

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 112/GT/2020

Coram:

Shri P.K. Pujari, Chairperson

Shri I.S Jha, Member

Shri Pravas Kumar Singh, Member

Date of Order: 22nd March, 2022

In the matter of

Petition for revision of tariff of Rihand Super Thermal Power Station-II (1000 MW) for the 2014-19 tariff period, after truing-up exercise.

AND

IN THE MATTER OF

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

...Petitioner

Vs

1. Uttar Pradesh Power Corporation Limited,
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226 001
2. Rajasthan Urja Vikas Nigam Limited,
(*On behalf of Rajasthan Discoms*),
Vidyut Bhawan, Janpath,
Jaipur-302 005
3. Tata Power Delhi Distribution Limited,
Grid Substation, Hudson Road, Kingsway Camp,
New Delhi-110009
4. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi-110019
5. BSES Yamuna Power Limited,
Shakti Kiran Building, Karkardooma,
Delhi-110092



6. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-VI,
Panchkula-134109
7. Punjab State Power Corporation Limited,
The Mall,
Patiala-147 001
8. Himachal Pradesh State Electricity Board Limited,
Kumar Housing Complex Building-II, Vidyut Bhawan,
Shimla-171 004
9. Power Development Department,
Government of J&K,
Civil Secretariat,
Srinagar
10. Electricity Department of Chandigarh,
Union Territory of Chandigarh,
Additional Office Building, Sector-9 D,
Chandigarh
11. Uttarakhand Power Corporation Limited,
Urja Bhavan, Kanwali Road,
Dehradun-248 001

...Respondents

Parties present:

Ms. Swapna Seshadri, Advocate NTPC
Shri Anand K. Ganesan, Advocate NTPC
Ms. Ritu Apurva, NTPC
Ms. Megha Bajpeyi, BRPL
Shri Manish Garg, UPPCL
Shri Mohit Mudgal, BYPL

ORDER

The present petition has been filed by the Petitioner, NTPC Limited (hereinafter referred to as 'the Petitioner'), for truing-up of tariff of Rihand Super Thermal Power Station-II (1000 MW) (hereinafter referred to as 'the generating station') for the 2014-19 tariff period, 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').



Background

2. The generating station, with a capacity of 1000 MW comprises of two units of 500 MW each and is located in the State of Uttar Pradesh. Unit-III of the generating station achieved COD on 15.8.2005 and Unit-IV on 1.4.2006. The Commission vide its order dated 1.12.2016 in Petition No. 318/GT/2014 had approved the capital cost and annual fixed charges of the generating station for the 2014-19 tariff period as under:

Capital Cost allowed

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	295355.88	295355.88	295355.88	295355.88	295355.88
Add: Additional Capital Expenditure	0.00	0.00	0.00	0.00	0.00
Closing Capital Cost	295355.88	295355.88	295355.88	295355.88	295355.88
Average Capital cost	295355.88	295355.88	295355.88	295355.88	295355.88

Annual Fixed Charges allowed

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	15518.06	15518.06	15518.06	15518.06	5672.90
Interest on Loan	5587.19	4253.36	2966.21	1727.20	883.16
Return on Equity	17375.79	17459.96	17459.96	17459.96	17459.96
Interest on Working Capital	4574.93	4613.24	4645.81	4752.44	4582.15
O & M Expenses	16423.85	17433.85	18503.85	19643.85	20862.85
Compensation Allowance	0.00	0.00	200.00	200.00	200.00
Total	59479.81	59278.47	59293.88	59301.51	49661.03

3. Clause (1) of Regulation 8 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.”

4. The Petitioner in the present petition, has claimed the capital cost and annual fixed charges as follows:



Capital Cost claimed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	295355.88	295424.55	295810.45	295809.07	295613.84
Add: Addition during the year / period	0.00	238.70	0.00	(-) 17.39	1241.90
Less: Decapitalization during the year /period	0.00	0.61	5.69	177.87	251.76
Less: Reversal during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Discharges during the year /period	68.67	147.81	4.32	0.03	0.00
Closing Capital Cost	295424.55	295810.45	295809.07	295613.84	296603.98
Average Capital Cost	295390.21	295617.50	295809.76	295711.46	296108.91

Annual Fixed Charges claimed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	15544.91	15556.87	15555.75	15526.92	5693.55
Interest on Loan	5588.43	4243.08	2963.39	1727.87	899.83
Return on Equity	17378.69	17476.31	17487.68	17481.87	17551.56
Interest on Working Capital	5355.47	5407.40	5508.39	5660.28	5523.21
O&M Expenses	16624.13	17798.83	18765.56	19941.91	21186.62
Compensation Allowance	0.00	0.00	200.00	200.00	200.00
Sub-total	60491.63	60482.49	60480.77	60538.84	51054.77
Additional O&M expenses					
Impact of Pay Revision	0.00	29.80	1246.94	1504.32	1919.13
Impact of GST	0.00	0.00	0.00	148.60	206.47
Total	60491.63	60512.29	61727.71	62191.76	53180.37

5. Reply to the Petition has been filed by the Respondents UPPCL and Respondent BYPL on 6.2.2020 and 4.6.2021 respectively. The Petitioner vide affidavit dated 24.5.2021 has filed its rejoinder to the reply of UPPCL and also filed additional submissions vide affidavit dated 4.6.2021. The matter was heard along with Petition No. 426/GT/2020 (tariff of generating station for the period 2019-24), on 11.6.2021 and the Commission, after permitting the Respondent BRPL and Respondent BYPL to file their respective pleadings, reserved its order in the matter. In compliance to the directions, the Respondents BRPL and Respondent BYPL have filed their replies/additional submissions on 2.7.2021. The Respondent TPDDL and Respondent UPPCL have filed their replies on 1.7.2021 and 21.6.2021 respectively. In response, the Petitioner has filed its rejoinders to the replies of the Respondents by separate affidavits dated 19.7.2021. Taking into consideration the submissions of the parties and

the documents available on record, we proceed to examine the claims of the Petitioner, on prudence check, as stated in the subsequent paragraphs.

Capital Cost

6. Regulation 9 (3) of the 2014 Tariff Regulations provides as under:

“9. Capital Cost:

(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 Regulation 14; and*
- (c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15.”*

7. The Commission vide its common order dated 7.12.2015 in Petition No. 310/GT/2013 and Petition No. 298/GT/2014 had allowed the closing capital cost of Rs.295355.88 lakh as on 31.3.2014, while truing-up the tariff for the 2009-14 period. The closing capital cost was considered as the opening capital cost as on 1.4.2014 vide order dated 1.12.2016 in Petition No. 318/GT/2014 wherein tariff for the generating station for the 2014-19 tariff period was determined. Therefore, the capital cost of Rs.295355.88 lakh has been considered as the opening capital cost as on 1.4.2014 in accordance with Regulation 9(3) of the 2014 Tariff Regulations.

Additional Capital Expenditure

8. Regulation 14(3) and 14(4) of 2014 Tariff Regulations provides as under:

“14(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;*
- (ii) Change in law or compliance of any existing law;*
- (iii) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;*
- (iv) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged 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-materialisation of coal supply corresponding to full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station:

Provided that any expenditure on acquiring the minor items or the assets including tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, computers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2014:

Provided further that any capital expenditure other than that of the nature specified above in (i) to (iv) in case of coal/lignite-based station shall be met out of compensation allowance:

Provided also that if any expenditure has been claimed under Renovation and Modernisation (R&M), repairs and maintenance under (O&M) expenses and Compensation Allowance, same expenditure cannot be claimed under this regulation.

(4) In case of de-capitalization of assets of a generating company or the transmission licensee, as the case may be, the original cost of such asset as on the date of decapitalization shall be deducted from the value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalization takes place, duly taking into consideration the year in which it was capitalized.”

9. It is observed that no projected additional capital expenditure was claimed by the Petitioner for the 2014-19 tariff period in Petition No. 318/GT/2014. However, based on the submission of the Petitioner that it shall furnish the actual details of additional capitalization, duly reconciled with the respective balance sheets, at the time of truing-up of tariff, the Commission vide its order dated 1.12.2016 agreed to the submissions



and observed that the claim for additional capital expenditure shall be based on proper justification and documentary evidence and will be examined in terms of the provisions of the 2014 Tariff Regulations. Accordingly, the Petitioner in Form-9A of the petition has claimed additional capital expenditure for the 2014-19 tariff period on 'accrual basis' and on 'cash basis' as under:

<i>(Rs. in lakh)</i>								
Sl. No.	Head of Work/ Equipment	Regulation	2014-15	2015-16	2016-17	2017-18	2018-19	Total
1	Main Plant supply package	14(3)(v)	0.00	0.00	0.00	0.00	0.00	0.00
2	CHP supply package	14(3)(v)	0.00	0.00	0.00	0.00	0.00	0.00
3	Elevator Stage II	14(3)(v) & 54	0.00	69.97	0.00	0.00	0.00	69.97
4	Continuous Emission Monitoring System	14(3)(ii)	0.00	93.26	0.00	0.00	0.00	93.26
5	Effluent Quality Monitoring System	14(3)(ii)	0.00	34.61	0.00	0.00	0.00	34.61
6	S&T System – Relay hut-3	14(3) (vi)	0.00	40.86	0.00	0.00	0.00	40.86
7	2nd Raising of Mitihini Ash Dyke Lagoon – I	14(3)(iv)	0.00	0.00	0.00	0.00	1241.90	1241.90
	Add: Total Additional Capital Expenditure		0.00	238.70	0.00	0.00	1241.90	1480.60
	De-capitalization							
8	De-capitalization of Spares (part of capital cost)		0.00	0.61	5.69	177.87	251.76	435.93
	Less: Total De-capitalization		0.00	0.61	5.69	177.87	251.76	435.93
9	Add: Discharge of liability corresponding to allowed works		68.67	147.81	4.32	0.03	0.00	220.83
10	Less: LD recovery of Allowed work (Erection of PT Plant and Make up Water System)		0.00	0.00	0.00	17.39	0.00	17.39
	Total Additional Capital Expenditure claimed		68.67	385.90	(-) 1.37	(-) 195.24	990.14	1248.10

10. It is observed that the additional capital expenditure claimed by the Petitioner

for the 2014-19 tariff period is for new claims on Main Plant supply package, CHP supply package, Elevator Stage-II, Continuous Emission Monitoring System, Effluent Quality Monitoring System, S&T System - Relay hut-3 and 2nd Raising of Mitihini Ash Dyke Lagoon-I. We now examine the item-wise actual additional capital expenditure claimed by the Petitioner as under.

A. New Claims

(a) Elevator Stage-II

11. The Petitioner has claimed actual additional capital expenditure of Rs.69.67 lakh towards Elevator Stage-II in 2015-16 under Regulation 14(3)(v) read with Regulation 54 of 2014 Tariff Regulations. In justification of the same, the Petitioner has submitted that the work is a part of original scope of work of the generating station and the same was awarded to M/S OTIS Limited in 2007, i.e. well before the cut-off date. It has submitted that as on cut-off date i.e. 31.3.2009, major portion of work was complete, but the amount could not be capitalized, as the said asset could not be put to use. The Petitioner has stated that an amount of Rs.56.77 lakh as on 31.3.2009, was in CWIP. It has further stated that subsequently, M/S OTIS refused to complete the job and the remaining jobs were re-awarded to M/s Neutech Elevator System. The Petitioner has added that the said work form part of the original scope of work and is essentially required for efficient O&M of plant and for safe movement of man and materials.

12. The Respondent, UPPCL has submitted that there is an inordinate delay in completion of the work, which raises questions about the requirement of the work and has therefore submitted that prudence check may be undertaken with regard to the reasons for the delay in completion of the work. The Respondents, BRPL and BYPL have submitted that the claim under Regulations 14(3)(v) of the 2014 Tariff Regulations can be allowed, only if the work is executed prior to cut-off date, but this work was



executed only after the cut-off date and hence may not be permitted. They have also submitted that the exercise of the 'Power to Relax' under Regulation 54 is a judicial discretion and cannot be allowed for profit motive. The Respondent, TPDDL has submitted that the Petitioner cannot seek to override the provisions of the 2014 Tariff Regulations under the garb of exercise of the power to relax under Regulation 54 and for removal of difficulties under Regulation 55 of the 2014 Tariff Regulations. Placing reliance on the judgment of the Hon'ble Supreme Court in M.U. Sinai v UOI (1975) 3 SCC 765, the Respondent has submitted that the exercise of the power to relax cannot be used to change the essential provisions of the Regulations. In response, the Petitioner has clarified that the expenditure is necessary and form part of the original scope of work of the project and the delay in capitalization of the said asset, was due to reasons which are beyond the control of the Petitioner. It has also submitted that the exercise of "Power to Relax" and "Power to remove difficulties" have been provided as a judicial discretion, wherein, depending on the facts of a particular case, the Commission may permit the recovery of additional charges validly incurred by the generator.

13. The matter has been considered. We notice that the delay in completion of the said work by the Petitioner is on account of refusal of the original contractor to complete the work, which was re-awarded and thereafter the new contractor had completed the remaining work. Keeping in view that the delay in completion of the work was beyond the control of the Petitioner and considering the fact that the actual additional capital expenditure claimed is in respect of the asset/work, which forms part of the original scope of the work of the project, we allow the additional capitalization of the same is allowed under Regulation 14(3)(vi) read with Regulation 54 of 2014 Tariff Regulations.



(b) Continuous Emission Monitoring System

14. The Petitioner has claimed actual additional capital expenditure of Rs.93.26 lakh towards capitalization of Continuous Emission Monitoring System (CEMS) during 2015-16 under Regulation 14(3)(ii) of 2014 Tariff Regulations. In justification of the same, the Petitioner has submitted that the additional capital expenditure has been incurred in compliance to direction/order dated 5.2.2014 of the Central Pollution Control Board (CPCB). The Petitioner has further submitted that the Commission vide order dated 24.2.2017 in Petition No. 342/GT/2014 had allowed capitalization of the same in respect of Vindhyachal Super Thermal Power Station.

15. The Respondents, BYPL and BRPL have submitted that no additional capitalization was sought on the work in Petition No. 318/GT/2014 although the directions of CPCB were conveyed on 5.2.2014. It has also submitted that CEMS is inherently installed to ensure that the system is working properly and therefore, the claim of the Petitioner may be rejected. The Respondent, TPDDL has submitted that the Petitioner should have factored in and claimed the increased additional capital cost at the time of filing the tariff petition in 2014 itself and therefore, the Petitioner may not be allowed to burden the Respondent beneficiaries for its short sightedness and lack of adequate planning. The Respondent has further submitted that most of the new items claimed for additional capitalization under Regulation 14(3) of the 2014 Tariff Regulations relate to modernization and therefore, ought to be adjusted from the O&M expenses and Compensation allowance of Rs.600 lakh allowed to the Petitioner. The Respondent has prayed that the Commission that the additional capitalization claimed by the Petitioner should not be allowed and any approval shall be subject to prudence check. In response, the Petitioner has clarified that the work was implemented to comply with the directions of CPCB dated 5.2.2014. It has submitted that after the receipt of CPCB directions, it took some time to envisage the necessary system and



estimate the cost of the same and therefore, the claim has been made under Regulation 14(3) of the 2014 Tariff Regulations i.e. "Change in law" in this petition.

16. The matter has been considered. It is observed that the CPCB order dated 5.2.2014 provides for installation of continuous Stack Emission Monitoring system. Also, the Commission vide order dated 24.2.2017 in Petition No. 342/GT/2014 has allowed additional capital expenditure towards CEMS in respect of Vindhyachal Super Thermal Power Station Stage-III, for the period 2014-16, as stated below:

"We have examined the matter. It is noticed that in Petition No. 148/GT/2013, the petitioner had claimed an expenditure of Rs. 32.00 lakh in 2013-14 for this work and the same was allowed on projection basis vide order dated 15.5.2014 under Regulation 9(2)(ii) of the 2009 Tariff Regulations on the ground that the same is a statutory requirement as per guidelines issued by MoEF, GOI dated 6.4.2011. However, based on the submissions of the petitioner in Petition No. 343/GT/2014 (truing-up of 2009-14) that the expenditure towards CEMS has been awarded and will be capitalized during the period 2014-19, the Commission vide order dated 6.2.2017 had granted liberty to the petitioner to claim the expenditure during 2014-19 with the observation that the same will be considered in accordance with the 2014 Tariff Regulations. The petitioner, in this petition has claimed the expenditure on CEMS under Regulation 14 (3) (ii) of the 2014 Tariff Regulations on the ground that the same is a statutory requirement in terms of the MoEF, GOI guidelines dated 6.4.2011. On perusal of the said guidelines dated 6.4.2011, it is observed that the petitioner in terms of the said guidelines is required to comply with certain additional conditions which includes the continuous monitoring of stack emissions as well as ambient air quality and to take corrective measures from time to time to ensure that the levels are within permissible limits. In view of the above, we are inclined to allow the claim of the petitioner for Rs. 34.37 lakh in 2014-15 and Rs. 2.38 lakh in 2015-16 under Regulation 14 (3) (ii) of the 2014 Tariff Regulations."

17. In line with the above decision and keeping in view that the additional capital expenditure incurred is in respect of the asset/work which is mandatory required for continuous monitoring of stack emissions as well as ambient air quality, we allow the actual additional capital expenditure claimed by the Petitioner under Regulation 14(3)(ii) of the 2014 Tariff Regulations.

(c) Effluent Quality Monitoring System

18. The Petitioner has claimed actual additional capital expenditure of Rs.34.61 lakh towards Effluent Quality Monitoring System (EQMS) in 2015-16 under Regulation 14(3)(ii) of the 2014 Tariff Regulations. In justification of the same, the Petitioner has



submitted that the additional capital expenditure incurred in compliance to CPCB order dated 5.2.2014.

19. The Respondents, BYPL, BRPL and TPDDL have submitted that no additional capitalization was sought on this item/asset in Petition No. 318/GT/2014 although the directions of CPCB were conveyed on 5.2.2014. They have also submitted that QEMS is inherently installed to ensure that the system is working properly and therefore. the claim of the Petitioner may be rejected. In response, the Petitioner has clarified that the work was implemented to comply the directions of CPCB dated 5.2.2014 It has submitted that after the receipt of CPCB directions, it took some time to envisage the necessary system and estimate the cost of the same and therefore, the claim has been made under Regulation 14(3) of the 2014 Tariff Regulations i.e. "Change in law" in this petition.

20. The matter has been considered. The Petitioner has claimed the actual additional capital expenditure towards EQMS based on CPCB order dated 5.2.2014, wherein all the State Pollution Control Board (SPCB) and Pollution Control Committees (PCC) are required to manage common hazardous waste & biomedical waste and to comply with the norms. The said order empowers the SPCBs and PCCs to stipulate standards for discharge of environmental pollutants, for various categories of industries and common effluent treatment plants, common hazardous waste and biomedical waste incinerators, which are more stringent than those notified by the Central Government under the Environment Protection Act, 1986. In our view, since the additional capital expenditure incurred is in compliance to the directions/ orders of CPCB/SPCB the claim of the Petitioner is allowed under Regulation 14(3)(ii) of the 2014 Tariff Regulations.



(d) S&T System - Relay hut-3

21. The Petitioner has claimed actual additional capital expenditure of Rs.40.86 lakh towards S&T System - Relay hut-3 in 2015-16 under Regulation 14(3)(vi) of the 2014 Tariff Regulations. In justification, the Petitioner has submitted that the additional capital expenditure incurred is towards final payments in respect of the scheme for 'Augmentation of Railway Siding' allowed by order dated 7.12.2015 in Petition No. 310/GT/2013. It has also submitted that the job of 'Augmentation of Railway Siding' was completed in 2012-13, but payments were made only after reconciliation with RITES Limited.

22. The Respondents, BYPL and BRPL have submitted that the claim of the Petitioner was on account of the alleged reconciliation with the contractor and therefore, may be rejected. It has also submitted that the order dated 7.12.2015 in Petition No. 310/GT/2013, pertaining to the 2009-14 tariff period in which the work was allowed by the Commission, had attained finality.

23. The matter has been considered. It is observed that the Commission vide order dated 7.12.2015 in Petition No. 310/GT/2013 had allowed the total additional capitalization of Rs.4363.32 lakh for "Augmentation of Railway Siding" for the period 2011-13, as claimed by the Petitioner. The relevant portion is extracted below:

"Augmentation of Railway Siding

30. The petitioner has claimed actual additional capital expenditure of Rs. 4363.32 lakh (Rs. 3777.06 lakh in 2010-11, Rs. 162.04 lakh in 2011-12 and Rs. 424.23 lakh in 2012-13) as against the additional capital expenditure of Rs. 4255.48 lakh (Rs. 3777.06 lakh in 2010-11 and the projected additional capital expenditure of Rs. 478.42 lakh in 2011-12) allowed in 2010-11 vide order dated 2.8.2012 in Petition No. 254/2009. The petitioner vide affidavit dated 1.7.2014 has submitted that there is variation of Rs. 107.84 lakh between the projected expenditure and the actual capitalization as the earlier projections were based on estimates and the actual capitalization is based on awarded value/executed value. In view of the justification submitted by the petitioner, the actual additional capital expenditure of Rs. 4363.32 lakh (Rs. 3777.06 lakh in 2010-11, Rs. 162.04 lakh in 2011-12 and Rs. 424.23 lakh in 2012-13) is allowed."

24. The Petitioner in the present petition has claimed Rs.40.86 lakh as additional



capitalization in 2015-16 towards final payments made for the said work, after reconciliation. Keeping in view that the additional capitalization of the asset/item had already been approved and the claim is in respect of the balance payments made after reconciliation, we allow the claim of the Petitioner under Regulation 14(3)(v) of the 2014 Tariff Regulations.

(e) Erection of PT Plant and Make up Water System

25. The Petitioner has claimed recovery of Liquidated Damages (LD) for Rs.17.39 lakh in respect of the work of “Erection of PT plant and make up water system” but has not provided any justification in support of its claim. It is observed that the Petitioner has adjusted (deducted) recovery of LD of Rs.17.39 lakh from the capital cost. However, as per Regulation 11(B)(2) of the 2014 Tariff Regulations, any LD recovered by the Petitioner shall be adjusted from the capital cost. Therefore, the claim of the Petitioner towards LD is allowed in terms of Regulation 11(B)(2) of the 2014 Tariff Regulations and the said amount is adjusted from capital cost.

(f) 2nd Raising of Mitihini Ash Dyke Lagoon – I

26. The Petitioner has claimed actual additional capital expenditure of Rs.1241.90 lakh towards 2nd ash dyke raising in 2018-19 under Regulation 14 (3)(iv) of the 2014 Tariff Regulations. In justification of the same, the Petitioner has submitted that the work forms part of original scope of work of the generating station and has been carried out to accommodate the ash generated from the generating station in a phased manner, throughout the life of the project to dispose the generated ash.

27. The Respondent, BYPL has submitted that all thermal generating stations in the country were required to achieve 100% of Ash utilization as per MOEF notification dated 14.9.1999 and this has been reiterated in the MOEF notification dated 25.1.2016, which also provides for penal provisions, in the event of failure by thermal power



stations. The Respondent, BRPL has further submitted that when 100% ash utilization is required to be made by the generating plants in terms of the MOEF&CC notification, there ought not be a requirement to accommodate the ash generated from the generating station. In response, the Petitioner has clarified that generation of ash is continuous if coal is burned for generation of electricity and entire ash generated cannot be immediately utilized. The Petitioner has further clarified that ash generated needs to be stored in ash dyke and the raising of ash dykes are planned in advance, anticipating the ash required to be stored. The Petitioner has stated that due to remote location of the generating station, it has not been possible to achieve the prescribed fly ash utilization, since there are no projects in which such utilization is possible. The Petitioner has further submitted that it had taken steps to transport this ash to locations where ash can be utilized [e.g. Katni (MP)], by procuring special railway wagons, as well as installing load cells below ILOs. The Petitioner has pointed out that all the legacy ash lying in the generating station cannot be utilized overnight, in the manner as being suggested by the Respondent, BYPL. The Petitioner has added that expenditure on this item, including additional capitalization, is a continuous process and is incurred from time to time, depending on the requirements of the particular generating station.

28. The matter has been considered. It is observed that the said ash related work is within the original scope of work and these works are continuous in nature during the entire operational lifetime of the generating station. Therefore, the additional capital expenditure as claimed by the Petitioner is allowed under Regulation 14(3)(iv) the 2014 Tariff Regulations.

(g) Package ERV of allowed items

29. The additional capital expenditure claimed by the Petitioner, on accrual basis, is as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Main Plant Supply Package	310.93	215.00	(-) 32.06	(-) 0.003	207.42
CHP Supply Package	0.23	0.16	(-) 0.02	(-) 4.31	0.15
Total	311.16	215.16	(-) 32.09	(-) 4.32	207.57

30. In justification of the same, the Petitioner has submitted that the above claim is only for the purposes of re-instatement of liabilities due to Foreign Exchange Rate Variation in the works completed before cutoff date and allowed earlier. The Petitioner has prayed that the same be allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.

31. The matter has been considered. It is observed that the Petitioner has claimed additional capitalization of Rs.311.16 lakh in 2014-15, Rs.215.16 lakh in 2015-16, (-) Rs.32.09 in 2016-17, (-) Rs.4.32 lakh in 2017-18 and Rs.207.57 lakh in 2018-19 on accrual basis. Since the entire liability against these package ERVs 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 consistently considered and allowed package ERV for the purpose of tariff. However, as the Petitioner has claimed Package ERV on accrual basis, the same is treated as undischarged liability and the amount allowable, on cash basis, is 'nil' for the 2014-19 tariff period.

B. Decapitalization

32. The Petitioner has claimed decapitalization of Rs.435.93 lakh during the period 2015-19 (i.e. Rs.0.61 lakh in 2015-16, Rs.5.69 lakh in 2016-17, Rs.177.87 lakh in 2017-18 and Rs.251.76 lakh in 2018-19) under Regulation 14(4) of the 2014 Tariff Regulations. In justification of the same, the Petitioner has submitted that these assets were decapitalized as these became unserviceable. The Respondents, BYPL and BRPL have submitted that as per the details of decapitalization furnished in Form-9Bi, the total amount of decapitalization during the 2014-19 tariff period is Rs.1866.52 lakh



of which Rs.443.40 lakh is on account of decapitalization as part of capital cost and the remaining amount of Rs.1423.11 lakh is not part of capital cost. Further, these figures are without consideration of adoption of IND AS. The Respondent has referred to Regulation 9(6)(b) of the 2014 Tariff Regulations, which provides for assets for exclusion from capital cost and has submitted that the Petitioner has not disclosed the benefits of excluding the amount of Rs.1423.11 lakh from the capital cost and may be allowed under exclusion only. In response, the Petitioner has clarified that it has furnished all relevant details in Form 9Bi for the 2014-19 tariff period i.e. value of asset as per IND-AS balance sheet, IND-AS adjustment, original value of asset, and the year asset is put to use. It has further submitted that the depreciation recovered up to the year of actual decapitalization has also been specifically mentioned.

33. The matter has been examined. Regulation 14(4) of the 2014 Tariff Regulations provides that original value of de-capitalized assets shall be deducted from the capital cost allowed to the generating station. Accordingly, the de-capitalization of these assets as claimed by the Petitioner is allowed.

C. Un-discharged liabilities & Discharge of liabilities

34. The discharge of liabilities allowed as part of the additional capital expenditure, corresponding to allowed assets, are as under:

		<i>(Rs. in lakh)</i>				
		2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening un-discharged liabilities as on 01.04.2014 (Includes undischarged liabilities of Rs.4550.69 lakh pertaining to period prior to 1.4.2009)	4556.92	4791.47	4882.44	4829.93	4781.76
B	Discharges during the period out of liabilities as on 1.4.2009	62.49	147.81	0.00	0.00	0.00
C	Reversals during the period out of liabilities as on 1.4.2009	7.88	0.14	1.18	43.82	4264.67
D	Addition during the period	311.16	238.92	(-) 32.09	(-) 4.32	309.41
E	Discharges during the period	6.17	0.00	4.32	0.03	0.00

F	Reversal of liabilities out of liabilities added during the period	0.06	0.00	14.93	0.00	2.04
G	Discharges of liabilities during the period (B+E)	68.67	147.81	4.32	0.03	0.00
H	Reversal of liability during the period (C+F)	7.94	0.14	16.11	43.82	4266.72
I	Closing un-discharged liabilities (A+D-G-H)	4791.47	4882.44	4829.93	4781.76	824.46

35. As per the above table, the balance un-discharged liabilities corresponding to admitted capital cost as on 31.3.2019, works out to be Rs.824.46 lakh, which includes un-discharged liabilities of Rs.22.69 lakh (i.e. Rs.4550.69 lakh - Rs.62.49 lakh - Rs.7.88 lakh - Rs.147.81 lakh - Rs.0.14 lakh - Rs.1.18 lakh - Rs.43.82 lakh - Rs.4264.67 lakh) pertaining to the period prior to 1.4.2009.

D. Reconciliation of the actual Additional Capital Expenditure

36. The reconciliation of the actual additional capital expenditure for the 2014-19 tariff period with books of accounts as submitted by the Petitioner is as follows:

		<i>(Rs in lakh)</i>				
Sl. No.		2014-15	2015-16	2016-17	2017-18	2018-19
1	Closing Gross Block as per IGAAP Audited Balance Sheet as on 31.3.2016	0.00	0.00	1105233.32	0.00	0.00
2	Capital spares capitalized out of inventory	0.00	0.00	2879.67	0.00	0.00
3	Opening Gross Block as per IGAAP 01st April (1+2)	1059905.03	1080186.13	1108112.99	1160343.67	1166535.71
4	Add: Additions as per Note-2 (Ind-AS)	0.00	0.00	43015.64	9151.41	17664.85
5	Add: Additions as per Note-2 out of adjustment column (Ind-AS)	0.00	0.00	18439.52	481.66	3978.53
6	Less: Decapitalization as per Note-2 out of adjustment column (Ind-AS)	0.00	0.00	1672.37	1616.31	1434.08

Sl. No.		2014-15	2015-16	2016-17	2017-18	2018-19
7	Total addition as per Ind AS Balance Sheet (4+5-6)	0.00	0.00	59782.79	8016.76	20209.30
IND AS Adjustments						
8	Add: Vendor discounting out of assets in the year	0.00	0.00	19.56	10.70	6.36
9	Add: Vendor discounting out of CWIP during the year	0.00	0.00	21.35	0.00	11.85
10	Less: Unwinding expenses capitalized	0.00	0.00	47.56	0.00	5.17
11	Less: Unwinding expenses capitalized out of CWIP during the year	0.00	0.00	17.03	0.00	0.00
12	Less: IND AS Adjustment of Decapitalization out of ROW 6 (Mitigating the impact of carrying cost exemption to arrive)	0.00	0.00	4518.63	459.29	548.54
13	Less: Total addition in capital OH asset class (including adjustments also)	0.00	0.00	3354.46	2237.21	3560.01
14	Add: Decapitalization of capital Overhauling during the year	0.00	0.00	396.74	1193.01	820.21
15	Add: Any other IND AS adjustment having impact on Property, Plant & Equipment's (IUT)	0.00	0.00	(-52.08)	(-331.93)	3.36
16	Sub-total IND AS Adjustment (8+9-10-11-12-13+14+15)	0.00	0.00	(-7552.10)	(-1824.72)	(-3271.93)
17	Closing Gross Block as per IGAAP (3+7+16)	1080186.13	1105233.32	1160343.67	1166535.71	1183473.07
18	Addition as per IGAAP (17- 3)	20281.10	25047.19	52230.68	6192.04	16937.36
19	Addition as per IGAAP corresponding to Rihand-I	1691.93	3187.74	11999.61	5685.95	10706.60



Sl. No.		2014-15	2015-16	2016-17	2017-18	2018-19
20	Addition as per IGAAP corresponding to Rihand-III	16012.94	22341.34	40238.35	372.76	8527.17
21	Addition as per IGAAP corresponding to Rihand-II (18-19-20)	2576.23	(-481.89)	(-7.28)	133.32	(-2296.41)
22	Exclusions (Items not allowable/not claimed) (accrual basis)	2265.07	(-958.89)	30.50	332.91	(-3595.96)
23	Net Additional Capital Expenditure Claimed (accrual basis) (21-22)	311.16	477.01	(-37.78)	(-199.59)	1299.55
24	Less: Undischarged liabilities	311.16	238.92	(-32.09)	(-4.32)	309.41
25	Net Additional Capital Expenditure Claimed (Cash basis) (23-24)	0.00	238.09	(-5.69)	(-195.27)	990.14
24	Discharge of liabilities	68.67	147.81	4.32	0.03	0.00
25	Total Additional Capital Expenditure Claimed (24+25)	68.67	385.90	(-1.37)	(-195.24)	990.14

E. Exclusions

37. It is observed from the above that the actual additional capital expenditure claimed by the Petitioner is at variance with the additional capital expenditure as per books of accounts. This is on account of exclusion of certain expenditure and exclusion of liabilities in the additional capital expenditure considered for the purpose of tariff. The summary of exclusions for the purpose of tariff, is discussed as follows:

Exclusions 2014-15

38. The exclusions claimed by the Petitioner for 2014-15 is as follows:

(Rs. In lakh)

		Year put to use	Accrual basis as per IGAAP	Undischarged liability included in column 3	Cash basis	IDC included in column 3
A	Disallowed items					
A1	Construction of cabins along MGR track		5.95	5.83	0.12	0.00
B	Liability Reversal					
B1	CHP supply package		(-)7.88	(-)7.88	0.00	0.00
B2	HT overhead line erection for MGR Station IV		(-)0.06	(-)0.06	0.00	0.00
	Sub-total B		(-)7.94	(-)7.94	0.00	0.00
C	Inter Unit Transfer		842.74	0.00	842.74	0.00
D	Items not claimed					
D1	Capital spares		1776.56	25.82	1750.74	0.00
D2	Capitalization of MBOA		0.17	0.01	0.15	0.00
	Sub-total D		1776.73	25.83	1750.90	0.00
E	Decapitalization					
E1	De-capitalisation of Wagons-Part of Capital Cost		(-)138.64	0.00	(-)138.64	0.00
E2	De-capitalization of MBOA (part of capital cost)					
	Furniture & Fixtures	2003-04	(-)0.17	0.00	(-)0.17	0.00
		2006-07	(-)1.02	0.00	(-)1.02	0.00
		2007-08	(-)2.33	0.00	(-)2.33	0.00
	Other Office Equipment	2007-08	(-)0.50	0.00	(-)0.50	0.00
	EDP, WP Machines & SATCOM Equipment	2006-07	(-)0.43	0.00	(-)0.43	0.00
		2008-09	(-)2.09	0.00	(-)2.09	0.00
	Sub-total E2		(-)6.55	0.00	(-)6.55	0.00
E3	De-capitalization of MBOA (not part of capital cost)					
	Other Office Equipment	2011-12	(-)0.25	0.00	(-)0.25	0.00
	EDP, WP Machines & SATCOM Equipment	2011-12	(-)0.59	0.00	(-)0.59	0.00
	Vehicles	2010-11	(-)6.10	0.00	(-)6.10	0.00
	Sub-total E3		(-)6.94	0.00	(-)6.94	0.00
E4	De-capitalization capital spares (not part of capital cost)	2009-10	(-)65.53	0.00	(-)65.53	0.00
		2010-11	(-)24.69	0.00	(-)24.69	0.00
		2011-12	(-)1.95	0.00	(-)1.95	0.00
		2012-13	(-)36.14	0.00	(-)36.14	0.00
		2013-14	(-)48.10	0.00	(-)48.10	0.00
		2014-15	(-)23.86	0.00	(-)23.86	0.00
	Sub-total E4		(-)200.28	0.00	(-)200.28	0.00
	Sub-total E		(-)352.41	0.00	(-)352.41	0.00
	Total Exclusions claimed (A+B+C+D+E)		2265.07	23.72	2241.35	0.00

Disallowed items

39. The Petitioner has sought the exclusion of capitalization of Rs.5.95 lakh in 2014-15 towards "Construction of cabins along MGR track" since the works were disallowed



vide order dated 2.8.2012 in Petition No. 254/2009 filed for approval of tariff for 2009-14 period. Accordingly, the exclusion claimed by the Petitioner for additional capitalization is allowed.

Reversal of liability

40. The Petitioner has claimed reversal of liability of (-) Rs.7.88 lakh in 2014-15 towards “CHP supply package” and (-) Rs.0.06 lakh in 2014-15 towards “HT overhead line erection for MGR Station IV”. In justification, the Petitioner has submitted that liabilities are excluded for the purpose of tariff. Therefore, liability reversal is kept under exclusion. Further, as tariff is allowed on cash basis and liabilities do not form part of tariff, the exclusion of reversal of undischarged liabilities is allowed for the purpose of tariff.

Inter-unit transfer

41. The Petitioner has claimed inter-unit transfer amounting to Rs.842.74 lakh in 2014-15 under exclusions. In justification, the Petitioner has submitted that the Commission has not been considering the temporary inter-unit transfers as part of tariff and hence, kept under exclusions. We are of the considered view that both positive and negative entries arising out of inter unit transfers of temporary nature shall be ignored for the purpose of tariff. In view of above, the exclusion of inter-unit transfer as claimed by the Petitioner is allowed.

Capitalization of Spares

42. The Petitioner has procured capital spares amounting to Rs.1776.56 lakh including undischarged liability of Rs.25.82 lakh in 2014-15. In justification, the Petitioner has submitted that as capital spares capitalized after the cut-off date are not allowed in terms of the 2014 Tariff Regulations the same has been kept under exclusions. Since capitalization of spares over and above initial spares, procured after the cut-off date of the generating station are not allowed for the purpose of tariff, as



they form part of O&M expenses as and when consumed, the Petitioner has excluded the said amount. Accordingly, in view of the above, the exclusion of the said amounts under this head is in order and is allowed.

Capitalization of Miscellaneous Bought out Assets (MBOA)

43. The Petitioner has claimed capitalization of MBOA of Rs.0.17 lakh including undischarged liabilities of Rs.0.01 lakh in 2014-15. In justification, the Petitioner has submitted that capitalization of MBOA beyond cut-off date is not admissible as per 2014 Tariff Regulations. In view of the fact that positive entries corresponding to the disallowed assets were not allowed to be a part of the capital cost for the purpose of tariff, the exclusion (of positive entries) as claimed and effected by the Petitioner is in order. Accordingly, the exclusion of the said amount under this head is in order and is allowed.

Decapitalization of Wagons forming part of capital cost

44. The Petitioner has claimed decapitalization of assets amounting to (-) Rs.138.64 lakh towards decapitalization of wagons as part of capital cost in 2014-15. In justification, the Petitioner has submitted that capitalization of these items is replacements and hence not being claimed for the generating station. We are of the view that, since the replacement of asset is part of capital cost, the amount needs to be deducted from the capital cost for the purpose of tariff. Accordingly, exclusion of (-) Rs.138.64 lakh on account of decapitalization of wagons is contrary to the 2014 Tariff Regulations and hence not allowed.

De-capitalization of Miscellaneous Bought out Assets (MBOA) forming part of the capital cost

45. The Petitioner has claimed exclusion of decapitalized MBOA amounting to (-) Rs.6.55 lakh in 2014-15 in the books of accounts. After examining the exclusions



sought on de-capitalization of MBOA, it is noticed that an amount of Rs.2.24 lakh has been recovered by the Petitioner as depreciation. The decapitalization of MBOA includes furniture and fixtures, other office equipment, EDP, WP machines & SATCOM Equipment which were capitalized prior to the cut-off date of the generating station i.e., 31.3.2009. Hence, the decapitalized amount pertains to MBOAs, which were part of the capital cost of the generating station for the purpose of the tariff. As such, the decapitalized amount needs to be deducted for arriving at the capital cost for the purpose of tariff. Accordingly, exclusion of (-) Rs.6.55 lakh on account of decapitalization of MBOA is contrary to the 2014 Tariff Regulations and hence not allowed.

De-capitalization of Miscellaneous Bought out Assets (MBOA) not forming part of the capital cost

46. The Petitioner has claimed exclusion of de-capitalized MBOA amounting to (-) Rs.6.94 lakh in 2014-15 for the purpose of tariff. In justification, the Petitioner has submitted that capitalization of these assets was kept under exclusion and allowed by the Commission vide common order dated 7.12.2015 in Petition No. 310/GT/2013 and Petition No. 298/GT/2014. Since capitalization of spares after the cut-off date is not permissible and therefore, do not form part of the capital cost for the purpose of tariff, the exclusion of decapitalization of the spares as claimed by the Petitioner, is in order and allowed.

Decapitalization of spares not forming part of capital cost

47. The Petitioner has excluded decapitalized spares amounting to (-) Rs.200.28 lakh in 2014-15 for the purpose of tariff. In justification of the same, the Petitioner has submitted that capitalization of spares of Rs.176.42 lakh was allowed under exclusion by common order dated 7.12.2015 in Petition No 310/GT/2013 and Petition No. 298/GT/2014 and therefore, the same has been claimed under exclusion. It has further



submitted that spares amounting to Rs.23.86 lakh were capitalized beyond the cut-off date and as capitalization of spares beyond the cut-off date is not permissible in terms of the 2014 Tariff Regulations, the capitalization of such spares has been claimed as exclusion in the present petition. Since spares which do not form part of capital cost and those capitalized spares which are capitalized after the cut-off date are not permissible to be considered as part of the capital cost, the same are not considered for the purpose of tariff. Therefore, the exclusion of decapitalization of the spares as claimed by the Petitioner, is in order and allowed.

Exclusions 2015-16

48. The exclusions claimed by the Petitioner for 2015-16 is as follows:

(Rs. In lakh)

		Year put to use	Accrual basis as per IGAAP	Undischarged Liability included in column 3	Cash basis	IDC included in column 3
	1	2	3	4	5=(3-4)	6
A	Disallowed items					
A1	Construction of cabins along MGR track		1.11	0.00	1.11	0.00
A2	Expansion of campus wide OFC network of Rihand-II		128.55	28.28	100.27	0.00
	Sub-total A		129.66	28.28	101.38	0.00
B	Liability Reversal					
B1	Consultancy Package for architectural work		(-)0.14	(-)0.14	0.00	0.00
B2	NUCON Pneum Actuator		(-)20.76	(-)20.76	0.00	0.00
B3	KGOO Motor LUV 5/4HQ 35-335		(-)0.00	(-)0.00	0.00	0.00
B4	Transformer 3.25MVA, 11/2.3KV ONAN		(-)0.80	(-)0.80	0.00	0.00
B5	Procurement of Air Motor for PAPH.		(-)0.02	(-)0.02	0.00	0.00
	Sub-total B		(-) 21.72	(-)21.72	0.00	0.00
C	Inter Unit Transfer		(-) 975.86	0.00	(-)975.86	0.00
D	Items not claimed					
D1	Capital spares		412.31	12.70	399.61	0.00
D2	Capitalization of MBOA		0.64	0.00	0.64	0.00
	Sub-total D		412.94	12.70	400.24	0.00
E	Decapitalization					
E1	De-capitalization of MBOA (part of capital cost)					
	EDP, WP Machines &	2005-06	(-)7.75	0.00	(-)7.75	0.00

		Year put to use	Accrual basis as per IGAAP	Undischarged Liability included in column 3	Cash basis	IDC included in column 3
	SATCOM Equipment	2006-07	(-)49.12	0.00	(-)49.12	0.00
		2007-08	(-)66.14	0.00	(-)66.14	0.00
	Sub-total E1		(-)123.01	0.00	(-)123.01	0.00
E2	De-capitalization capital spares (not part of capital cost)	2010-11	(-)15.15	0.00	(-)15.15	0.00
		2012-13	(-)32.78	0.00	(-)32.78	0.00
		2013-14	(-)3.81	0.00	(-)3.81	0.00
		2014-15	(-)145.63	0.00	(-)145.63	0.00
		2015-16	(-)170.03	0.00	(-)170.03	0.00
	Sub-total E2		(-)367.41	0.00	(-)367.41	0.00
E3	De- capitalization of MBOA (not part of capital cost)					
	EDP, WP Machines & SATCOM Equipment	2009-10	(-)13.50	0.00	(-)13.50	0.00
	Sub-total E3		(-)13.50	0.00	(-)13.50	0.00
	Sub-total E		(-)503.92	0.00	(-)503.92	0.00
	Total Exclusions claimed (A+B+C+D+E)		(-)958.89	19.26	(-)978.16	0.00

Disallowed items

49. The Petitioner has sought the exclusion of capitalization of Rs.1.11 lakh in 2015-16 towards "Construction of cabins along MGR track" and Rs.128.55 lakh (including undischarged liabilities of Rs.28.28 lakh) in 2015-16 towards "Expansion of campus wide OFC network of Rihand-II" as these works were disallowed vide order dated 2.8.2012 in Petition No. 254/2009 for the 2009-14 tariff period. Accordingly, the exclusion claimed by the Petitioner for additional capitalization is allowed.

Reversal of liability

50. The Petitioner has claimed reversal of liability of (-) Rs.0.14 towards Consultancy Package for architectural work, (-) Rs.20.76 lakh towards NUCON Pneum Actuator, (-) Rs.0.002 lakh towards KGOO motor LUV 5/4HQ 35-335, (-) Rs.0.80 lakh towards Transformer 3.25 MVA, 11/2.3KV ONAN and (-) Rs.0.02 towards Procurement of air motor for PAPH. In justification, the Petitioner has submitted that liabilities are excluded for the purpose of tariff and therefore, liability reversal is kept under exclusion. As tariff is allowed on cash basis and liabilities do not form part of tariff, the



exclusion of reversal of undischarged liabilities is allowed for the purpose of tariff.

Inter-unit transfer

51. The Petitioner has claimed inter-unit transfer amounting to (-) Rs.975.86 lakh in 2015-16 under exclusions. In justification, the Petitioner has submitted that the Commission has not been considering the temporary inter-unit transfers as part of tariff and hence, kept under exclusions. We are of the considered view that both positive and negative entries arising out of inter unit transfers of temporary nature shall be ignored for the purpose of tariff. In view of above, the exclusion of inter-unit transfer as claimed by the Petitioner is allowed.

Capitalization of Spares

52. The Petitioner has procured capital spares amounting to Rs.412.31 lakh including undischarged liability of Rs.12.70 lakh in 2015-16. In justification, the Petitioner has submitted that as capital spares capitalized after the cut-off date are not allowed in terms of the 2014 Tariff Regulations, the same has been kept under exclusions. Since capitalization of spares over and above initial spares, procured after the cut-off date of the generating station are not allowed for the purpose of tariff, as they form part of O&M expenses as and when consumed, the Petitioner has excluded the said amount. Accordingly, in view of the above, the exclusion of the said amounts under this head is in order and is allowed.

Capitalization of Miscellaneous Bought out Assets (MBOA)

53. The Petitioner has claimed capitalization of MBOA of Rs.0.64 lakh. In justification, the Petitioner has submitted that capitalization of MBOA beyond cut-off date is not admissible as per 2014 Tariff Regulations. In view of the fact that positive entries corresponding to the disallowed assets were not allowed to be a part of the capital cost for the purpose of tariff, the exclusion (of positive entries) as claimed and effected by



the Petitioner is in order. Accordingly, the exclusion of the said amount under this head is in order and is allowed.

De-capitalization of Miscellaneous Bought out Assets (MBOA) forming part of the capital cost

54. The Petitioner has claimed exclusion of decapitalized MBOA amounting to (-) Rs.123.01 lakh in 2015-16 in the books of accounts. After examining the exclusions sought on de-capitalization of MBOA, it is noticed that an amount of Rs.48.67 lakh has been recovered by the Petitioner, as depreciation. The decapitalization of MBOA includes EDP, WP machines & SATCOM equipment which were capitalized prior to the cut-off date of the generating station i.e., 31.3.2009. Hence, the decapitalized amount pertains to MBOA which were part of the capital cost of the generating station for the purpose of the tariff. As such, the decapitalized amount needs to be deducted for arriving at the capital cost for the purpose of tariff. Accordingly, exclusion of (-) Rs.123.01 lakh on account of decapitalization of MBOA is contrary to the 2014 Tariff Regulations and hence not allowed.

De-capitalization of Miscellaneous Bought out Assets (MBOA) not forming part of the capital cost

55. The Petitioner has claimed exclusion of de-capitalized MBOA amounting to (-) Rs.13.50 lakh in 2015-16 for the purpose of tariff. In justification, the Petitioner has submitted that capitalization of these assets was kept under exclusion and allowed by the Commission vide common order dated 7.12.2015 in Petition No. 310/GT/2013 and Petition No. 298/GT/2014. Since capitalization of spares after the cut-off date is not permissible and therefore do not form part of the capital cost for the purpose of tariff, the exclusion of decapitalization of the spares as claimed by the Petitioner, is in order and allowed.



Decapitalization of spares not forming part of capital cost

56. The Petitioner has excluded decapitalized spares amounting to (-) Rs.367.41 lakh in 2015-16 for the purpose of tariff. In justification of the same, the Petitioner has submitted that the capitalization of spares of Rs.51.75 lakh was allowed under exclusion by common order dated 7.12.2015 in Petition No. 310/GT/2013 and Petition No. 298/GT/2014 and therefore, same has been claimed under exclusion. It has further submitted that spares for Rs.315.67 lakh were capitalized beyond the cut-off date and as capitalization of spares beyond cut-off date is not permissible in terms of the 2014 Tariff Regulations, the capitalization of such spares has been claimed as exclusion in the present petition. Since spares, which do not form part of capital cost and those spares which have been capitalized after the cut-off date are not permissible to be considered as part of the capital cost, the same are not considered for the purpose of tariff. Therefore, the exclusion of decapitalization of the spares as claimed by the Petitioner, is in order and allowed.

Exclusions 2016-17

57. The exclusions claimed by the Petitioner for 2016-17 is as follows:

	Head of Work / Equipment	Year put to use	Accrual basis as per Note 2 of BS	Ind AS Adjustment	Accrual basis as per IGAAP	Undischarged Liability included in column 3	Cash basis	IDC included in column 3
	1	2	3	3A	3B=3+3A	4	6=(3B-4)	6
A	Liability Reversal							
A1	Consultancy Package for architectural work		(-)1.18	0.00	(-)1.18	(-)1.18	0.00	0.00
A2	Dgn./Manf/Supply/ Erection & Commission Elevators		(-)14.93	0.00	(-)14.93	(-)14.93	0.00	0.00
	Sub-total A		(-)16.11	0.00	(-)16.11	(-)16.11	0.00	0.00
B	Items not claimed							
B1	Capital spares		528.27	0.17	528.44	6.44	522.00	0.00
	Sub-total B		528.27	0.17	528.44	6.44	522.00	0.00
C	Decapitalization							
C1	De-capitalization of MBOA (part of capital cost)							
	Furniture & Fixtures	2006-07	(-)0.15	(-)1.97	(-)2.12	0.00	(-)2.12	0.00



	Head of Work / Equipment	Year put to use	Accrual basis as per Note 2 of BS	Ind AS Adjustment	Accrual basis as per IGAAP	Undischarged Liability included in column 3	Cash basis	IDC included in column 3
		2007-08	(-)0.04	(-)1.17	(-)1.22	0.00	(-)1.22	0.00
		2008-09	0.00	(-)0.04	(-)0.04	0.00	(-)0.04	0.00
	Other office Equipment	2007-08	0.00	(-)0.67	(-)0.67	0.00	(-)0.67	0.00
	EDP, WP Machines & SATCOM Equipment	2006-07	(-)15.07	(-)138.39	(-)153.46	0.00	(-)153.46	0.00
		2008-09	(-)0.67	(-)6.06	(-)6.73	0.00	(-)6.73	0.00
	Vehicles	2006-07	0.00	(-)0.10	(-)0.10	0.00	(-)0.10	0.00
	Communication Equipment's	2006-07	(-)1.53	(-)4.69	(-)6.21	0.00	(-)6.21	0.00
		2007-08	(-)0.26	(-)0.23	(-)0.49	0.00	(-)0.49	0.00
	Sub-total C1		(-)17.72	(-)153.74	(-)171.45	0.00	(-)171.45	0.00
C2	De- capitalization of MBOA (not part of capital cost)							
	Other Office Equipment	2009-10	0.00	(-)0.02	(-)0.02	0.00	(-)0.02	0.00
	EDP, WP Machines & SATCOM Equipment	2009-10	(-)0.08	(-)0.55	(-)0.63	0.00	(-)0.63	0.00
		2010-11	(-)4.68	(-)42.09	(-)46.76	0.00	(-)46.76	0.00
		2011-12	(-)0.07	(-)3.03	(-)3.10	0.00	(-)3.10	0.00
		2012-13	0.00	(-)0.70	(-)0.70	0.00	(-)0.70	0.00
	Sub-total C2		(-)4.83	(-)46.39	(-)51.22	0.00	(-)51.22	0.00
C3	De-capitalization of capital spares (not part of capital cost)	2009-10	(-)1.75	(-)1.42	(-)3.17	0.00	(-)3.17	0.00
		2012-13	(-)17.07	(-)8.73	(-)25.80	0.00	(-)25.80	0.00
		2013-14	(-)1.18	(-)0.31	(-)1.49	0.00	(-)1.49	0.00
		2014-15	(-)47.28	(-)41.87	(-)89.15	0.00	(-)89.15	0.00
		2015-16	(-)38.50	(-)51.60	(-)90.10	0.00	(-)90.10	0.00
		2016-17	(-)44.20	(-)5.25	(-)49.45	0.00	(-)49.45	0.00
	Sub-total C3		(-)149.98	(-)109.18	(-)259.16	0.00	(-)259.16	0.00
	Sub-total C		(-)172.53	(-)309.31	(-)481.83	0.00	(-)481.83	0.00
D	Ind AS adjustment - Reclassification of Asset Class		40.81	(-)40.81	(-)0.00	0.00	0.00	0.00
	Total Exclusions claimed (A+B+C+D)		380.45	(-)349.94	30.50	(-)9.67	40.17	0.00

Reversal of liability

58. The Petitioner has claimed reversal of liability of (-) Rs.1.18 lakh towards Consultancy Package for architectural work and (-) Rs.14.93 lakh towards Design/Manufacture/Supply/ Erection & Commission of elevators. In justification, the Petitioner has submitted that liabilities are excluded for the purpose of tariff and therefore, liability reversal is kept under exclusion. Since tariff is allowed on cash basis and liabilities do not form part of tariff, the exclusion of reversal of undischarged liabilities is allowed for the purpose of tariff.



Capitalization of Spares

59. The Petitioner has procured capital spares amounting to Rs.528.27 lakh including undischarged liability of Rs.0.17 lakh in 2015-16. In justification, the Petitioner has submitted that as capital spares capitalized after the cut-off date are not allowed in terms of the 2014 Tariff Regulations, the same has been kept under exclusions. Since capitalization of spares over and above initial spares, procured after the cut-off date of the generating station are not allowed for the purpose of tariff, as they form part of O&M expenses as and when consumed, the Petitioner has excluded the said amount. In view of the above, the exclusion of the said amounts under this head is in order and is allowed.

De-capitalization of Miscellaneous Bought out Assets (MBOA) forming part of the capital cost

60. The Petitioner has claimed exclusion of decapitalized MBOA amounting to (-) Rs.171.45 lakh in 2016-17 in books of accounts. After examining the exclusions sought on de-capitalization of MBOA, it is noticed that an amount of Rs.88.38 lakh has been recovered by the Petitioner as depreciation. The decapitalization of MBOA includes Furniture & fixtures, Other office equipment, EDP, WP machines & SATCOM Equipment, vehicles and communication equipment's which were capitalized prior to the cut-off date of the generating station i.e., 31.3.2009. Hence, the decapitalized amount pertains to MBOA which were part of the capital cost of the generating station for the purpose of the tariff. As such, the decapitalized amount needs to be deducted for arriving at the capital cost for the purpose of tariff. Accordingly, exclusion of (-) Rs.171.45 lakh on account of decapitalization of MBOA is contrary to the 2014 Tariff Regulations and hence not allowed.



De-capitalization of Miscellaneous Bought out Assets (MBOA) not forming part of the capital cost

61. The Petitioner has claimed exclusion of de-capitalized MBOA amounting to (-) Rs.51.22 lakh in 2016-17 for the purpose of tariff. In justification, the Petitioner has submitted that capitalization of these assets was kept under exclusion and allowed by Commission, vide common order dated 7.12.2015 in Petition No. 310/GT/2013 and Petition No. 298/GT/2014. Since capitalization of spares after the cut-off date is not permissible and therefore do not form part of the capital cost for the purpose of tariff, the exclusion of decapitalization of the spares as claimed by the Petitioner, is in order and allowed.

Decapitalization of spares not forming part of capital cost

62. The Petitioner has excluded decapitalized spares amounting to (-) Rs.259.16 lakh in 2016-17 for the purpose of tariff. In justification of the same, the Petitioner has submitted that capitalization of spares of Rs.30.46 lakh was allowed under exclusion by common order dated 7.12.2015 in Petition No. 310/GT/2013 and Petition No. 298/GT/2014 and therefore, same has been claimed under exclusion. Further, spares amounting to Rs.228.70 lakh were capitalized beyond the cut-off date and as capitalization of spares beyond cut-off date is not permissible in terms of the 2014 Tariff Regulations, the capitalization of such spares has been claimed as exclusion in the present petition. Since spares which do not form part of capital cost and those capitalized spares which are capitalized after the cut-off date are not permissible to be considered as part of the capital cost, the same are not considered for the purpose of tariff. Therefore, the exclusion of decapitalization of the spares as claimed by the Petitioner, is in order and allowed.



Ind-AS Adjustment (Reclassification of asset class)

63. With regard to the expenditure on Ind-AS adjustment (reclassification of asset class), the reconciliation statement, as submitted by the Petitioner, indicates an expenditure of Rs.40.81 lakh in 2016-17, with corresponding negative entry of same amount as IND-AS adjustment. As such, after adjustment, the net claim against reclassification of asset class reduces to zero, as per IGAPP. Considering the fact that the expenditure is an accounting adjustment leading to zero expenditure, the same is in order and does not impact the claim made by the Petitioner.

Exclusions 2017-18

64. The exclusions claimed by the Petitioner for 2017-18 is as follows:

		Year put to use	Accrual basis as per Note 2 of BS	Ind AS Adjustment	Accrual basis as per IGAAP	Undischarged liability included in column 3	Cash basis	IDC included in column 3
	1	2	3	3A	3B=(3+3A)	4	6=(3B-4)	6
A	Liability Reversal							
A1	Erect. of PT Plant and Make up Water System		(-)43.82	0.00	(-)43.82	(-)43.82	0.00	0.00
	Sub-total A		(-)43.82	0.00	(-)43.82	(-)43.82	0.00	0.00
B	Inter Unit Transfer-DLW Loco to Sipat		(-)504.95	(-)331.87	(-)836.82	0.00	(-)836.82	0.00
C	Items not claimed							
C1	Capital spares		1385.61	1.58	1387.19	170.05	1217.14	0.00
	Sub-total C		1385.61	1.58	1387.19	170.05	1217.14	0.00
D	De-capitalization							
D1	De-capitalization of MBOA (part of capital cost)							
	Other Office Equipment	2006-07	(-)0.25	(-)2.21	(-)2.46	0.00	(-)2.46	0.00
		2007-08	(-)0.10	(-)0.09	(-)0.18	0.00	(-)0.18	0.00
		2008-09	(-)0.01	(-)0.12	(-)0.13	0.00	(-)0.13	0.00
	EDP, WP Machines & SATCOM Equipment	2006-07	(-)1.15	(-)10.31	(-)11.45	0.00	(-)11.45	0.00
		2006-07	(-)1.13	(-)10.20	(-)11.33	0.00	(-)11.33	0.00
		2007-08	0.00	(-)0.04	(-)0.04	0.00	(-)0.04	0.00
		2008-09	(-)1.11	(-)10.02	(-)11.13	0.00	(-)11.13	0.00
	Communication Equipment	2006-07	(-)0.37	(-)0.44	(-)0.81	0.00	(-)0.81	0.00
		2007-08	(-)0.46	(-)0.42	(-)0.87	0.00	(-)0.87	0.00
	Hospital Equipment	2006-07	(-)0.05	(-)0.09	(-)0.14	0.00	(-)0.14	0.00
		2007-08	(-)0.09	(-)0.06	(-)0.15	0.00	(-)0.15	0.00
	Sub-total D1		(-)4.71	(-)33.99	(-)38.70	0.00	(-)38.70	0.00
D2	De-capitalization of MBOA (not part of capital cost)							
	EDP, WP Machines & SATCOM Equipment	2009-10	(-)0.52	(-)3.25	(-)3.77	0.00	(-)3.77	0.00



		Year put to use	Accrual basis as per Note 2 of BS	Ind AS Adjustment	Accrual basis as per IGAAP	Undischarged liability included in column 3	Cash basis	IDC included in column 3
	EDP, WP Machines & SATCOM Equipment	2010-11	(-)1.36	(-)7.15	(-)8.51	0.00	(-)8.51	0.00
	Communication Equipment	2009-10	(-)0.23	(-)0.13	(-)0.36	0.00	(-)0.36	0.00
	Sub-total D2		(-)2.11	(-)10.53	(-)12.64	0.00	(-)12.64	0.00
D3	De-capitalization capital spares (not part of capital cost)	2010-11	(-)0.82	(-)0.57	(-)1.39	0.00	(-)1.39	0.00
		2013-14	(-)5.82	(-)1.25	(-)7.07	0.00	(-)7.07	0.00
		2014-15	(-)86.22	(-)16.55	(-)102.76	0.00	(-)102.76	0.00
		2015-16	(-)0.93	0.00	(-)0.93	0.00	(-)0.93	0.00
		2016-17	(-)8.03	0.00	(-)8.03	0.00	(-)8.03	0.00
	Sub-total D3		(-)101.81	(-)18.37	(-)120.19	0.00	(-)120.19	0.00
D4	De-capitalization of Assets	2006-07	(-)0.96	(-)1.15	(-)2.11	0.00	(-)2.11	0.00
	Sub-total D		(-)109.59	(-)64.05	(-)173.64	0.00	(-)173.64	0.00
E	IndAS Adjustment (Overhauling)							
	Overhauling		1699.25	(-)1699.25	0.00	0.00	0.00	0.00
	Overhauling De-capitalization		(-)288.59	288.59	0.00	0.00	0.00	0.00
	Sub-total E		1410.66	(-)1410.66	0.00	0.00	0.00	0.00
	Total Exclusions claimed (A+B+C+D+E)		2137.91	(-)1805.00	332.91	126.23	206.68	0.00

Reversal of liability

65. The Petitioner has claimed reversal of liability of (-) Rs.43.82 lakh in 2017-18 towards Erection of PT plant and make up water system. In justification, the Petitioner has submitted that liabilities are excluded for the purpose of tariff and therefore, reversal of liability is kept under exclusion. Since tariff is allowed on cash basis and liabilities do not form part of tariff, the exclusion of reversal of undischarged liabilities is allowed for the purpose of tariff.

Inter-unit transfer

66. The Petitioner has claimed inter-unit transfer for (-) Rs.836.82 lakh in 2017-18 under exclusions. In justification, the Petitioner has submitted that the Commission has not considered temporary inter-unit transfers as part of tariff and hence, kept under exclusions. We are of the considered view that both positive and negative entries arising out of inter unit transfers of temporary nature shall be ignored for the purpose of tariff. In view of above, the exclusion of inter-unit transfer as claimed by the Petitioner

is allowed.

Capitalization of Spares

67. The Petitioner has procured capital spares amounting to Rs.1387.19 lakh including undischarged liability of Rs.170.05 lakh in 2017-18. In justification, the Petitioner has submitted that as capital spares capitalized after the cut-off date are not allowed in terms of the 2014 Tariff Regulations and hence, the same are kept under exclusions. Since capitalization of spares over and above initial spares, procured after the cut-off date of the generating station, are not allowed for the purpose of tariff, as they form part of O&M expenses as and when consumed, the Petitioner has excluded the said amount. In view of the above, the exclusion of the said amounts under this head is in order and is allowed.

De-capitalization of Miscellaneous Bought out Assets (MBOA) (forming part of the capital cost)

68. The Petitioner has claimed exclusion of decapitalized MBOA amounting to (-) Rs.38.70 lakh in 2017-18 in the books of accounts. After examining the exclusions sought on de-capitalization of MBOA, it is noticed that an amount of Rs.20.03 lakh has been recovered by the Petitioner as depreciation. The decapitalization of MBOA includes other Office equipment's, EDP, WP machines & SATCOM Equipment, communication equipment's and hospital equipment's which were capitalized prior to the cut-off date of the generating station i.e., 31.3.2009. Hence, decapitalized amount pertains to MBOA which were part of the capital cost of the generating station for the purpose of the tariff. As such, the decapitalized amount needs to be deducted for arriving at the capital cost for the purpose of tariff. Accordingly, exclusion of (-) Rs.38.70 lakh on account of decapitalization of MBOA is contrary to the 2014 Tariff Regulations and hence not allowed.



De-capitalization of Miscellaneous Bought out Assets (MBOA) (not forming part of the capital cost)

69. The Petitioner has claimed exclusion of de-capitalized MBOA amounting to (-) Rs.12.64 lakh in 2017-18 for the purpose of tariff. In justification, the Petitioner has submitted that capitalization of these assets was kept under exclusion and allowed by the Commission vide common order dated 7.12.2015 in Petition No. 310/GT/2013 and Petition No. 298/GT/2014. Since capitalization of spares after the cut-off date is not permissible and therefore do not form part of the capital cost for the purpose of tariff, the exclusion of decapitalization of the spares as claimed by the Petitioner, is in order and allowed.

Decapitalization of spares (not forming part of capital cost)

70. The Petitioner has excluded decapitalized spares amounting to (-) Rs.120.19 lakh in 2017-18 for the purpose of tariff. In justification of the same, the Petitioner has submitted that the capitalization of spares of Rs.8.46 lakh was allowed under exclusion by common order dated 7.12.2015 in Petition No. 310/GT/2013 and Petition No. 298/GT/2014 and therefore, same has been claimed under exclusion. Further, spares amounting to Rs.111.73 lakh were capitalized beyond the cut-off date and as capitalization of spares beyond cut-off date is not permissible in terms of the 2014 Tariff Regulations, the capitalization of such spares has been claimed as exclusion in the present petition. Since spares which do not form part of capital cost and those spares which are capitalized after the cut-off date are not permissible to be considered as part of the capital cost, the same are not considered for the purpose of tariff. Therefore, the exclusion of decapitalization of the spares as claimed by the Petitioner, is in order and allowed.

Decapitalization of MBOA (not forming part of capital cost)

71. The Petitioner has claimed de-capitalized MBOA amounting to (-) Rs.2.11 lakh in



2017-18. The decapitalization of MBOA includes EDP, WP machines & SATCOM Equipment, Furniture & Fixture, Other Office Equipment and Hospital Equipment form part of the capital cost of the generating station for the purpose of the tariff. As such, in terms of Regulation 14(4) of the 2014 Tariff Regulations, the decapitalized amount needs to be deducted for arriving at the capital cost for the purpose of tariff. Accordingly, the exclusion claimed by the Petitioner on account of decapitalization of MBOA is not in accordance to Regulation 14(4) of the 2014 Tariff Regulations and hence not allowed for the purpose of tariff-

Ind-AS Adjustment (Overhauling)

72. With regard to the expenditure on Ind-AS Adjustment (Overhauling), the reconciliation statement as submitted by the Petitioner, indicates an expenditure of Rs.1699.25 lakh towards Overhauling and (-) Rs.288.59 lakh towards Overhauling de-capitalization in 2017-18, with corresponding negative and positive entries of same amount as IND-AS adjustment. As such, after adjustment, the net claim against reclassification of asset class reduces to zero as per IGAPP. Considering the fact that the expenditure is an accounting adjustment leading to zero expenditure, the same is in order and does not impact the claim made by the Petitioner.

Exclusions 2018-19

73. The exclusions claimed by the Petitioner for 2018-19 is as follows:

		Year put to use	Accrual basis as per Note 2 of BS	Ind AS Adjustment	Accrual basis as per IGAAP	Undischarged Liability included in column 3	Cash basis	IDC included in column 3
	1	2	3	3A	3B=3+3A	4	6=(3B-4)	6
A	Liability Reversal							
A1	Main Plant Supply Package		(-) 4264.67	0.00	(-)4264.67	(-)4264.67	0.00	0.00
A2	Elevator Stage II		(-)2.04	0.00	(-)2.04	(-)2.04	0.00	0.00
A3	PORTABLE INFRARED THERMOVISION CAMERA		(-)0.15	0.00	(-)0.15	(-)0.15	0.00	0.00
	Sub-total A		(-)4266.87	0.00	(-)4266.87	(-)4266.87	0.00	0.00



		Year put to use	Accrual basis as per Note 2 of BS	Ind AS Adjustment	Accrual basis as per IGAAP	Undischarged Liability included in column 3	Cash basis	IDC included in column 3
B	Items not claimed							
B1	Capital spares		741.49	0.08	741.57	10.91	730.66	0.00
	Sub-total B		741.49	0.08	741.57	10.91	730.66	0.00
C	Decapitalization							
C1	De-capitalization of MBOA (part of capital cost)							
	Office Furniture	2006-07	0.00	(-)0.02	(-)0.02	0.00	(-)0.02	0.00
	Other Office equipment	2006-07	0.00	(-)0.08	(-)0.08	0.00	(-)0.08	0.00
	Sub-total C1		0.00	(-)0.10	(-)0.10	0.00	(-)0.10	0.00
C2	De-capitalization of capital spares (not part of capital cost)	2010-11	(-)0.41	(-)0.29	(-)0.70	0.00	(-)0.70	0.00
		2017-18	(-)69.86	0.00	(-)69.86	0.00	(-)69.86	0.00
	Sub-total C3		(-)70.27	(-)0.29	(-)70.56	0.00	(-)70.56	0.00
	Sub-total C		(-)70.27	(-)0.39	(-)70.67	0.00	(-)70.67	0.00
D	Ind AS Adjustment (Overhauling)							
	Overhauling		1587.86	(-)1587.86	0.00	0.00	0.00	0.00
	Overhauling De-capitalization		(-)217.39	217.39	0.00	0.00	0.00	0.00
	Sub-total D		1370.47	(-)1370.47	0.00	0.00	0.00	0.00
	Total Exclusions claimed (A+B+C+D)		(-)2225.19	(-)1370.78	(-)3595.96	(-)4255.96	660.00	0.00

Reversal of liability

74. The Petitioner has claimed reversal of liability of (-) Rs.4264.67 lakh towards Main Plant Supply Package, (-) Rs.2.04 lakh towards Elevator Stage II and (-) Rs.0.15 lakh towards Portable Infrared Thermovision Camera. In justification, the Petitioner has submitted that liabilities are excluded for the purpose of tariff and therefore, liability reversal is kept under exclusion. Since tariff is allowed on cash basis and liabilities do not form part of tariff, the exclusion of reversal of undischarged liabilities is allowed for the purpose of tariff.

Capitalization of Spares

75. The Petitioner has procured capital spares amounting Rs.741.57 lakh including undischarged liability of Rs.10.91 lakh in 2018-19. In justification, the Petitioner has submitted that as capital spares capitalized after the cut-off date are not allowed in terms of the 2014 Tariff Regulations and the same has been kept under exclusions. Since capitalization of spares over and above initial spares, procured after the cut-off

date of the generating station are not allowed for the purpose of tariff, as they form part of O&M expenses as and when consumed, the Petitioner has excluded the said amount. In view of the above, the exclusion of the said amounts under this head is in order and is allowed.

De-capitalization of Miscellaneous Bought out Assets (MBOA) forming part of the capital cost

76. The Petitioner has claimed exclusion of decapitalized MBOA amounting to (-) Rs.0.10 lakh in 2018-19 in the books of accounts. After examining the exclusions sought on de-capitalization of MBOA, it is noticed that an amount of Rs.0.06 lakh has been recovered by the Petitioner as depreciation. The decapitalization of MBOA includes office furniture and other office equipment's which were capitalized prior to the cut-off date of the generating station i.e., 31.3.2009. Hence, decapitalized amount pertains to MBOA which were part of the capital cost of the generating station for the purpose of the tariff. As such, the decapitalized amount needs to be deducted for arriving at the capital cost for the purpose of tariff. Accordingly, exclusion of (-) Rs.0.10 lakh on account of decapitalization of MBOA is contrary to the 2014 Tariff Regulations and hence not allowed.

Decapitalization of spares not forming part of capital cost

77. The Petitioner has excluded decapitalized spares amounting to (-) Rs.70.56 lakh in 2018-19 for the purpose of tariff. In justification of the same, the Petitioner has submitted that the capitalization of spares of Rs.0.70 lakh was allowed under exclusion by common order dated 7.12.2015 in Petition No. 310/GT/2013 and Petition No. 298/GT/2014 and therefore, the same has been claimed under exclusion. Further, spares amounting to Rs. 69.86 lakh were capitalized beyond the cut-off date and as capitalization of spares beyond cut-off date is not permissible in terms of the 2014 Tariff Regulations, the capitalization of such spares has been claimed as exclusion in



the present petition. Since spares which do not form part of capital cost and those capitalized spares which are capitalized after the cut-off date are not permissible to be considered as part of the capital cost, the same are not considered for the purpose of tariff. Therefore, the exclusion of decapitalization of the spares as claimed by the Petitioner, is in order and allowed.

Ind-AS Adjustment (Overhauling)

78. With regard to the expenditure on Ind-AS adjustment (Overhauling), the reconciliation statement as submitted by the Petitioner indicates an expenditure of Rs.1587.86 lakh towards Overhauling and (-) Rs.217.39 lakh towards Overhauling de-capitalization in 2018-19, with corresponding negative and positive entries of same amount as IND-AS adjustment. As such, after adjustment, the net claim against reclassification of asset class reduces to zero as per IGAPP. Considering the fact that the expenditure is an accounting adjustment leading to zero expenditure, the same is in order and does not impact the claim made by the Petitioner.

79. Accordingly, the summary of exclusions allowed/ not allowed for the 2014-19 tariff period is as follows:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Exclusions claimed (A)	2265.07	(-) 958.89	30.50	332.91	(-) 3595.96
Exclusions allowed (B)	2410.26	(-) 835.89	201.96	373.72	(-) 3595.86
Exclusion not Allowed (A-B)	(-) 145.19	(-) 123.01	(-) 171.45	(-) 40.81	(-) 0.10

80. Based on the above discussions, the additional capital expenditure claimed and allowed for the 2014-19 tariff period is summarized as follows:

			<i>(Rs. in lakh)</i>					
			2014-15	2015-16	2016-17	2017-18	2018-19	Total
A	New Claims							
	Elevator Stage II	Claimed	0.00	69.97	0.00	0.00	0.00	69.97
		Allowed	0.00	69.97	0.00	0.00	0.00	69.97
	Continuous Emission Monitoring System	Claimed	0.00	93.26	0.00	0.00	0.00	93.26
		Allowed	0.00	93.26	0.00	0.00	0.00	93.26
	Effluent Quality Monitoring System	Claimed	0.00	34.61	0.00	0.00	0.00	34.61
		Allowed	0.00	34.61	0.00	0.00	0.00	34.61
	S&T System –	Claimed	0.00	40.86	0.00	0.00	0.00	40.86



			2014-15	2015-16	2016-17	2017-18	2018-19	Total
	Relay hut-3	Allowed	0.00	40.86	0.00	0.00	0.00	40.86
	2nd Raising of Mitihini Ash Dyke Lagoon – I	Claimed	0.00	0.00	0.00	0.00	1241.90	1241.90
		Allowed	0.00	0.00	0.00	0.00	1241.90	1241.90
	Total additions (A)	Claimed	0.00	238.70	0.00	0.00	1241.90	1480.60
		Allowed	0.00	238.70	0.00	0.00	1241.90	1480.60
B	Decapitalization of spares (part of capital cost) (B)	Claimed	0.00	0.61	5.69	177.87	251.76	435.93
		Allowed	0.00	0.61	5.69	177.87	251.76	435.93
C	Discharge of liability of allowed works (C)	Claimed	68.67	147.81	4.32	0.03	0.00	220.83
		Allowed	68.67	147.81	4.32	0.03	0.00	220.83
D	Total additional capitalization including discharge of liability (D)=(A-B+C)	Claimed	68.67	385.90	(-) 1.37	(-) 177.84	990.14	1265.50
		Allowed	68.67	385.90	(-) 1.37	(-) 177.84	990.14	1265.50
E	Less: Adjustment with respect to Recovery of LD	Claimed	0.00	0.00	0.00	17.39	0.00	17.39
		Allowed	0.00	0.00	0.00	17.39	0.00	17.39
F	Exclusions not allowed							
	Less: Exclusions (F)		145.19	123.01	171.45	40.81	0.10	480.57
	Net Additional Capitalization allowed (D-E-F)		(-) 76.52	262.89	(-) 172.82	(-) 236.05	990.04	767.54

Capital Cost allowed for 2014-19 tariff period

81. Accordingly, the capital cost approved for the 2014-19 tariff period is as follows:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	295355.88	295279.36	295542.25	295369.43	295133.38
Add: Net additional capital expenditure allowed	(-)76.52	262.89	(-)172.82	(-)236.05	990.04
Closing Capital Cost	295279.36	295542.25	295369.43	295133.38	296123.42
Average Capital Cost	295317.62	295410.81	295455.84	295251.40	295628.40

Debt-Equity Ratio

82. Regulation 19 of the 2014 Tariff Regulations provides as follows:

“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 utilised 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 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.”

83. The gross normative loan and equity amounting to Rs.206749.12 lakh and Rs.88606.76 lakh, respectively as on 1.4.2014, as considered in Commission’s order dated 1.12.2016 in Petition No. 318/GT/2014 has been retained for the purpose of tariff. Further, the additional capital expenditure admitted as above has been allocated in the debt-equity ratio of 70:30. Accordingly, the debt-equity ratio in respect of the generating station, as on 1.4.2014 and 31.3.2019 allowed is as follows:

(Rs. in lakh)

	Capital cost as on 1.4.2014		Additional Capital Expenditure 2014-19		Capital cost as on 31.3.2019	
	Amount	(%)	Amount	(%)	Amount	(%)
Debt (A)	206749.12	70.00%	537.28	70.00%	207286.40	70.00%
Equity (B)	88606.76	30.00%	230.26	30.00%	88837.02	30.00%
Total (A+B)	295355.88	100.00%	767.54	100.00%	296123.42	100.00%

Return on Equity

84. 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.”

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

“Tax on Return on Equity: (1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non-generation or non-transmission business, as the case may be) shall not be considered for the calculation of “effective tax rate”

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

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

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

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

86. The Petitioner has claimed Return on Equity for the 2014-19 tariff period after

grossing up the base rate of return on equity of 15.50% with the effective tax rates (based on MAT rates) for each year as per Regulation 25 of the 2014 Tariff regulations. The return on equity is trued up on the basis of the MAT rate applicable in the respective years and is allowed for the generating station as follows:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Normative Equity-Opening (A)	88606.76	88583.80	88662.67	88610.82	88540.01
Addition of Equity due to additional capital expenditure (B)	(-)22.96	78.87	(-)51.85	(-)70.81	297.01
Normative Equity-Closing (C) = (A) + (B)	88583.80	88662.67	88610.82	88540.01	88837.02
Average Normative Equity (D) = [(A+C)/2]	88595.28	88623.24	88636.75	88575.42	88688.52
Return on Equity (Base Rate) (E)	15.500%	15.500%	15.500%	15.500%	15.500%
Effective Tax Rate for the year (F)	20.961%	21.342%	21.342%	21.342%	21.549%
Rate of Return on Equity (Pre-Tax) (G) = [(E)/(1-F)]	19.610%	19.705%	19.705%	19.705%	19.758%
Return on Equity (Pre-Tax) annualized (H) = [(D)*(G)]	17373.53	17463.21	17465.87	17453.79	17523.08

Interest on Loan

87. Regulation 26 of the 2014 Tariff Regulations provides as follows:

“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.”

88. Interest on loan has been worked out as follows:

(a) Gross normative loan amounting to Rs.206749.12 lakh as considered in order dated 1.12.2016 in Petition No. 318/GT/2014 has been retained as on 1.4.2014.

(b) Cumulative repayment amounting to Rs.130955.13 lakh as considered in order dated 1.12.2016 in Petition No. 318/GT/2014 has been retained as on 1.4.2014.

(c) Accordingly, the net normative opening loan as on 1.4.2014 is Rs.75793.99 lakh.

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

(e) Depreciation allowed has been considered as repayment of normative loan during the respective year of the 2014-19 tariff period. Further, proportionate adjustment has been made to the repayments corresponding to discharges considered during the respective years on account of cumulative repayment adjusted as on 1.4.2009. Also, repayments have been adjusted for de-capitalization of assets considered for the purpose of tariff; and

(f) The Petitioner has claimed weighted average rate of interest (WAROI) of 8.2136% in 2014-15, 8.0627% in 2015-16, 7.9678% in 2016-17, 7.9839% in 2017-18 and 8.0266% in 2018-19. In line with the provisions of the regulations stated above, the weighted average rate of interest has been calculated by applying the actual loan portfolio existing as on 1.4.2014, along with subsequent additions during the 2014-19 tariff period, if any, for the generating station. In case of loans carrying floating rate of interest, the details of rate of interest, as furnished by the Petitioner, has been considered for the purpose of tariff.

89. The calculation for interest on loan is as follows:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Gross opening loan (A)	206749.12	206695.56	206879.58	206758.60	206593.37
Cumulative repayment of loan up to previous year (B)	130955.13	146422.84	161918.06	177333.64	192685.49
Net Loan Opening (C) = [(A) - (B)]	75793.99	60272.72	44961.52	29424.97	13907.88
Addition due to additional capital expenditure (D)	(-)53.56	184.02	(-)120.98	(-)165.23	693.03
Repayment of loan during the year (E)	15516.10	15515.51	15500.39	15475.63	5719.18
Less: Repayment adjustment on account of de-capitalization (F)	60.48	48.87	84.81	123.77	154.49
Add: Repayment adjustment on account of discharges corresponding to un-discharged liabilities deducted as on 1.4.2009 (G)	12.09	28.58	0.00	0.00	0.00
Net Repayment (H) = [(E) - (F) + (G)]	15467.71	15495.22	15415.58	15351.86	5564.70
Net Loan Closing (I) = [(C) + (D) - (H)]	60272.72	44961.52	29424.97	13907.88	9036.21
Average Loan (J) = [(C+I)/2]	68033.35	52617.12	37193.25	21666.42	11472.04
Weighted Average Rate of Interest on loan (K)	8.2136%	8.0627%	7.9678%	7.9839%	8.0266%
Interest on Loan (L) = [(J)*(K)]	5588.01	4242.34	2963.47	1729.82	920.81

Depreciation

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

“27. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset: Provided that in case of hydro generating station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the



Plant:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-II to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 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 upto 31.3.2014 from the gross depreciable value of the assets.

(7) The generating company or the transmission licensee, 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) alongwith justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure during the fag end of the project.

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

91. Cumulative depreciation amounting to Rs.131780.98 lakh as on 1.4.2014, as considered in order dated 1.12.2016 in Petition No. 318/GT/2014 has been retained for the purpose of tariff. WAROD has been calculated in terms of Regulation 27 of 2014 Tariff Regulations and has been considered for computation of depreciation for the period 2014-18. Since as on 1.4.2018, the used life of the generating station (i.e. 12.31 years) is more than 12 years from the effective station COD of 7.12.2005, depreciation has been calculated by spreading over of the balance depreciable value for respective year i.e. 2018-19. Accordingly, depreciation has been computed as under:

	(Rs. in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Average Capital Cost (A)	295317.62	295410.81	295455.84	295251.40	295628.40
Value of freehold land included in average capital cost (B)	0.00	0.00	0.00	0.00	0.00
Aggregated Depreciable Value (C)= [(A-B) *90%]	265785.86	265869.73	265910.26	265726.26	266065.56



Remaining aggregate depreciable value at the beginning of the year (D) = [(C) - (Cumulative Depreciation (shown at M) at the end of the previous year)]	134004.88	118621.04	103166.35	87566.78	72554.22
No. of completed years at the beginning of the year (E)	8.31	9.31	10.31	11.31	12.31
Balance useful life at the beginning of the year (F) = [25 - (E)]	16.69	15.69	14.69	13.69	12.69
Weighted Average Rate of Depreciation (WAROD) (G)=[(H/A)]	5.2540%	5.2522%	5.2463%	5.2415%	1.9346%
Combined Depreciation during the year/ period (H) = [(A) * (G)]	15516.10	15515.51	15500.39	15475.63	5719.18**
Combined Depreciation during the year/ period (annualized) (I) = (H)	15516.10	15515.51	15500.39	15475.63	5719.18
Cumulative depreciation at the end of the year (before adjustment for de-capitalization) (J) = [(I) + (Cumulative Depreciation (shown at M) at the end of the previous year)]	147297.08	162764.20	178244.30	193635.12	199230.53
Add: Cumulative depreciation adjustment on account of discharges out of un-discharged liabilities deducted as on 1.4.2009 (K)	12.09	28.58	0.00	0.00	0.00
Less: Depreciation adjustment on account of de-capitalization (L)	60.48	48.87	84.81	123.77	154.49
Cumulative depreciation at the end of the year (M) = [(J) + (K) - (L)]	147248.69	162743.91	178159.49	193511.34	199076.04

O&M Expenses

92. Regulation 29(2) of the 2014 Tariff Regulations provides as follows:

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

(a) 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):

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

93. The O&M expenses claimed by the Petitioner in Form-3A of the petition are as follows:

	(Rs. in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
O&M expenses (normative) under Regulation 29 (1) of the 2014 Tariff Regulations	16000.00	17010.00	18080.00	19220.00	20430.00
O&M expenses under Regulation 29(2) of the 2014 Tariff Regulations					
Water Charges	423.85	420.80	420.70	423.85	434.30
Capital Spares consumed	200.28	368.03	264.86	298.06	322.32
Total O&M expenses claimed (Regulation 29(1) & Regulation 29 (2) of the 2014 Tariff Regulations	16624.13	17798.83	18765.56	19941.91	21186.62
Impact of Pay revision	-	29.80	1246.94	1504.32	1919.13
Impact of GST	-	-	-	148.60	206.47
Total O&M expenses claimed	16624.13	17828.63	20012.50	21594.83	23312.22

94. The Commission vide RoP of the hearing dated 11.6.2021 directed the Petitioner to submit a comparative table (detail breakup) indicating the actual O&M expenses incurred versus the normative O&M expenses allowed to the generating station for the 2014-19 tariff period. The Petitioner vide affidavit dated 4.6.2021 has submitted the comparison of actual O&M expenses incurred during the 2014-19 tariff period, as against the normative O&M expenses allowed for the 2014-19 tariff period.



95. The normative O&M expenses claimed by Petitioner are in terms of Regulation 29(1)(a) of the 2014 Tariff Regulations and are the same as allowed by order dated 1.12.2016 in Petition No. 318/GT/2014. Hence, the claim of the Petitioner for normative O&M expenses is allowed.

Water Charges

96. 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:

*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:
xxx”*

97. The Commission vide its order dated 1.12.2016 in Petition No. 318/GT/2014 had allowed water charges amounting to Rs.423.85 lakh during the period 2014-18 and Rs.432.85 lakh in 2018-19. Further, the Commission by order dated 1.12.2016 in Petition No. 318/GT/2014 directed the following:

“38. The petitioner is however, directed to furnish the details such as the contracted quantity, allocation of water, the actual water consumed during 2014-19, the basis of calculation of quantity of CW, PAF& generation loss considered for computation of water charges for the generating station for the period 2014-19 at the time of truing-up of tariff. In addition, the petitioner shall also confirm / clarify as to whether the water charges have been paid on the basis of contracted quantity or on the basis of allocation.”

98. In compliance, the Petitioner has submitted the “principles for consumptive water charges for future” as per the record note of discussions with the State Government of U.P on 3.4.1999. The Petitioner has also furnished the details of contracted quantity / water allocation, actual water consumption and water charges paid during the 2014-19 tariff period as follows:

	Units	2014-15	2015-16	2016-17	2017-18	2018-19
Type of Cooling Tower	-	Induced Draft Cooling Tower				
Type of Cooling Water System	-	Closed Cycle				
Water Allocation/Contracted	Cusec	37.19	37.19	37.19	37.19	37.19
Actual water Consumption	Cusec	37.19	37.19	37.19	37.19	37.19
Rate of Water Charges	Paise/kWh	268.68	268.68	268.68	268.68	268.68/



	Units	2014-15	2015-16	2016-17	2017-18	2018-19
						295.54
Total water Charges Paid	Rs. in lakh	423.85	420.80	420.70	423.85	434.30

99. The Petitioner vide affidavit dated 4.6.2021 has furnished Auditor certificate, in respect of the actual water charges incurred for the 2014-19 tariff period along with the computation of the year-wise claim. After scrutiny of the said information, the audited actual water charges claimed by the Petitioner, as above, are allowed on prudence check.

Capital spares

100. Regulation 29(2) of the 2014 Tariff Regulations provides as follows:

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

xxxx:

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.”

101. As per the second proviso to Regulation 29(2) of the 2014 Tariff Regulations, capital spares are admissible separately. The Petitioner has claimed total actual capital spares for Rs.1453.54 lakh during the period 2014-19 (i.e. Rs.200.28 lakh in 2014-15, Rs.368.03 lakh in 2015-16, Rs.264.86 lakh in 2016-17, Rs.298.06 lakh in 2017-18 and Rs.322.32 lakh in 2018-19). The Petitioner has submitted that in order to meet the customers demand and to maintain high machine availability at all times by the generating station, the units/ equipment's are taken under overhaul/maintenance and inspected regularly for wear and tear. It has stated that during such works, spares parts of equipment's which had been damaged/ unserviceable are replaced/consumed so that the machines continue to perform at expected efficiency, on a sustained basis. Therefore, the Petitioner has prayed that capital spares replaced/consumed by the generating station during the 2014-19 tariff period may be allowed.



102. The Commission vide RoP of the hearing dated 13.8.2020 directed the Petitioner to furnish the audited statement with respect to the consumption of capital spares, as per Form-17. In response, the Petitioner vide affidavit dated 4.6.2021 has submitted the auditor certificate in support of capital spares consumed. The details of the Capital Spares submitted by the Petitioner in Form 9Bi is as follows:

Year	<i>(Rs. in lakh)</i>		
	Capital Spares (part of capital cost)	Capital Spares (not part of capital cost)	Total Capital Spares consumed
	(A)	(B)	(A) + (B)
2014-15	0.00	200.28	200.28
2015-16	0.61	367.41	368.03
2016-17	5.69	259.16	264.86
2017-18	177.87	120.19	298.06
2018-19	251.76	70.56	322.32

103. We have examined the list of the capital spares consumed by the Petitioner. It is evident from the audited statement and Form 9Bi of the respective years that capital spares claimed comprise of two categories i.e. (i) spares which form part of the capital cost and (ii) spares which do not form part of the capital cost of the project. In respect of capital spares which form part of the capital cost of the project, the Petitioner has been recovering tariff since their procurement and, therefore, the same cannot be allowed as part of additional O&M expenses. Accordingly, only those capital spares, which do not form part of the capital cost of the project, are being considered. However, from the Petitioner's submission it is observed that spares (i.e. ultrasonic flow meter) amounting to Rs.11.02 lakh not forming part of capital cost are the ones which has been returned back to the vendor by the Petitioner in 2015-16. Accordingly, spares of Rs.11.02 lakh is not being considered for the purpose of tariff. It is pertinent to mention that the term 'capital spares' has not been defined in the 2014 Tariff Regulations. The term capital spares, in our view, is a piece of equipment, or a spare part, of significant cost that is maintained in inventory for use in the event that a similar piece of critical equipment fails or must be rebuilt. Keeping in view the principle of



materiality and to ensure standardized practices in respect of earmarking and treatment of capital spares, the value of capital spares exceeding Rs.1 (one) lakh, on prudence check of the details furnished by the Petitioner in Form-17 of the petition, has been considered for the purpose of tariff. Based on this, the details of the allowed capital spares considered for the 2014-19 tariff period is summarized as follows:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Capital Spares (not part of capital cost) claimed (A)	200.28	367.41	259.16	120.19	70.56
Value of capital spares (of Rs.1 lakh and below) disallowed on individual basis (B)	2.30	0.77	1.49	1.12	0.70
Net total value of capital spares considered (C) = (A) - (B)	197.98	366.65	257.67	119.07	69.86

104. We are also of the view that spares do have a salvage value. Accordingly, in line with the practice of considering the salvage value, presumed to be recovered by the Petitioner on sale of other capital assets, on becoming unserviceable, the salvage value of 10% has been deducted from the cost of capital spares considered above, for the 2014-19 tariff period. Therefore, on prudence check of the information furnished by the Petitioner in Form-17 and on applying the said ceiling limit along with deduction of the salvage value @10%, the net capital spares allowed in terms of Regulation 29(2) of 2014 Tariff Regulations is as follows:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Net total value of capital spares considered (A)	197.98	366.65	257.67	119.07	69.86
Salvage value @ 10% (B)	19.80	36.66	25.77	11.91	6.99
Net Claim allowed (C) = (A)*(B)	178.18	329.98	231.90	107.16	62.88

Impact of Goods and Service Tax (GST)

105. The Petitioner has claimed impact of GST for Rs.148.60 lakh during the period 2017-18 and Rs.206.47 lakh in 2018-19. The Respondent, UPPCL has submitted that the Petitioner may be directed to submit the details of GST determination. The Petitioner vide its rejoinder dated 24.5.2021 has submitted that O&M expenses



comprises of employee wages and generation administration and other expenses (renamed as “Other Expenses” in the books of the Company after introduction of IND AS). These inter alia include repair and maintenance and other overheads of the station. The Petitioner has bifurcated the generation administration and other expenses into material consumed, taxable services and exempt services. The amount claimed by the Petitioner is only on account of differential in rate of tax for taxable services (i.e. under erstwhile Service Tax 15% and in GST 18%) as under:

(Rs. in lakh)

Nature		2017-18 Q2-Q4 Post GST period Claimable	2018-19 GST Claimable
Material	A	7830.08	10530.85
Services- Taxable	B	17534.32	24363.53
Services- Exempt	C	18172.64	23835.10
Total General Administration Expenses	D=A+B+C	43537.04	58729.48
Impact of 3% additional tax on Taxable Services due to GST	E= (B*0.03/1.18)	445.79	619.41
Equated Capacity of Rihand STPS Station (MW)	F	3000	3000
Equated Capacity of Rihand STPS-II (MW)	G	1000	1000
Amount claimed in Tariff petition	E*G/F	148.60	206.47

106. The matter has 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 para 49.6 of the SOR to the 2014 Tariff Regulations, which is extracted as follows:

“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...”

107. Further, the escalation rates considered in the O&M expense norms under the 2014 Tariff Regulations 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.

Impact of wage revision

108. The Petitioner has claimed an amount of Rs.4700.18 lakh (Rs.29.80 lakh in 2015-16, Rs.1246.94 lakh in 2016-17, Rs.1504.31 lakh in 2017-18 and Rs.1919.14 lakh in 2018-19) as impact of wage revision in respect of employees of CISF and Kendriya Vidyalaya Staff from 1.1.2016 and the employees of the Petitioner posted in the generating station, with effect from 1.1.2017. However, it is noticed that the said claim of the Petitioner includes impact on account of the payment of additional PRP/ ex-gratia to its employee's consequent upon wage revision. As such, as per consistent methodology adopted by the Commission, 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 stands reduced to Rs.4201.96 lakh with the following year-wise break-up:

	<i>(Rs. in lakh)</i>				
	2015-16	2016-17	2017-18	2018-19	Total
Wage revision impact claimed excluding PRP/ ex-gratia	29.80	1246.94	1405.24	1519.98	4201.96

109. The Petitioner vide its affidavit dated 4.6.2021 has submitted the following:

(a) Comparative table indicating the actual O&M expenses incurred at this generating station versus the normative O&M expenses allowed for the 2014-19 tariff period for the whole generating station (i.e. all Stages of FGUTPS);

(b) Actual impact of pay revision duly certified by Auditor, Expenses after comparing salaries wages before and after pay revision; and

(c) Detailed break-up of the actual O&M expenses booked by the Petitioner on gross basis;

110. The Respondent, UPPCL has submitted that the Petitioner has not placed any facts or figures to substantiate its claim that the O&M expense norms are inadequate or



insufficient after factoring in the pay revision. It has also submitted that the Petitioner has claimed incremental impact of pay revision, which is Rs.4700 lakh and not the 'balance amount' as required under Para 16 of Statement of Objects and Reasons (SOR) to the 2014 Tariff Regulations. Hence, the Respondent has submitted that the claim of Petitioner towards incremental expenditure on account of pay revision is not maintainable and should be rejected. In response, the Petitioner has clarified that the Commission while fixing the O & M expense norms under the 2014 Tariff Regulations, has considered the basic salaries and wages, but did not consider pay revision, since the said expenditure was notified, after notification of the 2014 Tariff Regulations. The Petitioner has stated that the increase claimed is a direct result of the implementation of the 7th Pay Commission recommendations and the decision of the Government of India communicated vide Office Memorandum (OM) of DPE dated 3.8.2017 with regard to recommendation of the 3rd Pay Revision Committee for CPSUs. The Petitioner has referred to the National Tariff Policy and submitted that once normative level of operating parameters are specified, the same cannot be reduced/ tightened to lower of normative and actuals and hence, if the Commission were to penalize the Petitioner for operating in an efficient manner, by reducing its recovery of wage revision, then the same would effectively lead to disincentivising efficient performance.

111. The Petitioner vide its affidavit dated 4.6.2021 has furnished the actual O&M expenses for Stage-I, Stage-II and Stage-III of the generating station for the 2014-19 tariff period, along with the Wage revision impact (excluding PRP and ex-gratia) for the generating station as shown below:

(Rs. in lakh)		
Year	Actual O&M expenses for Rihand STPS (excluding water charges & Capital Spares)	Wage Revision impact claimed for Rihand STPS- Stage-II excluding PRP/Ex-gratia
2014-15	48738.63	0.00
2015-16	55519.27	29.80
2016-17	66699.02	1246.94



Year	Actual O&M expenses for Rihand STPS (excluding water charges & Capital Spares)	Wage Revision impact claimed for Rihand STPS- Stage-II excluding PRP/Ex-gratia
2017-18	62620.94	1405.24
2018-19	62614.07	1519.98
Total	296191.93	4201.96

112. 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 Statement of Object and Reasons (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 SOR is extracted as follows:

*"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 macroeconomics 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.**"*

113. The methodology indicated in the SOR above suggests a comparison of the normative O&M expenses with the actual O&M expenses, on a 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 expenses 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 they put departmental restrictions and try to bring the expenditure for the next year below the norms.

114. As such, 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 whether 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.

115. The matter has been examined on the basis of the submissions of the parties and the documents available on record. The Petitioner has furnished the detailed break-up of the actual O&M expenses incurred during the 2014-19 tariff period for combined stages i.e. Stage-I and II and III of the generating station (3000 MW). It is noticed that the total O&M expenses incurred is more than the normative O&M expenses recovered during each year of the 2014-19 tariff period. The impact of the wage revision could not be factored by the Commission while framing the O&M expenses 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 relevant provisions of SOR of the 2014 Tariff Regulations, the approach followed for arriving at the allowable impact of pay revision is given in the subsequent paragraphs.

116. First step is to compare the normative O&M expenses with the actual O&M expenses 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 fees, 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 expenses norms for the 2014-19 tariff period, have been excluded from the yearly actual O&M expenses of the generating station as well as corporate centre. Having brought the normative O&M expenses and actual O&M expenses at same level, if normative O&M expenses for the period 2015-19 are higher than actual O&M expenses (normalized) for the same period, the impact of wage revision (excluding PRP and ex-gratia) as claimed for the 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 less 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.

117. In this regard, the details as furnished by the Petitioner for actual O&M expenses for Stage-I, Stage-II and Stage-III of the generating station (3000 MW) and wage revision impact (excluding PRP and ex-gratia) for Stage-II 1000 MW of the generating station are as follows:



(Rs. in lakh)

	2015-16	2016-17	2017-18	2018-19	Total
Actual O&M expenditure (normalized) for Rihand STPS (Combined for Stage-I, Stage-II and Stage-III) (A)	49372.43	62524.16	57185.49	56404.15	225486.23
Actual O&M expenditure (normalized) for Rihand STPS Stage-II prorated based on capacity (B)	16457.48	20841.39	19061.83	18801.38	75162.08
Normative O&M Expenses for Rihand STPS Stage-II (C)	17010.00	18080.00	19220.00	20430.00	74740.00
Under-recovery (D) = [(B) -(C)]	(-) 552.52	2761.39	(-) 158.17	(-) 1628.62	422.08
Wage revision impact claimed excluding PRP/ex-gratia (E)	29.80	1246.94	1405.24	1519.98	4201.96

118. As stated, for like to like comparison of the actual O&M expenses and normative O&M expenses, the expenditure against O&M expenses sub-heads as discussed above, has been excluded from the actual O&M expenses to arrive at the actual O&M expenses (normalized) for the combined Stage-I, Stage-II and Stage-III of the generating station (3000 MW). Accordingly, the following table portrays the comparison of normative O&M expenses versus the actual O&M expenses (normalized) along with wage revision impact claimed by the Petitioner for the generating station (Stage-III 1000 MW) for period 2015-19 (on combined basis) commensurate with the wage revision claim being spread over these four years:

(Rs. in lakh)

Sl. No.		2015-16	2016-17	2017-18	2018-19	Total
1	Actual O&M expenditure (normalized) for Rihand STPS (Combined for stage-I, Stage-II and Stage-III) (a)	49372.43	62524.16	57185.49	56404.15	225486.23
2	Actual O&M expenditure (normalized) for Rihand STPS Stage -II prorated based on capacity (b)	16457.48	20841.39	19061.83	18801.38	75162.08
3	Normative O&M Expenses for Rihand STPS Stage -II (c)	17010.00	18080.00	19220.00	20430.00	74740.00

Sl. No.		2015-16	2016-17	2017-18	2018-19	Total
4	Under-recovery (d) = (c)-(b)	(-) 552.52	2761.39	(-) 158.17	(-) 1628.62	422.08
5	Wage revision impact claimed excluding PRP / ex-gratia	29.80	1246.94	1405.24	1519.98	4201.96
6	Wage revision impact allowed excluding PRP/ ex-gratia	29.80	392.28	0	0	422.08

119. It is observed that for the period 2015-19, the normative O&M expenses is lesser than the actual O&M expenses (normalized) incurred and the under recovery is to the tune of Rs.422.08 lakh, which also includes the under recovery of Rs.4201.96 lakh due to wage revision impact. As such, in terms of methodology as discussed above, the wage revision impact (excluding PRP/incentive) of Rs.422.08 lakh is allowable for the generating station.

120. Accordingly, we, in exercise of the Power under Regulation 54 of the 2014 Tariff Regulations, relax Regulation 29(1) of the 2014 Tariff Regulations, and allow the reimbursement of the wage revision impact amounting to Rs.422.08 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 during 2022-23. 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.

121. Based on the above discussions, the total annualized O&M expenses allowed for the 2014-19 tariff period in respect of the generating station is summarized as



follows:

(Rs. in lakh)

		2014-15	2015-16	2016-17	2017-18	2018-19
Installed Capacity (MW) (A)		1000	1000	1000	1000	1000
O&M Expenses under Regulation 29(1) (in Rs. lakh / MW) (B)		16.00	17.01	18.08	19.22	20.43
Total O&M Expenses (in Rs. lakh) (C) = [(A)*(B)]	Claimed	16000.00	17010.00	18080.00	19220.00	20430.00
	Approved	16000.00	17010.00	18080.00	19220.00	20430.00
Water Charges (in Rs. lakh) (D)	Claimed	423.85	420.80	420.70	423.85	434.30
	Approved	423.85	420.80	420.70	423.85	434.30
Capital Spares Consumed (in Rs. lakh) (E)	Claimed	200.28	368.03	264.86	298.06	322.32
	Approved	178.18	329.98	231.90	107.16	62.88
Total O&M Expenses as allowed (including Water Charges and Capital Spares Consumed) (F) = (C+D+E)	Claimed	16624.13	17798.83	18765.56	19941.91	21186.62
	Approved	16602.03	17760.78	18732.60	19751.01	20927.18
Additional O&M Expenditure						
Impact of Wage Revision (in Rs. lakh) (G)	Claimed	0.00	29.80	1246.94	1504.32	1919.13
	Approved	0.00	29.80	392.28	0.00	0.00
Impact of GST (in Rs. lakh) (H)	Claimed	0.00	0.00	0.00	148.60	206.47
	Approved	0.00	0.00	0.00	0.00	0.00
Sub Total Additional O&M Expenditure (I) = (G+H)	Claimed	0.00	29.80	1246.94	1652.92	2125.60
	Approved	0.00	29.80	392.28	0.00	0.00
Total O&M Expenses (in Rs. Lakh) (J) = (F+I)	Claimed	16624.13	17828.63	20012.50	21594.83	23312.22
	Approved	16602.03	17790.58	19124.88	19751.01	20927.18

Operational Norms

Normative Annual Plant Availability Factor

122. The Normative Annual Plant Availability Factor of 83% for 2014-15 to 2016-17 and 85% for 2017-18 and 2018-19, as approved by order dated 1.12.2016 in Petition No. 318/GT/2014 in accordance with the provisions of Regulation 36 (A) of the 2014 Tariff Regulations, is allowed.

Auxiliary Energy Consumption

123. The Normative Auxiliary Energy Consumption of 5.75% for 2014-15 to 2018-19, as approved by order dated 1.12.2016 in Petition No. 318/GT/2014 in accordance with the provisions of Regulation 36 (E)(a)(ii) of the 2014 Tariff Regulations is allowed.

Station Heat Rate

124. The Gross Station Heat Rate of 2375.00 Kcal/ kWh as approved by order dated

1.12.2016 in Petition No. 318/GT/2014, in accordance with the provisions of Regulation 36 (C) of the 2014 Tariff Regulations has been allowed.

Interest on working capital

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

“28. Interest on Working Capital:

(1) The working capital shall cover:

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

(i) Cost of coal or lignite and limestone towards stock if applicable for 15 days for pit-head generating stations and 30 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;

(ii) Cost of coal or lignite and limestone for 30 days for generation corresponding to the normative annual plant availability factor;

(iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor and in case of use of more than one secondary fuel oil cost of fuel oil stock for the main secondary fuel oil;

(iv) Maintenance spares @ 20% of operation and maintenance expenses specified in regulation 29;

(v) Receivables equivalent to two months of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor; and

(vi) Operation and maintenance expenses for one month.

(2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this regulation shall be based on the landed cost incurred (taking into account normative transit and handling losses) by the generating company and gross calorific value of the fuel as per actual for the three months preceding the first month for which tariff is to be determined and no fuel price escalation shall be provided during the tariff period.

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

(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency.”

Fuel Components and Energy Charges in working capital

126. 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.

127. 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.

128. 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.”

129. 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 Hon'ble High Court of Delhi (W.P. No.1641/2014-NTPC v CERC) challenged 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 Hon'ble 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 Hon'ble 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.”

130. 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 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.

131. In Petition No. 318/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 order dated 1.12.2016 in Petition No.318/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.

132. The Petitioner, in this petition has claimed the fuel related components of working capital based on GCV of coal as 3893.20 Kcal/kg (as indicated at Form-13F) consequent to the order of the Commission dated 1.12.2016 in Petition No. 318/GT/2014. This "as received" GCV of 3893.20 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 as follows:

	(Rs. in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of Coal towards stock (15 days)	3434.40	3434.40	3434.40	3517.16	3517.16
Cost of Coal towards Generation (30 days)	6868.80	6868.80	6868.80	7034.31	7034.31
Cost of Secondary fuel oil 2 months	323.22	324.11	323.22	331.01	331.01

133. 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.

134. 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 was uploaded in the website of the Petitioner and shared with the beneficiaries, the Petitioner vide affidavit dated 4.6.2021, 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 %) (C)	Weighted Average GCV of coal received (TM basis) (kcal/kg) (D)=[A*(1-B%)/(1-C%)]
1	January 2014	3826.42	8.71	4.72	3666.18
2	February 2014	3773.94	12.08	4.39	3470.40
3	March 2014	3851.40	8.12	3.91	3682.66
	Average				3606.41

135. The submissions have been considered. As discussed above, the Petitioner in Form-13 F 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.



136. 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 tariff 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. 318/GT/2014. In the present 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.

137. 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 discussed 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."

138. 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 furnished 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.

139. 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 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.

140. The Petitioner has calculated GCV of 3893.20 kcal/kg, which represents the simple average of GCV of the 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 earlier works out to 3607.18 kcal/kg.

141. 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 3607.18 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.

142. Based on the above discussion, the cost of fuel components in working capital is worked out and allowed as follows:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of Coal towards stock (15 days)	3016.08	3016.08	3016.08	3088.76	3088.76
Cost of Coal towards generation (30 days)	6032.17	6032.17	6032.17	6177.52	6177.52
Cost of Secondary fuel oil 2 months	323.02	323.90	323.02	330.80	330.80

143. The cost of coal towards stock and generation allowed for the 2014-19 tariff period is less than the cost claimed by the Petitioner for the following reasons:

- a) The Petitioner has considered average GCV of coal for 30 months as 3793.20 kCal/kWh (including adjustment of GCV of 100 kCal/kg) and weighted average price of coal as 1839.74 Rs/MT while the Commission has considered the same as 3607.18 kCal/kg and 1536.44 Rs/MT respectively. Storage loss of 100 kCal/kg as considered by the Petitioner has not been considered as there is no such provision in 2014 Tariff Regulations.
- b) The Normative Transit and Handling loss of as considered by the Petitioner is beyond the permissible limit for pit head stations. Accordingly, Normative Transit and Handling loss of 0.2% has been considered for the calculation of working capital requirements.

Energy Charge Rate (ECR) for calculating working capital

144. 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

145. The Petitioner has claimed Energy Charge Rate (ECR) ex-bus of 124.78 Paise/kWh for the generating station based on the landed cost of coal during preceding three months, GCV of coal [on 'as received' basis for average of 30 months] along with the storage loss of 100 kCal/kWh} & GCV and price of Oil procured and burnt for the preceding three months of 2014-19 tariff period for the generating station. Since these claims of the Petitioner has not be allowed as stated above, the allowable ECR, based on the operational norms as specified under the 2014 Tariff Regulations and on weighted average of 'as received' GCV of 3607.18 kcal/kg is worked out as follows:

	Unit	2014-19
Capacity	MW	1000.00
Gross Station Heat Rate	Kcal/kWh	2375.000
Auxiliary Energy Consumption	%	5.75%
Weighted average GCV of oil (As received)	Kcal/lit	10353.45
Weighted average GCV of coal (As received)	Kcal/kg	3607.18
Weighted average price of oil	Rs./KL	53312.05
Weighted average price of Coal	Rs./MT	1536.44
Rate of energy charge ex-bus	Rs./kWh	1.099

Working Capital for Maintenance Spares

146. The Petitioner in Form-13B has claimed maintenance spares in the working capital shown in the table as follows:



(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
3324.83	3565.73	4002.50	4318.97	4662.44

147. Regulation 28(1)(a)(iv) of the 2014 Tariff Regulations provide for maintenance spares @ 20% of the operation & maintenance expenses. As specified in Regulation 29(2) of the 2014 Tariff Regulations, the cost of maintenance spares @20% of the operation & maintenance expenses including water charges and cost of capital spares consumed, allowed are as follows:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
3320.41	3552.16	3746.52	3950.20	4185.44

Working Capital for Receivables

148. Receivables equivalent to two months of capacity charge and energy charge has been worked out duly taking into account mode of operation of the generating station on secondary fuel, as follows:

(Rs.in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Variable Charges - for two months (A)	12551.92	12586.30	12551.92	12854.37	12854.37
Fixed Charges – for two months (B)	10004.15	9995.84	9946.89	9922.71	8341.29
Total (C) = (A+B)	22556.06	22582.14	22498.80	22777.08	21195.66

Working Capital for O & M Expenses (1 month)

149. O&M expenses for 1 month claimed by the Petitioner in Form-13B for the purpose of working capital is shown in the table as follows:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
1385.34	1485.72	1667.71	1799.57	1942.68

150. Regulation 28(a)(vi) of the 2014 Tariff Regulations provides for O&M expenses for one month for coal-based generating station as a part of working capital. The one month O&M expenses, as allowed for tariff purpose is shown in table as follows:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
1383.50	1480.07	1561.05	1645.92	1743.93

151. The difference in the claimed O&M expenses for 1 month and maintenance

spares and the O&M expenses for 1 month and cost of maintenance spares allowed as above is due to the fact that, while the Petitioner's claim is based on the O&M expenses inclusive of the expenditure on GST and impact of wage revision, these components have not been included in our calculations towards working capital requirements.

Rate of interest on working capital

152. In terms of clause (3) of Regulation 28 of the 2014 Tariff Regulations, the rate of interest on working capital has been considered as 13.50% (Bank rate 10.00 + 350 bps).

153. Accordingly, Interest on working capital has been computed as follows:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Working capital for Cost of Coal/Lignite for Stock (A)	3016.08	3016.08	3016.08	3088.76	3088.76
Working capital for Cost of Coal/Lignite for Generation (B)	6032.17	6032.17	6032.17	6177.52	6177.52
Working capital for Cost of oil for 2 months (C)	323.02	323.90	323.02	330.80	330.80
Working capital for Fuel Cost (D)	0.00	0.00	0.00	0.00	0.00
Working capital for Liquid Fuel Stock (E)	0.00	0.00	0.00	0.00	0.00
Working capital for O & M expenses - 1 month (F)	1383.50	1480.07	1561.05	1645.92	1743.93
Working capital for Maintenance Spares - 20% of O&M (G)	3320.41	3552.16	3746.52	3950.20	4185.44
Working capital for Receivables - 2 months (H)	22556.06	22582.14	22498.80	22777.08	21195.66
Total Working Capital (I) = (A+B+C+D+E+F+G+H)	36631.24	36986.52	37177.65	37970.28	36722.11
Rate of Interest (J)	13.50%	13.50%	13.50%	13.50%	13.50%
Total Interest on Working capital (K) = (I)*(J)	4945.22	4993.18	5018.98	5125.99	4957.49

Annual Fixed Charges

154. Based on the above, the annual fixed charges approved for the 2014-19 tariff period in respect of the generating station is summarized as follows:



(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	15516.10	15515.51	15500.39	15475.63	5719.18
Interest on Loan	5588.01	4242.34	2963.47	1729.82	920.81
Return on Equity	17373.53	17463.21	17465.87	17453.79	17523.08
Interest on Working Capital	4945.22	4993.18	5018.98	5125.99	4957.49
O&M Expenses	16602.03	17760.78	18732.60	19751.01	20927.18
Sub-total	60024.89	59975.02	59681.32	59536.23	50047.74
Compensatory Allowance	0.00	0.00	200.00	200.00	200.00
Total	60024.89	59975.02	59881.32	59736.23	50247.74

155. The difference between the annual fixed charges recovered by the Petitioner in order dated 1.12.2016 in Petition No. 318/GT/2014 and the annual fixed charges determined by this order shall be adjusted in terms of the clauses (13) of Regulation 8 of the 2014 Tariff Regulations.

156. Annexure-I given below shall form part of the order.

157. Petition No. 112/GT/2020 stands disposed of in terms of the above.

Sd/-
(Pravas Kumar Singh)
Member

Sd/-
(I.S. Jha)
Member

Sd/-
(P.K. Pujari)
Chairperson

Annexure-I

Depreciation for the 2014-19 Tariff Period

(Rs. in lakh)

SI No	Description	Rate of Dep (%)	GB as on 01.04.2014	Depreciation	GB as on 01.04.2015	Depreciation	GB as on 01.04.2016	Depreciation	GB as on 01.04.2017	Depreciation	GB as on 01.0.2018	Depreciation
1	Freehold Land	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Leasehold Land	3.34%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Roads, bridges, culverts & helipad	3.34%	924.00	30.86	924.00	30.86	924.00	30.86	924.00	30.86	924.00	30.86
4	Main Plant Buildings	3.34%	742.50	24.80	742.50	24.80	742.50	24.80	742.50	24.80	742.50	24.80
5	Other Buildings	3.34%	6942.00	231.86	6947.95	232.06	6948.91	232.09	6947.73	232.05	6947.73	232.05
6	Temporary erection	100.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	Water supply, drainage & sewerage system	5.28%	1292.50	68.24	1292.50	68.24	1292.50	68.24	1292.50	68.24	1292.50	68.24
8	MGR track and signalling system	5.28%	4490.00	237.07	4489.94	237.07	4530.80	239.23	4530.80	239.23	4530.80	239.23
9	Railway siding	5.28%	34.50	1.82	34.50	1.82	34.50	1.82	34.50	1.82	34.50	1.82
10	Earth dam reservoir	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	Plant and machinery	5.28%	286694.50	15137.47	289278.15	15273.89	289549.40	15288.21	289765.81	15299.63	289950.48	15309.39
12	Furniture and fixtures	6.33%	1015.50	64.28	1011.97	64.06	1011.97	64.06	1007.92	63.80	1007.92	63.80
13	Other Office Equipments	6.33%	388.50	24.59	387.75	24.54	386.11	24.44	385.68	24.41	382.90	24.24
14	EDP, WP machines & SATCOM equipment	15.00%	570.50	85.58	570.50	85.58	436.08	65.41	181.67	27.25	135.43	20.31
15	Vehicles including speedboats	9.50%	7.00	0.67	7.00	0.67	7.00	0.67	6.90	0.66	6.90	0.66
16	Construction equipment	5.28%	616.50	32.55	616.50	32.55	616.50	32.55	616.50	32.55	616.50	32.55
17	Electrical installations	5.28%	1183.50	62.49	1183.52	62.49	1183.53	62.49	1183.53	62.49	1183.53	62.49
18	Communication equipment	6.33%	334.50	21.17	331.56	20.99	460.11	29.12	453.41	28.70	451.37	28.57
19	Hospital equipment	5.28%	92.73	4.90	92.73	4.90	92.73	4.90	92.73	4.90	92.59	4.89
20	Laboratory and workshop equipment	5.28%	61.77	3.26	61.77	3.26	61.77	3.26	61.77	3.26	61.77	3.26
21	Leased assets - Vehicles	9.50%	6.00	0.57	-0.10	-0.01	-0.10	-0.01	-0.10	-0.01	-0.10	-0.01
22	Software	15.00%	137.00	20.55	137.00	20.55	137.00	20.55	137.00	20.55	137.00	20.55
23	Assets Not Owned By company	5.28%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	Unserviceable/Obsolete assets	5.28%	0.00	0.00	0.00	0.00	0.00	0.00	43.03	2.27	43.03	2.27
Total			305533.49	16052.74	308109.72	16188.31	308415.31	16192.70	308407.87	16167.47	308541.34	16169.98
	Weighted Average Depreciation			5.2540%		5.2522%		5.2463%		5.2415%		5.2408%

*Calculated as per rate of depreciation in Appendix-II of the 2014 Tariff Regulations.

