CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

<u>Petition No. 32/GT/2020</u>

Coram:
Shri I. S. Jha, Member
Shri Arun Goyal, Member
Shri Pravas Kumar Singh, Member

Date of Order: **28th July, 2023**

In the matter of:

Petition for truing-up of tariff of Agartala Gas Turbine Combined Cycle Power Plant (135 MW) of NEEPCO Limited for the period 2014-19.

And

In the matter of:

North Eastern Electric Power Corporation Limited,
Corporate Office: Brookland Compound Lower New Colony,
Shillong 793 003, Meghalaya **...Petitioner**

Vs

1. Assam Power Distribution Company Limited,
   "Bijulee Bhawan", Paltan bazar,
   Guwahati-781 001

2. Meghalaya Energy Corporation Limited,
   Meter Factory Area, Short Round road,
   Integrated Office Complex
   Shillong – 793001, Meghalaya

3. Tripura State Electricity Corporation Limited,
   Vidyut Bhawan, North Banamalipur,
   Agartala, Tripura – 799001

4. Power and Electricity Department,
   Government of Mizoram,
   Aizawal, Mizoram – 796001

5. Manipur State Power Distribution Company Limited,
   Government of Manipur, Keishampat,
   Imphal, Manipur – 795001

6. Department of Power,
   Government of Arunachal Pradesh,
   Vidyut Bhawan, Itanagar – 791111

7. Department of Power,
   Government of Nagaland,
   Kohima – 797 001

8. North Eastern Regional Power Committee,
   NERPC Complex, Dong Parmaw2,
   Lapalang, Shillong 793006, Meghalaya.

9. North Eastern Regional Load Despatch Centre,
   Dogtleh, Lower Nongrah,
   Lapalang, Shillong 793006, Meghalaya. **...Respondents**

Parties Present:
Shri Susanta Deka, NEEPCO
Shri Ripunjoy Bhuyan, NEEPCO
Ms.Elizabeth Pyrbot, NEEPCO

ORDER

The Petitioner, NEEPCO Limited, has filed this petition for truing-up of tariff of Combined Cycle Gas based Power Project (135 MW) (in short "the generating station") for the period 2014-19 in terms of Regulation 8 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (in short "the 2014 Tariff Regulations"). The generating station with an installed capacity of 135 MW comprises of four Gas Turbine (GT) units of 21 MW each and two Steam Turbine (ST) units of 25.50 MW each. The beneficiaries of the North Eastern States have been allocated full capacity of 135 MW from the generating station.

2. The Agartala Gas Turbine Power Project (AGTPP) has an installed capacity of 84 MW and operating in open cycle mode, was declared under Commercial Operation with effect from 1.8.1998. Further, AGTPP was converted to a Combined Cycle Power Plant with the addition of two Steam Turbine Generating units (STG) comprising of a capacity of 25.5 MW each with effect from 29.7.2015 and 1.9.2015 respectively. Accordingly, the date of commercial operation of the units of the generating station are as under:

	Capacity (MW)	Date of Commercial Operation (COD)
Unit – I (GT)	21	1.4.1998
Unit – II (GT)	21	1.4.1998
Unit – III (GT)	21	1.4.1998
Unit – IV (GT)	21	1.8.1998
Unit – V (ST)	25.5	29.7.2015
Unit – VI (ST) / Generating Station	25.5	1.9.2015

3. Since two additional Steam Turbine generating units were introduced with effect from 29.7.2015 and 1.9.2015, CEA had considered the capacity of 23 MW for each STG units and accordingly issued allocation order for the installed capacity of 130 MW for the generating station. However, the Commission, vide its order dated 14.7.2017 in Petition No. 94/GT/2016, had considered the capacity of 25.5 MW for each STG, based on the PG test report, in terms of Regulation 5 of the 2014 Tariff Regulations, and approved the capital cost and the annual fixed charges for 135 MW of the generating station for the period 2014-19 as under:

Capital Cost allowed

(Rs. in lakh)

	2014-15	**2015-16**			**2016-17**	**2017-18**	**2018-19**
		1.4.2015 to 28.7.2015	**29.7.201 5 to 31.8.2015 (COD of STG-II)**	**1.9.2015 to 31.3.2016 (COD of STG-I)**			
Opening Capital cost	34172.61	34243.04	49607.45	64599.76	65532.21	65677.14	65677.14
Additional Capitalization approved vide order dated 23.2.2016	126.90	586.71	167.63	1050.16	80.00	0.00	0.00
Additional Capitalization approved in present Petition i.e. as on COD of STG-I and II	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Less: Decapitalization	56.47	65.77	18.79	117.71	35.60	0.00	0.00
Add: Liability discharge during the period (Cost of Construction Power)	0.00	0.00	0.00	0.00	100.53	0.00	0.00
Net Additional capital expenditure	70.43	520.94	148.84	932.45	144.93	0.00	0.00
Closing capital cost	**34243.04**	**34763.98**	**49756.29**	**65532.21**	**65677.14**	**65677.14**	**65677.14**

Annual Fixed Charges allowed

(Rs. in lakh)

	2014-15	2015-16			2016-17	2017-18	2018-19
		1.4.2015 to 28.7.2015	29.7.2015 to 31.8.2015	1.9.2015 to 31.3.2016			
Depreciation	544.35	639.85	1393.98	2148.09	2269.67	2277.09	2277.09
Interest on Loan	0.00	0.00	368.34	709.99	642.82	557.46	473.35
Return on Equity	3273.64	3306.98	4204.24	5113.68	5145.52	5149.80	5149.80
Interest on Working Capital	872.24	947.27	954.21	1198.34	1142.46	1167.43	1193.90
O & M Expenses	3470.88	3707.76	3909.15	4819.50	5147.55	5498.55	5872.50
Total	**8161.11**	**8601.86**	**10829.92**	**13989.60**	**14348.03**	**14650.34**	**14966.63**

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 shall make an application for interim truing up of capital expenditure including additional capital expenditure in FY 2016-17."*

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

Capital cost claimed

(Rs. in lakh)

	2014-15	2015-16			2016-17	2017-18	2018-19
		1.4.2015 to 28.7.2015	29.7.2015 to 31.8.2015	1.9.2015 to 31.3.2016			
Opening Capital Cost	34172.61	34165.67	50704.68	65359.26	65987.32	66464.58	68109.08
Add: Addition during the year/period	0.00	0.00	0.00	628.06	136.29	1231.64	89.22
Less: De capitalization during the year/period	0.00	0.00	0.00	0.00	0.00	351.73	56.45
Less: Reversal during the year/period	6.94	0.00	0.00	0.00	79.28	0.00	0.00
Add: Discharges during the year/period	0.00	0.00	0.00	0.00	420.25	764.59	234.89
Closing Capital Cost	**34165.67**	**33540.03**	**50079.04**	**65987.32**	**66464.58**	**68109.08**	**68376.74**

	2014-15	2015-16			2016-17	2017-18	2018-19
		1.4.2015 to 28.7.2015	29.7.2015 to 31.8.2015	1.9.2015 to 31.3.2016			
Average Capital Cost	34169.14	33852.85	50391.86	65673.29	66225.95	67286.83	68242.91

Annual Fixed Charges claimed

(Rs. in lakh)

	2014-15	2015-16			2016-17	2017-18	2018-19
		1.4.2015 to 28.7.2015	29.7.2015 to 31.8.2015	1.9.2015 to 31.3.2016			
Depreciation	544.35	510.40	1311.50	2066.63	2102.06	2196.28	2360.19
Interest on Loan	0.00	0.00	385.46	716.48	757.95	778.09	909.25
Return on Equity	3271.38	3476.88	4540.61	5470.36	5214.97	5917.20	5393.37
Interest on Working Capital	970.09	1056.31	1328.80	1315.10	1066.97	1077.92	1339.65
O & M Expenses	3470.88	3707.76	3909.15	4819.50	5147.55	5498.55	5872.50
Total	**8256.70**	**8751.34**	**11475.52**	**14388.07**	**14289.51**	**15468.05**	**15874.96**

6. The Respondent No.1, APDCL has filed its reply vide affidavit dated 20.7.2021 and the Petitioner vide affidavit dated 9.8.2021 has filed its rejoinder to the said reply. This Petition along with Petition No.246/GT/2020 (tariff for the period 2019-24) was heard on 18.11.2021 and 10.8.2022, and the Petitioner was directed to submit certain additional information. In response, the Petitioner vide affidavits dated 16.12.2021 and 8.9.2022, respectively has submitted the additional information, after serving copies on the Respondents. This Petition was thereafter heard on 20.9.2022, and the Commission, after directing the Petitioner to submit certain additional information, reserved its order in the petition. In response, the Petitioner vide affidavit dated 10.10.2022 has filed the additional information, after serving copies on the Respondents. Based on the submissions of the parties and the documents available on record and on prudence check, we proceed for truing-up the tariff of the generating station for the period 2014-19, as stated in the subsequent paragraphs.

Capital Cost

7. Regulation 9 of the 2014 Tariff Regulations provides as follows:

"9. Capital Cost:

(1) The Capital cost as determined by the Commission after prudence check in

accordance with this regulation shall form the basis of determination of tariff for existing and new projects.

(2) The Capital Cost of a new project shall include the following:
(a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
(c) Increase in cost in contract packages as approved by the Commission;
(d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;
(e) capitalized Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;
(f) expenditure on account of additional capitalization and de-capitalization determined in accordance with Regulation 14 of these regulations;
(g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and
(h) adjustment of any revenue earned by the transmission licensee by using the assets before COD.

(3) The Capital cost of an existing project shall include the following:
(a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014.
(b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and
(c) expenditure on account of renovation and modernization as admitted by this Commission in accordance with Regulation 15."

8. The Commission vide its order dated 14.7.2017 In Petition No.94/GT/2016 had allowed the opening capital cost of Rs. 34172.61 lakh. The Petitioner in the present Petition has also considered the opening capital cost of Rs. 34172.61 lakh, as on 1.4.2014. Accordingly, in terms of Regulation 9(3) of the 2014 Tariff Regulations, the capital cost of Rs. 34172.61 lakh as on 31.3.2014, has been considered as the opening capital cost as on 1.4.2014, for the purpose of truing-up of the tariff.

Capital Cost as on COD of STG II i.e. 29.7.2015 and COD of STG I i.e. 1.9.2015
Project Approval

9. The Investment Approval (IA) dated 2.7.2012 for cost of execution of the Project envisaged the conversion of the existing Open Cycle Plant to Combined Cycle Power Plant, by installation of two Steam Turbine generating units, as the same was conveyed by the MOP, GOI vide its letter dated 2.7.2012 at an estimated cost of Rs. 29687 lakh (including Interest During Construction of Rs. 2506 lakh) at June, 2011 Price Level with

a debt equity ratio of 70:30.The Petitioner has submitted that in terms of the Investment Approval, the expenditure for the project is to be borne by the Petitioner with a debt equity ratio of 70:30. It has further submitted that the Revised Cost Estimate (RCE) for the Project was accorded by the Board of Directors of the Petitioner's Company in March, 2016 based on the September, 2015 Price Level (COD of STG I) at Rs. 36525 lakh (including Interest During Construction of Rs. 1920 lakh).

10. The Respondent, APDCL has submitted that in the absence of approved RCE by MoP, the Commission had approved the capital cost as on COD of the project as Rs 29687.00 lakh (including Interest During Construction of Rs 2506.00 lakh). It has further submitted that the Commission had directed Petitioner for submission of the approved RCE from GOI in due course and in the absence of approved RCE by GOI, the Commission may take an informed decision regarding the RCE of Rs 36525.00 lakh as claimed by the Petitioner. In response, the Petitioner had submitted that NEEPCO was conferred the status of "Mini Ratna Category-1 PSE" with effect from 8.4.2013 and accordingly the Memorandum of Article of Association of the Company was amended on 28.3.2014, with due approval of the Government of India. It has also stated that the Department of Public Enterprises, Government of India OMs dated 9.10.1997 and 5.8.2005 grant powers to Mini Ratna Category-1 PSEs to incur capital expenditure on new projects to the extent of Rs. 500.00 crore or equal to net worth, whichever is less, without Government approval. The Petitioner has stated that according to the revised delegation of powers conveyed by DPE's OM dated 29.8.2014, RCE for increase in cost beyond 20% of firmed up cost estimate, needs appraisal and approval of the competent authority, which in this case is the Board of Directors of the Petitioner, as per the extant delegation of powers. The Petitioner has added that DPE's OM dated 15.11.2007 clearly mentions that RCEs which are within the power delegated to a Ministry/ Department/

CPSE irrespective of the authority which had initially approved the project, shall be approved at the level of the competent authority as per power of fresh approval.

11. We have examined the matter. It is observed that the Petitioner in this petition has furnished that it was conferred the status of "Mini Ratna Category-1 PSE" with effect from 8.4.2013 and accordingly the Memorandum of Article of Association of the company was amended on 28.3.2014 with due approval of the Government of India. The Department of Public Enterprises, Government of India OMs dated 9.10.1997 and 5.8.2005 grant powers to Mini Ratna Category-1 PSEs to incur capital expenditure on new projects to the extent of Rs. 500.00 crore or equal to net worth, whichever is less, without government approval. According to the revised delegation of powers conveyed by DPE's above referred OM dated 29.8.2014, RCE for increase in cost beyond 20% of firmed up cost estimate needs appraisal and approval of the competent authority, which in this case is the Board of Directors of the Petitioner, as per the extant delegation of powers. Further, DPE's OM dated 15.11.2007 clearly mentions that RCEs which are within the power delegated to a Ministry/Department/CPSE irrespective of the authority which had initially approved the project, shall be approved at the level of the competent authority as per power of fresh approval. In view of the submissions of the Petitioner, as above, the Commission has considered the RCE of Rs. 36525 lakh (including IDC of Rs.1920 lakh) as approved by the Board of Directors of the Petitioner and approves the additional capital expenditure as claimed by the Petitioner.

Time Over-run

12. It is observed that the Commission vide its order dated 14.7.2017 in Petition No. 94/GT/2016 had condoned the delay of 93 days for both the STGs and has not condoned the delay of 273 days for STG-I and 117 days for STG-II, out of total delay of 366 days for STG-I and 210 days for STG-II. The relevant paragraph of the order is

extracted below:

> *"20. In line with the above, we consider the collapsing/piling of soil covariate as geological surprise and accordingly, on prudence check the delay of 93 days due to delay in piling work has been condoned.*
>
> *21. As regards the delay in other activities, the Petitioner has submitted that the delay of 273 days for STG-I and 117 days for STG-II in Pile cap foundation of chimney, Fabrication and Erection of chimney, piling work of ACC-I and II and STG building, and erection was on account of delay in failing of piling work. However, it is noticed that the Petitioner has not furnished any supporting documents substantiating the period of delay of the said works but has instead submitted that the delay was on account of failure of piling work in both the STG's. In the absence of any documentary evidence substantiating the period of delay and the reasons thereof, we are inclined to hold that there has been slackness in the project management by the Petitioner and the delay on this count cannot be said to be beyond the control of the Petitioner. Accordingly, we are of the view that delay of 273 days for STG-I and 117 days for STG-II is attributable to the Petitioner. Therefore, the delay of 273 days for STG-I and 117 days for STG-II has not been allowed on prudence check.*
>
> *22. To summaries, out of total delay of 366 days for STG-I and 210 days for STG-II, the delay of 93 days has been allowed for both the STGs, the delay of 273 days for STG-I and 117 days for STG-II has not been allowed for the reason stated there under."*

13. Accordingly, the time overrun as allowed by order dated 14.7.2017 in Petition No. 94/GT/2016 has been considered for the purpose of tariff for the period 2014-19.

<u>Infirm Power</u>

14. The Petitioner has submitted that the revenue earned from sale of infirm power from the two STG units from their respective dates of commissioning till their CODs have been adjusted in the capital cost of the project, after accounting for fuel expenses, in terms of Regulation 18 of the 2014 Tariff Regulations. Accordingly, the amount of Rs. 1251.28 lakh has been reduced from the capital cost as on COD of STG-I and STG-II.

<u>IDC/IEDC</u>

15. The Petitioner has submitted that the initial estimate of IDC as per Investment Approval is Rs.2506 lakh as on COD of the units. However, IDC has been revised to Rs.1920 lakh as on COD in the RCE approved by the Board of the Petitioner's company.

16. As stated above, the total delay of 273 days for STG I and 117 days for STG II has

been disallowed in this order. Accordingly, IDC/IEDC corresponding to the time overrun disallowed, has been deducted from the capital cost.

Cost of Construction Power

17. The Petitioner has submitted that an amount of Rs.100.53 lakh has been incurred towards Purchase of construction power from the Respondent Tripura State Electricity Corporation Limited. It has further submitted that the expenditure on account of purchase of construction power shall be capitalized during 2016-17. Accordingly, the cost of construction power has been considered in 2016-17.

Price Variation

18. The Petitioner has submitted that an amount of Rs. 23.88 crore has been paid to the contractor as per price variation, but no amount has been paid to the contractors on account of price variation beyond the scheduled date of each activity as per the agreement and therefore, payment of price variation does not arise. The Petitioner has further submitted that few price variation bills are yet to be finalized as payment of few running bills could not be settled due to some road permit issues. It has also stated that the price variation will not be paid beyond scheduled completion date of each activity for any pending bills.

19. The matter has been considered. It is observed that the Commission vide order dated 14.7.2017 in Petition No. 94/GT2016 had directed the Petitioner to submit the Price variation calculation containing details of the amount paid to the contractors till SCOD and from SCOD to actual COD along with other details/documents at the time of truing up of tariff in terms of Regulation 8(1) of the 2014 Tariff Regulations. The Petitioner vide affidavit dated 16.12.2021 in compliance to ROP of the hearing dated 18.11.2021 has submitted the details of actual price variation of Rs 2165.19 lakh and Rs 40.83 lakh paid M/s Thermax Ltd. And M/s BBL respectively. Accordingly, out of total

amount of Rs. 23.88 crore as claimed by the Petitioner, the Petitioner has only submitted the details of Rs 2206.03 lakh paid to the contractors.

20. The Petitioner, while submitting the above two details, has only furnished the date of price variation invoice of Rs 40.84 lakh, raised pertaining to one contractor M/s BBL. However, the Petitioner has not submitted the dates of price variation invoice, raised to the contractor M/s Thermax, amounting to Rs 2165.19 lakh. The Petitioner has also not submitted the scheduled completion and actual completion dates of corresponding activity/ies for which price variation invoice has been raised. However, the Petitioner has submitted that no amount has been paid to the contractors on account of price variation beyond the scheduled date of each activity as per the agreement. Accordingly, we are of the concerned view that the price variation of Rs 2206.03 lakh as paid to the contractors is allowed to be capitalized.

Liquidated Damages

21. The Petitioner has submitted that the amount of LD to be claimed for the period of time over-run is yet to be finalized by the Petitioner. In view of submissions, the amount of LD has not been considered in this order. The Petitioner is directed to submit the details on this count, after finalization and recovery of LD.

Capital Cost as on COD

22. The capital cost as on COD of STG-II and STG-I as on 29.7.2015 and 1.9.2015 is summarized as below:

(Rs. in lakh)

Particulars	STG-II (COD-29.7.2015)	STG-I (COD-1.9.2015)
Capital Cost claimed	**17164.66**	**15280.22**
Less: -IDC claimed	(959.81)	(959.81)
Less: -IEDC claimed	(1375.88)	(1375.88)
Add: -IDC Allowed (1919.61*93 days/ 366 days) (1919.61*93 days/210 days)	243.89	425.06

Add: -IEDC allowed [1375.88*(93 days/366 days)] [1375.88*(93 days/210 days)]	349.61	609.32
Less: -Sale of Infirm Power	(625.64)	(625.64)
Capital Cost allowed as on COD	**14796.83**	**13353.27**

Additional Capital Expenditure

23. Clause (3) of Regulation 7 of the 2014 Tariff Regulations provides that the application for determination of tariff shall be based on admitted capital cost including any additional capital expenditure already admitted up to 31.3.2014 (either based on actual or projected additional capital expenditure) and estimated additional capital expenditure for the respective years of the tariff period 2014-19. Regulations 14(3) of the 2014 Tariff Regulations provides as under:

"14(1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
(i) Undischarged liabilities recognized to be payable at a future date.
(ii) Works deferred for execution.
(iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13.
(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and
(v) Change in law or compliance of any existing law:
Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.
(2) The capital expenditure incurred or projected to be incurred in respect of the new project on the following counts within the original scope of work after the cut-off date may be admitted by the Commission, subject to prudence check:
(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law.
(ii) Change in law or compliance of any existing law:
(iii) Deferred works relating to ash pond or ash handling system in the original scope of work; and
(iv) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.
(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:
(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;
(ii) Change in law or compliance of any existing law;

(iii) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;

(iv) Deferred works relating to ash pond or ash handling system in the original scope of work;

(v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;

(vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;

(vii) Any additional capital expenditure which has become necessary for efficient operation of generating station other than coal/lignite-based stations or transmission system as the case may be. The claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;

(viii) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;

(ix) In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolesce of technology, replacement of switchyard equipment due to increase of fault level, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system; and

(x) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receiving system arising due to non-materialization of coal supply corresponding to full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station:

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

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

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

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

24. The Petitioner, in Form 9A, has claimed total additional capital expenditure of Rs. 2085.20 lakh during the period 2014-19. However, no additional capital expenditure has been claimed for the period 2014-15 and from 1.4.2015 to 31.8.2015. The Petitioner has also submitted that the additional capital expenditure claimed are on accrual basis and includes undischarged liabilities. Accordingly, the additional capital expenditure claimed by the Petitioner for the period 2014-19 is as under:

(Rs. in lakh)

Sl. No.	Head of Work /Equipment	Regulation	2014-15	2015-16 (1.9.2015 to 31. 3.2016)	2016-17	2017-18	2018-19	Total
A	**Additional Capital Expenditure for GT (Unit -I to IV)**							
1	Supply of 2 No(s) SF6 SPR Circuit Breaker	Regulation not mentioned	0.00	0.00	27.14	0.00	0.00	**27.14**
2	Upgradation of Controller for 2 units (Mark-Vie) for Installation and Commissioning	14(1)	0.00	0.00	0.00	1102.73	0.00	**1102.73**
3	Installation of SPM data analyzer	14(1)	0.00	0.00	0.00	15.18	0.00	**15.18**
4	Fire Fighting	0	0.00	0.00	0.00	43.50	0.00	**43.50**
5	Gas detection protection	0	0.00	0.00	0.00	5.85	0.00	**5.85**
6	6.6 kV Numerical Relay	14(1)	0.00	0.00	0.00	0.00	7.73	**7.73**
7	Lightning Arresters	14(1)	0.00	0.00	0.00	0.00	20.71	**20.71**
8	48-volt 200AH plant acid battery bank	14(1)	0.00	0.00	0.00	0.00	7.13	**7.13**
9	Replacement of 6 no. Cooling water pump	14(1)	0.00	0.00	0.00	0.00	26.55	**26.55**
10	Supply and Installation of Remote Calibration	14(1)	0.00	0.00	0.00	0.00	10.94	**10.94**
11	Procurement of 19 No. Deluge Valve for Automation of Fire Fighting system at Generator Transformer	14(1)	0.00	0.00	0.00	0.00	13.92	**13.92**
12	Installation and commissioning of deluge valve	14(1)	0.00	0.00	0.00	0.00	2.24	**2.24**
	Sub Total (A)		**0.00**	**0.00**	**27.14**	**1167.26**	**89.22**	**1283.61**
B	**Additional Capital Expenditure for STG (Unit-V to VI)**							
1	BOP Mechanical (DM Water System)	14(1)	0.00	139.61	0.00	3.60	0.00	**143.21**
2	BOP Electrical (DM Water system)	14(1)	0.00	1.43	0.00	0.00	0.00	**1.43**
3	BOP Lighting System	14(1)	0.00	0.00	0.00	0.00	0.00	**0.00**
4	Modification of existing GT Control Room	14(1)	0.00	0.00	0.00	0.00	0.00	**0.00**
5	RCC Drain surrounding Air-Cooled Condenser (ACC) building to raw water reservoir & RCC Culvert	14(1)	0.00	0.29	0.00	0.00	0.00	**0.29**
6	Laboratory Instruments (C&I)	14(1)	0.00	0.00	6.33	0.00	0.00	**6.33**
7	Chlorination Plant Spares	14(1)	0.00	0.00	0.00	0.00	0.00	**0.00**
8	Control System Hook up with existing GT control for central control (Combined ST control)	14(1)	0.00	0.00	0.00	0.00	0.00	0.00
9	Construction of C type building (double story) with electrical wiring and fitting	14(1)	0.00	88.50	0.00	0.00	0.00	88.50
10	Different process chemicals for the initial charging of HRSG, Act & DM water lines	14(1)	0.00	19.27	0.00	0.00	0.00	19.27

Sl. No.	Head of Work /Equipment	Regulation	2014-15	2015-16 (1.9.2015 to 31. 3.2016)	2016-17	2017-18	2018-19	Total
11	Acid & Alkali (HCL and NaOH flakes for initial charging of DM plant)	14(1)	0.00	7.70	0.00	0.00	0.00	7.70
12	Procurement of pH meter & conductivity meter	14(1)	0.00	1.16	0.00	0.00	0.00	1.16
13	Resin, Carbon filter media, Gravity filter media for initial charging of DM plant	14(1)	0.00	8.86	0.00	0.00	0.00	8.86
14	Cost of site development & Investigation	14(1)	0.00	1.40	0.00	0.00	0.00	1.40
15	Cost of Construction Facilities	14(1)	0.00	3.24	100.53	0.00	0.00	103.77
16	Emergency DG set interconnection Cabling works	14(1)	0.00	7.79	0.00	0.00	0.00	7.79
17	Modification of existing GT Control Room	14(1)	0.00	0.00	0.00	0.00	0.00	0.00
18	ETP (Effluent Treatment Plant) Pond	14(1)	0.00	6.14	0.00	0.00	0.00	6.14
19	Mod Kit for modification of GT control system (4 Nos) for combine cycle operation	14(1)	0.00	239.14	0.00	0.00	0.00	239.14
20	Site service charges for installation and commissioning of combined cycle modification for all 4 GTs	14(1)	0.00	37.92	0.00	0.00	0.00	37.92
21	Laboratory Equipment for DM plant	14(1)	0.00	4.09	0.00	0.00	0.00	4.09
22	Active and reactive power transducer (ABB make)	14(1)	0.00	48.95	0.00	0.00	0.00	48.95
23	Parapet wall on Effluent tank	14(1)	0.00	0.64	0.00	0.00	0.00	0.64
24	Development of Green Belt	14(1)	0.00	0.87	0.00	0.00	0.00	0.87
25	Spectrophotometer (HACH make model DR2800)	14(1)	0.00	4.08	0.00	0.00	0.00	4.08
26	Chain link fencing in B-Type, C-type & HOP's Quarter		0.00	0.00	2.29	0.00	0.00	2.29
27	Construction of HOP Residence including electric wiring/fittings		0.00	0.00	0.00	60.78	0.00	60.78
	Sub Total (B)		**0.00**	**628.06**	**109.15**	**64.38**	**0.00**	**794.61**
C	**Sub Total (C) = (A) + (B)**		**0.00**	**628.06**	**136.29**	**1231.64**	**89.22**	**2085.20**
D	Decapitalization of Spares (part of capital cost) (D)		0.00	0.00	0.00	351.73	56.45	408.18
E	Reversal during the year/period (E)		6.94	0.00	79.28	0.00	0.00	86.22
G	Discharge of Liabilities (G)		0.00	0.00	420.25	764.59	234.89	1419.74
G	**Net Additional capitalization claimed (G) = (F) + (G)**		**(-) 6.94**	**628.06**	**477.26**	**1644.50**	**267.66**	**3010.53**

25. It is observed that the Petitioner has either not mentioned any regulation or has only mentioned Regulation 14(1) without mentioning the relevant sub-clause of the said Regulation under which most of the assets have been claimed for additional capitalization. The Petitioner has claimed the additional capital expenditure for GTs and STGs separately. However, the COD of the open cycle (GT) of the generating station is 1.8.1998 and the COD of the combined cycle (i.e. only STG) is 1.9.2015. Accordingly, in terms of the 2014 Tariff Regulations, the cut-off date of the STG is 31.3.2018. Accordingly, the actual additional capital expenditure claimed by the Petitioner for GT's and STG's are discussed below:

(A) Additional Capital Expenditure towards GT (Units I to IV)

2014-16

26. No additional capital expenditure has been claimed by the Petitioner with respect to Gas Turbines during the period from 2014-15 and 2015-16.

2016-17

27. The additional capital expenditure claimed by the Petitioner towards GT (Units I to IV) in 2016-17 is discussed below:

(Rs. in lakh)

Sl. No.	Head of Work / Equipment	Regulation	Justification	Claimed	Allowed	Remarks on admissibility
1	Supply of 2 No.(s) SF6 SPR Circuit Breaker.	Regulation not mentioned.	Pneumatic type Circuit Breakers are obsolete now. Hence no spares support from OEM is not available.	27.14	27.14	This item is a new item which was not envisaged during submission of additional capital expenditure and decapitalization proposal for the period 2014-19. The Petitioner, in justification of the same, has submitted the certificate from OEM (M/s ABB) regarding obsolescence of 145kV SF6 circuit breakers type ELF SF2-1/ELF145nc. Considering the fact that the asset has become technically obsolete and the need for additional capitalization is for the safe operation of the plant, the claim of the Petitioner is **allowed** under Regulation 14(3)(vii) of the 2014 Tariff Regulations. The Petitioner has however not provided the gross value of the replaced asset and depreciation recovered. Accordingly, the gross value of the old asset has been considered as Rs. 11.28 lakh under Assumed deletion
	Total amount			**27.14**	**27.14**	

2017-18

28. The additional capital expenditure claimed by the Petitioner towards GT (Units I to IV) in 2017-18 is discussed below:

(Rs. in lakh)

Sl. No.	Head of Work /Equipment	Regulation	Justification	Claimed	Allowed	Remarks on Admissibility
1	Upgradation of Controller for 2 units (Mark-Vie) For Installation and Commissioning	14(1)	This item was allowed in the tariff period 2015-16. But, due to delay in finalization of specification, the same could not be materialized in 2015-16. Instead, supply, installation and commissioning was done in the year 2017-18. Installation in Unit#4 was done in Sept 2017 and Unit#3 in Nov 2017.	1102.73	1102.73	It is observed that the Commission vide order dated 14.7.2017 in Petition No. 94/ GT/ 2016 had allowed Rs. 1500 lakh in 2015-16 for the said work. As the additional capital expenditure claimed by the Petitioner has already been allowed and is lesser than the admitted amount, the claim is **allowed** under Regulation 14(3)(vi) of 2014 Tariff Regulations. The Petitioner has submitted the original value of the asset decapitalised.
2	Installation of SPM data analyser	14(1)	In the CEMS panel, which was installed during erection & commissioning of extension project, the SPM data analyser was not incorporated. However, uploading of SPM data to CPCB Portal is also mandatory for viewing real time data by CPCB authority.	15.18	0.00	The Petitioner has submitted hat installation of SPM data analyzer is required for uploading the SPM data to CPCB portal. However, the Petitioner has not submitted any documentary evidence substantiating the claim that it is mandatory requirement as per direction of CPCB, or directions from appropriate Government agencies or statutory authorities. In view of this, the additional capital expenditure claimed is **not allowed.**
3	Fire Fighting	Regulation not mentioned	Arbitral Award Pragati Engineering	43.50	43.50	The Petitioner has not mentioned any Regulation under which the said expenditure has been claimed. However, the Petitioner has submitted that it is the left-over work abandoned by M/s Pragati and was done by M/s Nilex. Since, firefighting is an important asset for the safety and security of

Sl. No.	Head of Work /Equipment	Regulation	Justification	Claimed	Allowed	Remarks on Admissibility
						the plant, and the Petitioner has capitalized and completed the work, we are of the concerned view that the additional capital expenditure claimed **is allowed**
4	Gas detection protection	Regulation not mentioned	As the OEM i.e. M/s HIIPL certified that the Gas detection protection are obsolete. Hence for safety of the machine this has been installed.	5.85	5.85	The Petitioner has submitted letter dated 31.8.2016 from OEM (M/s Honeywell International India Private Limited) as regards obsolescence of existing gas alarm module i.e. 5700. Keeping in view the obsolescence of technology and considering the necessity of the additional capital expenditure for safe operation of the plant, the additional capital expenditure claimed is **allowed** under Regulation 14(3)(vii) of the 2014 Tariff Regulations
	Total amount			**1167.26**	**1152.08**	

2018-19

29. The additional capital expenditure claimed by the Petitioner towards GT (Units I to IV) in 2018-19 is discussed below:

(Rs. in lakh)

S. No	Head of Work /Equipment	Regulation	Justification	Claimed	Allowed	Remarks on admissibility
1	6.6 kV Numerical Relay.	14(1)	The original estimate was prepared based on budgetary offer from OEM. However, on tendering, the cost involvement came down. The delay occurred due to delay in	7.73	7.73	It is observed that the Commission vide order dated 14.7.2017 in Petition No. 94/GT/ 2016 had allowed Rs. 48 lakh for the said work. As the additional capital expenditure claimed by the Petitioner has already been allowed and is lesser than the admitted amount, the

			finalization technical specification and tender finalization.			claim is **allowed** under Regulation 14(3)(vi) of 2014, Tariff Regulations. The Petitioner has submitted the original value of the asset decapitalised.
2	Lightning Arresters	14(1)	Estimate was prepared by obtaining a budgetary offer. However, actual expenditure is less than Admitted cost by commission	20.71	20.71	It observed that the Commission vide order dated 14.7.2017 in Petition No. 94/GT/2016 had allowed Rs. 25 lakh towards the said work. As the additional capital expenditure claimed by the Petitioner has already been allowed and is lesser than the admitted amount, the claim is **allowed** under Regulation 14(3)(vi) of the 2014 Tariff Regulations. The Petitioner has submitted the original value of the asset decapitalised.
3	48 volt 200AH plant acid battery bank	14(1)	Processing of proposal was delayed due to responsible engineers busy in commissioning of Combined cycle project. Total amount admitted by the Commission could not be utilized as finalization of tender of Battery chargers were delayed. It is proposed to claim the expenditures of Battery chargers in the tariff period of 2019-24. However, an Rs. 7,12,721.00 spent against purchase of 48 V Battery Bank has been	7.13	7.13	It is observed that the Commission vide order dated 14.7.2017 in Petition No. 94/GT/2016 had allowed Rs. 80 lakh for the said work. As the additional capital expenditure claimed by the Petitioner has already been allowed and is lesser than the admitted amount, the claim is **allowed** under Regulation 14(3)(vi) of 2014, Tariff Regulations. The Petitioner has submitted the original value of the asset decapitalised.

			capitalized in 2018-19.			
4	Replacement of 6 no. Cooling water pump	14(1)	The Commission already approved Rs. 18.4 lakh for replacement of 4 no. old Cooling Water Pump Motor Set in 2014-15 and 2015-16. Against this approval the Petitioner has replaced 4(four) no. of Cooling Water Pump Motor Sets in 2017-18. In addition to this, the Petitioner has replaced additional 6 (six) number Cooling Water Pumps in March 2019 as the condition of the old Cooling Water Pump was deteriorating and caused frequent outage of GTGs. Total cost of these 6 (six) no. Pump Set is Rs. 26.55 lakh. This will enhance the reliability of GTG performance.	26.55	26.55	It is observed that the Commission vide order dated 14.7.2017 in Petition No. 94/GT/2016 had allowed Rs. 18.40 lakh for the said work. However, the claim of the Petitioner is more than the admitted cost. Considering the fact that the admitted cost of Rs 18.40 lakh was pertaining to replacement of 4 no. of cooling tower and the Petitioner has replaced 6 no. of additional cooling water pimp as the condition of these pumps were deteriorating, we allow the claim of the Petitioner under Regulation 14(3)(vi) of 2014 Tariff Regulations. The Petitioner has submitted the original value of the asset decapitalised.
5	Supply and Installation of Remote Calibration	14(1)	Member Secretary, Tripura Pollution Control Board, vide his Letter No. F6(29)/TSPCB/ 93/3652, Dt. 08/05/2018 directed NEEPCO to installation Remote Calibration facilities at AGTCCPP. Accordingly, Remote Calibration facility was installed.	10.94	10.94	It is observed that the additional capital expenditure claimed has been incurred as per the directions of the statutory authority. In view of this, the claim of the Petitioner is **allowed** under Regulation 14(3)(iii) of the 2014 Tariff Regulations.
6	Procurement of 19 No. Deluge Valve for Automation of Fire	14(1)	The Deluge Valves of Automation of	13.92	13.92	Considering the fact that the additional

	Fighting system at Generator Transformer		Fire Fighting System of Generator Transformers were in defunct condition and Fire Fighting system of Generator Transformer was at risk. So, all the old and defunct Deluge Valve were replaced with new one.			capital expenditure claimed is for the safe operation of the plant, the claim of the Petitioner is **allowed.** Accordingly, the gross value of the old asset has been considered as Rs. 5.25 lakh under Assumed deletion
7	Installation and commissioning of deluge valve	14(1)	The Deluge Valves of Automation of Fire Fighting System of Generator Transformers were in defunct condition and Fire Fighting system of Generator Transformer was at risk. So, all the old and defunct Deluge Valve were replaced with new one.	2.24	2.24	Considering the fact that the additional capital expenditure claimed is for the safe operation of the plant, the claim of the Petitioner is **allowed** Accordingly, the gross value of the old asset has been assumed as Rs. 0.84 lakh under Assumed deletion
	Total amount			**89.22**	**89.22**	

Additional Capital Expenditure towards STG (Units V to VI)

30. The COD of STG is 1.9.2015 and therefore, the cut-off date is 31.3.2018 in terms of the 2014 Tariff Regulations. The Petitioner has claimed additional capital expenditure under Regulation 14(1) of the 2014 Tariff Regulations, but has not provided any specific sub-clauses under the said Regulation. The claims of the Petitioner for additional capital expenditure is discussed below:

1.4.2014 to 31.8.2015 and 2018-19

31. No additional capital expenditure has been claimed by the Petitioner towards STG (Units V to VI) from 1.4.2014 to 31.8.2015 and for the year 2018-19.

1.9.2015 to 31.3.2018

32. The additional capital expenditure claimed towards STG (Units V &VI) during the

period from 1.9.2015 to 31.3.2018 under Regulation 14(1) of the 2014 Tariff Regulations are discussed below:

(Rs. in lakh)

S. No.	Head of Work /Equipment	2015-16 (1.9.2015 to 31.3.2016)	2016-17	2017-18	Total
1	BOP Mechanical (DM Water System)	139.61	0.00	3.60	143.21
2	BOP Electrical (DM Water system)	1.43	0.00	0.00	1.43
3	BOP Lighting System	0.00	0.00	0.00	0.00
4	Modification of existing GT Control Room	0.00	0.00	0.00	0.00
5	RCC Drain surrounding Air-Cooled Condenser (ACC) building to raw water reservoir & RCC Culvert	0.29	0.00	0.00	0.29
6	Laboratory Instruments (C&I)	0.00	6.33	0.00	6.33
7	Chlorination Plant Spares	0.00	0.00	0.00	0.00
8	Control System Hook up with existing GT control for central control (Combined ST control)	0.00	0.00	0.00	0.00
9	Construction of C type building (double story) with electrical wiring and fitting	88.50	0.00	0.00	88.50
10	Different process chemicals for the initial charging of HRSG, Act & DM water lines	19.27	0.00	0.00	19.27
11	Acid & Alkali (HCL and NaOH flakes for initial charging of DM plant)	7.70	0.00	0.00	7.70
12	Procurement of pH meter & conductivity meter	1.16	0.00	0.00	1.16
13	Resin, Carbon filter media, Gravity filter media for initial charging of DM plant	8.86	0.00	0.00	8.86
14	Cost of site development & Investigation	1.40	0.00	0.00	1.40
15	Cost of Construction Facilities	3.24	100.53	0.00	103.77
16	Multimedia projectors with accessories	0.00	0.00	0.00	0.00
17	Emergency DG set interconnection Cabling works	7.79	0.00	0.00	7.79
18	Modification of existing GT Control Room	0.00	0.00	0.00	0.00
19	ETP (Effluent Treatment Plant) Pond	6.14	0.00	0.00	6.14
20	Mod Kit for modification of GT control system (4 Nos) for combine cycle operation	239.14	0.00	0.00	239.14
21	Site service charges for installation and commissioning of combined cycle modification for all 4 GTs	37.92	0.00	0.00	37.92
22	Laboratory Equipment for DM plant	4.09	0.00	0.00	4.09
23	Active and reactive power transducer (ABB make)	48.95	0.00	0.00	48.95
24	Parapet wall on Effluent tank	0.64	0.00	0.00	0.64
25	Development of Green Belt	0.87	0.00	0.00	0.87

S. No.	Head of Work /Equipment	2015-16 (1.9.2015 to 31.3.2016)	2016-17	2017-18	Total
26	Spectrophotometer (HACH make model DR2800)	4.08	0.00	0.00	4.08
27	Chain link fencing in B-Type, C-type & HOP's Quarter	0.00	2.29	0.00	2.29
28	Construction of HOP Residence including electric wiring/fittings	0.00	0.00	60.78	60.78
	Total	**628.06**	**109.15**	**64.38**	**794.61**

33. The Respondent APDCL has submitted that the Petitioner has claimed the above-mentioned additional capital expenditure without proper justification and any prior approval. In response, the Petitioner has submitted that the Commission vide order dated in 14.7.2017 in Petition No. 94/GT/2016, had not allowed these additional capital expenditures and stated that these shall be considered at the time of truing up of tariff in terms of Regulation 8(1) of the 2014 Tariff Regulations, after approval of the RCE, based on the justification/documentary evidence to be furnished by the Petitioner. Accordingly, the Petitioner has performed the said works and has claimed the same in this petition.

34. The matter has been considered. It is observed that the Commission vide order dated 14.7.2017 in Petition No. 94/GT/2016 has observed the following:

> *"42. The cut-off date of the generating station is 31.3.2018. It is evident from the above that the petitioner has claimed total additional expenditure of ₹3179.69 lakh for the period 2015-19 in respect of works which are within the original scope of work and within the cut-off date of the generating station under Regulation 14(1) of the 2014 Tariff Regulations. It has also claimed additional capital expenditure in respect of works which are necessary for efficient operation of the generating station after the cut-off date of the generating station under the provisions of Regulation 14(3) of the 2014 Tariff Regulations. As stated earlier, the capital cost as on COD of the project has been restricted to the original Investment Approval cost of ₹14843.47 lakh as on COD of STG-II (29.7.2015) and ₹29686.94 lakh as on COD of STG-I (1.9.2015) subject to submission of approved RCE by the MoP, GoI, by the petitioner. In this background, we are not inclined to consider the additional capital expenditure claimed by the petitioner, at this stage. The claim of the petitioner under the head shall however be considered at the time of truing up of tariff in terms of Regulation 8 of the 2014 Tariff Regulations after approval of RCE based on the justification/documentary evidence to be furnished by the petitioner."*

35. The Commission in the above order had not allowed any additional capital

expenditure and the same was subject to furnishing of approved RCE by MOP, GOI. It is observed that the Petitioner, in this petition, has furnished that it was conferred the status of “Mini Ratna Category-1 PSE” with effect from 8.4.2013, and accordingly the Memorandum of Article of Association of the Company was amended on 28.3.2014, with due approval of the Government of India. It has stated that the Department of Public Enterprises, Government of India OMs dated 9.10.1997 and 5.8.2005 grant powers to Mini Ratna Category-1 PSEs to incur capital expenditure on new projects to the extent of Rs. 500.00 crore or equal to net worth, whichever is less, without government approval. According to the revised delegation of powers conveyed by DPE’s above referred OM dated 29.8.2014, RCE for increase in cost beyond 20% of firmed up cost estimate needs appraisal and approval of the competent authority, which in this case is the Board of Directors of the Petitioner, as per the extant delegation of powers. Further, DPE’s OM dated 15.11.2007 clearly mentions that RCEs which are within the power delegated to a Ministry/Department/CPSE irrespective of the authority which had initially approved the project, shall be approved at the level of the competent authority as per power of fresh approval. In view of the above, the Commission has considered the RCE of Rs. 36525 lakh (including IDC of Rs.1920 lakh) as approved by the Board of Directors of the Petitioner and approves the additional capital expenditure as claimed by the Petitioner.

36. However, it is observed that the Petitioner vide affidavit dated 10.10.2022 has submitted revised Form 9(A) and has claimed additional capital expenditure of Rs. 628.06 lakh during the period from 1.9.2015 to 31.3.2016. However, the sum of additional capital expenditure claimed by the Petitioner for the said period is Rs. 621.08 lakh instead of Rs. 628.06 lakh. This mis-match is due to computation error, which has been rectified. Accordingly, the Commission has considered the amount of Rs. 621.08

lakh for additional capital expenditure during the period 1.9.2015 to 31.3.2016. Since the additional capital expenditure claimed by the Petitioner for STG is within the original scope of work and within the cutoff date, we allow the claim of the Petitioner under Regulation 14(1) of the 2014 Tariff Regulations. Accordingly, the additional capital expenditure allowed for STG (Units V to VI) during 1.9.2015 to 31.3.2018 is as under:

(Rs. in lakh)

2014-15	2015-16			2016-17	2017-18	2018-19
	(1.4.15 to 28.7.15)	(29.7.15 to 31.8.15)	(1.9.15 to 31.3.16)			
0.00	0.00	0.00	621.08	109.15	64.38	0.00

37. Accordingly, the total additional capital expenditure allowed is as under:

(Rs. in lakh)

	2014-15	2015-16			2016-17	2017-18	2018-19	Total
		(1.4.15 to 28.7.15)	(29.7.15 to 31.8.15)	(1.9.15 to 31.3.16)				
GTG (Unit I to IV)	0.00	0.00	0.00	0.00	27.14	1152.08	89.22	1268.44
STG (Unit V to VI)	0.00	0.00	0.00	621.08	109.15	64.38	0.00	794.61
Total Additional Capital expenditure allowed	**0.00**	**0.00**	**0.00**	**621.08**	**136.29**	**1216.46**	**89.22**	**2063.04**

De-capitalization

38. The Petitioner has claimed decapitalization of Rs. 408.18 lakh during the period 2017-19 (i.e. Rs. 351.73 lakh in 2017-18 and Rs. 56.45 lakh in 2018-19) under Regulation 14(4) of the 2014 Tariff Regulations. In justification of the same, the Petitioner has submitted that these assets were decapitalized as these became unserviceable. Regulation 14(4) of the 2014 Tariff Regulations provides that original value of de-capitalized assets shall be deducted from the capital cost allowed to the generating station. Accordingly, the de-capitalization of these assets as claimed by the Petitioner is allowed.

Assumed Deletion

39. As per consistent methodology adopted by the Commission in its orders, 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 affected 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”.

40. Accordingly, the gross value of the assets de-capitalized under ‘assumed deletions’ as considered by the Petitioner based on WPI and capitalized value of new asset is not acceptable. 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 instant petition, year of COD of the generating station is 1.4.1998. We have considered the value of asset under consideration as on COD as 100 and escalated it @ 5% 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. Accordingly, as the Petitioner has not furnished the decapitalization value of assets which was claimed and allowed as additional capital expenditure, the same is determined under ‘Assumed Deletions’ of period 2019-24 is as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19	Total
0.00	0.00	11.28	0.00	6.09	17.37

41. Accordingly, the total de-capitalization considered for the purpose of tariff is as under:

(Rs. in lakh)

Sl. No.	Name of the Asset	Original Value of the Asset Capitalized					Total
		2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	
1	Decapitalization	0.00	0.00	0.00	351.73	56.45	408.18
2	Assumed Deletion	0.00	0.00	11.28	0.00	6.09	17.37
3	**Total De-capitalization**	**0.00**	**0.00**	**11.28**	**351.73**	**62.54**	**425.55**

Exclusions

42. The Petitioner, in Form 9 (d), has claimed exclusion of capital spares of Rs. 17.96 lakh in 2014-15, Rs.146.72 lakh in 2015-16, Rs. 1110.45 lakh in 2016-17, Rs. 57.39 lakh in 2017-18 and Rs. 24.41 lakh in 2018-19 towards items such as Furniture, Laboratory & Metering. Testing, Main Frame Computer, EDP Equipment, Office Equipment, Hospital Equipment, Misc. Equipment, Audio Visual, Main Frame Computer, T&P Special, Make Up Water System, T&P Ordinary, Solar Power Plant, Switchgear including Cable Connection, Steam Turbine, Gas Turbine etc. It is observed that the Petitioner in Form 9(c) statement, showing reconciliation of additional capital expenditure claimed with the capital additions as per books, has furnished exclusions of Rs. 11.02 lakh in 2014-15. In view of this, exclusions as submitted in Form 9 (c) has been considered for 2014-15. Since exclusions claimed is towards capitalization of assets, the same is allowed. Accordingly, the details of exclusions claimed/allowed and disallowed are summarized below:

(Rs. in lakh)

	2014-15	**2015-16**			**2016-17**	**2017-18**	**2018-19**
		(1.4.2015 to 28.7.2015)	**(29.7.2015 to 31.8.2015)**	**(1.9.2015 to 31.3.2016)**			
Exclusion claimed	17.96	0.00	2.24	144.48	1110.45	57.39	24.41
Exclusions Allowed	11.02	0.00	2.24	144.48	1110.45	57.39	24.41
Exclusions Not Allowed	6.94	0.00	0.00	0.00	0.00	0.00	0.00

Discharge and Reversal of liabilities

43. The discharges and reversal of liabilities claimed by the Petitioner are as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Reversal	6.94	0.00	79.28	0.00	0.00	86.22
Discharges	0.00	0.00	420.25	764.59	234.89	1419.74

44. It is observed that the Petitioner has claimed Rs. 6.94 lakh as reversal in 2014-15 for which there is neither openings nor additions during the year found in the submissions. Hence, the reversal of Rs.6.94 lakh in 2014-15 is not allowed.

45. Further, the discharge of liability of Abhijit Dutta for 2018-19 is limited to its opening i.e. Rs 2.04 lakh (Rs.2.27 lakh-0.23 lakh included in reversal) as repayment cannot be more than the balance undischarged liability. Accordingly, the discharges and reversal of liabilities allowed is summarized below:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Un-discharged liabilities (A)	**0.00**	**0.00**	**1884.44**	**1384.90**	**620.31**
Additions during the 2014-19 tariff period (corresponding to allowed additional capital expenditure) (B)	0.00	1884.44	0.00	0.00	0.00
Discharges during the 2014-19 tariff period (corresponding to allowed additional capital expenditure) (C)	0.00	0.00	420.25	764.59	234.66
Reversal of Liabilities out of liabilities added during the 2014-19 tariff period (corresponding to allowed additional capital expenditure) (D)	0.00	0.00	79.28	0.00	0.00
Closing Un-discharged liabilities (E) = (A+B-C-D)	**0.00**	**1884.44**	**1384.90**	**620.31**	**385.65**

Capital cost allowed for the period 2014-19

46. Accordingly, the capital cost approved for the generating station for the period 2014-19 is as under:

	2014-15	**2015-16**			**2016-17**	**2017-18**	**2018-19**
		(1.4.2015 to 28.7.2015)	**(29.7.2015 to 31.8.2015)**	**(1.9.2015 to 31.3.2016)**			
Opening Capital Cost	34172.61	34165.67	48962.49	62315.76	62936.84	63402.82	65032.15

	2014-15	2015-16			2016-17	2017-18	2018-19
		(1.4.2015 to 28.7.2015)	(29.7.2015 to 31.8.2015)	(1.9.2015 to 31.3.2016)			
Add: Addition during the year / period	(-) 6.94	0.00	0.00	621.08	136.29	1216.46	89.22
Less: De-capitalization during the year / period	0.00	0.00	0.00	0.00	11.28	351.73	62.54
Less: Reversal during the year / period	0.00	0.00	0.00	0.00	79.28	0.00	0.00
Add: Discharges during the year / period	0.00	0.00	0.00	0.00	420.25	764.59	234.66
Closing Gross Block	**34165.67**	**34165.67**	**48962.49**	**62936.84**	**63402.82**	**65032.15**	**65293.48**
Average Gross Block	34169.14	34165.67	48962.49	62626.30	63169.83	64217.48	65162.81

Debt-Equity Ratio

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

"19. Debt-Equity Ratio: (1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that

(i) where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:

(ii) the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

(iii) any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

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

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

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

(4) In case of the generating station and the transmission system including communication, system declared under commercial operation prior to 1.4.2014, but where debt: equity ratio has not been determined by the Commission for determination

of tariff for the period ending 31.3.2014, the Commission shall approve the debt: equity ratio based on actual information provided by the generating company or the transmission licensee as the case may be."

48. The gross loan and equity amounting to Rs. 17489.46 lakh and Rs. 16683.15 lakh, respectively, as on 31.3.2014, was considered in order dated 14.7.2016 in Petition No. 94/GT/2016. The same has been considered as gross loan and equity as on 1.4.2014. Accordingly, the debt-equity ratio allowed is as under:

	Capital cost as on 1.4.2014		Additional Capital Expenditure during 1.4.2015 to 28.7.2015		Capital cost as on 28.7.2015		Addition in Capital cost due to COD of STG I on 29.7.2015	
	Amount	**(%)**	**Amount**	**(%)**	**Amount**	**(%)**	**Amount**	**(%)**
Debt	17489.46	51.18%	(-) 4.86	70.00%	17484.60	51.18%	10357.78	70%
Equity	16683.15	48.82%	(-) 2.08	30.00%	16681.07	48.82%	4439.05	30%
Total	**34172.61**	**100.00%**	**(-) 6.94**	**100.00%**	**34165.67**	**100.00%**	**14796.83**	**100.00%**

	Capital cost as on 29.7.2015		Additional Capital Expenditure during 29.7.2015 to 31.8.2015		Capital cost as on 31.8.2015		Addition in Capital cost due to COD of STG II on 1.9.2015		Revised Capital cost as on 1.9.2015	
	Amount	**(%)**	**Amount**	**(%)**	**Amount**	**(%)**	**Amount**	**(%)**	**Amount**	**(%)**
Debt	27842.38	56.86%	0.00	70%	27842.38	56.86%	9347.29	70%	37189.67	59.68%
Equity	21120.11	43.14%	0.00	30%	21120.11	43.14%	4005.98	30%	25126.10	40.32%
Total	**48962.49**	**100.00%**	**0.00**	**100.00%**	**48962.49**	**100.00%**	**13353.27**	**100%**	**62315.76**	**100.00%**

	Additional Capital Expenditure during 1.9.2015 to 31.3.2016		Capital cost as on 31.3.2016		Additional Capital Expenditure during 2016-19		Decapitalization during 2014-19		Capital cost as on 31.3.2019	
	Amount	**(%)**	**Amount**	**(%)**	**Amount**	**(%)**	**Amount**	**(%)**	**Amount**	**(%)**
Debt	434.75	70%	37624.42	59.78%	1947.53	70%	212.77	50.00%	39359.18	60.28%
Equity	186.32	30%	25312.42	40.22%	834.66	30%	212.77	50.00%	25934.30	39.72%
Total	**621.08**	**100.00%**	**62936.84**	**100.00%**	**2782.19**	**100.00%**	**425.55**	**100.00%**	**65293.48**	**100.00%**

Return on Equity

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

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

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that:

i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in Appendix-I:

ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:

iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:

v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometer."

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

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

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

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

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

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

51. In term of Regulation 25(3) of the 2014 Tariff Regulations, 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 period from

2014-15 to 2018-19, on actual gross income of any financial year. The base rate of return on equity is to be grossed up with the effective tax rate of the respective financial years.

52. The Commission in its order dated 7.6.2021 in Petition No. 273/GT/2019 (truing-up of tariff of Ranagandi HEP for the period 2014-19), had considered the tax rates for the generating station of the Petitioner as under:

Year	Effective Tax Rate (%)
2014-15	20.2521
2015-16	25.9099
2016-17	34.6080
2017-18	27.3764
2018-19	21.5488

53. Since the effective tax rate is 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, the tax rate as worked out and allowed in the said order dated 7.6.2021, has been considered for the computation of ROE for this generating station, as below:

(Rs. in lakh)

	2014-15	**2015-16**			**2016-17**	**2017-18**	**2018-19**
		(1.4.2015 to 28.7.2015)	**(29.7.2015 to 31.8.2015)**	**(1.9.2015 to 31.3.2016)**			
Notional Equity-Opening (A)	16683.15	16681.07	21120.11	25126.10	25312.42	25449.96	25868.41
Addition of Equity due to additional capital expenditure (B)	(-) 2.08	0.00	0.00	186.32	137.54	418.45	65.89
Normative Equity - Closing (C) = (A) + (B)	16681.07	16681.07	21120.11	25312.42	25449.96	25868.41	25934.30
Average Normative Equity (D) = (A+C)/2	16682.11	16681.07	21120.11	25219.26	25381.19	25659.18	25901.36
Return on Equity (Base Rate) (E)	15.500%	15.500%	15.500%	15.500%	15.500%	15.500%	15.500%

	2014-15	2015-16			2016-17	2017-18	2018-19
		(1.4.2015 to 28.7.2015)	(29.7.2015 to 31.8.2015)	(1.9.2015 to 31.3.2016)			
Effective Tax Rate for respective years (F)	20.252%	25.910%	25.910%	25.910%	34.608%	27.376%	21.549%
Rate of Return on Equity (Pre-Tax) (G) = (E)/(1-F)	19.436%	20.920%	20.920%	20.920%	23.703%	21.343%	19.758%
Return on Equity (Pre-Tax) (H) = (D)*(G)*(No. of days in operation/No. of days in year)	**3242.33**	**1134.62**	**410.45**	**3070.38**	**6016.10**	**5476.44**	**5117.59**

Interest on Loan

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

> *"26. Interest on loan capital: (1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.*
>
> *(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.*
>
> *(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of Decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalization of such asset*
>
> *(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.*
>
> *(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:*
>
> *Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered*
>
> *Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered*
>
> *(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.*
>
> *(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest*

and in that event the costs associated with such refinancing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

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

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

Provided that the beneficiaries or the long-term transmission customers /DICs shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan."

55. Accordingly, Interest on loan has been allowed as under:

(a) Gross normative loan amounting to Rs. 17489.46 lakh as on 1.4.2014, as considered in order dated 14.7.2017 in Petition No. 94/GT/2016, has been retained as on 1.4.2014;

(b) Cumulative repayment amounting to Rs. 17489.46 lakh as on 1.4.2014, as considered in order dated 14.7.2017 in Petition No. 94/GT/2016, has been retained as on 1.4.2014;

(c) Accordingly, the net normative opening loan as on 1.4.2014 works out to Rs. Nil;

(d) Addition to normative loan on account of additional capital expenditure (net of de-cap's) approved above has been considered.

(e) Depreciation allowed has been considered as repayment of normative loan during the respective year of the 2014-19 tariff period. Further, the repayments have been adjusted for de-capitalization of assets considered for the purpose of tariff;

(f) Further, the opening loan of Rs. 27842.38 lakh as on COD of STG-II (29.7.2015) and Rs. 37189.67 lakh as on COD of STG-I (1.9.2015) has been considered.

(g) The Petitioner has claimed interest on loan considering the weighted average rate of interest (WAROI) of 3.8250% in 2014-15, 3.7534% in 2015-16, 4.3720% in 2016-17, 4.9170% in 2017-18 and 6.4518% in 2018-19. In line with the provisions of the regulations stated above, the WAROI has been calculated by applying the actual loan portfolio existing as on 1.4.2014, along with subsequent additions during the period 2014-19, if any, for the generating station.

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

(Rs in lakh)

	2014-15	2015-16			2016-17	2017-18	2018-19
		(1.4.2015 to 28.7.2015)	(29.7.2015 to 31.8.2015)	(1.9.2015 to 31.3.2016)			
Gross opening loan (A)	17489.46	17484.60	27842.38	37189.67	37624.42	37952.87	39163.74
Cumulative repayment of loan upto previous year / period (B)	17489.46	17484.60	17484.60	17602.74	18737.85	20729.96	22572.56
Net Opening loan (C) = (A) - (B)	0.00	0.00	10357.78	19586.93	18886.57	17222.90	16591.17
Addition due to additional capital expenditure (D)	(-) 4.86	0.00	0.00	434.75	328.44	1210.87	195.44
Repayment of loan during the period (E)	(-) 4.86	0.00	118.14	1135.11	2000.01	2088.81	2245.12
Less: Repayment adjustment on account of de-capitalization (F)	0.00	0.00	0.00	0.00	7.89	246.21	43.78
Repayment of loan during the year (G) = (E) - (F)	(-) 4.86	0.00	118.14	1135.11	1992.11	1842.60	2201.34
Net Closing loan (H) =(C) +(D) -(G)	0.00	0.00	10239.64	18886.57	17222.90	16591.17	14585.28
Average Loan (I) = (C+H)/2	0.00	0.00	10298.71	19236.75	18054.73	16907.04	15588.23
Weighted Average Rate of Interest of loan (J)	3.825%	3.753%	3.7534%	3.7534%	4.3720%	4.9170%	6.4518%
Interest on Loan (K) = (I)*(J)*(No. of days in operation/No. of days in year)	**0.00**	**0.00**	**35.91**	**420.20**	**789.35**	**831.33**	**1005.73**

Depreciation

57. 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) alongwith justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure during the fag end of the project.

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

58. The COD of the generating station is 1.8.1998. As such, the generating station has completed 12 years of operation as on 1.8.2010. Moreover, the generating station shall complete its useful life in 2023-24. As such, depreciation has been calculated in two

stages. In the first stage, the remaining depreciation of the generating station has been calculated within its useful life, as per the provisions of the 2014 Tariff Regulations. In the second stage, depreciation on the additional capitalization has been calculated by claiming maximum depreciation in 12 years, as allowed by the Commission in case of normal projects.

59. Considering the above fact, that the generating station has completed 12 years of operation during 2010-11, the remaining depreciable value has been spread over the balance useful life of the generating station. With the commissioning of the STGs, the depreciation of the generating station has been calculated, based on the weighted average rate of depreciation for the period from 2015-16 to 2018-19. Necessary calculations in support of depreciation are as under:

(A) *Depreciation allowed for Open Cycle generating station*

(Rs. in lakh)

	2014-15	**2015-16**			**2016-17**	**2017-18**	**2018-19**
		(1.4.2015 to 28.7.2015)	**(29.7.2015 to 31.8.2015)**	**(1.9.2015 to 31.3.2016)**			
Average Capital Cost (A)	34169.14	34165.67	34165.67	34165.67	34133.96	34502.42	34915.94
Value of freehold land included above (B)	275.32	275.32	275.32	275.32	275.32	275.32	275.32
Value of software and IT equipment included in average capital cost (C)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Capital cost, net of freehold land and IT equipment (D)=(A-B-C)	33893.82	33890.35	33890.35	33890.35	33858.64	34227.11	34640.62
Aggregated Depreciable Value (E)= (D*90%) + (C)	30504.44	30501.31	30501.31	30501.31	30472.78	30804.40	31176.56
Remaining aggregate depreciable value at the beginning of	5044.91	4501.06	4325.38	4277.14	3949.79	3752.70	3848.58

	2014-15	2015-16			2016-17	2017-18	2018-19
		(1.4.2015 to 28.7.2015)	(29.7.2015 to 31.8.2015)	(1.9.2015 to 31.3.2016)			
the year (F) = (E)- (Cum. Depreciation at the end of previous year)							
No. of completed years at the beginning of the year (G)	15.67	16.67	16.67	16.67	17.67	18.67	19.67
Balance useful life at the beginning of the year (H) = 25 - (G)	9.33	8.33	8.33	8.33	7.33	6.33	5.33
Weighted Average Rate of Depreciation (WAROD) (I)	--	--	--	--	--	--	--
Depreciation during the year/ period (J) = (F)/(H) *(No. of days in operation/ No. of days in year)	**540.72**	**175.69**	**48.24**	**298.82**	**538.85**	**592.84**	**722.06**
Cumulative depreciation at the end of the year (before adjustment for de-capitalization) (K) = (J) + (Cum. Dep at at the end of previous year)	26000.25	26175.93	26224.17	26522.99	27061.84	27644.54	28050.04
Less: Depreciation adjustment on account of de-capitalization (L)	0.00	0.00	0.00	0.00	10.15	316.56	56.29
Cumulative depreciation at the end of the year (M) = (K) - (L)	**26000.25**	**26175.93**	**26224.17**	**26522.99**	**27051.69**	**27327.98**	**27993.75**

(B) *Depreciation allowed for STG-I and STG-II*

(Rs. in lakh)

	2014-15	2015-16			2016-17	2017-18	2018-19
		(1.4.2015 to 28.7.2015)	**(29.7.2015 to 31.8.2015)**	**(1.9.2015 to 31.3.2016)**			
Average Capital Cost (A)	0.00	0.00	14796.83	28460.64	29035.87	29715.06	30246.88
Value of freehold land included above (B)	0.00	0.00	275.32	275.32	275.32	275.32	275.32
Value of software and IT equipment included in average capital cost (C)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Capital cost, net of freehold land and IT equipment (D)=(A-B-C)	0.00	0.00	14521.51	28185.32	28760.56	29439.74	29971.56
Aggregated Depreciable Value (E)= (D*90%) + (C)	0.00	0.00	13069.36	25366.79	25884.50	26495.77	26974.40
Remaining aggregate depreciable value at the beginning of the year (F) = (E) - (N)	0.00	0.00	13069.36	25366.79	24978.30	24128.42	23111.09
No. of completed years at the beginning of the year (G)	0.00	0.00	0.00	0.02	0.02	1.02	2.02
Balance useful life at the beginning of the year (H) = 25 - (G)	0.00	0.00	25.00	24.98	24.98	23.98	22.98
Weighted Average Rate of Depreciation (WAROD) (I)	0.000%	0.000%	5.085%	5.049%	5.032%	5.034%	5.035%
Depreciation during the year/ period (Prorated) (J) = (A) * (I)*(No. of days in operation/No. of days in year)	**0.00**	**0.00**	**69.90**	**836.30**	**1461.15**	**1495.97**	**1523.06**
Cumulative depreciation at the end of the year (before	0.00	0.00	69.90	906.20	2367.35	3863.32	5386.38

	2014-15	2015-16			2016-17	2017-18	2018-19
		(1.4.2015 to 28.7.2015)	(29.7.2015 to 31.8.2015)	(1.9.2015 to 31.3.2016)			
adjustment for de-capitalization) (K) = (J) + (Cum. Dep. at the end of previous year)							
Less: Depreciation adjustment on account of de-capitalization (L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cumulative depreciation at the end of the year (M) = (K) - (L)	**0.00**	**0.00**	**69.90**	**906.20**	**2367.35**	**3863.32**	**5386.38**

60. Total Depreciation allowed for the period 2014-19 is as under:

(Rs. in lakh)

	2014-15	2015-16			2016-17	2017-18	2018-19
		(1.4.2015 to 28.7.2015)	(29.7.2015 to 31.8.2015)	(1.9.2015 to 31.3.2016)			
Depreciation allowed for Open Cycle station (A)	540.72	175.69	48.24	298.82	538.85	592.84	722.06
Depreciation allowed for STG-I and STG-II (B)	0.00	0.00	69.90	836.30	1461.15	1495.97	1523.06
Total Depreciation allowed(C) = (A)+(B)	**540.72**	**175.69**	**118.14**	**1135.11**	**2000.01**	**2088.81**	**2245.12**

Operation & Maintenance Expenses

61. Regulation 29(1)(c) of the 2014 Tariff Regulations provides as under:

(1) Normative Operation and Maintenance expenses of thermal generating stations shall be as follows:

(c) Open Cycle Gas Turbine/Combined Cycle generating stations:

(in Rs. lakh/MW)

Year	Gas Turbine/ Combined Cycle generating stations other than small gas turbine power generating stations	Small gas turbine power generating stations	Agartala GPS	Advance F Class Machines
2014-15	14.67	33.43	41.32	26.55
2015-16	15.59	35.70	44.14	28.36
2016-17	16.57	38.13	47.14	30.29
2017-18	17.61	40.73	50.35	32.35
2018-19	18.72	43.50	53.78	34.56

62. The Commission vide order dated 14.7.2017 in Petition No 94/GT/2016 had observed that after the CODs of STG-I and STG-II, the project has been converted to Combined Cycle generating station. In view of the above, the Commission has considered the O&M expenses specified for Small Gas Turbine Power Project, in terms of Regulation 29(1)(c) of the 2014 Tariff Regulations. Accordingly, the O&M expenses claimed by the Petitioner is the same as allowed by order dated 14.7.2017 in Petition No. 94/GT/2016. Therefore, the same is allowed (annualized basis) as under:

(Rs. in lakh)

2014-15	**2015-16**			**2016-17**	**2017-18**	**2018-19**
	1.4.2015 to 28.7.2015	**29.7.2015 to 31.8.2015**	**1.9.2015 to 31.3.2016**			
3470.88	3707.76	3909.15	4819.50	5147.55	5498.55	5872.50

63. The O&M considered for the purpose of tariff is as follows:

(Rs. in lakh)

2014-15	**2015-16**			**2016-17**	**2017-18**	**2018-19**
	1.4.2015 to 28.7.2015	**29.7.2015 to 31.8.2015**	**1.9.2015 to 31.3.2016**			
3470.88	1205.53	363.15	2804.79	5147.55	5498.55	5872.50

Additional O&M Expenditure on account of Pay revision

64. The Petitioner has claimed wage revision impact of Rs. 104.69 lakh in 2016-17, Rs. 462.56 lakh in 2017-18 and Rs. 261.85 lakh in 2018-19. The Commission vide ROP of the hearing dated 18.11.2021, had directed the Petitioner to provide comparative statement of the normative O&M expenses allowed to the generating station versus the actual audited O&M expenses incurred for the period 2014-19. In response, the Petitioner vide affidavit dated 16.12.2021 has submitted the following details:

(Rs. in lakh)

	Normative	**Actual**	**Variation**
2014-15	3470.88	3825.5	-354.62
2015-16	4819.50	3216.46	1603.04
2016-17	5147.55	3579.59	1567.96
2017-18	5498.55	4931.79	566.76

2018-19	5872.50	4293.35	1579.15
Total	**24808.98**	**19846.69**	**4962.29**

65. It is observed from the above submissions, that the actual O&M expenses which also includes wage revision impact of Rs. 829.10 lakh is lesser than the normative O&M expenses, recovered during the period 2016-19. As such, considering the fact that the normative O&M expenses allowed to the generating station in terms of the 2014 Tariff Regulations for the period 2016-19, exceeds the actual audited O&M expenses, the impact of the wage due to revision, as claimed by the Petitioner, is not allowed.

Capital Spares

66. It is observed that the Petitioner has claimed capital spares of Rs. 1058.33 lakh in 2016-17, Rs. 111.12 lakh in 2017-18 and Rs. 27.60 lakh in 2018-19. It is observed that the Petitioner has submitted that the capital spares have been claimed as a part of additional capital expenditure i.e. forms part of capital cost. In view of the above, the capital spares claimed is not allowed.

Interest on Working Capital

67. 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) 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;

(iii) Maintenance spares @ 30% of operation and maintenance expenses specified in Regulation 29;

(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; and

(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."

Fuel Cost and Energy Charges in Working Capital

68. Regulation 28(1)(b)(i) of the 2014 Tariff Regulations provides for Fuel cost for 30 days corresponding to the Normative Annual Plant Availability Factor. The Fuel cost for 30 days for computation of interest on working capital as considered by the Petitioner is as under:

(Rs. in lakh)

2014-15	2015-16			2016-17	2017-18	2018-19
	1.4.2015 to 28.7.2015	29.7.2015 to 31.8.2015	1.9.2015 to 31.3.2016			
1493.07	1648.22	2143.95	1832.00	1182.89	1099.59	1675.45

Energy Charges

69. Regulation 30(6)(b) of the 2014 Tariff Regulations provides for computation and payment of Energy Charge for thermal generating stations as follows:

"6. Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal place in accordance with the following formula: (b) For gas and liquid fuel-based stations
ECR = GHR x LPPF x 100 / {CVPF x (100 – AUX)}
Where,
AUX =Normative auxiliary energy consumption in percentage.
CVPF=(a) Weighted Average Gross calorific value of coal as received, in kCal per kg for coal-based stations
(b) Weighted Average Gross calorific value of primary fuel as received, in kCal per kg, per litre or per standard cubic meter, as applicable for lignite, gas and liquid fuel-based stations.
(c) In case of blending of fuel from different sources, the weighted average Gross calorific value of primary fuel shall be arrived in proportion to blending ratio.
CVSF =Calorific value of secondary fuel, in kCal per ml.
ECR = Energy charge rate, in Rupees per kWh sent out.
GHR =Gross station heat rate, in kCal per kWh.
LC = Normative limestone consumption in kg per kWh.
LPL = Weighted average landed price of limestone in Rupees per kg.

LPPF =Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month. (In case of blending of fuel from different sources, the weighted average landed price of primary fuel shall be arrived in proportion to blending ratio) SFC = Normative Specific fuel oil consumption, in ml per kWh.

LPSFi=Weighted Average Landed Price of Secondary Fuel in Rs./ml during the month Provided that energy charge rate for a gas/liquid fuel based station shall be adjusted for open cycle operation based on certification of Member Secretary of respective Regional Power Committee for the open cycle operation during the month.

Normative Annual Plant Availability Factor (NAPAF)

70. The Normative Annual Plant Availability Factor (NAPAF) of 85% as considered in Commission's order dated 14.7.2017 in Petition No.94/GT/2016 for the period 2014-19 has been considered for purpose of tariff.

Auxiliary Energy Consumption

71. Regulation 36(E)(c) of the 2014 Tariff Regulations provides for 1% Auxiliary Energy Consumption (AEC) for Open Cycle and 2.50% for Combined cycle gas based generating stations. Accordingly, the AEC considered is as under:

2014-15	2015-16			2016-17	2017-18	2018-19
	1.4.2015 to 28.7.2015	29.7.2015 to 31.8.2015	1.9.2015 to 31.3.2016			
1%	1%	1%	2.50%	2.50%	2.50%	2.50%

Station Heat Rate

72. The Petitioner has claimed actual Station Heat Rate of the generating station as under:

	Unit	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Station Heat Rate	kCal/kWh	2534 (C.C.) 3700 (O.C.)	2534 (C.C.) 3700 (O.C.)	2534 (C.C.)	2534 (C.C.)	2534 (C.C.)

73. The Petitioner has submitted that in order dated 14.7.2016 in Petition No.94/ GT/ 2016, SHR of 2534 kCal/kWh had been allowed. The Petitioner has further submitted that the actual SHR claimed is in line with the recommendations of the CEA towards lower PLF and, has accordingly, prayed that actual SHR may be allowed, in exercise of the power to relax in terms of Regulation 54 of the 2014 Tariff Regulations.

74. The Respondent, APDCL has submitted that lower PLF of the plant is mainly due to non-availability of gas which is the sole liability of Petitioner, and it should look for avenues to increase the availability of gas so that SHR as approved can be maintained.

75. The Petitioner has considered SHR of 3700 kCal/kWh for Open Cycle and 2534 kCal/kWh for Combined Cycle as allowed by order dated 14.7.2016 in Petition No.94/GT/2016. Accordingly, the SHR as approved by order dated 14.7.2016 in Petition No. 94/GT/2016 has been considered for the period 2014-19.

Sl.No.	Description	Unit	2014-15	2015-16			2016-17	2017-18	2018-19
				1.4.2015 to 28.7.2015	29.7.2015 to 31.8.2015	1.9.2015 to 31.3.2016			
1	Normative Heat Rate (For CC Operation)	(KCal/kWh)	2534.00						
2	Normative Heat Rate (For OC Operation)	(KCal/kWh)	3700.00						
3	Capacity	MW	84.00	84.00	109.50	135.00	135.00	135.00	135.00
4	Normative Availability Factor	%	0.85	0.85	0.85	0.85	0.85	0.85	0.85
5	APC for CC operation	%	2.50%						
6	APC for OC operation	%	1.00%						
7	Weighted Average Rate of Fuel	Rs./1000SCM	7104.00	7818.00	7818.00	7906.00	5135.00	4759.00	7264.00
8	Weighted Average GCV of Fuel	KCal/SCM	9175.85	9172.57	9192.35	9185.48	9214.66	9186.82	9202.94
9	Rate of Energy-Ex Bus	(Rs/KWh)	2.89	3.19	3.18	2.24	1.45	1.35	2.05

76. Energy charges for 2 months on the basis of as billed GCV for the purpose of interest in working capital (annualized) has been worked out as under:

(Rs. in lakh)

2014-15	2015-16			2016-17	2017-18	2018-19
	1.4.2015 to 28.7.2015	29.7.2015 to 31.8.2015	1.9.2015 to 31.3.2016			
2986.14	3296.44	4287.90	3664.00	2365.77	2199.19	3350.90

Liquid fuel stock for ½ month

77. The Petitioner has not used any liquid fuel in the generation of electricity and, hence, the same has not been considered.

Working capital for O & M Expenses (1 month)

78. O&M expenses for 1 month claimed by the Petitioner in Form-13B is as under:

(Rs. in lakh)

2014-15	2015-16			2016-17	2017-18	2018-19
	1.4.2015 to 28.7.2015	29.7.2015 to 31.8.2015	1.9.2015 to 31.3.2016			
289.24	308.98	325.76	401.63	428.96	458.21	489.38

79. Regulation 28(1)(b)(v) of the 2014 Tariff Regulations provides for O&M expenses for one month. Accordingly, O&M expenses (1 month) of working capital are allowed as claimed be Petitioner.

Working capital for Maintenance spares

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

(Rs. in lakh)

2014-15	2015-16			2016-17	2017-18	2018-19
	1.4.2015 to 28.7.2015	29.7.2015 to 31.8.2015	1.9.2015 to 31.3.2016			
1041.26	1112.33	1172.75	1445.85	1544.27	1649.57	1761.75

81. Maintenance spares @30% of the O&M expenses as claimed by the Petitioner, in terms of Regulation 28(1)(b)(ii) of the 2014 Tariff Regulations is allowed

Working capital for Receivables

82. Regulation 28(1)(b)(iv) of the 2014 Tariff Regulations provides for receivables for two months. Accordingly, receivables equivalent to two months of capacity charge and energy charge has been worked out duly taking into account, the mode of operation of the generating station on secondary fuel, as under:

(Rs. in lakh)

	2014-15	2015-16			2016-17	2017-18	2018-19
		1.4.2015 to 28.7.2015	29.7.2015 to 31.8.2015	1.9.2015 to 31.3.2016			
Variable Charges - for two months (A) corresponding to NAPAF)	2986.14	3296.44	4287.90	3664.00	2365.77	2199.19	3350.90

	2014-15	2015-16			2016-17	2017-18	2018-19
		1.4.2015 to 28.7.2015	29.7.2015 to 31.8.2015	1.9.2015 to 31.3.2016			
Fixed Charges - for two months (B) corresponding to NAPAF)	1370.07	1465.22	1884.33	2345.30	2505.76	2493.26	2595.11
Total (C) = (A+B)	**4356.21**	**4761.67**	**6172.24**	**6009.30**	**4871.53**	**4692.45**	**5946.01**

Rate of interest on working capital

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

(Rs. in lakh)

	2014-15	2015-16			2016-17	2017-18	2018-19
		1.4.2015 to 28.7.2015	29.7.2015 to 31.8.2015	1.9.2015 to 31.3.2016			
Fuel Cost (30 Days corresponding to NAPAF) (A)	1472.61	1621.20	2108.80	1801.97	1166.68	1084.53	1652.50
Liquid Fuel Stock (15 Days corresponding to NAPAF) (B)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
O&M expenses - (1 month) (C)	289.24	308.98	325.76	401.63	428.96	458.21	489.38
Maintenance Spares - (30% of O&M) (D)	1041.26	1112.33	1172.75	1445.85	1544.27	1649.57	1761.75
Receivables (2 months at NAPAF) (E)	4356.21	4761.67	6172.24	6009.30	4871.53	4692.45	5946.01
Total Working Capital (F) = (A+B+C+D+E)	**7159.33**	**7804.18**	**9779.55**	**9658.74**	**8011.44**	**7884.76**	**9849.63**
Rate of Interest (G)	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%
Total Interest on Working capital (H) = (F)*(G)*(No. of days in operation/No. of days in year)	**966.51**	**342.55**	**122.65**	**758.84**	**1081.54**	**1064.44**	**1329.70**

Annual Fixed Charges for the period 2014-19

84. Based on the above discussion, the annual fixed charges approved for the generating station for the period 2014-19 is summarized below:

(Rs. in lakh)

	2014-15	2015-16			2016-17	2017-18	2018-19
		1.4.2015 to 28.7.2015	29.7.2015 to 31.8.2015	1.9.2015 to 31.3.2016			
Depreciation (A)	540.72	175.69	118.14	1135.11	2000.01	2088.81	2245.12
Interest on Loan (B)	0.00	0.00	35.91	420.20	789.35	831.33	1005.73
Return on Equity (C)	3242.33	1134.62	410.45	3070.38	6016.10	5476.44	5117.59
Interest on Working Capital (D)	966.51	342.55	122.65	758.84	1081.54	1064.44	1329.70
O&M Expenses (E)	3470.88	1205.53	363.15	2804.79	5147.55	5498.55	5872.50
Total AFC (G) = (A+B+C+D+E)	**8220.44**	**2858.39**	**1050.28**	**8189.33**	**15034.55**	**14959.57**	**15570.64**

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

85. 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 the clauses 8(13) of the 2014 Tariff Regulations.

86. Petition No.32/GT/2020 is disposed of in terms of the above.

Sd/-	Sd/-	Sd/-
(Pravas Kumar Singh)	**(Arun Goyal)**	**(I.S. Jha)**
Member	**Member**	**Member**