the petitioner has claimed GSHR of 2443 kCal/kWh which is in gross contravention to the 2014 Tariff Regulations and GSHR should be 2375 kCal/kWh for 500 MW sets as per the Regulation 36 (C) (a) (i) for existing Thermal Plants.

51. Based on the guaranteed design gross turbine cycle heat rate of 1944.50 kCal/kWh and boiler efficiency of 83.23%, the GSHR is worked out as 1.045 x (1944.50/0.8323) = 2441.43 kCal/kwh. The Commission vide order dated 27.2.2017 in Petition No. 204/GT/2015 approved the Station Heat Rate of 2443 kCal/kWh for the period 2009-14 which is more than 2441.43 kCal/kWh, the Station Heat Rate worked out for the period 2014-19. Hence, GSHR of 2441.43 kCal/kWh for the period 2014-19 is allowed.

Auxiliary Energy Consumption

52. The petitioner has claimed Auxiliary Energy Consumption at 5.25% during period 2014-19. Regulation 36(E)(a)(ii) of 2014 Tariff Regulations, provides for the Auxiliary Energy Consumption of 5.25% for coal based generating stations of 500 MW sets with

Natural Draft cooling tower and steam driven BFP. Hence, the Auxiliary Energy Consumption considered by the petitioner is as per norms and is allowed.

Specific Oil Consumption

53. Regulation 36(D)(a) of the 2014 Tariff Regulations provides secondary fuel oil consumption of 0.50 ml/kWh for coal-based generating station. Hence, the secondary fuel oil consumption considered by the petitioner is as per norms and is allowed.

Interest on working capital

54. Sub-section (a) of clause (1) of Regulation 28 of the 2014 Tariff Regulations provides as under:

> *"28. Interest on Working Capital:*
> *(1) The working capital shall cover*
>
> *(a) Coal-based/lignite-fired thermal generating stations*
>
> *(i) Cost of coal or lignite and limestone towards stock, if applicable, for 15 days for pit-head generating stations and 30 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;*
>
> *(ii) Cost of coal or lignite and limestone for 30 days for generation corresponding to the normative annual plant availability factor;*
>
> *(iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;*
>
> *(iv)Maintenance spares @ 20% of operation and maintenance expenses specified in regulation 29;*
>
> *(v) Receivables equivalent to two months of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor; and*
>
> *(vi) Operation and maintenance expenses for one month."*

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

Fuel components in working capital

56. The petitioner has claimed the cost for fuel component in working capital based on price and 'as received GCV' of coal procured and burnt for the preceding three months i.e January, 2014, February, 2014 and March, 2014 and secondary fuel oil for the preceding three months i.e. January, 2014, February, 2014 and March, 2014 as follows:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of coal for 2 months	27972.42	27972.42	27972.42	27972.42	27972.42
Cost of secondary fuel oil for 2 months	360.66	361.65	360.66	360.66	360.66

The respondentNo.3 MPPMCL has submitted that Cost of coal towards stock for 15 days (pit head) / 30 days (non-pit head) for generation corresponding to the normative annual plant availability factor or the maximum coal stock storage capacity whichever is lower has to be allowed as per Regulation 28 of the 2014 Tariff Regulations. The respondent has submitted that the petitioner may be directed to demonstrate the actual coal stock storage capacity of this generating station for computation of cost of coal towards stock. It has further submitted that the petitioner has considered the weighted average GCV of coal as received basis and not on billed basis which is inappropriate and insufficient for arriving at the weighted average GCV and cost of coal. The respondent has submitted that the figures/data indicated by the petitioner are not the representative figures and thus the same is in gross contravention to the provisions of the 2014 Tariff Regulations. The respondent has also submitted that the coal company has billed GCV in the range of 5134 kCa/Kg (non coaking coal) however, as the petitioner DVC has received GCV in the range of 3600 to 3769 kCal/Kg.The respondent has also submitted that the petitioner has claimed an amount of ₹3308.21 lakh towards Bus Unit in calculation of WC and the same is against the provision of the Regulation 28, and hence should be disallowed.

57. The issue of "as received" GCV for computation of energy charges was challenged by NTPC and other generating companies through writ petition in the Hon'ble High Court of Delhi. The writ petition was heard on 7.9.2015 and Hon'ble High Court of Delhi had directed that the Commission shall decide the place from where the sample of coal should be taken for measurement of GCV of coal on as received basis within 1 month on the request of petitioners.

58. As per the directions of the Hon'ble High Court, the Commission vide order dated 25.1.2016 in Petition No. 283/GT/2014 has decided as under:

> *"58. In view of the above discussion, the issues referred by the Hon'ble High Court of Delhi are decided as under:*
>
> *(a) There is no basis in the Indian Standards and other documents relied upon by NTPC etc.to support their claim that GCV of coal on as received basis should be measured by taking samples after the crusher set up inside the generating station, in terms of Regulation 30(6) of the 2014 Tariff regulations.*
>
> *(b) The samples for the purpose of measurement of coal on as received basis should be collected from the loaded wagons at the generating stations either manually or through the Hydraulic Auger in accordance with provisions of IS 436(Part1/Section1) -1964 before the coal is unloaded. While collecting the samples, the safety of personnel and equipment as discussed in this order should be ensured. After collection of samples, the sample preparation and testing shall be carried out in the laboratory in accordance with the procedure prescribed in IS 436(Part1/Section1)-1964 which has been elaborated in the CPRI Report to PSERC."*

59. Further, the petitioner has claimed energy charge rate (ECR) of 2.501 ₹/kWh based on the weighted average price, GCV of coal (as received basis) & oil procured and burnt for the preceding three months. It is observed that the petitioner has not placed on record the GCV of coal on "as received" basis taken from the loaded wagons at the unloading point, though the petitioner was statutorily required to furnish such information

with effect from 1.4.2014. In compliance with the direction of the Hon"ble High Court of Delhi, the Commission in its order dated 25.1.2016 in Petition No. 283/GT/2014 has clarified that the sample for measurement of GCV of coal on "as received" basis shall be taken from the loaded wagons at the unloading point either manually or through the Hydraulic Augur. The petitioner has not submitted the required data regarding measurement of GCV of coal in compliance with the directions contained in the said order dated 25.1.2016. The present petition cannot be kept pending till the petitioner submits the required information. Hence, the Commission has decided to compute the energy charges by provisionally taking the GCV of coal on as "billed basis" and allowing on adjustment for total moisture as per the formula given as under:

$$\frac{GCV \times (1-TM)}{(1 - IM)}$$

Where: GCV=Gross Calorific value of coal
TM=Total moisture
IM= Inherent moisture

60. In view of the above, the cost for fuel components in working capital have been computed at 83% NAPAF for the years 2014-15, 2015-16 and 2016-17 and at 85% for the years 2017-18 and 2018-19 and based on "as billed" GCV of coal and price of coal procured and secondary fuel oil for the preceding three months from January, 2014 to March 2014 and allowed as under:

(₹ in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Cost of coal for 60 days	20645.64	20645.64	20645.64	21143.13	21143.13
Cost of secondary fuel oil for 2 months	360.66	361.65	360.66	369.35	369.35
Total	**21006.30**	**21007.29**	**21006.30**	**21512.48**	**21512.48**

61. The Energy Charge Rate (ECR) based on operational norms specified under the 2014 Tariff Regulations and on "as billed" GCV of coal for preceding 3 months i.e. January, 2014 to March,2014 is worked out as under:-

Sl. No.		Unit	2014-19
1	Capacity	MW	1000
2	Gross Station Heat Rate	kCal/kWh	2441.43
3	Aux. Energy Consumption	%	5.25
4	Weighted average GCV of oil	kCal/lt.	10275.32
5	Weighted average GCV of Coal (As Billed.)	kCal/kg	5105.63
6	Adjustment on account of coal received at the generating station for equilibrated basis (Air dried) in the billed GCV Of Coal India		*
7	Weighted average price of oil	Rs./KL	59525.16
8	Weighted average price of Coal	Rs./MT	3619.99
9	**Rate of energy charge ex-bus**	**₹/kWh**	1.757**

** To be calculated by the petitioner based on the adjustment formula*
*** To be revised as per the figures at Sr. No. 6*

Maintenance Spares

62. The petitioner has claimed the maintenance spares in the working capital as under:

(₹ in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
3200.00	3402.00	3616.00	3844.00	4086.00

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

Receivables

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

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Variable Charges (two months)	20175.16	20230.44	20175.16	20661.31	20661.31
Fixed Charges (two months)	19542.40	19099.11	18517.78	17987.44	17450.92
Total	**39717.56**	**39329.54**	**38692.94**	**38648.75**	**38112.24**

O&M Expenses

65. O&M expenses for 1 month claimed by the petitioner for the purpose of working capital are as under:

(₹ in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
1333.33	1417.50	1506.67	1601.67	1702.50

66. Regulation 28(a)(vi) of Tariff Regulations, 2014 provides Operation and maintenance expenses for one month for coal-based generating station. The expenses for O&M expense as claimed by the petitioner is found to be in order and is allowed.

Rate of Interest

67. Clause (3) of Regulation 28 of the 2014 Tariff Regulations provides as under:

> *"Interest on working Capital: (3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later."*

68. In terms of the above regulations, SBI PLR of 13.50% (Bank rate 10.00 + 350bps) has been considered for the purpose of calculating interest on working capital. Interest on working capital has been computed as under:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of coal for 60 days	20645.64	20645.64	20645.64	21143.13	21143.13
Cost of secondary fuel oil- 2 months	360.66	361.65	360.66	369.35	369.35
O & M expenses- 1 Month	1333.33	1417.50	1506.67	1601.67	1702.50
Maintenance Spares	3200.00	3402.00	3616.00	3844.00	4086.00
Receivables- 2 months	39717.56	39329.54	38692.94	38648.75	38112.24
Total Working Capital	**65257.20**	**65156.33**	**64821.91**	**65606.90**	**65413.22**
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	**8809.72**	**8796.11**	**8750.96**	**8856.93**	**8830.78**

Other Elements of Tariff

69. In addition, the petitioner has claimed expenditure towards Cost of Common Offices, Pension & Gratuity contribution, Share of Additional O&M due to mega insurance, CISF expenditure & expenditure for subsidiary activity and interest & contribution on sinking funds as given below:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Share of Common Office Expenditure	208.76	194.64	248.00	363.90	412.33
Share of P&G & impact of pay revision	5760.59	12037.25	12037.25	12037.25	12037.25
Share of Additional O&M due to mega insurance , CISF expenditure & expenditure for subsidiary activity	636.41	725.59	863.25	977.00	1038.46
Interest & Contribution on Sinking Fund (As per section 40, Part IV of DVC Act)	4297.37	4598.18	4920.06	5264.46	5632.97

70. We now discuss and decide these elements as detailed below:

Additional O&M due to CISF Security, Mega Insurance and share of Subsidiary Activities

71. The petitioner has claimed the following projected expenditure during 2014-19 against the additional O&M due to CISF Security, Mega Insurance and share of Subsidiary Activities.

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Share of Additional O&M due to mega insurance , CISF expenditure & expenditure for subsidiary activity	636.41	725.59	863.25	977.00	1038.46

72. The respondent No.3 MPPMCL has submitted that apart from the O&M expenses, Mega insurance, additional O&M Expenses for CISF and additional claims for share of subsidiary activity etc., have been claimed by the petitioner and are excessive, unreasonable and beyond the scope of the Regulation. It has further submitted that the claim of the petitioner for additional O&M expenses is arbitrary, illogical and without any basis, and hence the claim of additional O&M expenses should be disallowed.

73. The Commission vide ROP of hearing dated 12.1.2016 had directed the petitioner to furnish the detailed justification for the additional expenditure incurred on CISF security, details of mega insurance and details of the subsidiary activities along with the details of the O&M expenditure of the generating station during the period since COD of Unit-I. In response, the petitioner vide affidavit dated 9.2.2016 has submitted that the generating station of the petitioner are located in high alert security zones. Further, some items of additional O&M expenses like Mega Insurance, CISF security and subsidiary activities was allowed in order dated 9.7.2013 in Petition No. 269/GT/2012.

74. We have examined matter. In terms of the statement of reasons in support of the 2014 Tariff Regulations, the Commission observed as under:

"…29.39 Some of the generating stations have suggested that site specific factors should be taken into account and additional O&M expenses should be allowed. The

Commission is of the view that the site specific norms in case of thermal generating stations may not serve much purpose as there is a set of advantages and disadvantages associated with every site, which average out, and the proposed norms are also based on multiple stations with wide geographical spread and therefore, such aspects are already factored in the norms…"

75. In line with the above observations and in accordance with the 2014 Tariff Regulations, the additional O&M expenses claimed by the petitioner have not been considered.

Pension & Gratuity Contribution

76. The petitioner has claimed pension and gratuity contribution for the period 2014-19 and has submitted that it has considered the actuarial valuation as on 31.3.2014, for liability towards pension and gratuity fund and projected P&G liability for the tariff period 2014-19 including impact of pay revision.

77. The respondent, MPPMCL has submitted that the claim of the petitioner is beyond the scope of the 2014 Tariff Regulations. It has also submitted that such expenditures are already considered in normative O&M expenses being allowed to the petitioner and accordingly the same may be disallowed.

78. As regards the wage revision of employees, the respondent, MPPMCL has submitted that in view of huge return on equity earned, the petitioner should bear the burden of wage revision of its employees. It has further submitted that Ministry of Heavy Industries and Public Enterprises in its office memorandum dated 26.11.2008 had issued the following instructions:-

"3. Affordability in implementation of pay revision: - The revised pay scale would be adopted, subject to the condition of additional outgo by such revision for a period of 12 month should not result in more than 20% in dip in profit before tax (PBT) for the year 2007-08 of a CPSE in respect of executive as well as non-unionized supervisory

staff taken together in a CPSE. CPSEs that cannot afford to pay full package, can implement with either part PRP or no PRP. These CPSEs may pay full package subsequently, provided the dip in the profit (PBT) is fully recouped to the original level.

4. The CPSEs, which are not able to adopt the revised pay scale(2007), may give the increase on a basic pay plus DA drawn in the pre revised scale as on 01.01.2007, with a uniform lower fitment of 10% or 20%, depending upon their affordability, with the approval of their Ministry/ Department.

16. Financial Implications: - The CPSE concerned has to bear their additional financial implications on account of pay revision from their own resources and no budgetary support will be provided."

79. Accordingly, the respondent, MPPMCL has submitted that the petitioner should bear the financial implications by own, and the respondents are not liable to bear the burden of pay revision of employees of the petitioner.

80. We have examined the matter. It is observed that the liability claimed by the petitioner pertains to the period 2009-14 and does not pertain to the tariff period 2014-19. In this regard it is observed that the Commission in Para 101 of the order dated 29.7.2016 in Petition No. 471/GT/2014, had disallowed the claim of the petitioner and had observed as under:

"101. As stated, the Commission in order dated 7.8.2013 in Petition No. 275/GT/2012 had allowed the recovery of 40% of the difference in liability as per Actuarial valuation 31.3.2009 and 31.3.2006 in five equal installments. The Commission in the said order had allocated the same on its generating stations except Mejia Unit 5 & 6. The Commission has revised the allocation and has also allocated share of P&G liability to Mejia Unit 5 and 6 on the basis of capital cost of ₹205946.66 lakh admitted by it as on 31.3.2009. It is observed that the O&M expenses norms specified by the Commission under the 2009 Tariff Regulations applicable for the period 2009-14 had taken into consideration the P&G liability as part of O&M expenses. The statement of reason of the 2009 Tariff Regulations, at para 20.3 clearly states that O&M cost for purpose of tariff covers expenditure incurred on the employees including gratuity, CPF, medical, education allowances etc. The expenses on account of CPF considered in Public Sector Undertakings take care of pension liability applicable in Government Undertaking."

81. In line with the above observation, these expenses maybe met from the normative O&M Expenses allowed to the generating station. In view of this the share of pension and gratuity is not allowed.

Contribution to Sinking Fund

82. The petitioner in this petition has submitted that total debt borrowing is ₹7000 crore out of which actual allocation to generating stations of DVC is ₹3100 crore. The actual allocation of debt borrowing of ₹3100 Crore among the generating stations of DVC is as under:-

(₹ in lakh)

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

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

(₹ in lakh)

Station	2014-15	2015-16	2016-17	2017-18	2018-19
Total contribution and interest for debt borrowing	**15277.34**	**16346.76**	**17491.03**	**18715.40**	**20025.48**
Durgapur TPS	**4297.37**	**4598.18**	**4920.06**	**5264.46**	**5632.97**
Mejia TPS Units 5 and 6	1222.19	1307.74	1399.28	1497.23	1602.04
Chandrapura TPS Units 7 and 8	2217.68	2372.92	2539.02	2716.75	2906.92
Mejia TPS B	1971.27	2109.26	2256.91	2414.89	2583.93
Koderma TPS	4681.77	5009.49	5360.15	5735.37	6136.84
Raghunathpur TPS-I	887.07	949.17	1015.61	1086.70	1162.77
Total	**15277.34**	**16346.76**	**17491.03**	**18715.40**	**20025.48**

84. The respondent MPPMCL has submitted that as per Regulation interest and contribution on sinking fund is not allowed as pass through in annual fixed charges and

the provision of DVC Act are in contravention to what is allowable in tariff as per the 2014 Tariff Regulations and Electricity Act, 2003, hence the interest and contribution on sinking fund should not be allowed.

85. We have examined the matter. Section 40 of the DVC Act provides that the petitioner shall make provision for depreciation and for reserve and other funds at such rates and on such terms as may be specified by the C&AG in consultation with the Central Government. It is observed that the sinking funds have been created only for redemption of bonds. Further, the book of accounts for the years 2012-13 and 2013-14 show figures/entries regarding the contribution to sinking fund against PFC loans. Accordingly, the amount approved for this generating station is as under:-

(₹ in lakh)

2009-10	2010-11	2011-12	2012-13	2013-14
4297.37	4598.18	4920.06	5264.46	5632.97

Common Office Expenditure

86. The petitioner has submitted that the expenditure pertaining to common office expenditure such as Direction Office, Central Office, Other Offices, Subsidiary activities, IT centre and R&D caters services to all generating stations as well as composite transmission and distribution systems. It has also submitted that the total cost of common assets computed is based on capital cost as on 31.3.2014 as per Audited Accounts for the year 2013-14 which have been apportioned based on the opening cost of all generation and T&D system as on 1.4.2014 and apportionment thereof to each of the productive generating station in proportion to their installed capacities in MW as per directive of the Commission vide its order dated 29.7.2013 in Petition No. 268/GT/2013. Accordingly, the additional capital expenditure claimed by the petitioner towards various offices is as under:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Direction office	-	-	-	-	-
Subsidiary activities	-	-	-	-	-
Other offices	-	-	-	-	-
R&D	-	-	-	-	-
IT	698.90	685.00	4508.00	4508.00	300.00
Central Office	-	-	-	-	-
Total expenditure	**698.90**	**685.00**	**4508.00**	**4508.00**	**300.00**

87. The petitioner has computed Return on Equity, Interest on Loan and Depreciation on the Common Assets for the period 2014-19 based on the opening capital cost as on 1.4.2014 and projected additional capitalization during the period 2014-19 towards different offices and has apportioned them to each generating stations and T&D system in proportion to the capital cost approved as on 31.3.2014. Further, the petitioner has allocated the cost of common offices among generating stations on the basis of installed capacity. Accordingly, the annual fixed charges claimed towards Common Assets are as under:-

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Direction office	181.64	83.17	60.36	60.36	60.36
Subsidiary activities	169.44	89.54	58.91	58.91	58.91
Other offices	126.07	122.24	122.24	105.32	48.81
R&D	280.10	270.44	260.17	253.34	241.98
IT	100.99	219.39	667.10	1497.65	1893.35
Central Office	554.87	532.74	509.91	487.66	487.66
Total expenditure	**1413.11**	**1317.51**	**1678.69**	**2463.24**	**2791.07**

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Generating Stations claimed	1327.15	1237.37	1576.58	2313.41	2621.29
T&D	85.96	80.14	102.11	149.83	169.78
Total	**1413.11**	**1317.51**	**1678.69**	**2463.24**	**2791.07**

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Durgapur Steel TPS # 1 & 2 (1000 MW)	208.76	194.64	248.00	363.90	412.33

88. The respondent, MPPMCL has submitted that the petitioner's claim towards share of common office expenses is beyond scope of the 2014 Tariff Regulations.

89. In response to the directions of the Commission, it is observed that the petitioner has not submitted any details regarding the additional capitalization claimed under IT offices. In view of this, the additional capitalization claimed under IT office is not allowed. However, the petitioner is granted liberty to submit detailed justification on the said claim at the time of revision of tariff based on truing-up exercise in terms of Regulation 8 of the 2014 Tariff Regulations. It is noticed that the claim of the petitioner for common office expenditure is in line with the Commission's order dated 6.8.2009 in Petition No. 66/2005 and order dated 8.5.2013 in Petition No. 272/2010. The Commission has considered the O&M norms for this generating station as specified for 500 MW units including the expenditure for Common Offices in respect of depreciation and interest on loan. Accordingly, as also discussed earlier, only return on equity towards cost of cost offices has been allowed in computation of cost of common offices. The annual fixed charges of Common offices as worked out have been apportioned to the generating stations / T&D systems as considered as on 31.3.2014.

90. Accordingly, the fixed charges have been computed as per the admitted capital cost as on 1.4.2014 (as approved in order dated 27.2.2017 in Petition No. 204/GT/2015 and has been allocated to various generating stations as under.

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	573.79	573.79	573.79	573.79	573.79
Total	**573.79**	**573.79**	**573.79**	**573.79**	**573.79**

(₹ in lakh)

	Capital cost as on 1.4.2014	2014-15	2015-16	2016-17	2017-18	2018-19
Entire generating station	574165.23	496.93	496.93	496.93	496.93	496.93
T&D	88805.81	76.86	76.86	76.86	76.86	76.86
Total	**662971.04**	**573.79**	**573.79**	**573.79**	**573.79**	**573.79**

(₹ in lakh)

Station	Capacity	2014-15	Capacity	2015-16	2016-17	2017-18	2018-19
Bokaro TPS	630	50.04	630	49.25	49.25	49.25	49.25
Chandrapura TPS	390	30.98	390	30.49	30.49	30.49	30.49
Durgapur TPS	350	27.80	350	27.36	27.36	27.36	27.36
Mejia TPS #1 to 3	630	50.04	630	49.25	49.25	49.25	49.25
Mejia TPS #4	210	16.68	210	16.42	16.42	16.42	16.42
Mejia TPS #5 & 6	500	39.72	500	39.08	39.08	39.08	39.08
Maithon HS	63.2	5.02	63.2	4.94	4.94	4.94	4.94
Panchet HS	80	6.35	80	6.25	6.25	6.25	6.25
Tilaiya HS	4	0.32	4	0.31	0.31	0.31	0.31
Total	**2857.2**	**226.96**	**2857.2**	**223.34**	**223.34**	**223.34**	**223.34**
Chandrapura TPS #7 & 8	500	39.72	500	39.08	39.08	39.08	39.08
Mejia TPS 7 & 8	1000	79.44	1000	78.17	78.17	78.17	78.17
Durgapur Steel TPS # 1 & 2	**1000**	**79.44**	**1000**	**78.17**	**78.17**	**78.17**	**78.17**
Koderma TPS	898.63	71.38	1000.00	78.17	78.17	78.17	78.17
Total	**3398.63**	**269.97**	**3500.00**	**273.59**	**273.59**	**273.59**	**273.59**
Grand Total-Generation	**6255.83**	**496.93**	**6357.2**	**496.93**	**496.93**	**496.93**	**496.93**
Total T&D		76.86		76.86	76.86	76.86	76.86
Grand total		**573.79**		**573.79**	**573.79**	**573.79**	**573.79**

91. Accordingly, the annual fixed charges approved for the generating station for the period from1.4.2014 to 31.3.2019 is summarized as under:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	37192.67	37462.75	37462.75	37462.75	37462.75
Interest on Loan	36595.49	32498.09	27985.26	23557.29	19154.33
Return on Equity	18656.50	18827.68	18827.68	18827.68	18827.68
Interest on Working Capital	8809.72	8796.11	8750.96	8856.93	8830.78
O&M Expenses	16000.00	17010.00	18080.00	19220.00	20430.00
Sub - Total (a)	**117254.38**	**114594.63**	**111106.65**	**107924.65**	**104705.55**
Share of Common Office Expenditure	79.44	78.17	78.17	78.17	78.17
Share of P&G & impact of pay revision	0.00	0.00	0.00	0.00	0.00
Share of Additional O&M due to mega insurance , CISF expenditure & expenditure for subsidiary activity	0.00	0.00	0.00	0.00	0.00
Interest & Contribution on Sinking Fund (As per section 40, Part IV of DVC Act)	4297.37	4598.18	4920.06	5264.46	5632.97
Sub - Total (b)	**4376.80**	**4676.35**	**4998.23**	**5342.63**	**5711.14**
Total (a+b)	**121631.19**	**119270.98**	**116104.88**	**113267.29**	**110416.69**

Note: All figures are on annualised basis. All figures under each head have been rounded. The figure in total column in each year is also rounded. As such, the sum of individual items may not be equal to the arithmetic total of the column.

Month to Month Energy Charges

92. Clause 6 sub-clause (a) of Regulation 30 of the 2014 Tariff Regulations provides for computation and payment of Capacity Charge and Energy Charge for thermal generating stations:

"6. Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal place in accordance with the following formula:

(a) For coal based and lignite fired stations

ECR = {(GHR – SFC x CVSF) x LPPF / CVPF+SFC x LPSFi + LC x LPL} x 100 / (100 – AUX)

Where,

AUX = Normative auxiliary energy consumption in percentage.
CVPF = Gross calorific value of primary fuel as received, in kCal per kg, per litre or per standard cubic metre, as applicable.

CVSF = Calorific value of secondary fuel, in kCal per ml.
ECR = Energy charge rate, in Rupees per kWh sent out.
GHR = Gross station heat rate, in kCal per kWh.
LC = Normative limestone consumption in kg per kWh.
LPL = Weighted average landed price of limestone in Rupees per kg.
LPPF = Weighted average landed price of primary fuel, in Rupees per kg

93. The petitioner shall compute and claim the Energy Charges on month to month basis from the beneficiaries based on the formulae given under Regulation 30(6)(a) of the 2014 Tariff Regulations read with Commission's order dated 25.1.2016 in Petition No. 283/GT/2014 of NTPC. The petitioner has been directed by the Commission in its order dated 19.2.2016 in Petition No. 33/MP/2014 to introduce helpdesk to attend to the queries of the beneficiaries with regard to the Energy Charges. Accordingly, contentious issues if any, which arise regarding the Energy Charges, should be sorted out with the beneficiaries at the Senior Management level.

Application Fee and Publication Expenses

94. The petitioner has sought the reimbursement of filing fee and also the expenses incurred towards publication of notices for application of tariff for the period 2014-19. The petitioner has deposited the filing fees for the period 2014-15 in terms of the provisions of the Central Electricity Regulatory Commission (Payment of Fees) Regulations, 2012. Accordingly, in terms of Regulation 52 of the 2014 Tariff Regulations and in line with the decision in Commission's order dated 5.1.2016 in Petition No. 232/GT/2014, we direct that the petitioner shall be entitled to recover pro rata, the filing fees and the expenses incurred on publication of notices for the period2014-15 directly from the respondents on submission of documentary proof. The filing fees for the remaining years of the tariff period 2015-19 shall be recovered pro rata after deposit of the same and production of documentary proof.

95. The annual fixed charges approved for the period 2014-19 as above are subject to truing-up in terms of Regulation 8 of the 2014 Tariff Regulations.

96. Petition No. 205/GT/2015 is disposed of in terms of the above.

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

ANNEXURE-I

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2012	Additions during the period	Total
Loan-1 (REC)	12.50%	312000.00	0.00	312000.00
Loan-2 GOI Guaranteed Bond (Series 14)	10.30%	101400.00	0.00	101400.00
Loan-3 GOI Guaranteed Bond (Series 15)	9.69%	48200.00	0.00	48200.00
Total		461600.00	0.00	461600.00

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR TARIFF PERIOD 2014-19

(₹ in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Gross loan - Opening	461600	461600	461600	461600	461600
Cumulative repayments of Loans upto previous year	62400	83200	104000	124800	145600
Net loan - Opening	399200	378400	357600	336800	316000
Add: Drawl(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayment (s) of Loans during the year	20800	20800	20800	20800	20800
Net loan - Closing	378400	357600	336800	316000	295200
Average Net Loan	388800	368000	347200	326400	305600
Weighted average Rate of Interest on Loans	**11.602%**	**11.579%**	**11.507%**	**11.450%**	**11.383%**
Interest on loan	45110	42611	39953	37374	34786