

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 301/GT/2020

Coram:

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

Date of Order: 13th May, 2022

In the matter of:

Petition for revision of tariff of Jhanor Gandhar GPS for the period from 1.4.2014 to 31.3.2019, after truing up.

And

In the matter of:

NTPC Limited,
NTPC Bhawan,
Core-7, Scope Complex,
7, Institutional Area, Lodhi Road,
New Delhi – 110 003

...Petitioner

Vs

1. Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Vidyut Nagar,
Jabalpur 482 008
2. Maharashtra State Electricity Distribution Company Limited,
Prakashgad, Bandra (East),
Mumbai 400 051
3. Gujarat Urja Vikas Nigam Limited,
Vidyut Bhavan, Race Course,
Vadodara – 390 007
4. Chattisgarh State Power Distribution Company Limited,
P.O. Sundar Nagar, Danganiya,
Raipur – 492013
5. Electricity Department of Goa,
Vidyut Bhawan, Panaji,
Goa



6. DNH Power Distribution Corporation Limited,
UT of DNH,
Silvassa-396230

7. Electricity Department,
Administration of Daman & Diu,
Daman-396210

...Respondents

Parties Present:

Shri Venkatesh, Advocate, NTPC
Shri Ashutosh K. Srivastava, Advocate, NTPC
Shri Suhael Buttan, Advocate, NTPC
Shri Anant Singh Ubeja, Advocate, NTPC.
Shri Abhishek Nangia, Advocate, NTPC
Shri Nihal Bhardwaj, Advocate, NTPC
Ms. Simran Saluja, Advocate, NTPC
Shri Jayant Bajaj, Advocate, NTPC
Ms. Mehak Verma, Advocate, NTPC
Shri Jatin Ghuliani, Advocate, NTPC
Shri A.S Pandey, NTPC.
Shri Parimal Piyush, NTPC
Shri Ravindra Khare, MPPMCL

ORDER

This petition has been filed by the Petitioner NTPC limited, for truing up of tariff of Jhanor Gandhar GPS (hereinafter referred to as 'the generating station') for the 2014-19 tariff period in terms of Regulation 8 (1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 hereinafter referred to as "the 2014 Tariff Regulations").

2. The generating station with a capacity of 657.39 MW comprises of three units of 144.30 MW each and one unit of 224.49 MW. The dates of commercial operation of the units of the generating station are as under:

	Capacity (MW)	Actual COD
GT Unit-I	144.30	1.3.1995
GT Unit-II	144.30	1.7.1995
GT Unit-III	144.30	1.3.1995
ST Unit-IV/Generating Station	224.49	1.11.1995



3. The Commission vide its order dated 30.3.2017 in Petition No. 326/GT/2014 had revised the tariff of the generating station after truing up exercise for the 2009-14 tariff period. Thereafter, by order dated 10.4.2017 In Petition No.325/GT/2014, the Commission had approved the tariff of the generating station for the 2014-19 tariff period. Subsequently, by order dated 10.10.2017 in Review Petition No. 24/RP/2017 (in Petition No.326/GT/2014), the tariff determined by order dated 30.3.2017 for the 2009-14 tariff period was revised, after rectification of certain errors. Pursuant to this, vide order dated 19.2.2019 in Petition No. 32/RP/2017 (in Petition No. 325/GT/2014), the tariff approved by order dated 10.4.2017 for the 2014-19 tariff period, was revised after correction of certain errors. Accordingly, the capital cost and the annual fixed charges approved by order dated 19.2.2019 are as under:

Capital Cost allowed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	253004.95	264910.74	280043.05	283423.54	283423.54
Add: Projected Additional Capital Expenditure allowed	11905.79	15132.31	3380.49	0.00	0.00
Closing Capital Cost	264910.74	280043.05	283423.54	283423.54	283423.54
Average Capital cost	258957.85	272476.90	281733.30	283423.54	283423.54

Annual Fixed Charges allowed

(Rs.in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	3726.94	4596.98	5086.05	5378.33	5378.33
Interest on Loan	1570.99	2323.03	2588.59	2134.59	1595.6
Return on Equity	24634.73	25553.26	26100.45	26200.37	26200.37
O&M Expenses	10180.19	10784.99	11429.23	12112.92	12842.62
Interest on Working Capital	5349.87	5465.01	5533.26	5583.77	5626.79
Annual Fixed Charges	45462.73	48723.27	50737.57	51409.97	51643.71

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

“8. Truing up

(1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2019, as admitted by the Commission after prudence check at the time of truing up:

Provided that the generating company or the transmission licensee, as the case may be, shall make an application for interim truing up of capital expenditure including additional capital expenditure in FY 2016-17.”



5. The Petitioner's claim for capital cost and annual fixed charges for the 2014-19 tariff period are as under:

Capital cost claimed

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	253017.08	266046.19	283640.20	286076.87	286077.45
Add: Addition during the year / period	18088.49	25910.59	3901.92	0.57	1922.07
Less: Decapitalisation during the year /period	5274.78	8350.19	1558.51	0.00	0.00
Less: Reversal during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Discharges during the year /period	215.40	33.60	93.26	0.00	21.93
Closing Capital Cost	266046.19	283640.20	286076.87	286077.45	288021.45
Average Capital Cost	259531.64	274843.20	284858.54	286077.16	287049.45

Annual Fixed Charges claimed

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	4337.80	5512.28	5353.12	5465.13	5564.62
Interest on Loan	1646.71	2463.79	2732.98	2205.12	1948.72
Return on Equity	24669.75	25694.44	26286.53	26358.57	26485.76
Interest on Working Capital	5491.96	5615.29	5808.54	5876.97	5884.41
O&M Expenses	10258.54	10834.37	12428.08	13154.72	13038.11
Total	46404.76	50120.17	52609.25	53060.51	52921.61
Additional O&M expenses					
Impact of Pay Revision	0.00	37.04	871.41	1,073.90	1,249.46
Impact of GST	0.00	0.00	0.00	76.00	124.00
Total Annual Fixed Charges	46404.76	50157.21	53480.66	54210.40	54295.07

6. The Respondent No.1, MPPMCL has filed its reply vide affidavit dated 8.10.2020 and the Petitioner vide affidavit dated 21.12.2020 has filed its rejoinder to the said reply. The Petitioner has also filed certain additional information vide affidavits dated 9.12.2020 and 29.6.2021 respectively. This Petition was heard along with Petition No.420/GT/2020 (tariff of generating station for 2019-24) on 10.8.2021, through virtual conferencing and the Commission after hearing the parties, reserved its order in these petitions. Taking into consideration the submissions of the parties and the documents available on record, we proceed to examine the claims of the Petitioner, in this petition, on prudence check, as stated in the subsequent paragraphs.



Capital Cost

7. 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*
- (a) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15.”*

8. It is observed that the Commission vide its order dated 30.3.2017 in Petition No.326/GT/2014 had approved the closing capital cost of Rs.253004.95 lakh, as on 31.3.2014. Subsequently, by order dated 10.10.2017 in Petition No. 24/RP/2017 (in Petition No. 326/GT/2014) relating to truing-up of tariff of the generating station for the 2009-14 tariff period, the closing capital cost as on 31.3.2014 was revised to Rs.253017.08 lakh. As such, the Petitioner has claimed the capital cost of Rs. 253017.08 lakh as on 1.4.2014 in the present petition (even though this capital cost of Rs.253017.08 lakh as on 1.4.2014 was inadvertently not considered while revising the capital cost of the generating station for the period 2014-19 vide its order dated 19.2.2019 in Review Petition No. 32/RP/2017 (in Petition No. 325/GT/2014). Accordingly, the capital cost of Rs.253017.08 lakh as on 1.4.2014, has been considered as the opening capital cost, for the purpose of truing-up of tariff for the 2014-19 tariff period, in accordance with Regulation 9(3) of the 2014 Tariff Regulations.

Additional Capital Expenditure

9. Regulations 14(3) of the 2014 Tariff Regulations provides as under:

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

- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;*



- (ii) Change in law or compliance of any existing law;
- (iii) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies or 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;

10. Regulation 15 of 2014 Tariff Regulations provides as under:

"15. Renovation and Modernisation: (1) The generating company or the transmission licensee, as the case may be, for meeting the expenditure on renovation and modernization (R&M) for the purpose of extension of life beyond the originally recognised useful life for the purpose of tariff of the generating station or a unit thereof or the transmission system or an element thereof, shall make an application before the Commission for approval of the proposal with a Detailed Project Report giving complete scope, justification, cost-benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level, estimated completion cost including foreign exchange component, if any, and any other information considered to be relevant by the generating company or the transmission licensee."

11. The projected additional capital expenditure allowed for the 2014-19 tariff period by order dated 19.2.2019 in Petition No. 32/RP/2017 in Petition No.325/GT/2014, is summarized below:

	<i>(Rs. in lakh)</i>			
	2014-15	2015-16	2016-17	2017-18
Total (R&M) GT 1	19139.57	0.00	0.00	0.00
Total (R&M) GT 2	0.00	25441.50	0.00	0.00
Total (R&M) GT 3	0.00	0.00	4939.00	0.00
Total De-capitalization (GT 1)	(-) 5274.78	0.00	(-) 1558.51	0.00
Total De-capitalization (GT 2)	0.00	(-) 8350.19	0.00	0.00
Deductions on account of capital spares	(-)1959.00	(-)1959.00	0.00	0.00
Net Additional Capital Expenditure	11905.79	15132.31	3380.49	0.00

12. The Petitioner, vide Form-9A, has submitted the actual additional capital



expenditure (on cash basis) for the 2014-19 tariff period, as under:

(Rs. in lakh)

Sl. No.	Head of Work/ Equipment	Additional Capital Expenditure claimed				
		2014-15	2015-16	2016-17	2017-18	2018-19
A	Additional capital expenditure towards allowed works	18075.61	25800.62	3840.54	0.57	0.58
i	Land compensation	0.00	0.00	0.00	0.57	0.58
ii	R& M of GT 1, 2 and 3	18075.61	25800.62	3840.54	0.00	0.00
B	New Claims	12.89	109.97	61.38	0.00	1921.49
I	X-ray Baggage Inspection System	12.89	0.00	0.00	0.00	0.00
li	LED Street Lightning	0.00	24.03	42.36	0.00	114.82
lii	Rooftop Solar	0.00	53.35	19.20	0.00	0.00
lv	Environment Quality Monitoring System (EQMS)	0.00	32.59	(-)0.18	0.00	0.00
V	Inert Gas Fire Extinguishing system	0.00	0.00	0.00	0.00	150.33
Vi	Rainwater Harvesting work in Admin. Building	0.00	0.00	0.00	0.00	7.50
Vii	Reverse Osmosis (RO) Plant	0.00	0.00	0.00	0.00	1644.41
Viii	CCTV server upgradation	0.00	0.00	0.00	0.00	4.43
	Total Additional capital expenditure (A+B)	18088.49	25910.59	3901.92	0.57	1922.07
C	Decapitalization against R&M works	(-) 5274.78	(-) 8350.19	(-) 1558.51		
D	Net Additional capital expenditure claimed	12813.71	17560.40	2343.41	0.57	1922.07
E	Discharge of Liabilities claimed	215.40	33.60	93.26	0.00	21.93
	Total Additional capital expenditure (A+B+C+D+E)	13029.11	17594.00	2436.66	0.57	1944.00

13. We now examine the actual additional capital expenditure claimed by the Petitioner as under:

A. Additional capital expenditure towards allowed works

a) Land compensation

14. The Petitioner has claimed additional capital expenditure of Rs.0.57 lakh in 2017-18 and Rs.0.58 lakh in 2018-19, on cash basis, for Land compensation under Regulation 14(3)(i) of the 2014 Tariff Regulations. In justification for the same, the Petitioner has submitted that as per the final judgment dated 6.1.2018 of the Principal Senior Civil Judge, Bharuch in LAR No. 2384/97, the Petitioner has paid



compensation to landowners amounting to Rs.0.57 lakh in 2017-18 and Rs.0.58 lakh in 2018-19, after final settlement of certain cases. The Petitioner has submitted that since the land compensation paid is in terms of the judgment of the Court, the additional capital expenditure may be allowed for the purpose of tariff. Since the additional capital expenditure incurred by the Petitioner is towards payment of land compensation in compliance to the final judgment dated 6.1.2018 of the Principal Senior Civil Judge, Bharuch in LAR No. 2384/97, we allow the claim of the Petitioner, under Regulation 14(3)(i) of the 2014 Tariff Regulations.

b) R&M of GT Unit 1, 2 and 3

15. The Petitioner has claimed the following additional capital expenditure towards R&M of GT Units 1, 2 and 3.

		<i>(Rs. in lakh)</i>				
	Regulation	2014-15	2015-16	2016-17	2017-18	2018-19
A1	R&M Scheme wise & GT wise capitalization					
A	GT-1 and ST	18069.28	879.27	0.00	0.00	0.00
1	R&M -Gas Turbine (HGP Components with custom duty) + Second Contract for installation	12077.25	0.00	0.00	0.00	0.00
2	Renovation of battery Bank for main plant and PLCC	87.70	0.00	0.00	0.00	0.00
3	Upgrading of Generation Relay Panel with numerical control relays	30.38	0.00	0.00	0.00	0.00
4	Generator Excitation System	33.18	0.00	0.00	0.00	0.00
5	Replacement of EA Bus I/o & Control Module in GT	182.95	0.00	0.00	0.00	0.00
6	Replacement of vibration monitoring, speed measuring & turbine supervisory instrumentation System for GTs,	102.95	0.00	0.00	0.00	0.00
	Regulation-15 read with Regulation 14(3)(vii)					



		Regulation	2014-15	2015-16	2016-17	2017-18	2018-19
	ST & Aux						
7	Balance works after R&M -Gas Turbine (HGP Components with custom duty) + Second Contract for installation		0.00	869.52	0.00	0.00	0.00
8	Balance works Generator Excitation System		0.00	9.75	0.00	0.00	0.00
9	R&M - of Gas Turbine (HGC Components)		1660.37	0.00	0.00	0.00	0.00
10	GT Rotor Refurbishment		3780.17	0.00	0.00	0.00	0.00
11	Renovation of battery Bank for main plant and PLCC		114.33	0.00	0.00	0.00	0.00
B	GT-2 and ST		0.00	24883.11	0.00	0.00	0.00
1	R&M -Gas Turbine (HGP Components with custom duty) + Second Contract for installation		0.00	24439.49	0.00	0.00	0.00
2	Upgrading of Generation Relay Panel with numerical control relays.		0.00	31.07	0.00	0.00	0.00
3	Generator Excitation System		0.00	33.18	0.00	0.00	0.00
4	Replacement of EA Bus I/o & Control Module		0.00	179.63	0.00	0.00	0.00
5	Replacement of vibration monitoring, speed measuring & turbine supervisory instrumentation System for GTs, ST & Aux	Regulation-15 read with Regulation 14(3)(vii)	0.00	155.66	0.00	0.00	0.00
6	Replacement of vibration monitoring, speed measuring & turbine supervisory instrumentation System for GTs, ST & Aux (GT-2)		0.00	39.57	0.00	0.00	0.00
7	Renovation of battery Bank for main plant and		0.00	4.49	0.00	0.00	0.00



		Regulation	2014-15	2015-16	2016-17	2017-18	2018-19
	PLCC (GT-2)						
C	GT-3		6.32	38.24	3840.54	0.00	0.00
1	R&M (Reconditioning of Rotor)	Regulation-15 read with Regulation 14(3)(vii)	0.00	0.00	3840.54	0.00	0.00
2	Replacement of vibration monitoring, speed measuring & turbine supervisory Instrumentation system for GTs, ST & Aux		6.32	0.00	0.00	0.00	0.00
3	Speed Monitoring System		0.00	38.24	0.00	0.00	0.00
	Total (A+B+C)		18075.61	25800.62	3840.54	0.00	0.00

2014-15: R&M of GT-1 & ST and GT-3

16. The Petitioner has claimed total additional capital expenditure of Rs.18075.61 lakh for R&M of GT-1 & ST, Replacement of Vibration monitoring, Speed measuring & Turbine supervisory Instrumentation system for GT-3. In justification for the same, the Petitioner has submitted that the Commission vide its order dated 10.4.2017 in Petition No. 325/GT/2014 had allowed the expenditure against R&M for GT-1 and ST in 2014-15. It has also submitted that GT-3 was put to use in 2013-14, after completion of R&M, and the expenditure against R&M for the same was allowed by the Commission vide order dated 30.3.2017 in Petition No. 326/GT/2014. The Petitioner has added that the capitalisation for some monitoring instruments pertaining to GT-3 for Rs.6.32 lakh, has also been claimed in 2014-15. Accordingly, the Petitioner has prayed that the additional expenditure claimed may be allowed under Regulation 15(3) read with Regulation 14(3)(vii) of the 2014 Tariff Regulations.

2015-16: R&M of GT-1 & ST and R&M of GT-2 & ST and GT-3

17. The Petitioner has claimed total additional capital expenditure of Rs.25800.62 lakh comprising of R&M of GT-1 & ST for Rs.879.27 lakh, R&M of GT-2 & ST for Rs.24883.11 lakh and Speed monitoring system for GT-3 for Rs.38.24 lakh. In



justification for the same, the Petitioner has submitted that the Commission vide order dated 30.3.2017 in Petition No. 326/GT/2014 and Order dated 10.4.2017 in Petition No. 325/GT/2014 had admitted these works against GT-wise R&M, as per their status of put to use. The Petitioner has submitted that in line with the same, the total expenditure incurred against R&M of GT-2 is claimed in 2015-16, after the machines are put to use. The Petitioner has also pointed out that tariff is being claimed in 2015-16 for additional expenditure for Replacement of vibration monitoring, speed measuring & turbine supervisory instrumentation system, Renovation of battery bank for main plant and PLCC are partial expenditure pertaining to R&M of GT-2, which are capitalised in books of account during 2014-15. The Petitioner has further submitted that GT-3 and GT-1 have already been put to use in 2013-14 and 2014-15 respectively, and accordingly tariff was allowed by the Commission. The Petitioner has stated that the additional capital expenditure towards Speed Monitoring System for GT-3 and the additional capital expenditure for HGP components with custom duty & generator excitation system for GT-1 are balance expenditure pertaining to peripheral systems of these GTs, which are completed and capitalised in 2015-16. Accordingly, the Petitioner has prayed that the additional expenditure claimed may be allowed under Regulation 15(3) read with Regulation 14(3)(vii) of the 2014 Tariff Regulations.

2016-17: R&M of GT-3

18. The Petitioner has claimed additional capital expenditure of Rs.3840.54 lakh towards R&M of GT-3 for Reconditioning of rotor. In justification for the same, the Petitioner has submitted that the additional capital expenditure against reconditioning of rotor for GT-3 was allowed by the Commission vide its order dated 19.2.2019 in Review Petition No. 32/RP/2017 in Petition No.325/GT/2014. Accordingly, the Petitioner has prayed to allow the expenditure in terms of Regulation 15(3) read with



Regulation 14(3)(vii) of the 2014 Tariff Regulations.

19. The Respondent has submitted that the Petitioner has mentioned that the additional capital expenditure against GT-1 was incurred in 2012-13. The Respondent has further submitted that the expenditure shall be restricted only to the amount as allowed in order dated 19.2.2019 in Review Petition No. 32/RP/2017. As regards replacement of EA Bus I/O and control module of GT-1 (2014-2016), the Respondent has submitted that the additional capital expenditure claimed in excess of Rs.60.60 lakh may not be allowed.

20. In response, the Petitioner has submitted that the additional capital expenditure claimed under renovation of battery bank for main and PLCC for GT-1 has been allowed in Review Petition No. 32/RP/2017 in Petition No. 325/GT/2014. As regards the request of the Respondent to restrict the amount to be allowed for this item, the Petitioner has submitted that the additional capital expenditure against the same had been allowed by order dated 19.2.2019 in Review Petition No. 32/RP/2017, which includes an amount of Rs.114.33 crore (capitalized in 2013-14) and Rs.67 lakh (projected for 2014-15). It has been further submitted that in Form-9A for 2014-15, both these expenses have been claimed with separate justifications, wherein the expenditure of Rs.114.33 crore pertaining to 2012-13 and projected expenditure of 2014-15 is being trued-up. However, the Respondent has wrongly aggregated them and stated that the complete expenditure pertains to 2012-13. The Petitioner has further submitted that the expenditure against Renovation of battery bank for main and PLCC for GT-1 had been allowed and the details regarding the said expenditure have been submitted in Form-9 in this Petition. As regards the replacement of EA bus I/O & control module of GT-1 (in 2014-15 and 2015-16), the Petitioner has submitted that the statement of Respondent is based on the amount allowed earlier pertaining to GT-



1 alone, but the total amount of Rs.179.63 lakh has been claimed for replacement of EA bus I/O & control module pertains to the expenditure for all three GTs, as this work is necessitated and planned for every GT. The Petitioner has also submitted that neither the expenses for these works for GT-2 and GT-3 has been separately claimed in the petition nor the description in Form-9A of 2015-16 shows that this claim only pertains to GT-1.

21. The matter has been considered. It is observed that the Petitioner has claimed the total expenditure towards R&M of GT's for Rs.47716.77 lakh (Rs.18075.61 lakh in 2014-15, Rs.25800.62 lakh in 2015-16 and Rs.3840.54 lakh in 2016-17), which is lower than the total additional expenditure towards R&M of GT's of Rs.49520.07 lakh (Rs.19139.57 lakh for 2014-15, Rs.25441.50 lakh for 2015-16 and Rs.4939.00 lakh for 2016-17) allowed on projected basis, in order dated 19.2.2019 in Petition No. 32/RP/2017 in Petition No.325/GT/2014. Further, the additional capital expenditure claimed by the Petitioner, is on actual basis, after the asset has been put to use. In this background and on prudence check, we allow the total R&M of GT's for Rs.47716.77 lakh (Rs.18075.61 lakh for 2014-15, Rs.25800.62 lakh for 2015-16 and Rs.3840.54 lakh for 2016-17) under Regulation 15(3) of the 2014 Tariff Regulations, along with corresponding undischarged liabilities of Rs.138.32 lakh for R&M of GT-1 [R&M - Gas Turbine (HGP Components with custom duty) + Second Contract for installation)] in 2014-15, Rs.74.95 lakh for R&M of GT-2 [R&M - Gas Turbine (HGP Components with custom duty) + Second Contract for installation)] in 2015-16 and Rs.23.96 lakh for R&M of GT-3 (reconditioning of rotor) in 2016-17.

c) R&M Package- Exchange Rate Variation (ERV)

22. The Petitioner has claimed adjustment of (-) Rs.38.68 lakh in 2014-15, on accrual basis, towards ERV for R&M Package. In justification, the Petitioner has



submitted that the same is towards the restatement of liability on account of exchange rate variation for the admitted work. In view of this, the restatement of liability on account of exchange rate variation for the admitted work is in order and is allowed.

B. New Claims

d) X-ray Baggage Inspection System

23. The Petitioner has claimed actual additional capital expenditure of Rs.12.89 lakh in 2014-15 for X-ray baggage inspection system under Regulation 14(3)(iii) of the 2014 Tariff Regulations. In justification, the Petitioner has submitted that considering the location of the generating station in the State of Gujarat, and the threat to the installations of power generation as per intelligence agencies from time to time, X-ray machine has been installed at the entry of the plant to enhance the security.

24. The Respondent, MPPMCL has submitted that the Petitioner has not furnished any supporting documents in support of the claim and therefore may be disallowed. In response, the Petitioner has submitted that in the order dated 27.7.2016 in Petition No. 321/GT/2014 the Commission had already considered a similar asset and had allowed the same towards higher safety and security. The Petitioner has pointed out the X-ray baggage has been installed in the generating station keeping in view the higher security and safety, based on intelligence report regarding the threat to industries in Gujarat.

25. The matter has been considered. It is observed that the Petitioner has claimed the X-Ray baggage inspection system under Regulation 14(3)(iii) of the 2014 Tariff Regulations considering the threat to the installations of power generation as per intelligence agencies. It is however noticed that the Petitioner, in support of the claim has not furnished any documentary evidence demonstrating that the claim is based on direction or advice of appropriate Governmental agencies or statutory authorities



responsible for national security/internal security in terms of Regulation 14(3)(iii) of the 2014 Tariff Regulations. In the absence of this, we are not inclined to allow the additional capital expenditure claimed by the Petitioner along with undischarged liabilities of Rs.0.26 lakh for the same.

e) LED Street lightning

26. The Petitioner has claimed total actual additional capital expenditure of Rs.181.22 lakh (i.e., Rs.24.03 lakh in 2015-16, Rs.42.36 lakh in 2016-17 and Rs.114.82 lakh in 2018-19) towards installation of LED street lightning. In justification of the same, the Petitioner has submitted the following:

a. The Prime Minister of India on 5.1.2015 had launched the National LED programme with an objective to reduce energy consumption by using energy efficient lighting. In line with the objective, Unnat Jyoti by Affordable LEDs for All (UJALA) and Street Lighting National Program is being implemented by M/s EESL.

b. Further, on 2.8.2017, the Ministry of Power, GoI, issued letter to the Petitioner Company, wherein it mandated to replace all old bulbs with LED bulbs in all Petitioner's buildings including compound/street lighting occupied by the Petitioner company.

c. Any direction of the Government of India is required to be implemented and has the force of law. Therefore, in order to comply with the directions issued by the Prime Minister and the GOI, the Petitioner initiated the work of replacing the old inefficient lights with energy efficient LED lighting in the premises of the station compound/ building owned and operated by the Petitioner Company. Hence, the claim may be allowed under change in law as per Regulation 14 (3)(ii) of the 2014 Tariff Regulations.

d. Moreover, Commission vide its order dated 10.4.2017 in Petition 325/GT/2017 had granted liberty to claim the amounts under the head along with the details under PAT scheme, at the time of truing-up of tariff.

27. The Respondent, MPPMCL has submitted that the claim of the Petitioner on account of LED (energy efficient lights) under Regulation 14(3)(ii) of 2014 Tariff Regulations, was earlier disallowed in order dated 10.4.2017 in Petition No. 325/GT/2014 and therefore, the same may be disallowed.

28. The submissions have been considered. It is observed that the Commission in order dated 10.4.2017 in Petition No. 325/GT/2014 had granted the liberty to the



Petitioner to claim the amounts under the head along with the details of the benefits arising out of the PAT scheme at the time of truing-up of tariff in terms of Regulation 8 of the 2014 Tariff Regulations. The Petitioner has not furnished any details of the benefits arising out of the PAT scheme. The Petitioner, has, however, claimed additional capital expenditure towards installation of 'LED lights' in terms of the MOP, Gol letter dated 2.8.2017, which recommends the replacement of existing old bulbs with LED bulbs, thereby resulting in the reduction of about 50% to 90% in energy consumption. In our view, the letter of the MOP, Gol, as referred to by the Petitioner, is recommendatory in nature and cannot be construed as a 'change in law' event or for compliance to an existing law, in order to consider the additional capital expenditure claim of the Petitioner. Moreover, the benefits of replacement of incandescent light with LED lighting system, accrues to the Petitioner. In view of the above, the additional capital expenditure claimed by the Petitioner is not allowed.

f) Rooftop Solar

29. The Petitioner has claimed actual additional capital expenditure of Rs.53.35 lakh in 2015-16 and Rs.19.20 lakh in 2016-17 towards installation of rooftop solar under Regulation 14(3)(ii) and Regulation 14(3)(vii) read with Regulation 54 of the 2014 Tariff Regulations. In justification of the same, the Petitioner has submitted that in view of the Government of India target for installation of 175 GW of Renewable power by the end of the year 2022 and as the measure of energy conservation, the Petitioner has taken up the initiative by installing Rooftop Solar. The Petitioner has submitted that this initiative will not only help reduce coal consumption, but also reduce the CO2 emissions, and contribute to the decrease in Auxiliary Power Consumption (APC). It has submitted that while on one hand it will help pass on the benefit of saving in APC to the beneficiaries of the generating station, on the other



hand, the asset shall contribute towards cleaner environment for the benefit of the public at large. The Petitioner has added that presently, Ministry of Environment and Forests (MoEF) is also prescribing installation of renewable generation plants in the premises of thermal generating station, while granting clearance for new projects. Accordingly, the Petitioner has submitted that the Commission may allow the expenditure for this work under change in law, in exercise of the power under the Regulation 54 of the 2014 Tariff Regulations (Power to relax).

30. The Respondent, MPPMCL has submitted that Regulation 14(3)(ii) and Regulation 14(3)(vii) of the 2014 Tariff Regulations, do not provide for consideration of the expenditure claimed by the Petitioner. In response, the Petitioner has submitted that installation of Rooftop Solar was an initiative towards Environment and Energy Conservation measures to reduce Green House Gases (GHG) and to save electricity. The Petitioner has submitted that the intention is to reduce the emission of gases in generation of electricity. The Petitioner has also pointed out that by the order dated 13.7.2020 in Petition No. 270/GT/2019 [Torrent Power Ltd. vs. Torrent Power Ltd. (Ahmedabad Distribution) & Ors], the Commission had allowed the claim for additional capital expenditure towards installation of KW Rooftop Solar Panels.

31. The matter has been considered. It is observed that the actual additional capital expenditure claimed by the Petitioner is for new item, which neither forms part of the capital cost nor has been replaced due to obsolescence or for non-availability of spares required for successful and efficient operation of the generating station. The Petitioner has not justified the claim with any technical justification, duly supported by documentary evidence like test results carried out by an independent agency. It is also not clear as to what benefits/ advantages, the beneficiaries would derive on account of installation of the Rooftop Solar by the Petitioner. Further, the Commission in order



dated 7.11.2021 in Petition No. 288/GT/2020 [tariff of Dadri Gas Power Station (of NTPC) for 2014-19 tariff period] had disallowed the additional capital expenditure claimed for Solar PV system. The relevant portion of the order is extracted below:

“43. The matter has been considered. It is observed that the actual additional capital expenditure claimed by the Petitioner is for new item which neither forms part of the capital cost nor has been replaced due to obsolescence or for non-availability of spares required for successful and efficient operation of the generating station. The Petitioner has not justified the claim with any technical justification, duly supported by documentary evidence like test results carried out by an independent agency. The Petitioner has also not demonstrated the need for an alternate back-up system, when the 24 DC battery bank is already in place. It is also not clear as to what benefits/advantages, the beneficiaries would derive on account of installation of the Solar PV system by the Petitioner to augment the existing DCS power supply. In this background, the total actual additional capital expenditure claimed for Rs. 24.09 lakh during the years 2015-16 and 2016-17 is not allowed.”

32. In this background, the actual additional capital expenditure claimed of Rs.53.35 lakh in 2015-16 and Rs.19.20 lakh in 2016-17 towards installation of rooftop solar is not allowed.

g) Effluent Quality Management System (EQMS)

33. The Petitioner has claimed actual additional capital expenditure of Rs.32.59 lakh in 2015-16 and (-) Rs.0.18 lakh in 2015-16 towards installation of EQMS under Regulation 14(3)(ii) of the 2014 Tariff Regulations. In justification for the same, the Petitioner has submitted that EQMS has been installed in the generating station to monitor the parameters of effluent water, before discharge from the plant premises, in order to avoid environment and water pollution. It has also submitted that this item is a mandatory requirement as per the Environment (Protection) Rules, 1986.

34. The Respondent, MPPMCL has submitted that Regulation 14(3)(ii) of the 2014 Tariff Regulations, do not permit the capitalisation of this expenditure. In response, the Petitioner has reiterated the submission made above. It has however added that in line with Environment Protection Act, 1986 and the subsequent rules, Central Pollution Control Board (CPCB) has published the guidelines on continuous online effluent



quality monitoring in November, 2014 to facilitate industries in selection of right monitoring system for their matrix of effluents, its installation and data management. It has also submitted that the CPCB vide letter dated 5.2.2014 had directed all State Pollution Control Boards for installation of EQMS in various energy intensive industries, including power plants.

35. We have considered the matter. Considering the fact that the additional capital expenditure incurred by the Petitioner for EQMS is mandatorily required in compliance to the Environment (Protection) Rules, 1986 and the guidelines of CPCB, the same is allowed under Regulation 14(3)(ii) of the 2014 Tariff Regulations. However, the corresponding un-discharged liability of Rs.2.02 lakh in 2015-16, shall be considered at the time of actual discharge of liability.

h) Inert Gas Fire Extinguishing system

36. The Petitioner has claimed actual additional capital expenditure of Rs.150.33 lakh in 2018-19, on cash basis, for Inert Gas Fire Extinguishing system, under Regulation 14(3)(ii) and Regulation 14(3)(iii) of the 2014 Tariff Regulations. In justification for the same, the Petitioner has submitted that the Commission in its order dated 10.4.2017 in Petition No. 325/GT/2014 had granted liberty to the Petitioner to claim the capitalisation for this work at the time of truing -up and the same shall be decided based on clarification sought from CEA.

37. The matter has been considered. It is noticed that in order dated 2.9.2021 in Petition No. 300/GT/2020 [tariff of FGUTPS, Stage-II (420 MW) for 2014-19], the Commission had allowed the additional capitalization of this asset to the Petitioner, on the ground that the same is required as statutory compliance under National Fire Protection Association Standard on Clean Agent Fire Extinguishing system (NFPA-2001). In this background, we allow the actual additional capital expenditure of Rs.



150.33 lakh in 2018-19 claimed for Inert Gas Fire Extinguishing system under Regulation 14(3)(ii) of the 2014 Tariff Regulations. It is further noticed that the Petitioner has not de-capitalized the corresponding old asset from books of accounts and has also not claimed any de-capitalization. In the absence of the actual decapitalization amount, the assumed deletion considered is Rs.48.94 lakh. Further, the corresponding un-discharged liability of Rs.29.20 lakh in 2018-19, shall be considered at the time of actual discharge of liability.

i) Rainwater Harvesting Work in Admin. Building

38. The Petitioner has claimed actual additional capital expenditure of Rs.7.50 lakh in 2018-19, on cash basis, for Rainwater harvesting work in administrative building under Regulation 14(3)(ii) read with Regulation 54 of the 2014 Tariff Regulations (power to relax). In justification for the same, the Petitioner has submitted that the Rainwater (Harvesting and Storage) Bill, 2016 envisages the compulsory harvesting of rainwater in every Government, residential, commercial and institutional building to conserve water and ensure recharge of groundwater.

39. The matter has been considered. It is observed that the Petitioner has claimed the Rainwater harvesting work in administrative building under Regulation 14(3)(ii) of the 2014 Tariff Regulations considering the Rainwater (Harvesting and Storage) Bill, 2016. It is not clear from the submissions of the Petitioner as to whether the said bill has been enacted as a law, mandating the expenditure claimed by the Petitioner. In the absence of this, the claim of the Petitioner cannot be construed under change in law to permit the additional capitalisation claimed. In view of this, the claim of the Petitioner is not allowed.

j) Reverse Osmosis (RO) Plant

40. The Petitioner has claimed actual additional capital expenditure of Rs.1644.41



lakh in 2018-19, on cash basis, for Reverse Osmosis (RO) Plant under Regulation 14(3)(ii) of the 2014 Tariff Regulations. In justification for the same, the Petitioner has submitted that in compliance to the guidelines on Techno-Economic Feasibility of Implementation of Zero Liquid Discharge (ZLD) dated 19.1.2015, issued by CPCB, the RO plant has been installed by the Petitioner and the same may be allowed under change in law.

41. The Respondent, MPPMCL has submitted that the Petitioner has not submitted any notification/circular/orders of the competent authority based on which the expenditure claimed is mandatory for the generating station. It has also submitted that the report on “Techno Economic feasibility of implementation of Zero Liquid Discharge (ZLD) for water polluting industries” furnished by the Petitioner does not incorporate ‘power generating stations’ as water polluting industries. In response, the Petitioner has submitted that CPCB has issued guidelines, which directs the adoption of ‘Reverse Osmosis’ as mandatory for the generating station. It has also submitted that the Hon’ble Supreme Court and the Hon’ble High Court of Delhi in its various judgments have held that the guidelines are binding in nature. Accordingly, the Petitioner has submitted that the guidelines issued by CPCB are binding in nature and hence it is mandatory for the Petitioner to adopt the method of ‘Reverse Osmosis’. The Petitioner has further submitted that the said expenditure would contribute to the efficient operation of the generating station.

42. The matter has been considered. The Petitioner has claimed additional capital expenditure for Reverse Osmosis (RO) Plant under Regulation 14(3)(ii) of the 2014 Tariff Regulations based on the guidelines on techno-economic feasibility of implementation of ZLD dated 19.1.2015, issued by CPCB. We notice that the Petitioner has not submitted any notification/circular/orders of the competent authority



to justify the claim based on change in law. In view of this, the actual additional capital expenditure claimed is not allowed. Further, the corresponding undischarged liabilities of Rs.142.89 lakh for Reverse Osmosis (RO) Plant are also not allowed.

k) CCTV server upgradation

43. The Petitioner has claimed actual additional capital expenditure of Rs.4.43 lakh in 2018-19, on cash basis, for CCTV server upgradation under Regulation 14(3)(ii) read with Regulation 143(vii) of the 2014 Tariff Regulations. In justification for the same, the Petitioner has submitted that CCTV has been installed in the generating station for safety and security measures. It has also submitted that in view of the cyber threat and for e-security, the upgradation of server for the CCTV system has become evident for successful and efficient operation of the station and to ensure the continuous monitoring for security.

44. The Respondent, MPPMCL has submitted that the Petitioner has not furnished proper justification/documentary evidence which mandates the additional expenditure under this head. The Respondent has also submitted that the said claim has also not been substantiated with technical justification duly supported with documentary evidence and therefore, the said claim is not covered under the said regulations. In response, the Petitioner has submitted that upgradation of CCTV software has been claimed due to cyber threat and certain policies mandate that upgradation is necessary for the smooth working of the plant. It has also submitted that CCTV had been allowed by the Commission earlier and as the software for the same got outdated, the same was to be upgraded, in view of cyber threat and e-security. Accordingly, the Petitioner has submitted that in view of cyber threat to the ministries, defence institutions and industries, MHA, GOI has been revisiting its policy from time to time.



45. The matter has been considered. It is observed that the Petitioner has claimed the CCTV server upgradation under Regulation 14(3)(ii) read with Regulation 143(vii) of the 2014 Tariff Regulations, considering the cyber threat and for e-security, for successful and efficient operation of the station and to ensure the continuous monitoring of security in view of cyber threat to the ministries, defence institutions and industries, MHA, GOI has been revisiting its policy from time to time. The Petitioner has however not furnished any documentary evidence in support of its claim that the up-gradation is necessary due to change in policy of the MHA GOI. In view of this, the actual additional capital expenditure of Rs.4.43 lakh in 2018-19 on cash basis, for CCTV server upgradation, is not allowed. Further, the corresponding undischarged liabilities of Rs.0.41 lakh for CCTV server upgradation is also not allowed.

C. De-capitalisation against R&M works of Gas Turbines (Part of capital cost)

46. The Petitioner has claimed total de-capitalization of Rs.15183.48 lakh for the 2014-19 tariff period, against R&M works of GT-1 and GT-2. In justification of the same, the Petitioner has submitted that the notional decapitalisation against R&M of GT-1 has been allowed vide order dated 10.4.2017 in Petition No. 325/GT/2014. It has also submitted that the principle of notional decapitalisation has also been decided by the Commission vide its order dated 10.10.2017 in Review Petition No. 24/RP/2017 (in Petition No. 326/GT/2014) and accordingly, the same is claimed for the purpose of tariff and actual decapitalisation has been claimed under exclusion. As the decapitalization claimed was allowed in order dated 19.2.2019 in Petition No. 32/RP/2017 in Petition No.325/GT/2014, the same is allowed as stated below, under Regulation 14(4) of the 2014 Tariff Regulations.



<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
(-) 5274.78	(-) 8350.19	(-) 1558.51	0.00	0.00

D. Assumed Deletion

47. As per consistent methodology adopted by the Commission, the expenditure on replacement of assets, if found justified, is allowed for the purpose of tariff provided that the capitalization of the said asset, is followed by de-capitalization of the gross value of the old asset. However, in certain cases, where the de-capitalization is proposed to be effected during the future years to the year of capitalization of the new asset, the de-capitalization of the old asset for the purpose of tariff is shifted to the very same year in which the capitalization of the new asset is allowed. Such de-capitalization which is not a book entry in the year of capitalization is termed as "Assumed Deletion". Therefore, the methodology of arriving at the fair value of the de-capitalized asset, i.e., escalation rate of 5% per annum from the COD has been considered in order to arrive at the gross value of old asset in comparison to the cost of new asset. In the present petition, year of COD of the generating station was in 1995-96. We have considered the value of asset under consideration as on COD as 100% and escalated it @5% per annum, till the year, during which additional capital expenditure is claimed against replacement of the same. The amount claimed for additional capital expenditure against the asset is multiplied by the derived ratio from above two values i.e., value in year of COD divided by value in capitalized year.

48. The Petitioner, in this petition, has claimed Inert Gas Fire Extinguishing system asset on replacement basis, but has not furnished the de-capitalized value of the old assets. Accordingly, the decapitalized value of the assets/ works has been calculated in terms of the above-mentioned methodology. Accordingly, the 'assumed deletions' allowed for the purpose of tariff are as follows:



	Year of claim	Additional capital expenditure allowed (on accrual basis)	(Rs. In lakh) Assumed deletion
Inert Gas Fire Extinguishing system	2018-19	150.33	(-) 48.94

E. Discharge of liabilities

49. The Petitioner has claimed the discharge of liabilities as follows:

(Rs. in lakh)				
2014-15	2015-16	2016-17	2017-18	2018-19
215.40	33.60	93.26	0.00	21.93

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

	(Rs. in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Un-discharged liabilities as on 1.4.2014 - A	227.79	112.03	76.97	23.96	23.96
Addition during the period 2014-19 (corresponding to allowed assets), including ERV updation - B	99.64	(-)1.72	23.96	0.00	29.20
Discharges during the period 2014-19 (corresponding to allowed assets) - C	215.40	33.34	76.97	0.00	21.93
Reversal of liabilities out of liabilities added during 2014-19 (corresponding to allowed assets) - D	0.00	0.00	0.00	0.00	2.03
Closing undischarged liabilities E=(A+B-C-D)	112.03	76.97	23.96	23.96	29.20

Reconciliation of actual additional capital expenditure

51. The Petitioner has furnished the reconciliation statement of the actual additional capital expenditure for the 2014-19 tariff period, with books of accounts, as summarised below:

		(Rs. in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19
1	Closing Gross Block as per IGAAP Audited Balance Sheet as on 31.03.2016	0.00	0.00	322639.45	0.00	0.00
2	Capital spares capitalized	0.00	0.00	154.75	0.00	0.00
3	Opening Gross Block as per IGAAP as on 01st April (1+2)	281948.69	300808.59	322794.20	325623.25	325826.64
4	Add: Additions as per Note-2	0.00	0.00	727.11	583.87	2802.29
5	Add: Additions as per Note-2 out of adjustment column	0.00	0.00	3658.47	14.24	700.99



		2014-15	2015-16	2016-17	2017-18	2018-19
6	Less: Decapitalization as per Note-2 out of adjustment column	0.00	0.00	847.12	74.98	49.25
7	Total Addition as per Ind AS Balance Sheet (4+5-6)	0.00	0.00	3538.46	523.13	3454.03
IND AS Adjustments						
8	Add: Vendor discounting out of assets in the year	0.00	0.00	132906.00	0.00	5401.00
9	Less: Unwinding expenses Capitalized	0.00	0.00	0.00	0.00	
10	Less: IND AS Adjustment of Decapitalization out of 6 (Mitigating the impact of carrying cost exemption to arrive)	0.00	0.00	710.74	319.73	176.72
11	Less: Total addition in capital OH asset class (including adjustments also)	0.00	0.00	0.00	0.00	470.65
12	Add: Decapitalization of capital Overhauling during the year	0.00	0.00	0.00	0.00	0.00
13	Add/Less: Any other IND AS adjustment having impact on Property, Plant & Equipment	0.00	0.00	0.00	0.00	0.00
14	Subtotal IND AS Adjustment (7+8-9-10-11+12+13)	0.00	0.00	(-709.41)	(-319.73)	(-647.31)
15	Closing Gross Block after IND AS adjustment (3+4+5-6+14)	300808.59	322639.45	325623.25	325826.64	328633.37
16	Addition as per IGAAP (15-3)	18859.89	21830.86	2829.05	203.40	2806.72
17	Exclusions (Items not allowable/ not claimed) (accrual basis)	6182.31	(-)4050.24	(-)1099.17	202.82	709.87
18	Net Additional Capital Expenditure Claimed (accrual basis) (16 -17)	12677.58	25881.10	3928.22	0.57	2096.85
19	Less: Undischarged liabilities	99.90	14.57	26.30	0.00	174.78
20	Net Additional Capital Expenditure claimed (cash basis)	12577.69	25866.53	3901.92	0.57	1922.07
21	Partial capitalization of GT-2	44.07	0.00	0.00	0.00	0.00
22	Partial capitalization for GT-1 capitalized during 2012-13 & 2013-14 in the books (Being claimed in 2014-15 after put to use)	5554.87	44.07	0.00	0.00	0.00
23	Normative Decapitalization admitted by Commission	5274.78	8350.19	1558.51	0.00	0.00
24	Liability Discharged	215.40	33.60	93.26	0.00	21.93
25	Total Additional Capitalization (20+21)	13029.11	17594.01	2436.67	0.57	1944.00



Exclusions

52. The summary of exclusions from books of accounts under different heads for the purpose of tariff are shown as follows:

Sl. No.	Head of Work /Equipment	<i>(Rs. in lakh)</i> Additional Capital Expenditure claimed under Exclusion				
		2014-15	2015-16	2016-17	2017-18	2018-19
B1	Disallowed: Decapitalization against R&M works in 2009-14 tariff Period	(-) 3336.49	(-) 5620.89	(-)1024.03	0.00	0.00
B2	Items not claimed	104.48	114.17	0.00	0.00	0.00
B3	Loan ERV	328.35	830.29	(-)204.53	(-)17.80	737.07
B4	Land Compensation (Deposit to Court)	5911.20	0.00	0.00	0.00	0.00
B5	Capital Spares	3242.94	763.71	512.48	572.19	189.46
B6	MBOA not Part of Capital cost	0.00	0.00	152.17	46.67	45.96
B7	Inter Unit Transfer	(-)3.48	(-)2.84	(-) 8.01	(-)3.50	(-)33.63
B8	Decapitalization of Capital Spares-Not part of Capital Cost	(-)60.71	(-)118.44	(-) 439.42	(-)53.97	0.00
B9	Decapitalization of Spares (Part of Capital cost)	(-)3.99	(-)1.41	(-) 61.16	(-)120.11	(-)197.46
B10	Decapitalization of MBOA (Not Part of Capital cost)	0.00	(-)14.45	(-)26.65	(-)139.53	(-)28.61
B11	Decapitalization of MBOA (Part of Capital cost)	0.00	(-)0.37	0.00	(-)80.63	0.00
B12	Asset not owned by company	0.00	(-)51.53	0.00	0.00	0.00
	Plant & Machinery	0.00	51.53	0.00	0.00	0.00
B13	Cost Adjustment	0.00	0.00	0.00	(-)0.51	0.00
B14	Capital works/Overhauling's	0.00	0.00	0.00	0.00	0.00
B15	Liability Reversal	0.00	0.00	0.00	0.00	(-)2.93
	Total Exclusions	6182.31	(-)4050.24	(-)1099.17	202.82	709.87

a) Decapitalization against R&M works of GTs in 2009-14 tariff period

53. The Petitioner has sought exclusion of decapitalization of Rs.3336.49 lakh in 2014-15, Rs.5620.89 lakh in 2015-16 and Rs.1024.03 lakh in 2016-17 against R&M of GTs. The Petitioner has submitted that the Commission vide its order dated 30.3.2017 in Petition No. 326/GT/2014, Order dated 10.4.2017 in Petition No. 325/GT/2014, Order dated 10.10.2017 in Review Petition No. 24/RP/2017 in Petition No. 326/GT/2014, had considered and decided the principle of notional decapitalisation



against R&M of GTs. Accordingly, the actual decapitalisation, capitalised in the books has been claimed under exclusion. In view of this, the claim for exclusion is allowed.

b) Items Not Claimed

54. The Petitioner has sought exclusion of capitalization of Rs.104.48 lakh in 2014-15 and Rs.114.17 lakh in 2015-16. The Petitioner, in justification of the same, has submitted that as per consistent methodology, the Commission does not consider the expenditure of minor nature for the tariff and hence kept under exclusion. In view of this, the claim for exclusion is allowed.

c) Loan ERV

55. The Petitioner has sought exclusion of Loan ERV of Rs.328.35 lakh in 2014-15, Rs.830.29 lakh in 2015-16, (-) Rs.204.53 lakh in 2016-17, (-) Rs.17.80 lakh in 2017-18, Rs.737.07 lakh in 2018-19. The Petitioner has submitted that it is required to bill the loan ERV directly on the beneficiaries as per the 2014 Tariff Regulations and hence, loan ERV has been considered as exclusion for the purpose of tariff. The exclusion of the said amount under this head is in order and is allowed.

d) Land compensation (Deposit to Court)

56. The Petitioner has claimed Land Compensation (deposit to Court) amounting to Rs.5911.20 lakh in 2014-15 under exclusion. In justification, the Petitioner has submitted that Land compensation of Rs.10394.42 lakh was deposited at Civil Court, Bharuch, in terms of the order dated 18.3.2011 of the Hon'ble High Court of Gujarat read with the order of Civil Court, Bharuch. It has submitted that out of Rs.10394.42 lakh, a sum of Rs.6397.18 lakh was charged to revenue in books of account during 2010-11 and 2011-12 and the same was allowed for reimbursement vide order dated 30.3.2017 in Petition No. 326/GT/2014. The Petitioner has submitted that as per the new accounting policy, the interest amount of Rs.5911.20 lakh has been capitalised in



the books of account in 2014-15. The Petitioner has stated that since the amount has been allowed for tariff, the same is claimed under exclusion. In view of the submissions, the exclusion of the said amount under this head is in order and is allowed.

e) Capitalization of Capital Spares

57. The Petitioner has procured capital spares as under:

(Rs. in lakh)

Sl. No.	Head of Work/ Equipment	Additional Capital Expenditure claimed under Exclusion				
		2014-15	2015-16	2016-17	2017-18	2018-19
B5	Capital Spares	3242.94	763.71	512.48	572.19	189.46

58. The Petitioner has submitted that capitalisation of capital spares, after the cut-off date, are not allowed in terms of the 2014 Tariff Regulations and, therefore, the same has been kept under exclusion. As capitalization of spares over and above the 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, the exclusion of the said amount under this head is in order and is allowed.

f) Capitalization of Miscellaneous Bought out Assets (MBOA) Items

59. The Petitioner has capitalised MBOA items as under:

(Rs. in lakh)

Sl. No.	Head of Work/ Equipment	Additional Capital Expenditure claimed under Exclusion				
		2014-15	2015-16	2016-17	2017-18	2018-19
B6	Capitalization of MBOA items	0.00	0.00	152.17	46.67	45.96

60. The Petitioner has submitted that since MBOA items capitalized after the cut-off date are not allowed as per the 2014 Tariff Regulations, the same has been kept under exclusion. The exclusion of the above-said amounts is in order and is, therefore, allowed.



g) Inter-Unit Transfer (ITU)

61. The Petitioner has claimed exclusion of Inter-unit transfer as under:

(Rs. in lakh)

Sl. No.	Head of Work/ Equipment	Additional Capital Expenditure claimed under Exclusion				
		2014-15	2015-16	2016-17	2017-18	2018-19
B7	Inter Unit Transfer	(-)3.48	(-)2.84	(-)8.01	(-)3.50	(-)33.63

62. In justification of the same, the Petitioner has submitted that as per practice, the Commission has not been considering Inter unit transfers for purpose of tariff and hence kept under exclusion. In view of the above, the exclusion of the said amounts is in order and allowed.

h) De-capitalization of spares (Not part of capital cost)

63. The Petitioner has excluded de-capitalized spares, not forming part of the capital cost as under:

(Rs. in lakh)

Sl. No.	Head of Work/ Equipment	Additional Capital Expenditure claimed under Exclusion				
		2014-15	2015-16	2016-17	2017-18	2018-19
B8	De-capitalization of Spares – Not Part of capital cost	(-)60.71	(-)118.44	(-)439.42	(-)53.97	0.00

64. The Petitioner, in justification of the same, has submitted that capitalization of spares beyond the cut-off date is not admissible as per the 2014 Tariff Regulations. Accordingly, the capitalization of spares has been claimed under exclusion. Since capitalization of spares brought after the cut-off date is not allowed to form part of the capital cost for the purpose of tariff, the exclusion of de-capitalization of these spares is in order and allowed.

i) De-capitalization of Spares - Part of capital cost

65. The Petitioner has excluded de-capitalized spares forming part of capital cost as under:



(Rs. in lakh)

Sl. No.	Head of Work/ Equipment	Additional Capital Expenditure Claimed under Exclusion				
		2014-15	2015-16	2016-17	2017-18	2018-19
B9	De-capitalization of Spares – Part of capital cost	(-)3.99	(-)1.41	(-)61.16	(-)120.11	(-)197.46

66. Since these spares form part of the capital cost, the exclusion, for de-capitalization of these spares, for the said amounts are not allowed.

j) De-capitalization of MBOA items - Not part of capital cost

67. The Petitioner has excluded de-capitalized of MBOA items, not forming part of capital cost as under:

(Rs. in lakh)

Sl. No.	Head of Work/ Equipment	Additional Capital Expenditure Claimed under Exclusion				
		2014-15	2015-16	2016-17	2017-18	2018-19
B10	De-capitalization of MBOA – Not Part of capital cost	0.00	(-)14.45	(-)26.65	(-)139.53	(-)28.61

68. As these MBOAs do not form part of the capital cost for the purpose of tariff, the exclusion for de-capitalization of these MBOA items for the said amounts are allowed.

k) De-capitalization of MBOA - Part of capital cost

69. The Petitioner has claimed exclusion of de-capitalized MBOA as under:

(Rs. in lakh)

Sl. No.	Head of Work/ Equipment	Additional Capital Expenditure Claimed under Exclusion				
		2014-15	2015-16	2016-17	2017-18	2018-19
B11	De-capitalization of MBOA - Part of capital cost	0.00	(-)0.37	0.00	(-)80.63	0.00

70. It is observed from the submissions of the Petitioner that MBOAs were part of the capital cost allowed in tariff. Since these assets form part of the capital cost, the exclusion, for de-capitalization of these MBOA items, for the said amounts are not allowed.



l) Asset not owned by the Company and Plant & Machinery

71. The Petitioner has claimed exclusion of Asset not owned by company for (-) Rs.51.53 lakh and for Plant & Machinery for Rs.51.53 lakh in 2015-16. In justification, the Petitioner submitted that these assets have been transferred out of the company and decapitalised from books of accounts and hence, the same have been shown under exclusion for the purpose of tariff. In view of the above, the exclusion of the said amounts is in order and allowed.

m) Cost Adjustment

72. The Petitioner has submitted that an amount of (-) Rs.0.51 lakh in 2017-18 pertains to cost adjustment against the capitalisation of Plant & machinery and hence, kept under exclusion. In view of the above, the exclusion of the said amounts is in order and allowed.

n) Ind AS adjustment - Capital works/Overhauling

73. As regards the expenditure on Ind-AS adjustment Overhauling, the reconciliation statement, as submitted by the Petitioner, indicates an expenditure of Rs.470.65 lakh in 2018-19, with corresponding negative entries of the same amount as IND-AS adjustment. As such, after adjustment, the net claim, against overhauling, 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.

o) Reversal of Liability

74. The Petitioner has claimed exclusion of reversal of liabilities of (-) Rs.2.93 lakh in 2018-19. In justification, the Petitioner has submitted that as tariff is determined on cash basis, the liability reversal has been kept under exclusion. In view of this, the exclusion of the said amounts is allowed.



75. Based on the above discussion, the summary of exclusions allowed/ not allowed for the purpose of tariff is as under:

<i>(Rs in lakh)</i>					
	2014-15	2015-16	2016-17	2017-18	2018-19
Exclusions Claimed (A)	6182.31	(-)4050.24	(-)1099.17	202.82	709.87
Exclusions Allowed (B)	6186.29	(-)4048.46	(-)1038.01	403.55	907.33
Exclusion not allowed (A-B)	(-)3.98	(-)1.78	(-)61.16	(-)200.73	(-)197.46

76. Accordingly, the additional capital expenditure allowed, on cash basis, for the 2014-19 tariff period, is summarised as follows:

<i>(Rs. in lakh)</i>						
Sl. No.	Head of Work/ Equipment	Additional Capital Expenditure allowed				
		2014-15	2015-16	2016-17	2017-18	2018-19
A	Additional capital expenditure towards allowed works	18075.61	25800.62	3840.54	0.57	0.58
i	Land compensation	0.00	0.00	0.00	0.57	0.58
ii	GT R&M 1, 2 and 3	18075.61	25800.62	3840.54	0.00	0.00
B	New Claims	0.00	32.59	(-) 0.18	0.00	157.83
i	X-RAY Baggage inspection system	0.00	0.00	0.00	0.00	0.00
ii	LED Street Lightning	0.00	0.00	0.00	0.00	0.00
iii	Rooftop Solar	0.00	0.00	0.00	0.00	0.00
iv	Environment Quality Monitoring System	0.00	32.59	(-)0.18	0.00	0.00
v	Inert Gas Fire Extinguishing system	0.00	0.00	0.00	0.00	150.33
vi	Rainwater Harvesting Work in Admin. Building	0.00	0.00	0.00	0.00	0.00
vii	Reverse Osmosis (RO) Plant	0.00	0.00	0.00	0.00	0.00
viii	CCTV server upgradation	0.00	0.00	0.00	0.00	0.00
	Total Additional capital expenditure (A+B)	18075.61	25833.21	3840.36	0.57	150.91
C	Decapitalization against R&M works and others	(-) 5274.78	(-) 8350.19	(-)1558.51	0.00	(-) 48.94
D	Net Additional capital expenditure allowed (A+B+C)	12800.83	17483.02	2281.85	0.57	101.96
E	Discharge of Liabilities allowed	215.40	33.34	76.97	0.00	21.93
F	Exclusions not allowed	(-)3.98	(-)1.78	(-) 61.16	(-) 200.73	(-)197.46
	Total Additional capital expenditure allowed (D+E)	13012.24	17514.58	2297.66	(-) 200.16	(-) 73.56



Capital cost allowed for the 2014-19 tariff period

77. Accordingly, the capital cost allowed for the purpose of tariff is as follows:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	253017.08	266029.32	283543.90	285841.56	285641.40
Add: Additional Capital Expenditure allowed	13012.24	17514.58	2297.66	(-)200.16	(-)73.56
Closing Capital Cost	266029.32	283543.90	285841.56	285641.40	285567.84
Average Capital Cost	259523.20	274786.61	284692.73	285741.48	285604.62

Debt-Equity Ratio

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

“19.(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 utilisation 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 modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

79. The gross loan and equity of Rs.129175.98 lakh and Rs.123841.10 lakh, respectively as on 31.3.2014 as allowed in order dated 10.10.2017 in Petition No. 24/RP/2017 in Petition No. 326/GT/2014 has been considered as on 1.4.2014. The Petitioner has claimed debt-equity ratio of 70:30 for additional capital expenditure during the 2014-19 tariff period. Accordingly, in terms of Regulation 19(5) of the 2014 Tariff Regulations, the debt-equity ratio of 70:30 has been considered for additional capital expenditure. Further, for assets de-capitalised during the 2014-19 tariff period debt-equity ratio of 50:50 has been considered as these assets were originally allocated to debt and equity in the ratio of 50:50 in the respective tariff orders. Accordingly, the details of debt-equity ratio in respect of the generating station as on 1.4.2014 and as on 31.3.2019 are as follows:

	Capital cost as on 1.4.2014 (Rs. in lakh)	(%)	Additional capital expenditure (Rs. in lakh)	(%)	De-capitalization (Rs. in lakh)	(%)	Capital cost as on 31.3.2019 (Rs. in lakh)	(%)
Debt	129175.98	51.05%	33773.81	70.00%	(-)7848.77	50.00%	155101.02	54.31%
Equity	123841.10	48.95%	14474.49	30.00%	(-)7848.77	50.00%	130466.82	45.69%
Total	253017.08	100.00%	48248.31	100.00%	(-)15697.54	100.00%	285567.84	100.00%

Return on Equity

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

“24. Return on Equity:

(1) Return on equity shall be computed in rupee terms on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations transmission system including communication system and run of 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 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 requirement 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 kilometres.”

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

“25. Tax on Return on Equity:

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

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

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

Illustration.

(i) In case of the generating company or the transmission licensee paying Minimum Alternate Tax (MAT) @ 20.96% including surcharge and cess: Rate of return on equity = $15.50/(1-0.2096) = 19.610\%$

(ii) In case of generating company or the transmission licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from generation or transmission business for FY 2014-15 is Rs 1000 crore.

(b) Estimated Advance Tax for the year on above is Rs 240 crore.

(c) Effective Tax Rate for the year 2014-15 = Rs 240 Crore/Rs 1000 Crore = 24%

(d) Rate of return on equity = $15.50/(1-0.24) = 20.395\%$

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



82. The Petitioner has claimed Return on Equity (ROE) for the 2014-19 tariff period, after grossing up the base rate of 15.50% with effective tax rates (based on MAT rates) for the respective years in terms of Regulation 24 and Regulation 25 of the 2014 Tariff Regulations and hence the same has been considered. Accordingly, ROE has been worked out as follows:

(Rs. in lakh)

		2014-15	2015-16	2016-17	2017-18	2018-19
Normative Equity-Opening	A	123841.10	126689.02	130273.00	130638.36	130538.17
Addition of Equity due to additional capital expenditure	B	2847.92	3583.98	365.36	(-)100.19	(-)71.35
Normative Equity-Closing	C=(A+B)	126689.02	130273.00	130638.36	130538.17	130466.82
Average Normative Equity	D=Average(A,C)	125265.06	128481.01	130455.68	130588.26	130502.49
Return on Equity (Base Rate)	E	15.500%	15.500%	15.500%	15.500%	15.500%
Effective Tax Rate	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)	24564.48	25317.18	25706.29	25732.42	25784.68

Interest on Loan

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

“26. Interest on loan capital:

(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization 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 upto the date of de-capitalization of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

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



Provided that if there is no actual loan for a particular year but normative loan is still outstanding the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the transmission system as the case may be does not have actual loan then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The generating company or the transmission licensee as the case may be shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee as the case may be in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 as amended from time to time including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiaries or the long term transmission customers /DICs shall not 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.”

84. Interest on loan has been computed as under:

- (i) Gross normative loan amounting to Rs.129175.98 lakh as considered in order dated 10.10.2017 in Petition No.24/RP/2017 (In Petition No. 326/GT/2014) has been considered as on 1.4.2014.
- (ii) Cumulative repayment amounting to Rs.113801.84 lakh, as considered in order dated 10.10.2017 in Petition No. 24/RP/2017 (In Petition No. 326/GT/2014) has been considered as on 1.4.2014.
- (iii) Accordingly, the net normative opening loan as on 1.4.2014 is Rs.15374.14 lakh.
- (iv) Addition to normative loan on account of additional capital expenditure approved above has been considered.
- (v) The repayment for the respective years of the 2014-19 tariff period has been considered equal to the depreciation allowed for that year. Further, repayments have been adjusted for de-capitalization of assets considered for the purpose of tariff;
- (vi) The weighted average rate of interest on loan (WAROI) is based on the details of actual loan portfolio and rate of interest furnished by the Petitioner, duly adjusted for interest capitalised during the respective years.

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



(Rs. in lakh)

		2014-15	2015-16	2016-17	2017-18	2018-19
Gross opening loan	A	129175.98	139340.30	153270.90	155203.20	155103.23
Cumulative repayment of loan up to the previous year	B	113801.84	114979.92	115672.39	120265.80	125813.96
Net Loan Opening	C=(A-B)	15374.14	24360.38	37598.51	34937.40	29289.28
Addition due to additional capital expenditure	D	10164.32	13930.60	1932.30	-99.96	-2.21
Repayment of loan during the year	E	3817.46	4868.46	5403.24	5648.53	5654.68
Less: Repayment adjustment on account of de-capitalization	F	2639.38	4175.99	809.84	100.37	123.20
Net Repayment of loan during the year	G=(E-F)	1178.08	692.47	4593.41	5548.16	5531.48
Net Loan Closing	H=(C+D-G)	24360.38	37598.51	34937.40	29289.28	23755.58
Average Loan	I= Average(C,H)	19867.26	30979.45	36267.96	32113.34	26522.43
Weighted Average Rate of Interest of loan	J	7.7604%	6.7451%	7.7598%	7.0657%	7.3886%
Interest on Loan	K=(I*J)	1541.78	2089.58	2814.33	2269.02	1959.63

Depreciation

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

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

87. Cumulative depreciation amounting to Rs.197980.56 lakh has been considered as on 1.4.2014, in terms of Order dated 10.10.2017 in Petition No. 24/RP/2017 (in Petition No. 326/GT/2014). Further, the value of freehold land included in the average capital cost has been adjusted while calculating the depreciable value for the purpose of tariff. The balance life of the generating station is 8.40 years as on 1.4.2014, 9.60 years as on 1.4.2015, 10.79 years as on 1.4.2016, 9.79 years as on 1.4.2017 and 8.79 years as on 1.4.2018 as per order dated 19.2.2019 in Petition No. 32/RP/2017 in Petition No.325/GT/2014. Since as on 1.4.2014, the used life of the generating station is more than 12 years from the effective station COD of 1.11.1995, depreciation has



been computed by spreading over the balance depreciable value over the balance useful life of the assets. Necessary calculations in support of depreciation are as shown below:

(Rs. in lakh)

		2014-15	2015-16	2016-17	2017-18	2018-19
Average Capital Cost	A	259523.20	274786.61	284692.73	285741.48	285604.62
Value of freehold land	B	3915.15	3915.15	3915.15	3915.44	3916.01
Aggregated Depreciable Value	$C=[(A-B)*90\%]$	230047.25	243784.32	252699.82	253643.44	253519.75
Remaining Aggregate Depreciable value at the beginning of the year	D= [(C)-(Cumulative Depreciation of Previous year)]	32066.69	46737.18	58301.01	55299.09	49704.66
Balance useful life at the beginning of the year	E	8.40	9.60	10.79	9.79	8.79
Depreciation (annualized)	$F=(D/E)$	3817.46	4868.46	5403.24	5648.53	5654.68
Less: Cumulative depreciation adjustment on account of de-capitalization	G	4750.89	7516.78	1457.71	177.79	221.76
Cumulative depreciation (at the end of the period)	$H=[(Cumulative Depreciation of Previous year) +F-G]$	197047.13	194398.81	198344.35	203815.09	209248.02

Operation & Maintenance Expenses

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

(Rs. in lakh/MW)

2014-15	2015-16	2016-17	2017-18	2018-19
14.67	15.59	16.57	17.61	18.72

89. Since the normative O&M expenses claimed by the Petitioner is in terms of the above Regulations, the same are allowed as under

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
9643.91	10248.71	10892.95	11576.64	12306.34



Water Charges

90. The first proviso to Regulation 29(2) of the 2014 Tariff Regulations provide as follows:

*“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:*

91. The Petitioner has claimed the actual water charges in terms of Regulation 29 (2) of the 2014 Tariff Regulations, for the generating station as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
549.93	465.76	1034.13	1404.08	534.31

92. The Respondent, MPPMCL has submitted that water charges may be allowed after prudence check of the same. In response, the Petitioner has stated that the details of water charges along with contracted quantity, allocation of water, the actual water consumed during the 2014-19 tariff period have already been submitted. The consolidated summary sheet indicating water charges for the generating station submitted by the Petitioner is as follows:

Year	Allocated Quantum	Total Water drawn	Drinking admissible water	Industrial water	Rate for Industrial water	Rate for drinking water	Industrial water payment	Drinking water payment	Under drawl charges	Total amount paid
	(M ³)	(M ³)	(M ³)	(M ³)	Water/ M ³	Water/ M ³	(Rs.)	(Rs.)	(Rs.)	(Rs.)
		(3)	(4)	(5)=3-4	(6)	(7)	(8)=5*6	(9)=4*7	(10)	(11)=8+9+10
2014-15	3779000	3137249	36500	3100749	17.71	2.15	54914265	78475	0	54992740
2015-16	2569000	2423276	36800	2386476	19.48	2.37	46488552	87216	0	46575768
2016-17	3147980	4857671	36500	4821171	21.43	2.61	103317695	95265	0	103412960
2017-18	3650000	5989118	36500	5952618	23.57	2.87	140303206	104755	0	140407961
2018-19	6205000	2083954	27500	2056454	25.94	3.14	53344417	86350	0	53430767

93. Accordingly, on prudence check, the actual water charges claimed in terms of Regulation 29 (2) of the 2014 Tariff Regulations, are allowed for the generating station as under:



<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
549.93	465.76	1034.13	1404.08	534.31

Capital spares

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

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

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.”

95. 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, units/ equipment’s are taken under overhaul/ maintenance and inspected regularly for wear and tear. It has submitted that during such works, spares parts of equipment which became damaged/ unserviceable are replaced/ consumed so that the machine continue to perform at expected efficiency on sustained basis. The Petitioner has further submitted that capital spares consumed are not funded through compensatory allowance or special allowance or claimed as a part of additional capitalisation or consumption of stores and spares and renovation and modernization. The Petitioner has submitted the year-wise details of the capital spares consumed by the generating station in terms of the last proviso to Regulation 29(2) of 2014 Tariff Regulations, in Form 17, as follows:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
64.70	119.85	500.58	174.08	197.46

96. We have examined the list of the capital spares consumed by the Petitioner. The capital spares comprise of (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 the additional O&M expenses. Accordingly, only those capital spares, which do not form part of the capital cost of the project, are being considered. 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 standardised 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. The Commission is also of the view that spares of value less than Rs. one lakh would normally form part of normal repair and maintenance expenses. Based on this, the details of the allowed capital spares considered for 2014-19 tariff period is summarized as under:

	<i>(Rs in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Capital spares not part of capital cost claimed	60.71	118.45	439.42	53.97	0.00
Value of spares Rs.1(one) lakh and below are disallowed on individual basis	4.25	27.98	10.73	0.00	0.00
Net total value of capital spares considered	56.47	90.47	428.69	53.97	0.00

97. Further, we are 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 under:

	<i>(Rs. In lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Net total value of capital spares considered	56.47	90.47	428.69	53.97	0.00
Less: Salvage value @ 10%	5.65	9.05	42.87	5.40	0.00
Net Capital spares allowed	50.82	81.42	385.82	48.58	0.00

98. Based on the above, the total annualised O&M expenses allowed for 2014-19 tariff period in respect of the generating station, is summarized as under:

	<i>(Rs. In lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses as per Regulation 29(1)	9643.91	10248.71	10892.95	11576.64	12306.34
Additional O&M Expenses under Regulation 29(2)					
Water Charges	549.93	465.76	1034.13	1404.08	534.31
Capital Spares	50.82	81.42	385.82	48.58	0.00
Total O&M Expenses allowed	10244.66	10795.89	12312.90	13029.29	12840.65

Impact of wage revision

99. The Petitioner has submitted that wage revision of employees was due from 1.1.2017 and it had incurred additional O&M expenses due to increase in employee cost on account of wage revision of its employees, Central Industrial Security Forces (CISF) and Kendriya Vidyalaya (KV) Staff from 1.1.2016 to 31.3.2019. The Petitioner has submitted that the total impact due to wage revision is Rs.3231.81 lakh (Rs.37.04 lakh during 2015-16, Rs.871.41 lakh during 2016-17, Rs.1073.90 lakh during 2017-18 and Rs.1249.46 lakh during 2018-19) and, therefore, it may be allowed to recover the impact of wage revision, as additional O&M expense from Respondents as one-time payment in exercise of the power under provisions of Regulations 54 and Regulation 55 of the 2014 Tariff Regulations.



100. The Respondent, MPPMCL submitted that the Petitioner has not submitted the year wise/ head wise details of impact of wage revision claimed. It is noticed that the Petitioner vide affidavit dated 29.6.2021 has furnished the detailed break-up of the actual O&M expenses for the 2014-19 tariff period under various sub-heads after including the claimed wage revision impact for employees of the Petitioner and employees of KV/DAV/CISF. The actual O&M expenses incurred by the Petitioner is as under:

(Rs. in lakh)

Year	Actual Audited O&M expenses
2014-15	9301.55
2015-16	8379.26
2016-17	10227.94
2017-18	10800.04
2018-19	10989.75
Total	49698.54

101. The Petitioner has submitted that the impact of employee pay revision on account of 7th Pay Commission for CISF and 3rd Pay Revision Committee for Central Public Sector Undertakings were not in existence and/ or incorporated, while the 2014 Tariff Regulations were being specified by the Commission. Therefore, the same ought to be allowed *de hors* the under/over recovery of O&M expenses by the generating company. The Petitioner has further stated that correlating the grant of relief on account of wage revision due to 7th Pay Commission to the actual O&M expenses of the Petitioner would amount to disincentivizing efficient generation, as generating companies who are inefficient in managing their O&M activities would be granted the entire expenses, whereas the generating companies which are efficient would only be granted partial relief and such a dispensation would be contrary to the object and purport of Section 61 of the Electricity Act, 2003 and the Tariff Policy, 2016.

102. 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.***

103. It is observed that the above methodology, as indicated in SOR suggests the comparison of normative O&M expenses with the actual O&M expenses on year-to-year basis. However, in this respect, the following facts need consideration:

- a) The norms are framed based on the averaging of the actual O&M expenses of past five years to capture the year-on-year variations in sub-heads of O&M expenses.
- 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 generators find that their actual expenditure has gone beyond the normative O&M in a particular year, they put departmental restrictions and try to bring the expenditure for the next year below the norms.

104. In consideration of above facts, the Commission finds 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, after wage revision. The comparison of the normative O&M expenses and the actual O&M expenses shall be made for three years i.e., 2015-19, on combined basis, which is commensurate with the wage revision claim being spread over the four years.

105. In view of the above, the following is the comparison of the normative O&M expenses allowed to the generating station for the period 2016-19 versus the actual O&M expenses incurred after considering the impact of wage revision:

	<i>(Rs. in lakh)</i>					
	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Actual Audited O&M expenses(A)	9301.55	8379.26	10227.94	10800.04	10989.75	
Normative O&M expenses as per Regulations(B)	9643.91	10248.71	10892.95	11576.64	12306.34	
Difference between the normative and actual O&M expenses [(B)-(A)]	NA	1869.45	665.01	776.60	1316.59	4627.65
Wage revision impact claimed	NA	37.04	871.41	1073.9	1249.46	3231.81

106. It is observed from the table above that for the years of wage revision impact i.e., 2015-16 to 2018-19, the normative O&M expenses allowed on a combined basis, are in excess of the actual expenses incurred by the Petitioner. Therefore, the Commission is not allowing any recovery of impact of wage revision through additional O&M expenses, since the normative O&M expenses allowed to the generating station



in terms of the Regulations, is sufficient to cater to the requirement of the impact of wage revision.

Impact of Goods and Service Tax (GST)

107. The Petitioner has claimed the impact of GST as a change in law under Regulation 3(9) read with Regulation 14(3) of 2014 Tariff Regulations. The Petitioner stated that the impact of increase in rate of indirect tax from 15% to 18% has been calculated on all taxable services and being claimed for the period 1.7.2017 to 31.3.2019. The Petitioner has claimed Rs.200.00 lakh towards impact of GST for the period 1.7.2017 to 31.3.2019.

108. The Respondent, MPPMCL has submitted that petitioner has claimed the impact of GST in 2017-18 and 2018-19 without providing proper documents /supporting statements. In response, the Petitioner has submitted that the total impact of GST for this generating station is Rs.76 lakh in 2017-18 and Rs.124 lakh in 2018-19, as a change in law' event, as tabulated under:

Nature		2017-18 (Q2-Q4)	2018-19
		Post GST period claimable (Rs. In lakh)	GST claimable (Rs. in lakh)
Material	A	405.09	663.07
Services- Taxable	B	2975.12	4891.95
Services- Exempt	C	3440.06	4343.40
Total General Administration Expenses	D=(A+B+C)	6820.27	9898.42
Impact of 3% additional tax on Taxable Services due to GST	E=B*(0.03/1.18)	75.64	124.37
Total claim			200.00

109. We have considered the submissions of parties. While framing the 2014 Tariff Regulations, the variation in taxes and duties have been captured in the normative O&M expenses allowed and any change in taxes is not admissible separately. Further, the 2014 Tariff Regulations has not specifically mentioned any consideration for allowing taxes separately. The escalation rates considered in the normative O&M



expenses is only after consideration of the variations during last five years, which also takes care of variation in taxes also. It may be noted that in case of reduction of taxes or duties, the Petitioner is not required to reimburse any taxes in tariff. Therefore, for any increase in taxes and duties, the Petitioner is not entitled to claim any additional expenses. As such, additional O&M expenses on account of GST are not admissible separately.

Operational Norms

(a) Normative Annual Plant Availability Factor

110. The Normative Annual Plant Availability Factor of 85% for 2014-15 to 2018-19, is in accordance with the provisions of Regulation 36 (A) of the 2014 Tariff Regulations and as approved by order dated 10.4.2017 in Petition No. 325/GT/2014. Hence, the same has been allowed.

(b) Auxiliary Energy Consumption:

111. The Petitioner has submitted Auxiliary Energy Consumption (AEC) of 2.50% as per Regulation 36(E)(c) of the 2014 Tariff Regulations and as approved in order dated 10.4.2017 in Petition No. 325/GT/2014. Hence, the same has been allowed.

(c) Station Heat Rate

112. The Gross Station Heat Rate of 2040 kCal/kWh is in accordance with the provisions of Regulation 36(C)(a) of the 2014 Tariff Regulations and as approved in order dated 10.4.2017 in Petition No. 325/GT/2014 for the 2014-19 tariff period. Hence, the same has been allowed.

Interest on Working Capital

113. Sub-section (b) 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

(b) Open-cycle Gas Turbine/Combined Cycle thermal generating stations



- (i) Fuel cost for 30 days corresponding to the normative annual plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;
- (ii) Maintenance spares @ 30% of operation and maintenance expense specified in regulation 29; and
- (iii) Liquid fuel stock for 15 days corresponding to the normative annual plant availability factor and in case of use of more than one liquid fuel, cost of main liquid fuel duly taking into account mode of operation of the generating stations of gas fuel and liquid fuel“;
- (iv) Receivables equivalent to two months of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;
- (v) 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.”

(a) Fuel Cost and Energy Charges for Working Capital

114. The Fuel cost for 30 days and Energy charges for two months have been calculated based on the Gross Calorific Value (GCV) and Price of gas, as considered in order dated 19.2.2019 in Petition No. 32/RP/2017 in Petition No. 325/GT/2014. Further, Liquid Fuel stock for 15 days has also been considered, as adopted in order dated 19.2.2019 in Petition No. 32/RP/2017 In Petition No. 325/GT/2014. Accordingly, the fuel cost for 30 days, Liquid Fuel stock for 15 days and Energy Charges allowed are as follows:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Fuel cost for 30 days	9383.05	9408.91	9383.20	9383.20	9383.20
Liquid Fuel stock for 15 days	0.00	0.00	0.00	0.00	0.00
Energy charges for two months	18766.09	18817.82	18766.41	18766.41	18766.41



(b) Working Capital for Maintenance Spares

115. The Petitioner in Form-13B has claimed maintenance spares for working capital as follows:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
3077.56	3261.42	3989.85	4291.39	4323.47

116. Regulation 28(1)(b)(ii) of the 2014 Tariff Regulations provide for maintenance spares @ 30% of the O & M expenses. In terms of Regulation 29(2) of the 2014 Tariff Regulations, the cost of maintenance spares @30% of the O&M expenses including water charges and cost of capital spares consumed, are allowed as follows:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
3073.40	3238.77	3693.87	3908.79	3852.20

(c) Working Capital for Receivables

117. Regulation 28(1)(b)(iv) of the 2014 Tariff Regulations provides for Receivables for two months of capacity charge and energy charge for sale of electricity. Accordingly, the Receivable component for working capital is allowed as follows:

(Rs.in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Variable Charges - for two months (A)	18766.09	18817.82	18766.41	18766.41	18766.41
Fixed Charges – for two months (B)	7587.16	8088.73	8640.09	8721.86	8645.24
Total (C) = (A+B)	26353.25	26906.55	27406.50	27488.27	27411.65

(d) Working Capital for O & M Expenses

118. O&M expenses for 1 (one) month as claimed by the Petitioner in Form-13B for the purpose of working capital is as follows:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
854.88	905.95	1108.29	1192.05	1200.96

119. Regulation 28(1)(b)(v) of the 2014 Tariff Regulations provides for Operation & Maintenance expenses for one month as a part of the working capital. The O&M expenses, for one month, as allowed is as under:



(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
853.72	899.66	1026.08	1085.77	1070.05

(e) Rate of interest on working capital

120. 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 of 10.00% + 350 bps). Accordingly, Interest on working capital has been computed as follows:

(Rs. in lakh)

		2014-15	2015-16	2016-17	2017-18	2018-19
Working capital for Fuel cost for 30 days	A	9383.05	9408.91	9383.20	9383.20	9383.20
O & M expenses for 1 month	B	853.72	899.66	1026.08	1085.77	1070.05
Working capital for Maintenance Spares @ 30% of O&M expenses	C	3073.40	3238.77	3693.87	3908.79	3852.20
Working capital for Receivables (2 months)	D	26353.25	26906.55	27406.50	27488.27	27411.65
Total Working Capital	E=(A+B+C+D)	39663.42	40453.88	41509.65	41866.03	41717.10
Rate of Interest	F	13.50%	13.50%	13.50%	13.50%	13.50%
Total Interest on Working capital	G=(E*F)	5354.56	5461.27	5603.80	5651.91	5631.81

Annual Fixed Charges

121. Based on the above, the annual fixed charges approved for the generating station for the 2014-19 tariff period (after truing-up) is summarised below:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	3817.46	4868.46	5403.24	5648.53	5654.68
Interest on Loan	1541.78	2089.58	2814.33	2269.02	1959.63
Return on Equity	24564.48	25317.18	25706.29	25732.42	25784.68
O&M Expenses	10244.66	10795.89	12312.90	13029.29	12840.65
Interest on Working Capital	5354.56	5461.27	5603.80	5651.91	5631.81
Total annual fixed charges approved	45522.94	48532.38	51840.57	52331.17	51871.46
Total annual fixed charges approved in order dated 19.2.2019 in Petition No. 32/RP/2017	45462.73	48723.27	50737.57	51409.97	51643.71



122. The difference between the annual fixed charges already recovered by the Petitioner and the annual fixed charges determined by this order shall be adjusted in terms of Regulation 8 (13) of the 2014 Tariff Regulations.

123. Petition No. 301/GT/2020 is disposed of in terms of the above.

Sd/-
(Pravas Kumar Singh)
Member

Sd/-
(Arun Goyal)
Member

Sd/-
(I.S.Jha)
Member

Sd/-
(P.K.Pujari)
Chairperson

