

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 240/GT/2020

Coram:

**Shri P.K. Pujari, Chairperson
Shri I.S. Jha, Member
Shri Arun Goyal, Member
Shri P.K. Singh, Member**

Date of Order: 14th April, 2022

In the matter of:

Petition for revision of tariff of Sipat Super Thermal Power Station Stage-I (1980 MW) for the period from 1.4.2014 to 31.3.2019, after truing up exercise.

And

In the matter of

NTPC Limited,
NTPC Bhawan, Core-7,
Core-7, Scope Complex,
7, Institutional Area, Lodhi Road,
New Delhi – 110003

....Petitioner

Vs

1. Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Vidyut Nagar,
Jabalpur – 482 008
2. Maharashtra State Electricity Distribution Company Limited,
Prakashgad, Bandra (East),
Mumbai – 400 051
3. Gujarat Urja Vikas Nigam Limited,
2nd Floor, Sardar Patel Vidyut Bhawan, Race Course,
Vadodara – 390 007
4. Chhattisgarh State Power Distribution Company Limited,
Vidyut Sewa Bhawan, Dagania,
Raipur – 492 001
5. Electricity Department,
Government of Goa, Vidyut Bhawan, Panji,
Goa – 403 001
6. DNH Power Distribution Corporation Limited,
UT of DNH, Silvassa – 396 230



7. Electricity Department,
Administration of Daman & Diu,
Daman – 396 210

....Respondents

Parties Present:

Ms. Swapna Seshadri, Advocate, NTPC
Shri Anand K. Ganesan, Advocate, NTPC
Ms. Ritu Apurva, Advocate, NTPC
Shri Jai Dhanani, Advocate, NTPC
Shri Arvind Banerjee, CSPDCL
Shri Anurag Naik, MPPMCL

ORDER

This petition has been filed by the Petitioner, NTPC Limited (in short, “NTPC”) for truing up of tariff of Sipat Super Thermal Power Station, Stage-I (3 x 660 MW) (hereinafter referred to as ‘the generating station’) for the period from 1.4.2014 to 31.3.2019, in accordance with Regulation 8 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as ‘the 2014 Tariff Regulations’).

2. The generating station with a capacity of 1980 MW comprises of three units of 660 MW each. The dates of commercial operation of the units of the generating station are as under:

Unit	COD
Unit-I	1.10.2011
Unit-II	25.5.2012
Unit-III/ Generating Station	1.8.2012

3. The Commission vide its order dated 6.12.2016 in Petition No. 295/GT/2014, while determining the trued-up tariff of the generating station for the 2009-14 tariff period, had approved the closing capital cost of Rs.877727.16 lakh as on 31.3.2014. Subsequently, the Commission vide its order dated 29.3.2017 in Petition No. 337/GT/2014 had revised the tariff for the 2009-14 tariff period on account of inadvertent clerical error pertaining to interest on loan and O&M expenses. The



Commission in its order dated 29.3.2017 in Petition No. 337/GT/2014 also approved the tariff of the generating station for the 2014-19 tariff period, considering the opening capital cost of Rs.877727.16 lakh, as on 1.4.2014. The capital cost and annual fixed charges allowed by order dated 29.3.2017 for the 2014-19 tariff period are as under:

Capital Cost

	(Rs. in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening capital cost	877727.16	909034.16	916601.16	918401.16	918401.16
Add: Projected additional capital expenditure	31307.00	7567.00	1800.00	0.00	2000.00
Closing capital cost	909034.16	916601.16	918401.16	918401.16	920401.16
Average capital cost	893380.66	912817.66	917501.16	918401.16	919401.16

Annual Fixed Charges

	(Rs. in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	45377.76	46365.03	46602.92	46648.64	46699.43
Interest on Loan	39635.02	37561.97	34736.18	31573.96	28402.39
Return on Equity	52557.58	53961.21	54238.08	54291.28	54350.40
Interest on Working Capital	11515.15	11643.06	11684.18	11876.06	11922.98
O&M Expenses	33880.32	35659.28	37338.32	39139.79	41028.71
Total	182965.84	185190.56	184599.69	183529.73	182403.91

Present Petition

4. Regulation 8(1) of the 2014 Tariff Regulations provides as under:

“8. Truing up

(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 31.3.2019, 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, shall make an application for interim truing up of capital expenditure including additional capital expenditure in FY 2016-17.”

5. In terms of Regulation 8(1) of the 2014 Tariff Regulations, the Petitioner vide affidavit dated 7.1.2020 has filed the present Petition for truing-up of tariff of the generating station for the 2014-19 tariff period. However, subsequently, the Petitioner vide its affidavit dated 23.8.2021 has revised its tariff claim for the 2014-19 tariff period. The capital cost and annual fixed charges claimed by the Petitioner for the 2014-19 tariff period are as under:



Capital Cost Claimed

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening capital cost	877727.16	901977.45	919042.99	923194.40	923888.36
Add: Addition during the year	20753.23	15632.36	3809.72	471.57	3205.61
Less: De-capitalisation during the year	(-) 347.90	(-) 911.46	(-) 823.11	(-) 1241.74	(-) 1097.35
Less: Reversal during the year	0.00	0.00	0.00	0.00	0.00
Add: Discharges during the year	3844.96	2344.65	1164.80	1464.13	400.58
Closing capital cost	901977.45	919042.99	923194.40	923888.36	926397.21
Average capital cost	889852.30	910510.22	921118.70	923541.38	925142.79

Annual Fixed Charges Claimed

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	45199.40	46193.04	46759.62	46906.01	47000.50
Interest on Loan	39777.47	37312.43	34613.19	31290.72	28272.92
Return on Equity	52351.54	53826.34	54453.48	54596.70	54835.68
Interest on Working Capital	12969.80	13132.72	13498.06	13948.04	13824.74
O&M Expenses	37546.85	40099.79	43361.71	47720.74	45068.17
Sub-total	187845.06	190564.32	192686.06	194462.20	189002.01
Impact of Pay Revision	0.00	59.79	3241.46	4054.76	5286.19
Impact of GST	0.00	0.00	0.00	293.02	408.53
Ash Transportation Expenditure	0.00	0.00	0.00	0.00	315.85
Total	187845.06	190624.11	195927.52	198809.98	195012.58

6. The Respondents, Maharashtra State Electricity Distribution Company Limited (MSEDCL), Madhya Pradesh Power Management Company Limited (MPPMCL) and Chhattisgarh State Power Distribution Company Limited (CSPDCL) filed its reply vide affidavits dated 6.1.2021, 31.5.2021 and 1.6.2021 respectively and the Petitioner vide its affidavits dated 15.5.2021 and 30.7.2021 has filed its rejoinder to the said replies. The Commission vide RoP of the hearing dated 11.6.2021 directed the Petitioner to submit certain additional information and the Petitioner in compliance submitted the required information vide affidavit dated 2.7.2021. The Petition was subsequently heard through video conferencing on 30.11.2021 along with Petition No. 425/GT/2020 (Petition for approval of tariff of the generating station for the 2019-24 tariff period) and the Commission reserved its order. Based on the submissions of the parties and the documents available on record and on prudence check, we proceed for truing up the



tariff of the generating station for the 2014-19 tariff period, in this Petition, as stated in the subsequent paragraphs.

Capital Cost

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

“(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;*
- (b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulations 14;*
- (c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15.”*

8. The Commission vide its order dated 29.3.2017 in Petition No. 337/GT/2014 had approved the annual fixed charges of the generating station for the 2014-19 tariff period considering the opening capital cost of Rs.877727.16 lakh (on cash basis) as on 1.4.2014. Accordingly, in terms of Regulation 9(3) of the 2014 Tariff Regulations, the capital cost of Rs.877727.16 lakh has been considered as opening capital cost as on 1.4.2014.

9. Regulation 14 of the 2014 Tariff Regulations, provides as under:

“14. Additional Capitalization and De-capitalization:

(1) The capital expenditure in respect of the new project or an existing project 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 recognized to be payable at a future date;*
- (ii) Works deferred for execution;*
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;*
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and*
- (v) Change in law or compliance of any existing law:*

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be



payable at a future date 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 in respect of the new project on the following counts within the original scope of work 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) Deferred works relating to ash pond or ash handling system in the original scope of work; and

(iv) 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.

(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 obsolescence 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 Modernization (R&M), repairs and maintenance under (O&M) expenses and Compensation Allowance, same expenditure cannot be claimed under this regulation.”

10. The Commission vide its order dated 29.3.2017 in Petition No. 337/GT/2014, had exercised the power to relax under Regulation 44 of the 2009 Tariff Regulations and relaxed the cut-off date of the generating station from 31.3.2015 to 31.3.2016. The relevant portion of the order is extracted below:

“We have examined the matter. The COD of the generating station is 1.8.2012 and accordingly the cut-off date of the generating station is 31.3.2015. It is noticed that most of the works which are within the original scope of work are at an advanced stage of completion is likely to get completed during the year 2015-16. It is observed that some of the works which was envisaged by the petitioner to be completed had spill over beyond the cut-off date of 31.3.2015 on account of uncontrollable reasons. In consideration of the above, and keeping in view that the expenditure is executed for efficient operation of the generating station that it is a fit case for relaxation of cut-off date of the generating station for a period of one year from 31.3.2015 to 31.3.2016. Accordingly, in exercise of the 'Power to relax' in terms of Regulation 44 of the 2009 Tariff Regulations, we relax the cutoff date as above of the generating station from 31.3.2015 to 31.3.2016, for the purpose of additional capital expenditure. We make it clear that relaxation of cut-off date as above is allowed as a special case and shall not be considered as precedent in future.”

11. Accordingly, the projected additional capital expenditure allowed vide order dated 29.3.2017 for the 2014-19 tariff period are as under:

<i>(Rs. in lakh)</i>							
	Regulation	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Land & Infrastructure	14(1)(ii)	700.00	0.00	0.00	0.00	0.00	700.00
Steam Generator	14(1)(ii)	3640.00	30.00	0.00	0.00	0.00	3670.00
Turbine Generator	14(1)(ii)	2000.00	0.00	0.00	0.00	0.00	2000.00
Ash Handling System	14(1)(ii)	110.00	5000.00	0.00	0.00	0.00	5110.00
Coal Handling Plant	14(1)(ii)	134.00	0.00	0.00	0.00	0.00	134.00
Fire Fighting System	14(1)(ii)	79.00	0.00	0.00	0.00	0.00	79.00



	Regulation	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Miscellaneous Tools & Plants	14(1)(ii)	808.00	0.00	0.00	0.00	0.00	808.00
Transformers Package	14(1)(ii)	824.00	0.00	0.00	0.00	0.00	824.00
Lighting	14(1)(ii)	60.00	0.00	0.00	0.00	0.00	60.00
C&I Package	14(1)(ii)	150.00	0.00	0.00	0.00	0.00	150.00
Initial Spares	14(1)(ii)	12700.00	0.00	0.00	0.00	0.00	12700.00
Main Plant Civil	14(1)(ii)	300.00	0.00	0.00	0.00	0.00	300.00
Township & Colony	14(1)(ii)	5590.00	1100.00	0.00	0.00	0.00	6690.00
Offsite Civil Works	14(1)(ii)	2170.00	1057.00	0.00	0.00	0.00	3227.00
Chimney	14(1)(ii)	42.00	0.00	0.00	0.00	0.00	42.00
Ash Dyke	14(1)(ii)	2000.00	380.00	1800.00	0.00	2000.00	6180.00
Total projected additional capital expenditure allowed		31307.00	7567.00	1800.00	0.00	2000.00	42674.00

12. The additional capital expenditure claimed by the Petitioner, duly supported by auditor certificate, for the 2014-19 tariff period, is as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Closing Gross Block as per audited books	1410954.33	1443035.73	* 1161027.25	* 1169438.51	* 1179607.83
Less: Opening Gross Block as per audited books	1380948.98	1410954.33	* 1151899.48	* 1161027.25	* 1169438.51
Additional capital expenditure as per audited books	30005.35	32081.40	9127.77	8411.27	10169.32
Less: Additional capital expenditure pertaining to other Stages	3647.90	5231.28	2519.57	1151.36	956.47
Additional capital expenditure for the generating station	26357.45	26850.12	6608.20	7259.90	9212.85
Less: IND AS Adjustment	0.00	0.00	1847.19	3775.86	1441.83
Additional capital expenditure as per IGAAP for the generating station	26357.45	26850.12	4761.01	3484.04	7771.02
Less: Exclusions	3340.16	9731.12	729.92	4142.54	5659.42
Additional capital expenditure claimed for the generating station (on accrual basis)	23017.30	17119.00	4031.09	(-) 658.49	2111.60
Less: Un-discharged liabilities included above	2611.96	2398.11	1044.48	111.67	3.33
Net additional capital expenditure claimed for the generating station (on cash basis)	20405.33	14720.89	2986.61	(-) 770.17	2108.27
Add: Discharges of liabilities	3844.96	2344.65	1164.80	1464.13	400.58
Net additional capital expenditure claimed including discharges for the generating station (on cash basis)	24250.29	17065.54	4151.41	693.96	2508.85

* As per IND-AS

Exclusions



13. The summary of exclusions from the books of accounts, as claimed by the Petitioner for the 2014-19 tariff period, on accrual basis, is as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Capital spares	0.00	0.00	1685.83	4516.39	980.02
De-capitalization of capital spares (not part of capital cost)	0.00	0.00	0.00	0.00	(-) 11.58
Loan FERV	4216.81	10790.51	(-) 1792.80	177.31	2970.58
Inter-unit transfer of assets	4.18	(-) 976.91	3.21	(-) 5.55	(-) 214.63
Miscellaneous Bought Out Assets	0.00	0.00	991.08	475.77	2015.21
De-capitalization of Miscellaneous Bought Out Assets (not part of capital cost)	0.00	0.00	0.00	0.00	(-) 2.58
De-capitalization of Miscellaneous Bought Out Assets (part of capital cost)	0.00	0.00	(-) 81.21	(-) 34.40	(-) 66.72
Reversal of liabilities	(-) 880.83	(-) 82.48	(-) 76.20	(-) 986.98	(-) 10.90
Total Exclusions claimed	3340.16	9731.12	729.92	4142.54	5659.42

14. We first examine the exclusions claimed by the Petitioner for the 2014-19 tariff period in the subsequent paragraphs.

(a) Capitalization of capital spares

15. The Petitioner has claimed exclusion of capital spares of Rs.1685.83 lakh in 2016-17, Rs.4516.39 lakh in 2017-18 and Rs.980.02 lakh in 2018-19. In justification the Petitioner has submitted that capital spares which have been capitalized after cut-off date are not allowable as per the 2014 Tariff Regulations and, accordingly, the same has been claimed as exclusions. Since capitalization of spares after the cut-off date of the generating station is not allowed as part of capital cost as per the 2014 Tariff Regulations, the Petitioner's claim for exclusion under this head is allowed.

(b) De-capitalization of capital spares (not forming part of capital cost)

16. The Petitioner has claimed exclusion of de-capitalization of capital spares not forming part of admitted capital cost of the generating station of Rs.11.58 lakh in 2018-19. In justification of the same, the Petitioner has submitted that these capital spares are being claimed under exclusion in this Petition and do not form part of capital cost and accordingly their de-capitalization has been claimed as exclusions. It is observed from the submission of the Petitioner that these capital spares are not forming part of



the allowed capital cost, however on scrutiny of Form-9Bi, it is observed that the Petitioner has failed to provide the year of put to use details of these spares to establish that these spares are the one's which have not been allowed for the purpose of tariff. Accordingly, the Petitioner's claim for exclusion of de-capitalization of these spares is not allowed.

(c) *Loan FERV*

17. The Petitioner has claimed exclusion of loan FERV of Rs.4216.81 lakh in 2014-15, Rs.10790.51 lakh in 2015-16, (-) Rs.1792.80 lakh in 2016-17, Rs.177.31 lakh in 2017-18 and Rs.2970.58 lakh in 2018-19. In justification for the same the Petitioner submitted that since the loan FERV is billed directly to the beneficiaries as per extant regulation, the same has been kept under exclusion. As the Petitioner is required to bill the claim for loan FERV directly from the beneficiaries, the claim under this head is allowed.

(d) *Inter-unit transfer of assets*

18. The Petitioner has claimed exclusion of Rs.4.18 lakh in 2014-15, (-) Rs.976.91 lakh in 2015-16, Rs.3.21 lakh in 2016-17, (-) Rs.5.55 lakh in 2017-18 and (-) Rs.214.63 lakh in 2018-19, on account of inter-unit transfer of assets to/from the generating station. In justification of the same the Petitioner submitted that temporary inter-unit transfer of assets is not allowed for the purpose of tariff and accordingly, the same has been kept under exclusion. The Commission in its various orders while dealing with the application for additional capitalization in respect of other generating stations of the petitioner had decided that both positive and negative entries arising out of inter-unit transfers of a temporary nature shall be ignored for the purposes of tariff. In line with the said decision, the exclusion of the said amounts on account of inter-unit transfer is allowed.

(e) *Capitalization of Miscellaneous Bought Out Assets (MBOA's)*

19. The Petitioner has claimed exclusion of the capitalization of MBOA's amounting



to Rs.991.08 lakh in 2016-17, Rs.475.77 lakh in 2017-18 and Rs.2015.21 lakh in 2018-19. In justification of the same, the Petitioner has submitted that MBOAs capitalized after the cut-off date are not allowed as per the 2014 Tariff Regulations and, accordingly, the same has been claimed as exclusions. Since capitalization of MBOA's after the cut-off date of the generating station is not allowed as part of capital cost as per the 2014 Tariff Regulations, the Petitioner's claim for exclusion under this head is allowed.

(f) De-capitalization of MBOA's (forming part of capital cost)

20. The Petitioner has claimed exclusion of de-capitalization of MBOA's forming part of admitted capital cost of the generating station amounting to Rs.81.21 lakh in 2016-17, Rs.34.40 lakh in 2017-18 and Rs.66.72 lakh in 2018-19. In justification of the same, the Petitioner has submitted that as the capitalization of expenditure against these items after the cut-off date is not allowed, the de-capitalization of the same has been claimed as exclusions. Since Regulation 14(4) of the 2014 Tariff Regulations provides that in case of de-capitalization of assets, the original cost of such assets shall be removed from the admitted capital cost of the generating station, the claim of the Petitioner under this head is not allowed.

(g) De-capitalization of MBOA's (not forming part of capital cost)

21. The Petitioner has claimed exclusion of de-capitalization of MBOA's not forming part of admitted capital cost of the generating station amounting to Rs.2.58 lakh in 2018-19. In justification of the same, the Petitioner has submitted that these MBOA's do not form part of the admitted capital cost and is therefore kept under exclusion. Since, these de-capitalized MBOA's do not form part of the admitted capital cost of the generating station, the exclusion claimed under this head is allowed.

(h) Reversal of liabilities

22. The Petitioner has claimed exclusion of reversal of liabilities of Rs.880.83 lakh in 2014-15, Rs.82.48 lakh in 2015-16, Rs.76.20 lakh in 2016-17, Rs.986.98 lakh in 2017-



18 and Rs.10.90 lakh in 2018-19. In justification of the same, the Petitioner has submitted that tariff is allowed on cash basis and liabilities do not form part of tariff, the reversal of the same has been kept under exclusion. Since tariff is allowed on cash basis, the exclusion of reversal of un-discharged liabilities is allowed for the purpose of tariff.

23. Based on above, the summary of exclusions allowed and disallowed for the 2014-19 tariff period is as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Capital spares	0.00	0.00	1685.83	4516.39	980.02
Loan FERV	4216.81	10790.51	(-) 1792.80	177.31	2970.58
Inter-unit transfer of assets	4.18	(-) 976.91	3.21	(-) 5.55	(-) 214.63
Miscellaneous Bought Out Assets	0.00	0.00	991.08	475.77	2015.21
De-capitalization of Miscellaneous Bought Out Assets (not part of capital cost)	0.00	0.00	0.00	0.00	(-) 2.58
Reversal of liabilities	(-) 880.83	(-) 82.48	(-) 76.20	(-) 986.98	(-) 10.90
Total Exclusions allowed	3340.16	9731.12	811.13	4176.94	5737.71
Total Exclusions disallowed	0.00	0.00	(-) 81.21	(-) 34.40	(-) 78.29

Additional Capital Expenditure

24. The Petitioner, in Form-9A, has submitted the actual additional capital expenditure claimed for the 2014-19 tariff period, as under:

		<i>(Rs. in lakh)</i>				
	Regulation	2014-15	2015-16	2016-17	2017-18	2018-19
Ash related works	14(3)(iv)	0.00	0.00	766.94	86.33	1094.49
Original scope of works and initial spares	14(1)(ii) & 14(1)(iii)	20749.33	15632.36	2884.28	382.79	2111.13
New Claims (within original scope)						
Turbo Ventilator	14(1)(v) read with 9(5)	3.90	0.00	0.00	0.00	0.00
Solar and Bio gas plant	14(3)(ii) read with 54	0.00	0.00	158.50	2.46	0.00
De-capitalization (part of capital cost)	14(4)	(-) 347.90	(-) 911.46	(-) 823.11	(-) 1241.74	(-) 1097.35



	Regulation	2014-15	2015-16	2016-17	2017-18	2018-19
Total additional capital expenditure (before discharges of liabilities)		20405.33	14720.89	2986.61	(-) 770.17	2108.27
Add: Discharge of liabilities	14(3)(vi)	3844.96	2344.65	1164.80	1464.13	400.58
Total additional capital expenditure claimed		24250.29	17065.54	4151.41	693.96	2508.85

25. The Petitioner has claimed additional capital expenditure of Rs.20753.53 lakh (Rs.20749.33 lakh + Rs.3.90 lakh) in 2014-15, 15632.36 lakh in 2015-16, 2884.28 lakh in 2016-17, 382.79 lakh in 2017-18, and 2111.13 lakh in 2018-19 under Regulation 14(1)(ii) and 14(1)(iii) of the 2014 Tariff Regulations, towards expenditure within original scope of work and initial spares. We now examine the year-wise actual additional capital expenditure claimed by the Petitioner as under:

2014-15

(a) Additional capital expenditure within the original scope of work and within cut-off date

26. The total additional capital expenditure claimed by the Petitioner under this head is Rs.20749.33 lakh in 2014-15 are detailed as under:

Sl. No.		Regulation	2014-15		
			ACE on cash basis	Liabilities	IDC
1	Land & Infrastructure	14(1)(ii)	46.62	0.00	1.85
2	Steam Generator		1519.34	343.83	9.04
3	Turbine Generator		218.74	258.43	3.71
4	Ash Handling System		0.07	0.00	0.00
5	Coal Handling Plant		97.49	0.00	0.00
6	Fire Fighting System		6.92	14.51	0.00
7	Misc. Tools & Plants		53.23	9.72	2.50
8	Transformers Package		3.29	4.39	0.00
9	Lighting		6.00	59.40	0.00
10	Initial Spares		(-) 62.16	0.00	0.00
11	Main Plant Civil		351.31	19.27	0.00
12	Township & Colony		4181.16	502.96	176.17
13	Offsite Civil Works		2304.09	402.91	62.24



14	Chimney		47.19	0.00	0.00
15	Ash Dyke		360.32	49.52	16.26
16	765 kV S/Y		26.56	13.25	0.00
17	AWRS		18.03	0.00	0.00
18	Locos		2181.81	0.00	0.00
19	50 KW Solar Plant		45.16	2.09	1.87
20	MGR		118.07	127.69	0.00
21	Networking		10.48	0.00	0.07
22	PT & DM Plant		2.88	13.04	0.00
23	Reservoir		101.63	4.27	0.00
24	Ventilation		0.00	2.91	0.00
25	Ash Brick Plant		7.36	2.07	0.37
26	CW system		0.00	12.48	0.00
27	MBOA		4521.79	89.71	0.00
28	Initial spares		4581.94	28.45	0.00
	Total		20749.32	1961.21	274.08

27. The Petitioner has submitted that out of the total additional capital expenditure claimed as above, an amount of Rs.9133.61 lakh on cash basis (excluding liabilities of Rs.1664.94 lakh) pertaining to Sl. No.1 to Sl. No.15 in table above, were already allowed by the Commission in its order dated 29.3.2017 in Petition No.337/GT/2014. The Petitioner has further submitted that the additional capital expenditure of Rs.11615.71 lakh, on cash basis (excluding liabilities of Rs.295.96 lakh) pertaining to Sl. No.16 to Sl. No.28 in the table above, were allowed by the Commission in order dated 6.12.2016 in Petition No. 295/GT/ 2014. The Respondent MPPMCL has submitted that the Petitioner has not submitted any proper justification for claiming MBOA of Rs.4611.50 lakh (on accrual basis) and hence the Petitioner may be directed to submit proper justification for the same. The Respondent has further submitted that the Petitioner's claim towards small value items such as networking, tools and tackles may be disallowed, and the Petitioner may be directed to meet the same through O&M expenses.

28. We have considered the matter. It is observed that the additional capital expenditure claimed in respect of assets under the above head (within the original scope) are well within the additional capital expenditure allowed in order dated 29.3.2017 in Petition No. 337/GT/2014 under Regulation 14(1)(ii) of the 2014 Tariff



Regulations, except for assets/works related to Main plant civil works, Off-site civil works, and Chimney. In respect of these assets, though the actual additional capital expenditure exceeds the projected additional capital expenditure allowed, the same are within the original scope of work and are within the cut-off date. In view of this, we allow the additional capital expenditure claimed as above under Regulation 14(1)(ii) of the 2014 Tariff Regulations. However, in respect of assets at Sl. No.19 and Sl. No. 25 of the table above, i.e. 50 KW Solar plant and Ash brick plant, the same is dealt with as under:

(i) 50 KW Solar Power Plant

29. The Petitioner has claimed additional capitalization of this asset (in Sl. No.19 of the table above) on the ground that the same forms part of the original scope of work and already allowed by the Commission. However, the Petitioner has not furnished any reference order through which the item was allowed and also no documentary proof in support of the contention that the asset/work is within the original scope of work. We have scrutinized all the previous tariff orders pertaining to the generating station and it could not be established that the works of solar plant was earlier allowed and was within the original scope of work. The Respondent, MPPMCL has submitted that the claim of the Petitioner is beyond the scope of the 2014 Tariff Regulations and hence may be disallowed. In view of the above, the claim for additional capital expenditure for 50 KW Solar plant is not allowed.

(ii) Ash Brick Plant

30. As regards claim of the Petitioner towards Ash brick plant (in Sl. No. 25 in the table above) it is noticed that the said asset/work was not allowed vide order dated 6.12.2016 in Petition No. 295/GT/2014. The relevant portion is extracted below:

“26. In view of the above background the claim of petitioner for actual additional capital expenditure of ₹552.08 lakh towards fly ash brick plant is disallowed. However, we are of the considered view that the expenditure incurred on fly ash brick plant should be met



from the revenue earned by the petitioner in terms of the notification of Ministry of Environments & Forests, GOI MOEF, GOI.”

In view of above, the Petitioner’s claim towards ash brick plant is disallowed.

(b) Additional capital expenditure not within the original scope of works but within the cut-off date

(a) New Claim- Turbo Ventilator

31. The Petitioner has claimed additional capital expenditure of Rs.3.90 lakh, on cash basis, (after removal of un-discharged liabilities of Rs.0.31 lakh and corresponding IDC being ‘nil’) in 2014-15 towards Turbo Ventilator under Regulation 14(1)(v) read with Regulation 9(5) of the 2014 Tariff Regulations. This claim of the Petitioner towards Turbo Ventilator appears to be in compliance to the PAT scheme; The Petitioner has not furnished any details as regards to the sharing of benefits as envisaged under Regulation 9(5)(b) of the 2014 Tariff Regulations. The Respondent CSPDCL has submitted that being a small amount this should be met through O&M expenses. Since the asset do not form part of the original scope of work and the sharing benefits as mandated under Regulation 9(5)(b) of the 2014 Tariff Regulations has also not been furnished by the Petitioner, the claim under this head is not allowed.

2015-16

(a) Additional capital expenditure within original scope of works and within the extended cut-off date

32. The total additional capital expenditure claimed by the Petitioner under this head is Rs.15632.36 lakh in 2015-16 as detailed below:

(Rs. in lakh)

Sl. No.	Regulation	2015-16			
		ACE on cash basis	Liabilities	IDC	
1	Steam Generator	14(1)(ii)	12.04	0.00	0.00
2	Ash Handling System	14(1)(ii)	23.84	7.76	0.00
3	Township & Colony	14(1)(ii)	1440.54	94.26	
4	Offsite Civil Works	14(1)(ii)	1383.98	99.78	26.57
5	Ash Dyke	14(1)(ii)	2580.53	75.08	172.19
	Total		5440.93	276.88	274.89



	New Claims				
6	Infrastructure	14(1)(ii)	8.94	947.99	0.00
7	Turbine Generator	14(1)(ii)	64.00	0.00	0.00
8	Coal Handling Plant	14(1)(ii)	9.86	0.58	0.00
9	Transformers Package	14(1)(ii)	68.15	0.00	0.00
10	Initial spares	14(1)(iii)	7813.71	40.89	0.00
11	Initial spares (Adj.)	14(1)(iii)	(-) 81.77	0.00	0.00
12	Main Plant Civil	14(1)(ii)	51.41	24.72	0.00
13	Fire Detection & Protection System	14(1)(ii)	35.80	16.95	0.00
14	Effluent Quality Monitoring System	14(1)(ii)	27.67	9.05	2.21
15	Locos (2 nos.)	14(1)(ii)	1089.22	0.00	0.00
16	LT Switchgear & Cabling	14(1)(ii)	7.21	0.00	0.00
17	MGR	14(1)(ii)	322.81	12.59	0.35
18	PT & DM Plant	14(1)(ii)	15.30	0.00	0.00
19	Reservoir	14(1)(ii)	25.95	0.44	0.00
20	AC & Ventilation	14(1)(ii)	17.60	1.37	0.00
21	Ash Brick Plant	14(1)(ii)	0.24	0.21	0.00
22	MBOA	14(1)(ii)	715.35	18.25	0.00
	Total		10191.43	1073.03	2.56
	Grand Total		15632.36	1349.91	277.45

33. The Petitioner has submitted that out of the additional capital expenditure claimed as above, an amount of Rs.5440.93 lakh (on cash basis, after excluding liabilities of Rs.276.88 lakh) in respect of assets in Sl. No.1 to Sl. No.5 in the table at paragraph 31 above, were allowed by the Commission in its order dated 29.3.2017 in Petition No.337/GT/2014. The Petitioner has further submitted that the additional capital expenditure of Rs.10191.43 lakh (excluding liabilities of Rs.1349.91 lakh) pertaining to Sl. No.6 to 22 are new claims towards work/ assets within original scope work and are within the extended cut-off date, allowed by the Commission.

34. It is observed that the additional capital expenditure claimed in respect of assets/works allowed in Sl. No.1 to Sl. No.5 above, are within the additional capital expenditure allowed vide order dated 29.3.2017 in Petition No. 337/GT/2014, except for assets/works related to Main plant civil works, Off-site civil works, and Chimney. In respect of these assets, though the actual additional capital expenditure exceeds the projected additional capital expenditure allowed, the same are within the original scope of work and is within the extended cut-off date (31.3.2016). In view of this, we allow the



additional capital expenditure claimed as above under Regulation 14(1)(ii) of the 2014 Tariff Regulations.

35. With respect to the additional capital expenditure claimed by the Petitioner for new claims in respect of assets in Sl. No.6 to Sl. No.22 in the table above, it is observed that these assets/ works are within the original scope of work and are within the extended cut-off date, except for the additional capital expenditure towards Ash brick plant. In view of this, the additional capital expenditure claimed in respect of these assets are allowed under Regulation 14(1)(ii) of 2014 Tariff Regulations. However, the additional capital expenditure claimed towards Ash brick plant, is disallowed for the reasons stated in paragraph 29 above.

2016-19

(a) Additional capital expenditure within the original scope of work and beyond the cut-off date

36. The total additional capital expenditure claimed by the Petitioner under this head is Rs.2884.28 lakh (after removal of un-discharged liabilities of Rs.830.72 lakh) in 2016-17, Rs.382.79 lakh (after removal of un-discharged liabilities of Rs.102.86 lakh) in 2017-18 and Rs.2111.13 lakh (after removal of un-discharged liabilities of Rs.3.33 lakh) in 2018-19 as detailed below:

(Rs in lakh)										
	Regulation	2016-17			2017-18			2018-19		
		ACE on cash basis	Liabilities	IDC	ACE on cash basis	Liabilities	IDC	ACE on cash basis	Liabilities	IDC
A/c & Ventilation	14(2)(iv)	9.46	3.55	0.00	21.60	0.00	0.00	0.00	0.00	0.00
Steam Generator	14(2)(iv)	42.03	0.47	0.00	7.64	9.52	0.00	13.44	0.00	0.00
Simulator/ Networking	14(2)(iv)	12.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CW/ Water System	14(2)(iv)	0.25	0.00	0.00	17.29	0.00	0.00	4.11	0.00	0.00
Land	14(2)(iv)	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coal Handling Plant	14(2)(iv)	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roads &	14(2)(iv)	49.81	5.77	1.11	23.02	0.00	0.00	0.00	0.00	0.00



	Regulation	2016-17			2017-18			2018-19		
		ACE on cash basis	Liabilities	IDC	ACE on cash basis	Liabilities	IDC	ACE on cash basis	Liabilities	IDC
Drains										
Fire Detection & Protection System	14(2)(iv)	19.41	3.43	0.00	4.15	4.36	0.00	0.00	0.00	0.00
MGR Railway siding	14(2)(iv)	31.16	239.31	0.00	11.74	33.18	0.00	8.59	0.00	0.00
Offsite Civil Works	14(2)(iv)	268.48	17.87	9.32	33.17	0.72	0.44	0.00	0.00	0.00
Turbine Generator/ TG Civil	14(2)(iv)	1490.90	381.64	0.00	85.13	14.46	0.00	25.45	0.00	0.00
Township Civil	14(1)(ii), 14(2)(iv) & 54	960.05	178.37	89.39	142.80	34.45	0.00	2059.54	3.33	366.44
Chimney	14(2)(iv)	0.00	0.00	0.00	9.01	0.00	0.00	0.00	0.00	0.00
Switch Yard Package	14(2)(iv)	0.00	0.00	0.00	7.62	0	0.00	0.00	0.00	0.00
Cabling	14(2)(iv)	0.00	0.00	0.00	19.60	6.18	0.00	0.00	0.00	0.00
TOTAL		2884.28	830.72	99.83	382.79	102.86	0.44	2111.13	3.33	366.44

37. The additional capital expenditure claimed by the Petitioner in respect of the above items (except for claim towards Township Civil works) are on account of the allowed works which have been completed within the cut-off date, but capitalized during the respective years, due to contract closing process, land issues related minor finishing works, deferment on account of being comparatively non-critical due to scarcity of sand, according priority to important works for completion and release of payments withheld earlier due to non-submission of drawings and documents etc. In view of this, we allow the claim of the Petitioner under Regulation 14(3)(iv) of the 2014 Tariff Regulations.

38. However, in case of Township Civil works, the Petitioner has submitted that the work was expected to be completed by 31.3.2016, but due to disruption in the supply of raw materials for civil construction viz. sand due to NGT order in December 2015, the work got spilled over, after the extended cut-off date. It has submitted that the work was taken up in two tranches, as such, the capitalization of first tranche, was done in 2016-17 with balance claim is in 2017-18. Tranche 2 was started in 2017-18 and capitalized



in 2017-18. In view of the delay which happened on account of the non-availability of environmental clearance due to NGT order because of which the sand required for construction was not available, the Petitioner has claimed additional capital expenditure under Regulation 14 (1) (ii) and Regulation 14 (2) (iv) read with Regulation 54 of the 2014 Tariff Regulations. The Respondent CSPDCL has submitted that work for Township was supposed to be completed within the original cut-off date i.e., 31.3.2015 which was extended by Commission to 31.3.2016, by relaxation under Regulation 44 of 2019 Tariff Regulations and hence the norms should not be relaxed again and the claim of the Petitioner may be disallowed.

39. We have considered the matter. It is noticed from the submissions of the Petitioner that the work was spilled over from the extended cut-off date of 31.3.2016, due to disruption in the supply of raw materials for construction apparently due to order of NGT. In our view, since the works could not be completed within the cut-off date for reasons beyond the control of the Petitioner, we are inclined to allow the additional capital expenditure under Regulation 14 (1) (ii) of the 2014 Tariff Regulations, in exercise of the power under Regulation 54 of 2014 Tariff Regulations.

(b) Additional capital expenditure beyond the original scope of work and after cut-off date

40. The Petitioner has claimed additional capital expenditure of Rs.158.50 lakh (after removal of un-discharged liabilities of Rs.4.12 lakh) on cash basis in 2016-17 and Rs.2.46 lakh (after removal of un-discharged liabilities of Rs.0.05 lakh) on cash basis in 2017-18 towards Solar and Bio gas plant under Regulation 14(3)(ii) read with Regulation 54 of the 2014 Tariff Regulations. In justification, the Petitioner stated that an initiative has been taken by it on the basis of the Central Government fixing a target as a measure of energy conservation. We notice that the Petitioner has not furnished any documentary evidence in support of the claim or any justification that the claim is



based on change in law or for compliance with the existing law. In view of this, the additional capital expenditure claimed under this head is disallowed.

(c) Additional capital expenditure for Ash related work

41. The Petitioner has claimed additional capital expenditure of Rs.766.94 lakh in 2016-17, Rs.86.33 lakh in 2017-18 and Rs.1094.49 lakh in 2018-19 towards ash related works under Regulation 14(3)(iv), on cash basis, the corresponding un-discharged liabilities being Rs.29.72 lakh in 2016-17 and Rs.8.77 lakh in 2017-18. IDC included in these additional capital expenditures being Rs.12.84 lakh in 2016-17, Rs.1.41 lakh in 2017-18 and Rs.53.60 lakh in 2018-19. In justification of the same, the Petitioner has submitted that these are ash related works under the original scope. These are deferred works and are necessary to be carried in phases throughout the life of plant for its sustainable operation. The Commission vide its order dated 29.3.2017 in Petition No. 337/GT/2014 had allowed projected additional capital expenditure of Rs.6180 lakh during the 2014-19 tariff period under Ash dyke. The Respondent, MPPMCL has questioned the need for ash dyke raising, in light of the requirement of ensuring 100% ash utilization by the generating stations under Ministry of Environment, Forest and Climate Change (MOEFCC) Notification dated 7.12.2015. The Petitioner vide its rejoinder has submitted that the ash dyke related works are within the original scope and has been carried out periodically, during the life of the plant, to ensure continuous and sustainable operation of the generating station. It has submitted that these works are executed in a phased manner, at intermittent intervals, during the life of plant, as and when necessitated.

42. We have considered the matter. In our considered view, ash generation and ash disposal is a continuous process, to be carried out from time to time during the operating life of the plant, to ensure successful running of the plant. It is noticed that



against the projected additional capitalization of Rs.6180 lakh allowed, the Petitioner has claimed only Rs.1947.76 lakh, on cash basis (after removal of un-discharged liabilities of Rs.38.48 lakh). Accordingly, we allow the additional capital expenditure claimed under this head.

(d) Additional capital expenditure for Package ERV

43. The Petitioner has not claimed any additional capital expenditure under this head during the 2014-19 tariff period, on cash basis. However, the claim of the Petitioner during the period 2014-17 for Rs.1878.87 lakh is on accrual basis. Since, the entire liability against this package ERV is yet to be discharged, the claim on cash basis is nil. It is pertinent to mention that the Commission in its various orders had adopted a consistent methodology to allow package ERV for the purpose of tariff, As the claim is still un-discharged, the amount allowable on cash basis, is nil for the 2014-19 tariff period.

De-capitalization of assets (part of capital cost)

44. The Petitioner has claimed de-capitalization of assets, forming part of the admitted capital cost, of Rs.347.90 lakh (Rs.0.01 towards CW System, Rs.340.13 lakh towards capital spares and Rs.7.76 lakh towards MBOA's) in 2014-15, Rs.911.46 lakh (Rs.904.06 lakh towards capital spares and Rs.7.40 lakh towards MBOA's) in 2015-16, Rs.823.11 lakh towards capital spares in 2016-17, Rs.1241.74 lakh towards capital spares in 2017-18 and Rs.1097.35 lakh towards capital spares in 2018-19, under Regulation 14(4) of the 2014 Tariff Regulation. Regulation 14(4) of the 2014 Tariff Regulations provides that in case of de-capitalization of assets, the original cost of such asset shall be removed from the admitted capital cost of the generating station. Accordingly, the de-capitalization claimed under this head is allowed for the purpose of tariff.



Discharge of liabilities

45. The discharges of liabilities claimed by the Petitioner for the 2014-19 tariff period is as under:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
3844.96	2344.65	1164.80	1464.13	400.58

46. Out of the discharge of liabilities claimed by the Petitioner, discharges amounting to Rs.0.31 lakh in 2016-17, Rs.3.83 lakh in 2017-18 and Rs.0.33 lakh in 2018-19, correspond to assets disallowed for the purpose of tariff and are accordingly not being considered for the purpose of tariff.

47. Accordingly, discharge of liabilities of Rs.3844.96 lakh in 2014-15, Rs.2344.65 lakh in 2015-16, Rs.1164.48 lakh in 2016-17, Rs.1460.31 lakh in 2017-18 and Rs.400.25 lakh in 2018-19 is allowed for the purpose of tariff.

48. The summary of un-discharged liabilities, corresponding to the admitted capital cost, is as under:

		<i>(Rs. in lakh)</i>				
		2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening un-discharged liabilities	36913.66	34795.36	34766.13	34565.80	32230.14
B	Liabilities corresponding to additional capital expenditure allowed during the year	2607.49	2397.90	1040.36	111.63	3.33
C	Discharges of liabilities during the year	3844.96	2344.65	1164.48	1460.31	400.25
D	Reversal of liabilities during the year	880.83	82.48	76.20	986.98	10.90
E	Closing un-discharged liabilities (A+B-C-D)	34795.36	34766.13	34565.80	32230.14	31822.32

* all pertaining to 2009-14 tariff period.

49. Accordingly, the additional capital expenditure allowed for the 2014-19 tariff period is summarized as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Ash related works	0.00	0.00	766.94	86.33	1094.49
Original scope of works and initial spares	20696.80	15632.12	2884.28	382.79	2111.13



	2014-15	2015-16	2016-17	2017-18	2018-19
50 KW Solar Plant	0.00	0.00	0.00	0.00	0.00
Ash Brick Plant	0.00	0.00	0.00	0.00	0.00
New Claims (within the original scope)					
Turbo Ventilator	0.00	0.00	0.00	0.00	0.00
Solar and Bio gas plant	0.00	0.00	0.00	0.00	0.00
De-capitalization (part of capital cost)	(-) 347.90	(-) 911.46	(-) 823.11	(-) 1241.74	(-) 1097.35
Total additional capital expenditure (before discharges of liabilities)	20348.90	14720.65	2828.11	(-) 772.62	2108.27
Add: Discharge of liabilities	3844.96	2344.65	1164.48	1460.31	400.25
Additional capital expenditure allowed (including discharges of liabilities)	24193.87	17065.30	3992.60	687.68	2508.52
Add: Exclusions disallowed	0.00	0.00	(-) 81.21	(-) 34.40	(-) 78.29
Net additional capital expenditure allowed	24193.87	17065.30	3911.39	653.28	2430.22

Capital cost allowed for the 2014-19 tariff period

50. Based on above, the capital cost allowed for the purpose of tariff is as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	877727.16	901921.03	918986.33	922897.72	923551.00
Add: Additional capital expenditure	24193.87	17065.30	3911.39	653.28	2430.22
Closing Capital Cost	901921.03	918986.33	922897.72	923551.00	925981.22
Average Capital Cost	889824.09	910453.68	920942.02	923224.36	924766.11

Debt Equity Ratio

51. Regulation 19 of the 2019 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.

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, only if such premium amount and internal resources are actually utilized for meeting the capital expenditure of the generating station or the transmission system.

(2) The generating company or the transmission licensee shall submit the resolution of the Board of the company or approval from Cabinet Committee on Economic Affairs (CCEA) regarding infusion of fund from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2014, the Commission shall approve the debt: equity ratio based on actual information provided by the generating company or the transmission licensee as the case may be.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 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.

52. Accordingly, the gross normative loan and equity amounting to Rs.614409.02 lakh and Rs.263318.14 lakh, respectively as on 1.4.2014 as considered in order dated 29.3.2017 in Petition No. 337/GT/2014 has been considered as gross normative loan and equity as on 1.4.2014. Further, the additional capital expenditure approved above has been allocated to debt and equity in debt-equity ratio of 70:30. Accordingly, the details of debt-equity ratio in respect of the generating station as on 1.4.2014 and as on 31.3.2019 are as follows:

	Capital cost as on 1.4.2014 (Rs. in lakh)	(%)	Net Additional capital expenditure (Rs. in lakh)	(%)	Total cost as on 31.3.2019 (Rs. in lakh)	(%)
Debt	614409.02	70.00	33777.84	70.00	648186.86	70.00
Equity	263318.14	30.00	14476.22	30.00	277794.36	30.00
Total	877727.16	100.00	48254.06	100.00	925981.22	100.00

Return on Equity

53. Regulation 24 of the 2014 Tariff Regulation 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% may be 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 kilometer.”

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

“25. 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.”

55. The Petitioner has claimed tariff considering rate of return on equity of 19.611% in 2014-15, 19.706% in 2015-18 and 19.758% in 2018-19. The Petitioner has arrived at these rates after grossing up base rate of return on equity of 15.50% with MAT rate of 20.9605% in 2014-15, 21.3416% in 2015-18 and 21.5488% in 2018-19.

56. The Respondent MSEDCL has submitted that as per the audited balance sheet submitted by the Petitioner the tax liability for this generating station is nil and hence the ROE should be provided at 15.50% without grossing up. In response, the Petitioner has submitted that it is a corporate entity and SIPAT is one its generating stations. It has submitted that the tax liability is imposed on the generating company as whole and the same is liable to be grossed up as per Regulation 25 of the 2014 Tariff Regulations.

57. We have considered the mater. The tax rate provided by the Petitioner has been considered for grossing up of ROE. However, after rectification of the rounding off errors, the rate of return on equity, to be considered for the purpose of tariff, works out to 19.610% for 2014-15, 19.705% for 2015-18 and 19.758% for 2018-19. Accordingly, ROE has been worked out as under:

	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Notional Equity- Opening	263318.14	270576.30	275695.89	276869.31	277065.29
Addition of Equity due to additional capital expenditure	7258.16	5119.59	1173.42	195.98	729.07
Normative Equity – Closing	270576.30	275695.89	276869.31	277065.29	277794.36
Average Normative Equity	266947.22	273136.10	276282.60	276967.30	277429.83
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Effective Tax Rate	20.961%	21.342%	21.342%	21.342%	21.549%
Rate of Return on Equity	19.610%	19.705%	19.705%	19.705%	19.758%



(Pre-tax)					
Return on Equity (Pre-tax) - (annualized)	52348.35	53821.47	54441.49	54576.41	54814.58

Interest on loan

58. Regulation 26 of the 2014 Tariff Regulations provides as under:

“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 refinancing 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 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.”

59. Interest on loan has been computed as under:



- i) The gross normative loan amounting to Rs.614409.02 lakh as on 1.4.2014, as considered in order dated 29.3.2017 in Petition No. 337/GT/2014, has been considered as on 1.4.2014.
- ii) Cumulative repayment amounting to Rs.90405.28 lakh as on 1.4.2014, as considered in order dated 29.3.2017 in Petition No. 337/GT/2014, has been considered as on 1.4.2014.
- iii) Accordingly, the net normative opening loan as on 1.4.2014 works out to Rs.524003.74 lakh.
- iv) Addition to normative loan on account of additional capital expenditure approved above have been considered.
- v) The Petitioner has claimed interest on loan considering weighted average rate of interest (WAROI) of 7.7993% in 2014-15, 7.7861% in 2015-16, 7.8528% in 2016-17, 7.8945% in 2017-18 and 8.0470% in 2018-19. However, considering the details of actual loan portfolio and rate of interest furnished by the Petitioner, duly adjusted for interest capitalized during the respective years the WAROI to be considered for the purpose of tariff works out to 7.7279% in 2014-15, 7.7041% in 2015-16, 7.8035% in 2016-17, 7.8747% in 2017-18 and 7.8588% in 2018-19.
- vi) Depreciation allowed has been considered as repayment of normative loan during the respective year of the 2014-19 tariff period. Further, repayments have been adjusted for de-capitalization of assets considered for the purpose of tariff.
- vii) Interest on loan has been worked out as under:

		<i>(Rs. in lakh)</i>				
		2014-15	2015-16	2016-17	2017-18	2018-19
A	Gross opening loan	614409.02	631344.73	643290.44	646028.41	646485.71
B	Cumulative repayment of loan up to previous year	90405.28	135560.49	181720.13	228254.08	274763.42
C	Net Loan Opening (A-B)	524003.74	495784.23	461570.31	417774.33	371722.28
D	Addition due to additional capital expenditure	16935.71	11945.71	2737.97	457.30	1701.16
E	Repayment of loan during the year	45170.38	46204.41	46762.35	46896.48	46981.36
F	Less: Repayment adjustment on account of de-capitalization	15.17	44.77	228.39	387.14	407.36
G	Net Repayment of loan during the year (E-F)	45155.21	46159.64	46533.96	46509.34	46574.00
H	Net Loan Closing (C+D-G)	495784.23	461570.31	417774.33	371722.28	326849.44
I	Average Loan [(C+H)/2]	509893.99	478677.27	439672.32	394748.30	349285.86
J	Weighted Average Rate of Interest of loan	7.7279%	7.7041%	7.8035%	7.8747%	7.8588%
K	Interest on Loan (I x J)	39403.99	36877.66	34309.77	31085.40	27449.73

Depreciation

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



“27. Depreciation:

(61) 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 12 years 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 on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 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 decapitalized asset during its useful services.”



61. The cumulative depreciation amounting to Rs.90405.28 lakh as on 1.4.2014 as considered in order dated 29.3.2017 in Petition No. 337/GT/2014 has been considered as on 1.4.2014. The value of freehold land amounting to Rs.3505.01 lakh as on 1.4.2014, as considered in order dated 29.3.2017 in Petition No. 337/GT/2014 along with additions during the 2014-19 tariff period has been considered for the purpose of tariff. Accordingly, the balance depreciable value before providing depreciation for the year 2014-15 works out to Rs.707260.92 lakh. Since, the elapsed life of the generating station (2.01 years) as on 1.4.2014 from effective station COD of the generating station i.e. 29.3.2012 is less than 12 years the depreciation has been computed considering weighted average rate of depreciation (Annexure-I). Necessary calculations in support of depreciation are as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Average capital cost (A)	889824.09	910453.68	920942.02	923224.36	924766.11
Value of freehold land included above (B)	3528.32	3551.63	3551.86	3552.08	3552.08
Aggregated depreciable value (C) = [(A-B) x 90%]	797666.20	816211.84	825651.15	827705.05	829092.63
Remaining aggregate depreciable value at the beginning of the year (D) = (C - 'J' of previous year)	707260.92	680651.35	643931.02	599450.96	554329.20
Balance useful life at the beginning of the year (E)	22.99	21.99	20.99	19.99	18.99
Weighted average rate of depreciation (F)	5.0763%	5.0749%	5.0777%	5.0796%	5.0804%
Depreciation during the year (G) = (A x F)	45170.38	46204.41	46762.35	46896.48	46981.36
Cumulative depreciation at the end of the year, before adjustment of de-capitalization adjustment. (H)=(G+J of previous year)	135575.66	181764.90	228482.48	275150.57	321744.78
Cumulative depreciation adjustment on account of de-capitalisation (I)	15.17	44.77	228.39	387.14	407.36
Cumulative depreciation, at the end of the year (J) = (H - I)	135560.49	181720.13	228254.08	274763.42	321337.43

Note: Cumulative depreciation as on 31.3.2014 is Rs.90405.28 lakh.



Operation & Maintenance Expenses

62. Regulation 29(1)(a) of the 2014 Tariff Regulations specifies the following norms for O&M expenses for coal based/lignite fired generating station:

“Normative Operation and Maintenance expenses of thermal generating stations shall be as follows:

(63) Coal based and lignite fired (including those based on Circulating Fluidised Bed Combustion (CFBC) technology) generating stations, other than the generating stations/units referred to in clauses (b) and (d):

(in Rs. Lakh/MW)

Year	200/210/250 MW Sets	300/330/350 MW Sets	500 MW Sets	600 MW Sets and above
FY 2014-15	23.90	19.95	16.00	14.40
FY 2015-16	25.40	21.21	17.01	15.31
FY 2016-17	27.00	22.54	18.08	16.27
FY 2017-18	28.70	23.96	19.22	17.30
FY 2018-19	30.51	25.47	20.43	18.38

Provided that the norms shall be multiplied by the following factors for arriving at norms of O&M expenses for additional units in respective unit sizes for the units whose COD occurs on or after 1.4.2014 in the same station:

200/210/250 MW	Additional 5 th & 6 th units	0.90
	Additional 7 th & more units	0.85
300/330/350 MW	Additional 4 th & 5 th units	0.90
	Additional 6 th & more units	0.85
500 MW and above	Additional 3 rd & 4 th units	0.90
	Additional 5 th & above units	0.85

63. The Commission in its order dated 29.3.2017 in Petition No. 337/GT/2014, after due consideration of the above multiplying factors, had allowed O&M expenses as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
O&M expenses allowed under Regulation 29(1)(a)	25185.60	26777.19	28456.23	30257.70	32146.62
Water Charges allowed under Regulation 29(2)	8694.72	8882.09	8882.09	8882.09	8882.09
Total O&M expenses allowed	33880.32	35659.28	37338.32	39139.79	41028.71

64. The O&M expenses claimed by the Petitioner in the present petition is as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
O&M expenses under Regulation 29(1)(a) of the 2014 Tariff Regulations	28512.00	30313.80	32214.60	34254.00	36392.40
O&M expenses under					



Regulation 29(2) of the 2014 Tariff Regulations:					
- Water charges	8694.72	8881.93	9194.46	9853.12	7566.85
- Water charges claimed for previous period	0.00	0.00	1129.54	2371.88	0.00
- Capital spares consumed	340.13	904.06	823.11	1241.74	1108.92
Sub-total O&M Expenses	37546.85	40099.79	43361.71	47720.74	45068.17
Impact of wage revision	0.00	59.79	3241.46	4054.76	5286.19
Impact of GST	0.00	0.00	0.00	293.02	408.53
Ash transportation expenses	0.00	0.00	0.00	0.00	315.85
Total O&M Expenses	37546.85	40159.58	46603.17	52068.52	51078.74

65. The Petitioner vide its affidavit dated 2.7.2021 has submitted that the Commission vide its order dated 22.8.2013 in Petition No.28/GT/2011 and order dated 6.12.2016 in Petition No.295/GT/2016 had consistently allowed O&M expenses for this generating station as an independent station. However, while determining the tariff for the 2014-19 tariff period, the Commission had recomputed the O&M expenses, both for the 2009-14 tariff period as well as the 2014-19 tariff period, by treating it as an expansion project and by exercising the power under Regulation 103A of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2014. The Petitioner has submitted that the above application, was both against the provisions of the 2009 Tariff Regulations and the 2014 Tariff Regulations, as the multiplying factors can only be applicable for same type of units and if the units are part of same generating station. The Petitioner has submitted that units of this generating station and Sipat STPS-II are not identical – (i) there are 3 units of 660 MW each in Stage-I whereas there are 2 units of 500 MW each in Stage-II; (ii) Stage-I is based on super critical technology whereas Stage-II is based on sub-critical technology; and (iii) the technology and equipment supplier for Stage-I is Power Machines whereas the technology and equipment supplier for Stage-II is BHEL. Accordingly, the economy of scale in the form of reduction in O&M expenses due to multiple units as envisaged in the 2009 Tariff Regulations cannot be applied to Sipat Stage-I, and the proviso to Regulation 29 of the 2014 Tariff Regulations is not applicable on a plain reading of the



same. The Petitioner has accordingly submitted that the Commission may reconsider and determine normative O&M expenses for this generating station for both the 2009-14 tariff period and the 2014-19 tariff period.

66. The Respondent MPPMCL has submitted that the O&M expenses claimed by the Petitioner should be compared with the actual O&M expenses for at least one-year (2014-15) and based on actuals, the O&M expenses may be decided for future years.

67. We have considered the submission of the parties. The O&M expenses for the 2014-19 tariff period have been decided on the basis of the actual of 2009-14 Tariff Period and there is no provision for truing up of O&M expenses as the 2014 Tariff Regulations.

68. Further, it is observed that in order dated 29.3.2017 in Petition No. 337/GT/2014, the Commission had determined the tariff of the generating station for the 2014-19 tariff period, after allowing the normative O&M expenses with a multiplication factor of 0.9 by applying the proviso to Regulation 29(1)(a) of the 2014 Tariff Regulations. It is observed that the Petitioner had filed Appeal No. 101 of 2017 & Appeal No. 110 of 2017 before the Appellate Tribunal for Electricity regarding applicability of 0.9 multiplication factor for computation of O&M Expenses. APTEL vide judgment dated 11.1.2022 in Appeal No. 101/2017 and Appeal No. 110/2017) set aside the findings of the Commission on this issue. The relevant portion of the judgment dated 11.1.2022 is extracted below:

“8.1(a) The Normative O&M charges for 2014-19 control period are determined on the basis of O&M charges incurred during the 2009-2014 control period.

Xxx

(b) Further, the O&M charges for the past years are collected as consolidated charges for the complete project /generating station irrespective of new /additional units during that period or existing units.

“8.2. From the above, it is crystal clear that the Normative O&M charges are determined based on the actual consolidated O&M charges for the past five years for a specific project having similar unit sizes.

8.3 Also, the Normative O&M charges are determined for the complete Generating Station including all the units which achieve COD prior to 1.4.2014. The multiplication



factor is to be applied for new units which achieve COD after 1.4.2014 and during the control period 2014-19.”

xxxx

8.7 We agree with the submissions made by the Appellant that considering the above COD, only the revised O&M norms for units existing as on 01.04.2014, as laid down in Regulation 29 (1) (a) of the 2014 Tariff Regulations are to be applied in case of the Appellant. As such any other interpretation of the aforesaid regulations is contrary to the plain text and meaning.

Xxx

8.13 We decline to accept the said contention as the provisions of the Tariff Regulations, 2014 have already been deliberated in the foregoing paras and there is no doubt that the Normative O&M charges are determined by consolidating the actual O&M charges for the past five years (the last control period) thus considering the actual sharing benefits by the additional units for that period and rationalizing the expenditure

Xxx

8.15 We do not find any relevance to the above submission as the benefit of sharing of resources by the additional units have already been factored in the actual O&M charges considered for the past years

Xxx

8.17 There is no denial that the benefit of sharing of resources by the additional units should be passed on to the consumers, however, once already factored into the actual O&M charges which is the basis for determination of Normative O&M charges for the next control period, such a benefit becomes the integral part of O&M charges.

Xxx

8.25 However, in the Impugned Order, CERC has essentially amended Proviso to Regulation 29 (1) (a) of the Tariff Regulations, 2014 without providing an opportunity to the Appellant to make submissions on this issue of Proviso to Regulation 29 (1)(a) of the Tariff Regulations, 2014. It is apposite to mention that in the entire proceedings no party had even whispered that the Proviso to Regulation 29 (1)(a) ought to be made applicable to units achieving COD Prior to 01.04.2014. Hence, there was no occasion for the Appellant to even respond to such a course being adopted by Central Commission. Even Central Commission at no stage indicated that it is seeking to apply to Proviso to Regulation 29 (1)(a) to Units achieving COD before 01.04.2014. Such a course adopted by Central Commission violates the principle of Natural Justice and for this ground alone the Impugned Order is liable to be set aside

In light of the above, we are of the considered view that the issues raised in the Batch of Appeals have merit and hence Appeals are allowed. The impugned order dated 21.01.2017 in Petition No. 283/GT/2014 and order dated 06.02.2017 in Petition No. 372/GT/2014 (“Petition 372”), are hereby set aside to the extent of our findings. The matter is remitted back to the Central Commission for passing a reasoned order pursuant to our observations are scrupulously complied with expeditiously and in a time-bound manner.”

69. It is observed that the generating station, with a capacity of 1980 MW comprises of three units of 660 MW each with COD as 1.10.2011, 25.5.2012 and 1.8.2012. Similarly, Stage-II of the generating station comprises of two units of 500 MW each with



COD as 20.6.2008 and 1.1.2009. Thus, the total capacity is 2980 MW (both Stage-I and Stage-II). As such, there is no addition of units after 1.4.2014. Therefore, in line with the above decision/ findings of APTEL, the O&M expenses allowable in terms of Regulation 29(1)(a) of the 2014 Tariff Regulations, for the 2014-19 tariff period are worked out and allowed as under:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
28512.00	30313.80	32214.60	34254.00	36392.40

Water Charges

70. 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”

71. 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. The Petitioner has claimed water charges based on actual water consumption of the generating station as under:

<i>(Rs. in lakh)</i>						
	Units	2014-15	2015-16	2016-17	2017-18	2018-19
Type of cooling tower	-	Induced Draft Cooling Tower (IDCT)				
Type of cooling water system	-	Closed Cycle				
Water allocation/contracted*	MCM	120	120	120	120	93
Actual water consumption for Sipat Stage-I & Stage-II	MCM	69.27	89.90	84.39	84.76	78.38
Rate of water charges	-	Rs.12.25/m ³				
Total water charges paid (for Sipat Stage-I & Stage-II)	Rs. in lakh	13086.00	13367.76	13838.13	14829.44	11388.49
Water charges paid for Sipat Stage-I and claimed in Petition	Rs. in lakh	8694.72	8881.93	9194.46	9853.12	7566.85

* for Sipat-I, Sipat-II and Balco CPP

72. The water charges allowed, on projected basis, by order dated 29.3.2017 in Petition No. 337/GT/2014 is as under:



<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
8694.72	8882.09	8882.09	8882.09	8882.09

73. The water charges of Rs.44191.08 lakh claimed for the 2014-19 tariff period is lower than the amount of Rs.44223.08 lakh allowed on projected basis in order dated 29.3.2017 in Petition No. 337/GT/2014 for the 2014-19 tariff period. The Petitioner has shown actual consumption of water on combined basis for both the stages of the generating station, which is well within the maximum water consumption limits of 3.5 m³/MWh as per Ministry of Environment, Forest and Climate Change (MOEFCC) Notification dated 7.12.2015. Further, the water charges claimed is in accordance with the auditor certified financial statements for the relevant financial years of the 2014-19 tariff period. Accordingly, the water charges claimed by the Petitioner, as under are allowed for the purpose of tariff:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
8694.72	8881.93	9194.46	9853.12	7566.85

74. In addition to above, the Petitioner has claimed arrears of water charges for the period from November, 2009 to January 2017, actually paid during 2016-17 and 2017-18, based on revised computational methodology for actual drawl of water w.e.f. February 2017 by the Water Resources Department of Chhattisgarh (WRD). The Petitioner submitted that water agreement for the generating station has been done for the period of 30 years based on allocation of water quantity on daily basis for 0.328 MCM and the aggregated billing for water consumption is carried out on monthly basis. It has also submitted that if the actual drawl is less than contracted quantity, the minimum payment of water charges is to be made based on allocation equivalent to 90% of the monthly contracted quantity of 10 MCM i.e. 9 MCM for Sipat Stage-I & Stage-II and if the actual consumption exceeds the contracted quantity on monthly basis, the water charges are payable @1.5 times the applicable rate of water charges.



The Petitioner has stated that the actual consumption consists of actual drawl of water plus 30% evaporation loss, as per the water agreement. However, the WRD revised the computational methodology for actual drawl w.e.f February, 2017. As per the revised methodology, the actual consumption is derived based on the maximum of actual drawl and 90% of contracted quantity. The quantity as arrived shall further include the 30% of evaporation loss on actual drawl. Based on the revised methodology, the WRD raised the arrear billing of Rs.16.98 crore and Rs.35.65 crore for the period November, 2009 to January, 2017 and the same has been paid in 2016-17 and 2017-18 respectively and has been booked under P&L in the books of account. Accordingly, the Petitioner has claimed arrear amounts of Rs.1129.54 lakh and Rs.2371.88 lakh paid for the Stage-I of the generating station during 2016-17 and 2017-18 in Form-3A in addition to the regular water charges paid to the WRD.

75. The Respondent MPPMCL has submitted that arrears of water charges claimed by the Petitioner are arbitrary. It has also submitted that water charges form part of O&M expenses prior to the 2014-19 tariff period and no water charges were payable separately. Accordingly, the Respondent has submitted that the arrears towards water charges claimed by the Petitioner are not tenable and are attributable to the Petitioner.

76. We have considered the matter. Since the expenditure has been incurred by the Petitioner, we are of the view that the said expenditure should be allowed. Accordingly, the arrears of water charges of Rs.1129.54 lakh and Rs.2371.88 lakh paid for the Stage-I of the generating station during 2016-17 and 2017-18 is allowed. Further, since the arrear payment include water charges for the period up to February 2017 the same has been considered as part of O&M expenses and consequential annual fixed charges being determined in this order under the 2014 Tariff Regulations.

Capital Spares



77. The last proviso to Regulation 29(2) of the 2014 Tariff Regulations provides as under:

“29.(2) The Water Charges and capital spares for thermal generating stations shall be allowed separately:

xxxxx

“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 capitalization or consumption of stores and spares and renovation and modernization”.

78. In terms of the said proviso, capital spares consumed are admissible separately, at the time of truing up of tariff, based on the details furnished by the Petitioner. The capital spares claimed by the Petitioner are as under:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
340.13	904.06	823.11	1241.74	1108.92

79. We have examined the list of spares furnished by the Petitioner along with the de-capitalization details as submitted in Form-9Bi. The capital spares consumption claimed by the Petitioner comprise of two categories as under:

<i>(Rs. in lakh)</i>					
	2014-15	2015-16	2016-17	2017-18	2018-19
Capital spares (part of capital cost)	340.13	904.06	823.11	1241.74	1097.35
Capital spares (not part of capital cost)	0.00	0.00	0.00	0.00	11.58
Total capital spares consumed claimed	340.13	904.06	823.11	1241.74	1108.92

80. However, as noted earlier, the exclusions for de-capitalization of capital spares of Rs.11.58 lakh in 2018-19 has been disallowed as the same form part of the capital cost allowed. Accordingly, the entire capital spares claimed by the Petitioner for the 2014-19 tariff period are considered to form part of the capital cost allowed. In respect of capital spares which form part of capital cost of the generating station, the Petitioner has been recovering tariff since their procurement and therefore the same cannot be allowed as part of additional O&M expenses. Accordingly, the entire claim of the



Petitioner, for the 2014-19 tariff period, pertaining to capital spares consumed is disallowed for the purpose of tariff.

Additional O&M Expenses on account of Goods and Service Tax

81. The Petitioner has claimed additional O&M expenses of Rs.293.02 lakh in 2017-18 and Rs.408.53 lakh in 2018-19 on account of payment of Goods and Service Tax (GST). The Respondent, MSEDCL has submitted that the Petitioner's claim of GST expenses towards O&M expenses will lead to additional burden on the consumers and the GST expenses towards O&M expenses are applicable only if a service is outsourced. MSEDCL also submitted that services are outsourced because of efficiency issue or lack of expertise within the company and it will obviously be lower than the cost of doing that job internally, further the O&M operating norms are the ceiling norms and generating companies are required to manage within these limits. The Respondent, MPPMCL has submitted that through enactment of GST Act, GOI has rationalized the tax regime by subsuming various taxes/cess/duties, this has generally resulted in reduction of overall applicable tax rate in the country and therefore the claim of the Petitioner does not appear to be in order. The Petitioner in its rejoinder submitted that it is a settled position of law that promulgation of GST is change in law event and falls within the purview of Regulation 3(9) read with Regulation 14(3) of the 2014 Tariff Regulations. The Petitioner further submitted that the amount claimed is only on account of differential rate of tax for taxable services relating to O&M i.e. under erstwhile service tax 15% and in GST 18%.

82. The submissions of the parties have been considered. It is observed that the Commission while specifying the O&M expense norms for the 2014-19 tariff period had considered taxes to form part of the O&M expense calculations and accordingly, had factored the same in the said norms. This is evident from paragraph 49.6 of the SOR



(Statement of Objects and Reasons) issued with the 2014 Tariff Regulations, which is extracted hereunder:

“49.6 With regards to suggestion received on other taxes to be allowed, the Commission while approving the norms of O&M expenses has considered the taxes as part of O&M expenses while working out the norms and therefore the same has already been factored in...”

83. Further, the escalation rates considered in the O&M expense norms is only after accounting for the variations during the past five years of the 2014-19 tariff period, which in our view, takes care of any variation in taxes also. It is pertinent to mention that in case of reduction of taxes or duties, no reimbursement is ordered. In this background, we find no reason to grant additional O&M expenses towards payment of GST.

Additional O&M Expenses on account of impact of Wage Revision

84. The Petitioner has submitted that the Commission while specifying the 2014 Tariff Regulations applicable for the 2014-19 tariff period, had taken note in SOR to the said regulations that any increase in the employee expenses, on account of pay revision shall be considered appropriately, on case to case basis, balancing the interest of generating stations and consumers. The Petitioner has, therefore, claimed additional O&M expenses of Rs.59.79 lakh in 2015-16, Rs.3241.46 lakh of in 2016-17, Rs.4054.76 lakh in 2017-18 and Rs.5286.19 lakh in 2018-19 towards impact of wage revision of employees of CISF from 1.1.2016 and the employees of the Petitioner posted in the generating station, with effect from 1.1.2017. The Respondent MPPMCL has submitted that the impact of wage revision claimed the Petitioner is not consistent and there is a huge anomaly in claimed wage revision impact for the last quarter of the 2016-17. The Respondent has further relied on the instructions issued by Ministry of Heavy Industries and &Public Enterprises in its office memorandum dated 3rd August 2017 and has contested that the financial implication of wage revision should be borne by the Petitioner.



85. In this regard the Petitioner vide affidavit dated 4.6.2021 has submitted the following:

- (a) Detailed break-up of the actual O&M expenses booked by the Petitioner for the 2014-19 tariff period for the whole generating station (i.e. all Stages of Sipat STPS).
- (b) Detailed break-up of actual O&M expense of the Corporate Centre and its allocation to various generating stations, for the 2014-19 tariff period.
- (c) Break-up of claimed wage revision impact on employee cost, expenses on corporate centre and on salaries of CISF employee of the generating station for the 2014-19 tariff period.

86. We have examined the submissions and the documents available on record. As stated, the Petitioner has claimed total amount of Rs.12642.20 lakh (Rs.59.79 lakh in 2015-16, Rs.3241.46 lakh of in 2016-17, Rs.4054.76 lakh in 2017-18 and Rs.5286.19 lakh in 2018-19) as impact of wage revision of employees of CISF from 1.1.2016 and for employees of the Petitioner posted at the generating station with effect from 1.1.2017. However, it is noticed that the said claim of the Petitioner includes the impact on account of the payment of additional PRP/ex-gratia to its employees, consequent upon wage revision, of Rs.325.26 lakh in 2017-18 and Rs.1313.03 lakh in 2018-19. As such, as per consistent methodology adopted by the Commission of excluding PRP/ex-gratia from actual O&M expenses of past data for finalization of O&M norms for various tariff settings, the additional PRP/ex-gratia, paid as a result of wage revision impact has been excluded from the wage revision impact claimed by the Petitioner, in the present case. Accordingly, the claim of the Petitioner in respect of wage revision impact stand reduced to Rs.11003.90 lakh with the following year-wise break up.

	<i>(Rs. in lakh)</i>					
	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Wage revision impact claimed (excluding PRP/ex-gratia)	0.00	59.79	3241.46	3729.50	3973.16	11003.90



87. The Commission while specifying the O&M expense norms under the 2014 Tariff Regulations had considered the actual O&M expense data for the period from 2008-09 to 2012-13. However, considering the submissions of the stakeholders, the Commission, in the SOR to the 2014 Tariff Regulations, had observed that the increase in employees cost due to impact of pay revision impact, will be examined on a case to case basis, balancing the interest of generating stations and the consumers. The relevant extract of the SOR is extracted under:

“29.26. Some of the generating stations have suggested that the impact of pay revision should be allowed on the basis of actual share of pay revision instead of normative 40% and one generating company suggested that the same should be considered as 60%. In the draft Regulations, the Commission had provided for a normative percentage of employee cost to total O&M expenses for different type of generating stations with an intention to provide a ceiling limit so that it does not lead to any exorbitant increase in the O&M expenses resulting in spike in tariff. The Commission would however, like to review the same considering the macro-economics involved as these norms are also applicable for private generating stations. In order to ensure that such increase in employee expenses on account of pay revision in case of central generating stations and private generating stations are considered appropriately, the Commission is of the view that it shall be examined on case to case basis, balancing the interest of generating stations and consumers.

33.2 The draft Regulations provided for a normative percentage of employee cost to total O&M expenses for generating stations and transmission system with an intention to provide a ceiling limit so that the same should not lead to any exorbitant increase in the O&M expenses resulting in spike in tariff. The Commission shall examine the increase in employee expenses on case to case basis and shall consider the same if found appropriate, to ensure that overall impact at the macro level is sustainable and thoroughly justified. Accordingly, clause 29(4) proposed in the draft Regulations has been deleted. The impact of wage revision shall only be given after seeing impact of one full year and if it is found that O&M norms provided under Regulations are inadequate/insufficient to cover all justifiable O&M expenses for the particular year including employee expenses, then balance amount may be considered for reimbursement.”

88. The methodology indicated in SOR quoted above suggests a comparison of the normative O&M expenses with the actual O&M expenses, on year to year basis. However, in this respect the following facts need consideration:

- (a) The norms are framed based on the averaging of the actual O&M expense of past five years to capture the year on year variations in sub-heads of O&M;
- (b) Certain cyclic expenditure may occur with a gap of one year or two years and as such adopting a longer duration i.e. five years for framing of norms also captures such expenditure which is not incurred on year to year basis;



- (c) When generating companies find that their actual expenditure has gone beyond the normative O&M expenses in a particular year put departmental restrictions and try to bring the expenditure for the next year below the norms.

89. In consideration of above facts, we find it appropriate to compare the normative O&M expenses with the actual O&M expenses for a longer duration so as to capture the variation in the sub-heads. Accordingly, it is decided that for ascertaining that the O&M expense norms provided under the 2014 Tariff Regulations are inadequate/insufficient to cover all justifiable O&M expenses, including employee expenses, the comparison of the normative O&M expenses and the actuals O&M expenses incurred shall be made for 2015-19 on a combined basis, which is commensurate with the wage revision claim being spread over these four years.

90. The Petitioner has furnished the detailed breakup of the actual O&M expenses incurred during the 2014-19 tariff period for combined stages i.e. Stage-I and Stage-II of the Sipat STPS. It is noticed that the total O&M expenses incurred for generating station is more than the normative O&M expenses recovered during each year of the 2014-19 tariff period. The impact of wage revision/ pay revision could not be factored by the Commission while framing the O&M expense norms under the 2014-19 Tariff Regulations since the pay/ wage revision came into effect from 1.1.2016 (for CISF & KV employees) and 1.1.2017 (for employees of the Petitioner) respectively. As such, in terms of SOR to the 2014 Tariff Regulations, the following approach has been adopted for arriving at the allowable impact of pay revision:

Comparison of the normative O&M expenses with the actual O&M expenses incurred for the period from 2015-16 to 2018-19, commensurate to the period for which wage revision impact has been claimed. For like to like comparison, the components of O&M expenses like productivity linked incentive, water charges, filing fee, ex-gratia, loss of provisions, prior period expenses, community development store expenses, ash utilization expenses, RLDC fee & charges and others (without breakup/details) which were not considered while framing the O&M expense norms for the 2014-19 tariff period, have been excluded from the yearly actual O&M expenses. Having done so, if the normative O&M expenses



for the period 2015-19 are higher than the actual O&M expenses (normalized) for the said period, then the impact of wage revision (excluding PRP and ex-gratia) as claimed for the said period is not admissible/allowed as the impact of pay revision gets accommodated within the normative O&M expenses. However, if the normative O&M expenses for the period 2015-19 are lesser than the actual O&M expenses (normalized) for the same period, the wage revision impact (excluding PRP and ex-gratia) to the extent of under recovery or wage revision impact (excluding PRP and Ex gratia), whichever is lower, is required to be allowed as wage revision impact for the period 2015-19.

91. The details as furnished by the Petitioner for actual O&M expenses incurred for Stage-I and Stage-II (2980 MW) for the period from 1.4.2014 to 31.3.2019, and the wage revision impact (excluding PRP and ex-gratia) for the generating station (Stage-I 1980 MW) are as under:

<i>(Rs. in lakh)</i>		
Year	Actual O&M expenses for whole Sipat STPS, excluding water charges & capital spares	Wage revision impact claimed for the generating station i.e. Sipat STPS, Stage-I (1980 MW)
2014-15	44510.15	0.00
2015-16	48143.16	59.79
2016-17	53691.97	3241.46
2017-18	58240.45	3729.50
2018-19	62262.61	3973.16
Total		11003.90

92. As a first step, the expenditure against sub-heads of O&M expenses as indicated in paragraph 89 above have been excluded from the actual O&M expenses incurred to arrive at the actual O&M expenses (normalized) for the combined stages of the generating station (Stage-I & Stage-II). Accordingly, the comparison of the normative O&M expenses versus the actual O&M expenses (normalized) along with the wage revision impact claimed by the Petitioner for the generating station i.e. Sipat STPS, Stage-I (1980 MW) for the period 2015-19 is as follows:

<i>(Rs. in lakh)</i>					
	2015-16	2016-17	2017-18	2018-19	Total
Actual O&M expenses (normalized) for the combined stages of the generating station (Stage-I and Stage-II i.e. 2980 MW) – (a)	44669.64	50216.84	53102.07	56718.39	204706.94
Actual O&M expenses (normalized) for the generating	29679.83	33365.55	35282.58	37685.38	136013.33



station i.e. Sipat STPS, Stage-I (1980 MW) pro-rated based on capacity – (b)					
Normative O&M expenses for Sipat STPS, Stage-I as per Regulation 29(1) of the 2014 Tariff Regulations – ©	30313.80	32214.60	34254.00	36392.40	133174.80
Under/(Excess) recovery for the generating station (d)=(b)-(c)	(-) 633.97	1150.95	1028.58	1292.98	2838.53
Wage revision impact claimed (excluding PRP/ex-gratia)	59.79	3241.46	3729.50	3973.16	11003.90

93. It is observed that for wage revision impact during the period 2015-19, the normative O&M expenses is less than the actual O&M expenses (normalized) and the under recovery is to the tune of Rs.2838.53 lakh which is lower than the wage revision impact claimed (excluding PRP/ex-gratia) by the Petitioner. As such, in terms of methodology described above, the wage revision impact (excluding PRP/ex-gratia) of Rs.2838.53 lakh is allowed for this generating station.

94. Accordingly, we, in exercise of the Power under Regulation 54 of the 2014 Tariff Regulations, relax Regulation 29(1) of the 2014 Tariff Regulations allow the reimbursement of the wage revision impact amounting to Rs.2838.53 lakh, as additional O&M expenses for the period 2015-19. The arrear payments on account of the wage revision impact is payable by the beneficiaries in twelve equal monthly instalments starting from the next bill after issue of this order. Keeping in view the consumer interest, we as a special case, direct that no interest shall be charged by the Petitioner on the arrear payments on the wage revision impact allowed in this order. This arrangement, in our view, will balance the interest of both the Petitioner and the Respondents. Also, considering the fact that the impact of wage revision is being allowed in exercise of the power to relax, the expenses allowed are not made part of the O&M expenses and the consequent annual fixed charges determined in this order.

Additional O&M Expenses on account of Ash Transportation expenses



95. The Petitioner has claimed an amount of Rs.315.85 lakh in 2018-19 towards Ash transportation expenses, as additional O&M expenses. The Petitioner has submitted that the notification dated 25.1.2016 of Ministry of Environment, Forest & Climate Change (MOEFCC), issued in terms of the provisions of the Environment (Protection) Act 1986, provides for the transportation cost of Fly ash generated at power stations, to be borne by such generating companies. The Petitioner has also stated that it had filed Petition No. 172/MP/2016 before this Commission, seeking reimbursement of the additional expenses incurred towards Fly Ash transportation, directly from the beneficiaries as the same are statutory expenses. Accordingly, the Petitioner has sought reimbursement of the additional expenditure incurred towards fly ash transportation, as under:

<i>(Rs. in lakh)</i>	
	2018-19
Expenditure towards fly ash transportation (a)	315.85
Revenue earned from sale of fly ash (b)	0.00
Net additional O&M expenses claimed (c = a-b)	315.85

96. The Petitioner vide affidavit dated 4.6.2021 has submitted that in support of the claim for Ash transportation expenses, arrived at after adjusting revenue earned from sale of fly ash after 25.1.2016, the Petitioner has already submitted an auditor certificate. The Petitioner also submitted that award for fly ash transportation contract has been done through transparent competitive bidding procedure. The Petitioner also submitted that prior to the MoEF&CC notification dated 25.1.2016, there was no mandate on the Petitioner to transport the fly ash. The fly ash was being made available to the industries seeking the same at the generating station itself and the industries were bearing the cost of transport of the fly ash themselves.

97. The matter has been examined. As regards reimbursement of Ash transportation expenses, the Commission in its order dated 5.11.2018 in Petition No.172/MP/2016, while directing compliance of certain conditions by the Petitioner, had granted liberty to



the Petitioner to approach the Commission at the time of truing-up exercise for the 2014-19 tariff period along with all details/information, duly certified by auditor. The MoEF&CC notification dated 25.1.2016 provides as follows:

“10. The cost of transportation of ash for road construction projects or for manufacturing of ash based products or use as soil conditioner in agriculture activity within a radius of hundred kilometers from a coal or lignite based thermal power plant shall be borne by such coal or lignite based thermal power plant and the cost of transportation beyond the radius of hundred kilometers and up to three hundred kilometers shall be shared equally between the user and the coal or lignite based thermal power plant.”

98. However, it is noticed that the Petitioner has only furnished the auditor certificate but has not submitted the relevant information required in terms of the MoEF&CC notification dated 25.1.2016 (such as the quantum of ash transported, locations, the distance of the end user (in km), the applicable awarded rate in Rs./ton per kilometer, name of the transporters, etc.). From the details furnished by the Petitioner, it is not clear as to (i) the quantum of ash, (ii) if ash transportation is beyond 100 km radius or less than 100 km radius, and (iii) if the sharing of 50% of ash transportation expenses to be shared between the ash (end) user and the Thermal Power plant as stipulated in MoEF&CC notification, were excluded from the claim or not. Therefore, in the absence of the above required information, we are not inclined to allow the said expenditure towards fly ash transportation at this stage. However, the Petitioner is at liberty to file a separate petition for the said claim towards fly ash transportation with all the supporting documents and justification.

99. Accordingly, the total O&M expenses allowed to the generating station for the 2014-19 tariff period is as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Normative O&M expenses claimed under Regulation 29(1)(a) of the 2014 Tariff Regulations (a)	28512.00	30313.80	32214.60	34254.00	36392.40
Normative O&M expenses allowed under Regulation	28512.00	30313.80	32214.60	34254.00	36392.40



29(1)(a) of the 2014 Tariff Regulations (b)					
Water Charges claimed under Regulation 29(2) of the 2014 Tariff Regulations (c)	8694.72	8881.93	9194.46	9853.12	7566.85
Water Charges allowed under Regulation 29(2) of the 2014 Tariff Regulations (d)	8694.72	8881.93	9194.46	9853.12	7566.85
Arrears of water charges claimed (e)	0.00	0.00	1129.54	2371.88	0.00
Arrears of water charges allowed (f)	0.00	0.00	1129.54	2371.88	0.00
Capital Spares consumed claimed under Regulation 29(2) of the 2014 Tariff Regulations (g)	340.13	904.06	823.11	1241.74	1108.92
Capital Spares consumed allowed under Regulation 29(2) of the 2014 Tariff Regulations (h)	0.00	0.00	0.00	0.00	0.00
Total O&M expenses claimed under Regulation 29 of the 2014 Tariff Regulations (a + c + e + g)	37546.85	40099.79	43361.71	47720.74	45068.17
Total O&M expenses allowed under Regulation 29 of the 2014 Tariff Regulations (b + d + f + h)	37206.72	39195.73	42538.60	46479.00	43959.25
Impact of Wage revision claimed	0.00	59.79	3241.46	4054.76	5286.19
Impact of Wage revision allowed	0.00	59.79	2778.74	0.00	0.00
Impact of GST claimed	0.00	0.00	0.00	293.02	408.53
Impact of GST allowed	0.00	0.00	0.00	0.00	0.00
Ash transportation expenses claimed	0.00	0.00	0.00	0.00	315.85
Ash transportation expenses allowed	0.00	0.00	0.00	0.00	0.00

Operational Norms

100. The operational norms in respect of the generating station i.e. normative annual plant availability factor, gross station heat rate, specific fuel oil consumption and auxiliary power consumption are discussed as follows:



Normative Annual Plant Availability Factor

101. In terms of Regulation 36(A)(a) of the 2014 Tariff Regulations, the Commission vide its order dated 29.3.2017 in Petitioner No. 337/GT/2014 had allowed the Normative Annual Plant Availability Factor (NAPAF) of 83% for the period 2014-17 and 85% for the period 2017-19. The same is considered for the purpose of revision of tariff.

Gross Station Heat Rate (kCal/kWh)

102. In terms of Regulation 36©(a) of the 2014 Tariff Regulations, the Gross Station Heat Rate (GSHR) of 2306.34 kCal/kWh as allowed vide Commission's order dated 29.3.2017 in Petitioner No. 337/GT/2014, is considered for the purpose of revision of tariff.

Specific Oil Consumption

103. In terms of Regulation 36(D)(a) of the 2014 Tariff Regulations, the secondary fuel oil consumption of 0.50 ml/kWh as allowed vide Commission's order dated 29.3.2017 in Petitioner No. 337/GT/2014, is considered for the purpose of revision of tariff.

Auxiliary Power Consumption

104. In terms of the Regulation 36€(a) of the 2014 Tariff Regulations, the auxiliary power consumption of 5.75% as allowed vide Commission's order dated 29.3.2017 in Petitioner No. 337/GT/2014, is considered for the purpose of revision of tariff.

Interest on Working Capital

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

“28 (1) The working capital shall cover:

(a) Coal-based/lignite-fired thermal generating stations

(vi) 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.”*

Fuel Component for computation of Working Capital

106. Regulation 28(2) of the 2014 Tariff Regulations provides that the computation of cost of fuel as part of Working Capital is to be based on the landed price and GCV of fuel as per actuals, for the three months preceding the first month for which the tariff is to be determined.

107. In terms of Regulation 30(6) of the 2014 Tariff Regulations, for determination of the energy charges in working capital, the GCV on ‘as received’ basis is to be considered.

108. Regulation 30(7) of the 2014 Tariff Regulations provides as under:

“(7) The generating company shall provide to the beneficiaries of the generating station the details of parameters of GCV and price of fuel i.e. domestic coal, imported coal, e-auction coal, lignite, natural gas, RLNG, liquid fuel etc., as per the forms prescribed at Annexure-I to these regulations:

Provided that the details of blending ratio of the imported coal with domestic coal, proportion of e-auction coal and the weighted average GCV of the fuels as received shall also be provided separately, along with the bills of the respective month:

Provided further that copies of the bills and details of parameters of GCV and price of fuel i.e. domestic coal, imported coal, e-auction coal, lignite, natural gas, RLNG, liquid fuel etc., details of blending ratio of the imported coal with domestic coal, proportion of e-auction coal shall also be displayed on the website of the generating company. The details should be available on its website on monthly basis for a period of three months.”

109. The issue of ‘as received’ GCV for computation of energy charges was challenged by the Petitioner and other generating companies through various writ petitions filed before the High Court of Delhi (W.P. No.1641/2014-NTPC v CERC) challenging Regulations 30(6) of the 2014-19 Tariff Regulations with regard to



measurement of GCV of coal on 'as received' basis for purpose of energy charges and the High Court had directed the Commission to decide the place from where the sample of coal should be taken for measurement of GCV of coal on 'as received' basis on the request of Petitioners. In terms of the directions of the High Court, the Commission vide order dated 25.1.2016 in Petition No. 283/GT/2014 (approval of tariff of Kahalgaon STPS for the 2014-19 tariff period) 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."

110. The review petition filed by the Petitioner against the aforesaid order dated 25.1.2016 was rejected by the Commission vide order dated 30.6.2016 in Petition No.11/RP/2016. The Petitioner filed Petition No. 244/MP/2016 before this Commission praying for removal of difficulties and the issues faced by it in implementing the Commission's orders dated 25.1.2016 and 30.6.2016 with regard to sampling of coal from loaded wagon top for measurement of GCV and the Commission by its order dated 19.9.2018 had disposed of the preliminary objections of the respondents therein and held that the petition is maintainable. Against this order, some of the respondents have filed appeal before the APTEL in Appeal Nos. 291/2018 (GRIDCO v NTPC & ors) and the same is pending.

111. In Petition No. 337/GT/2014 filed by the Petitioner for determination of tariff of this generating station for the 2014-19 tariff period, the Petitioner had not furnished GCV of coal on 'as billed' and on 'as received' basis for the preceding 3 months i.e. for



January 2014, February 2014 and March 2014 that were required for determination of Interest on Working Capital (IWC). Therefore, the Commission vide its order dated 29.3.2017 in Petition No.337/GT/2014 had considered GCV of coal on 'as billed' basis and provisionally allowed adjustment for total moisture while allowing the cost of coal towards generation & stock and two months' energy charges in the working capital.

112. The Petitioner, in this petition, has claimed fuel related components of working capital based on GCV of coal as 3730.70 Kcal/kg (as indicated at Form-13F) consequent to the order of the Commission dated 29.3.2017 in Petition No. 337/GT/2014. This "as received" GCV of 3730.70 kcal/kg represents the average of monthly as received GCVs for period from October 2016 to March 2019 (30 months). Further, the Petitioner has submitted that CEA vide letter dated 17.10.2017 has opined that 85-100 kcal/kg for a pit-head station and a margin of 105-120 kcal/kg for non-pit head station may be considered as a loss of GCV of coal between 'as received' and 'as fired'. Accordingly, the Petitioner has considered 100 kcal/kg margin on the average GCV of the period from October 2016 to March 2019 for computing working capital. Accordingly, the cost of fuel component in the working capital of the generating station claimed by the Petitioner is as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of Coal towards stock (15 days of generation)	7555.48	7555.48	7555.48	7737.54	7737.54
Cost of Coal towards Generation (30 days of generation)	15110.96	15110.96	15110.96	15475.08	15475.08
Cost of Secondary fuel oil (2 months of generation)	619.21	620.91	619.21	634.13	634.13

113. The Petitioner has also submitted that it has filed separate petition (Petition No. 244/MP/2016) seeking appropriate reliefs due to extreme practical difficulty faced by the Petitioner in implementing Regulation 30(6) of the 2014 Tariff Regulations and



directions issued by the Commission in its order dated 25.1.2016 and for consequential directions. It has also sought liberty to make additional submissions based on the final decision in Petition No. 244/MP/2016.

114. In response to the clarification sought from the Petitioner on the details of GCV on 'as received' basis for the months of January, 2014 to March, 2014, which were uploaded on the website of the Petitioner and shared with the beneficiaries, the Petitioner has submitted that though the computation of energy charges moved from 'as fired' basis to 'as received' basis, with effect from 1.4.2014 in terms of Regulation 30(6) of the 2014 Tariff Regulations, however, for calculation of IWC under Regulation 28(2) of the 2014 Tariff Regulations, the GCV shall be as per "actuals" for the three months preceding the first month for which tariff is to be determined. It has further submitted that for the 2014-19 tariff period, Regulation 28(2) of the 2014 Tariff Regulations unequivocally provide that the actual cost and GCV of the preceding three months shall be considered and for these preceding three months (January 2014 to March 2014), by virtue of it falling under the 2009 Tariff Regulations, shall be computed on the basis of 'as fired' GCV. Referring to the judgment of the Hon'ble Supreme Court in PTC India v CERC (2010) 4 SCC 603 and the judgment of APTEL in NEEPCO v TERC (2006) APTEL 148, the Petitioner has submitted that the Commission is bound by the provisions of the tariff regulations and that purposive interpretation ought to be given to the 2014 Tariff Regulations and interest on working capital ought to be computed in terms of Regulation 28 (2) of the 2014 Tariff Regulations, 2014 on actual GCV i.e. 'as fired' GCV. The Petitioner, without prejudice to the above submissions, has furnished the details of GCV on 'as received' basis for the months of January 2014 to March 2014, in compliance with the directions of the Commission, as under:



Sl. No.	Month	Weighted Average GCV of coal received (EM basis) (kcal/kg) (A)	Total Moisture (TM) (in %) (B)	Equilibrated Moisture (EM) (in %) ©	Weighted Average GCV of coal received (TM basis) (kcal/kg) (D)=[A*(1-B%)/(1-C%)]
1	January 2014	4411.28	11.30	5.78	4152.82
2	February 2014	4202.00	10.42	5.54	3984.92
3	March 2014	4229.91	10.67	5.69	4006.57
	Average				4048.10

115. The submissions have been considered. As discussed above, the Petitioner in Form-13F, has considered the average GCV of coal on 'as received basis' i.e. from wagon top for the period from October 2016 to March 2019 for the purpose of computation of working capital for the 2014-19 tariff period. In addition to the average GCV, it has also considered a margin of 100 kCal/kg for computation of the working capital of the generating station.

116. The Respondents MPPCL, CSPDCL and MSEDCL have submitted that the relaxation of GCV by a margin of 100 kCal/kg is not in terms of the 2014 Tariff Regulations and hence the same may not be allowed.

117. Regulation 28(2) of the 2014 Tariff Regulations provides that the computation of cost of fuel as a part of IWC is to be based on the landed price and gross calorific value of the fuel, as per actuals, for the three months preceding the first month for which the tariff is to be determined. Thus, calculation of IWC for 2014-19 period is to be based on such values for months of January 2014, February 2014 and March 2014. The Petitioner has not been able to furnish these values at the time of determination of tariff for the 2014-19 tariff period in Petition No. 337/GT/2014. In the present truing up petition, the Petitioner has proposed that instead of GCV for January 2014, February 2014 and March 2014, the Commission should consider the average values for months of October 2016 to March 2019 since the measurement of 'as received' GCV has been done in accordance with directions of the Commission vide order dated 25.1.2016 in Petition No. 283/GT/2014. In our view, the proposal of the Petitioner to consider the



retrospective application of 30 months' (October 2016 to March 2019) average of 'as received' GCV data in place of 'as received' GCV of the preceding three months (January 2014 to March 2014) is not acceptable, keeping in view that the average GCV for 30 months may not be commensurate to the landed cost of coal for the preceding three months to be considered for calculating IWC in terms of Regulation 28(2) of the 2014 Tariff Regulations and that due to efflux of time (gap of 30 month), the quality of coal extracted from the linked mines would have undergone considerable changes. Also, the consideration of loss of GCV of 100 kCal/kg cannot be considered, as the same is not as per provisions of the 2014 Tariff Regulations.

118. It is observed that though the Petitioner has furnished the details of 'as received' GCV for the three months of January 2014 to March 2014 as in table under paragraph 114 above, it has submitted that GCV of fuel is to be considered 'on actuals' for January 2014 to March 2014 and as such, GCV is required to be considered on an 'as fired' basis. In other words, the Petitioner has contended that since the period of January 2014 to March 2014 falls in the 2009-14 tariff period for measurement of GCV of coal, Regulation 18(2) read with Regulation 21(6) of the 2009 Tariff Regulations was applicable which mandates that generating company shall measure GCV on 'as fired' basis (and not on 'as received' basis). This submission of the Petitioner is also not acceptable in view of provisions of Regulation 21(6) of the 2009 Tariff Regulations that was amended on 31.12.2012, by addition of the following provisos:

"The following provisos shall be added under Clause (6) of Regulation 21 of the Principal Regulations as under namely:

Provided that generating company shall provide to the beneficiaries of the generating station the details of parameters of GCV and price of fuel i.e. domestic coal imported coal e-auction coal lignite natural gas RLNG liquid fuel etc. as per the form 15 of the Part-I of Appendix I to these regulations:

*Provided further that the details of blending ratio of the imported coal with domestic coal proportion of e-auction coal and the weighted average GCV of the fuels **as received** shall also be provided separately along with the bills of the respective month:*

Provided further that copies of the bills and details of parameters of GCV and price of fuel i.e. domestic coal imported coal e-auction coal lignite natural gas RLNG liquid fuel



etc. details of blending ratio of the imported coal with domestic coal proportion of e-auction coal shall also be displayed on the website of the generating company. The details should be available on its website on monthly basis for a period of three months.”

119. Accordingly, in terms of the above amendment to the 2009 Tariff Regulations, the details regarding the weighted average GCV of the fuels on ‘as received’ basis was also required to be provided by the Petitioner along with bills of the respective month. Also, bills detailing the parameters of GCV and price of fuel were to be displayed by the Petitioner on its website, on monthly basis.

120. As per SOR to the 2014 Tariff Regulations, we note that the main consideration of the Commission while moving from ‘as fired’ GCV to ‘as received’ GCV for the purpose of energy charges under Regulation 30(6) of the 2014 Tariff Regulations for the 2014-19 tariff period was to ensure that GCV losses which might occur within the generating station after receipt of coal are not passed on to the beneficiaries on account of improper handling and storage of coal by the generating companies. As regards the allowable (normative) storage loss within the generating station, CEA had observed that there is negligible difference between ‘as received’ GCV and ‘as fired’ GCV. As such, for the purpose of calculating energy charges, the Commission moved from ‘as fired’ GCV to ‘as received’ GCV under Regulation 30(6) of the 2014 Tariff Regulations without allowing any margin between the two measurements of GCV. Thus, ‘as received’ GCV was made applicable for the purpose of calculating working capital requirements based on the actual GCV of coal for the preceding three months of the first month for which tariff is to be determined in terms of Regulation 28(2) of 2014 Tariff Regulations. In case the submission of the Petitioner that ‘as fired’ is to be considered ‘at actuals’ for the preceding three months for purpose of IWC, the same would mean allowing (and passing through) all storage losses which would have occurred during the preceding three months (January 2014 to March 2014) for the 2014-19 tariff period.



This, according to us, defeats the very purpose of moving from ‘as fired’ GCV to ‘as received’ GCV in the 2014 Tariff Regulations. In this background and keeping in view that in terms of amended Regulation 21(6) of the 2009 Tariff Regulations, the Petitioner is required to share details of the weighted average GCV of the fuel on ‘as received’ basis, we consider the fuel component and energy charges for two months based on ‘as received’ GCV of the preceding three months (January 2014 to March 2014) for the purpose of computation of IWC in terms of Regulation 28(2) of the 2014 Tariff Regulations.

121. The Petitioner has calculated GCV 4048.10 kCal/kg which represents average of GCVs of preceding three months. The weighted average GCV for three months based on the net coal quantities as per Form-15 of the petition and the monthly GCVs as submitted by the Petitioner as discussed above works out to 4053.71 kCal/kg. Accordingly, the cost for fuel components in working capital has been computed considering the fuel details (price and GCV) as per Form-15 of the petition except for ‘as received’ GCV of coal, which is considered as 4053.71 kCal/kg as discussed above. All other operational norms such as Station Heat Rate, Auxiliary Energy Consumption and Secondary Fuel Cost have been considered as per the 2014 Tariff Regulations for calculation of fuel components in working capital.

122. Based on the above discussion, the cost for fuel component in working capital is worked out and allowed as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of Coal towards stock (15 days of generation)	6953.44	6953.44	6953.44	7120.99	7120.99
Cost of Coal towards Generation (30 days of generation)	13906.88	13906.88	13906.88	14241.99	14241.99
Cost of Secondary fuel oil (2 months of generation)	619.21	620.91	619.21	634.13	634.13

Energy Charge Rate (ECR) for computation of working capital



123. Regulation 30(6)(a) of the 2014 Tariff Regulations provides for computation and payment of 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

$$ECR = \{(GHR - SFC \times CVSF) \times LPPF / CVPF + SFC \times LPSFi + LC \times LPL\} \times 100 / (100 - AUX)$$

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, per litre or per standard cubic metre, as applicable during the month.

SFC = Normative specific fuel oil consumption, in ml/ kWh

LPSFi = Weighted average landed price of secondary fuel in Rs/ ml during the month”.

124. The Petitioner has claimed Energy Charge Rate (ECR) of 138.237 Paise/kWh for the generating station. The allowable ECR, based on the operational norms as specified in Regulation 36(A) of the 2014 Tariff Regulations and on weighted average of ‘as received’ GCV of 4053.71 kCal/kg is worked out as under:

	Unit	2014-19
Capacity	MW	1980
Gross Station Heat Rate	kCal/kWh	2306.34
Aux. Energy Consumption	%	5.75
Weighted average GCV of oil	kCal/lit	10130.00
Weighted average GCV of Coal	Kcal/kg	4053.71
Weighted average price of oil	Rs./KL	51614.61
Weighted average price of Coal	Rs./MT	2070.32
Rate of Energy Charge ex-bus	Rs./kWh	1.274

125. The Energy Charges for two months for computation of working capital based on ECR of Rs.1.274/kWh, has been worked out as under:

(Rs. in lakh)				
2014-15	2015-16	2016-17	2017-18	2018-19
28810.24	28889.18	28810.24	29504.47	29504.47



126. Accordingly, the fuel component and energy charges for two months in working capital is allowed as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of Coal for 45 days (15 days for coal stock and 30 days for generation)	20860.32	20860.32	20860.32	21362.98	21362.98
Cost of Secondary fuel oil (2 months of generation)	619.21	620.91	619.21	634.13	634.13
Energy Charges for 2 months	28810.24	28889.18	28810.24	29504.47	29504.47

Working Capital for Maintenance Spares

127. The Petitioner in Form-13B has claimed the maintenance spares in the working capital as under:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
7509.37	8031.92	9320.63	10413.70	10215.75

128. Regulation 28(1)(a)(iv) of the 2014 Tariff Regulations provide for maintenance spares @ 20% of the O&M expenses as specified in the Regulation 29 of the 2014 Tariff Regulations. Accordingly, maintenance spares @ 20% of the O&M expenses (including the water charges and capital spares) allowed for the 2014-19 tariff period is as under:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
7441.34	7839.15	8507.72	9295.80	8791.85

Working Capital for Receivables

129. Receivables equivalent to two months of capacity charges and energy charges has been worked out duly taking into account mode of operation of the generating station on secondary fuel, is allowed as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Variable Charges – for two months	28810.24	28889.18	28810.24	29504.47	29504.47
Fixed Charges – for two months	31089.81	31440.50	31793.42	32014.98	31004.11
Total	59900.05	60329.67	60603.67	61519.44	60508.57



Working Capital for O&M Expenses

130. The O&M expenses for working Capital (1 month of O&M Expenses) as claimed by the Petitioner in Form-13B are as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
3128.90	3346.63	3883.60	4339.04	4256.56

131. For consideration of working capital, O&M expenses of 1 month are to be considered. The normative O&M expenses allowed as per Regulation 29(1) of the 2014 Tariff Regulations, water charges and capital spares allowed as per Regulation 29(2) of the 2014 Tariff Regulations have been considered for calculating O&M expenses for one month as a part of working capital.

132. Accordingly, in terms of Regulation 28(1)(a)(vi) of the 2014 Tariff Regulations, one month O&M expenses allowed is as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
3100.56	3266.31	3544.88	3873.25	3663.27

133. In terms of Regulation 28(3) of the 2014 Tariff Regulations, the rate of interest on working capital has been considered as 13.50% (Bank rate 10% + 350 bps). Accordingly, Interest on working capital has been computed as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of Coal towards Stock (15 days)	6953.44	6953.44	6953.44	7120.99	7120.99
Cost of Coal towards Generation (30 days)	13906.88	13906.88	13906.88	14241.99	14241.99
Cost of Secondary fuel oil (2 months)	619.21	620.91	619.21	634.13	634.13
Maintenance Spares @ 20% of O&M expenses	7441.34	7839.15	8507.72	9295.80	8791.85
Receivables – 2 months	59900.05	60329.67	60603.67	61519.44	60508.57
O&M expenses – 1 month	3100.56	3266.31	3544.88	3873.25	3663.27
Total Working Capital	91921.49	92916.36	94135.81	96685.61	94960.81
Rate of Interest	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%
Interest on Working Capital	12409.40	12543.71	12708.33	13052.56	12819.71



134. The calculation of interest on working capital and energy charge as above are subject to the final decision of the Commission in Petition No. 244/MP/2016.

Annual Fixed Charges

135. Accordingly, the annual fixed charges approved for the 2014-19 tariff period for the generating station is summarized as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	45170.38	46204.41	46762.35	46896.48	46981.36
Interest on Loan	39403.99	36877.66	34309.77	31085.40	27449.73
Return on Equity	52348.35	53821.47	54441.49	54576.41	54814.58
Interest on Working Capital	12409.40	12543.71	12708.33	13052.56	12819.71
O&M Expenses	37206.72	39195.73	42538.60	46479.00	43959.25
Total	186538.84	188642.98	190760.54	192089.85	186024.64

Note: (1) All figures are on annualized basis. (2) 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.

136. The difference between the annual fixed charges already recovered in terms of the Commission's order dated 29.3.2017 in Petition No. 337/GT/2014 and the annual fixed charges determined by this order shall be adjusted in terms of Regulation 8 (13) of the 2014 Tariff Regulations.

137. The summary of the charges allowed in this order are as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Total Annual Fixed Charges	186538.84	188642.98	190760.54	192089.85	186024.64
Arrears of Water Charges	0.00	0.00	1129.54	2371.88	0.00
Capital Spares	0.00	0.00	0.00	0.00	0.00
Impact of Wage Revision	0.00	59.79	2778.74	0.00	0.00
Ash Transportation Charges	0.00	0.00	0.00	0.00	0.00

138. Annexure-I enclosed forms part of the order

139. Petition No. 240/GT/2020 is disposed of in terms of the above.

Sd/-
(Pravas Kumar Singh)
Member

Sd/-
(Arun Goyal)
Member

Sd/-
(I.S Jha)
Member

Sd/-
(P.K. Pujari)
Chairperson



Depreciation for the 2014-19 Tariff Period

(Rs. In lakh)

Name of assets	Depreciation Rate	2014-15		2015-16		2016-17		2017-18		2018-19	
		Gross Block as on 01.04.2014	Depreciation Amount	Gross Block as on 01.04.2015	Depreciation Amount	Gross Block as on 01.04.2016	Depreciation Amount	Gross Block as on 01.04.2017	Depreciation Amount	Gross Block as on 01.04.2018	Depreciation Amount
Land- Free Hold	0.00%	3505.01	0.00	3551.63	0.00	3551.63	0.00	3552.08	0.00	3552.08	0.00
Land- Lease Hold	3.34%	1289.08	43.06	1289.08	43.06	1289.08	43.06	1289.08	43.06	1289.08	21.53
Land- Right Of Use	3.34%	21.26	0.71	21.26	0.71	21.26	0.71	21.26	0.71	21.26	0.36
Plant & Machinery	5.28%	694358.28	37129.97	712079.86	38263.74	737304.23	38953.19	738195.43	38964.96	737750.12	19476.60
Cooling Toters & CW System.	5.28%	38195.95	2016.75	38195.95	2016.75	38195.95	2016.75	38195.95	2016.75	38195.95	1008.37
Air conditioning.	5.28%	1740.61	91.90	1740.61	91.90	1740.61	91.90	1740.61	91.90	1740.61	45.95
Chimney	5.28%	8430.30	445.12	8430.30	445.12	8430.30	445.12	8430.30	445.12	8430.30	222.56
Main Plant Building	3.34%	74929.53	2508.83	75300.11	2516.29	75376.23	2518.16	75411.74	2518.89	75420.23	1259.52
Service Building	3.34%	11826.01	489.29	17473.08	614.88	19346.18	646.16	19346.18	646.16	19346.18	323.08
S-Yard/Electrical Instalaltions	5.28%	27931.86	1475.51	27958.85	1476.23	27958.85	1476.35	27963.62	1476.66	27970.32	738.42
Raw Water Reservoir	5.28%	10207.30	541.74	10313.20	545.23	10339.58	545.94	10339.84	545.94	10339.84	272.97
MGR	5.28%	13317.02	704.21	13357.52	713.68	13675.84	728.53	13919.87	736.07	13961.46	368.58
Residential /other Blg	3.34%	12298.62	410.77	12298.62	410.77	12298.62	426.22	13223.54	444.19	13374.56	223.36
Road/Bridge	3.34%	255.72	18.41	846.54	36.15	1318.13	45.02	1377.78	46.40	1400.77	23.39
Water Supply	5.28%	433.72	33.40	831.40	46.37	924.93	49.63	954.93	51.08	979.87	25.87
Locomotive	9.50%	4744.63	450.74	4744.63	450.74	4744.63	450.74	4744.63	450.74	4744.63	225.37
Wagons	5.28%	5794.96	305.97	5794.96	305.97	5794.96	305.97	5794.96	305.97	5794.96	152.99
Spares	5.28%	6833.83	360.83	6833.83	360.83	6833.83	405.03	8508.22	535.68	11782.87	311.07
Furniture & Fixtures,OFFICE EQUIP.	6.33%	2086.20	159.30	2947.04	209.75	3680.15	249.22	4194.17	274.61	4482.15	141.86
Communication Equip.	6.33%	52.58	3.77	66.40	4.46	74.67	6.54	132.12	8.89	148.64	4.70
EDP,WP&SATCOM.	15.00%	689.73	110.78	787.36	124.93	878.42	153.84	1172.76	181.57	1248.14	93.61
VEHICLES	9.50%	22.95	3.21	44.59	4.24	44.59	4.24	44.59	4.24	44.59	2.12
Construction equip.	5.28%	683.97	40.58	853.18	45.06	853.46	45.06	853.46	45.06	853.46	22.53
Temporary Constructions.	100.00%	-	-	-	-	-	-	-	-	-	-
Laboratory & Workshop Equipment	5.28%	549.57	29.63	572.92	30.27	573.53	30.28	573.58	30.74	590.90	15.60
Railway Sidings	5.28%	185.58	15.22	390.85	20.64	390.85	21.33	417.11	22.02	417.11	11.01
Hospital Equipment	5.28%	12.68	1.05	27.25	2.29	59.60	3.15	59.65	3.20	61.42	1.62
Software	15.00%	3.44	0.77	6.84	1.45	12.46	2.14	16.12	2.42	16.12	1.21
Total		920400.40	47391.53	946757.85	48781.51	975712.58	49664.29	980473.58	49893.03	983957.63	24994.25
Weighted Average Rate of Depreciation			5.0763%		5.0749%		5.0777%		5.0796%		5.0804%

