CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 576/GT/2020

Coram:

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

Date of Order: 20th March, 2023

In the matter of:

Petition for truing-up of tariff of Vallur Thermal Power Station (1500 MW) for the period 2014-19.

And

In the matter of:

NTPC Tamil Nadu Energy Company Limited
No. 123, G- Block, Anna Nagar (East)
Chennai- 600102 **.....Petitioner**

Vs

1. A. P Transmission Corporation Limited,
   Vidyut Soudha, Khairatabad,
   Hyderabad - 500 082.

2. A. P. Eastern Power Distribution Company Limited,
   P&T Colony, Seethammadhara,
   Vishakapatnam - 503 013

3. A. P. Southern Power Distribution Company Limited,
   Beside Srinivassakalyana Mandapam,
   Tiruchanur Road, Kesavayana Gunta,
   Tirupati- 517501

4. Transmission Corporation of Telangana Limited
   Vidyut Soudha Khairatabad,
   Hyderabad - 500 082

5. Telangana State Southern Power Distribution Company Limited,
   Mint Compound, Corporate Office
   Hyderabad-500 063

6. Telangana Northern Power Distribution Company Limited,
   H.No. 2-5-31/2, Vidyut Bhavan, Nakkalagutta,
   Hanmkonda, Warangal - 506 001

7. Power Company of Karnataka Limited,
   KPTCL Complex, Kaveri Bhawan,
   Bangalore - 560 009

8. Bangalore Electricity Supply Company Limited,
   Krishna Rajendra Circle, Bangalore-506001

9. Mangalore Electricity Supply Company Limited,
   MESCOM Bhavna, Corporate Office,
   Bejai Kevai Cross Road
   Mangalore-575 004

10. Chamundeshwari Electricity Supply Company Limited,
    Corporate Office No. 29, Ground Floor,
    Kaveri Grameena Bank Road,
    Vijayanagar 2nd Stage,
    Mysore - 570 017

11. Gulbarga Electricity Supply Company Limited,
    Main Road, Gulbarga, 585102

12. Hubli Electricity Supply Company Limited,
    Navanagar , P.B. Road,
    Hubli - 580 025

13. Kerela State Electricity Board Limited,
    VaidyuthiBhavanam, Pattom
    Thiruvananthapuram - 695 004

14. Tamil Nadu Generation & Distribution Corporation Limited,
    NPKRR Maaligai, 144, Anna Salai
    Chennai - 600 002

15. Electricity Department,
    Government of Puducherry,
    137, NSC Bose Salai,
    Puducherry-605 001 **….Respondents**

Parties Present:

Ms. Swapna Seshadri, Advocate, NTECL
Shri Anand K. Ganesan, Advocate, NTECL
Ms. Ritu Apurva, Advocate, NTECL
Ms. Ashabari Thakur, NTECL
Shri Deepak Thakur, NTECL
Shri S. Vallinayagam, Advocate, TANGEDCO
Shri B. Rajeswari, TANGEDCO
Shri R. Ramalakshmi, TANGEDCO
Ms. R. Alamelu, TANGEDCO

ORDER

This Petition has been filed by the Petitioner, NTPC Tamil Nadu Energy Company Limited for truing-up of tariff of Vallur Thermal Power Station (3 x 500 MW) (in short "the generating station") for the period 2014-19 in terms of Regulation 8 (1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations").

Background

2. The investment approval of the project was accorded on 14.7.2007 by the Board of the Petitioner Company, for Stage-I, Phase-I comprising of two units of 500 MW at a cost of Rs.5552.78 crore and Phase-II comprising of one unit of 500 MW, at a cost of Rs.3086.78 crore, on 19.5.2009. The Petitioner has entered into Power Purchase Agreement (PPA) with the Respondents, for supply of the power generated from the project in terms of the allocation made by the Ministry of Power, Government of India vide its letter dated 28.9.2010. The dates of commercial operation of the units of the generating station are as under:

Unit-I	29.11.2012
Unit-II	25.8.2013
Unit-III	26.2.2015

3. The Commission vide its order dated 8.2.2016 in Petition No.198/GT/2013 had approved the tariff of the generating station from the date of COD of Unit-I (29.11.2012) to 24.8.2013 and for Units I and II (combined) from COD of Unit-II (25.8.2013) to 31.3.2014. Aggrieved by the said order dated 8.2.2016, the Petitioner had filed Review Petition (Petition No. 28/RP/2016) on various issues, and the Commission vide its order dated 18.4.2017 disposed of the same, revising the tariff of Units-I and II of the generating station. Subsequently, after the COD of Unit-III was declared on 26.2.2015, the Petitioner filed Petition No. 277/GT/2014, for approval of tariff of the generating

station, considering the COD of Unit-III, and the Commission vide its order dated 11.7.2017, approved the capital cost and annual fixed charges as under:

Capital Cost allowed

(Rs. in lakh)

	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19
	1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
Opening Capital Cost	**558876.17**	****827217.36**	**790341.99**	**866442.63**	**907730.04**	**933540.21**
Less: Unexplained gap between project funding and actual expenditure as on Unit-III COD	0.00	37629.15	0.00	0.00	0.00	0.00
Less: IDC/FC/FERV claimed as on Unit-III COD	0.00	58051.10	0.00	0.00	0.00	0.00
Less: Notional IDC included in capital cost claimed	0.00	1241.76	0.00	0.00	0.00	0.00
Add: IDC allowed on COD of Unit-III	0.00	51969.73	0.00	0.00	0.00	0.00
Add: FC allowed on COD of Unit-III	0.00	372.24	0.00	0.00	0.00	0.00
Add: FERV allowed on COD of Unit-III	0.00	235.62	0.00	0.00	0.00	0.00
Add: Notional IDC allowed	0.00	435.75	0.00	0.00	0.00	0.00
Less: Pro-rata reduction in IEDC	0.00	1520.23	0.00	0.00	0.00	0.00
Less: Pro-rata reduction in two packages	0.00	50.96	0.00	0.00	0.00	0.00
Total Opening cost	**558876.17**	**781737.50**	**790577.61**	**866442.63**	**907730.04**	**933540.21**
Add: Additional capital expenditure	71.03	1551.20	38587.53	36160.00	24559.00	0.00
Add: Liabilities discharged	8103.17	7288.91	37277.49	5127.41	1251.17	0.00
Closing capital cost	**567050.37**	**790577.61**	**866442.63**	**907730.04**	**933540.21**	**933540.21**

(**including 260166.99 capitalised for Unit-III on 26.2.2015)

Annual Fixed Charges allowed

(Rs. in lakh)

	2014-15		2015-16	2016-17	2017-18	2018-19
	1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
Return on Equity	23010.13	3360.71	38525.72	41249.51	42809.53	43409.62
Interest on Loan	37183.20	5307.31	57134.24	56721.98	54225.15	49954.71
Depreciation	25721.16	3689.53	41870.42	44734.88	46386.20	47036.42
Interest on Working Capital	10939.19	1246.66	13600.42	13805.42	14140.05	14181.65
O&M Expenses	14909.51	2202.18	25133.34	26714.33	28398.75	30186.60
Total	**111763.20**	**15806.39**	**176264.14**	**183226.13**	**185959.69**	**184769.00**

Present petition

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

> *"8. Truing up (1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including*

additional capital expenditure incurred up to 31.3.2019, as admitted by the Commission after prudence check at the time of truing up:

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

5. In terms of the above regulations, the Petitioner has filed the present petition for truing-up of tariff of the generating station, for the period 2014-19, and has claimed the following capital cost and annual fixed charges:

Capital Cost claimed

(Rs. in lakh)

	2014-15		**2015-16**	**2016-17**	**2017-18**	**2018-19**
	1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
Opening Capital Cost	558876.17	820608.41	829448.53	861027.00	893479.38	924508.64
Add: Addition during the year / period	71.03	1810.95	18448.79	24124.22	25889.98	11749.07
Less: Decapitalisation during the year /period	0.00	0.00	0.00	0.00	0.00	3036.13
Less: Reversal during the year / period	0.00	0.00	0.00	0.00	0.00	0.00
Add: Discharges during the year /period	8103.17	7029.16	13129.69	8328.16	5139.29	5352.09
Closing Capital Cost	**567050.37**	**829448.53**	**861027.00**	**893479.38**	**924508.64**	**938573.68**
Average Capital Cost	**562963.27**	**825028.47**	**845237.76**	**877253.19**	**908994.01**	**931541.16**

Annual Fixed Charges claimed

(Rs.in lakh)

	2014-15		**2015-16**	**2016-17**	**2017-18**	**2018-19**
	1.4.2014 to 25.2.2015	**1.4.2014 to 25.2.2015**				
Depreciation	25798.84	3871.85	42610.48	44309.76	45807.73	46792.90
Interest on Loan	37179.27	5597.33	55174.48	47857.43	45588.31	43382.24
Return on Equity	23010.13	3526.88	39303.56	51860.03	53736.44	55214.79
Interest on Working Capital	9510.91	1453.69	15679.10	15992.91	16558.51	16870.00
O&M Expenses	14912.47	2202.48	25442.45	27685.02	30362.53	34805.98
Additional O&M Expense						
Impact of Pay revision	-	-	35.41	517.64	1863.86	2233.39
Impact of GST					431.87	535.57
Total	**110411.63**	**16652.23**	**178245.48**	**188222.80**	**194349.25**	**199834.86**

6. The Respondent TANGEDCO vide affidavit dated 24.9.2020 and the Respondent KSEBL vide affidavit dated 20.7.2021, have filed their replies and the Petitioner vide affidavits dated 24.6.2021 and 27.08.2021, has filed its rejoinder to the said replies. The

Petitioner, vide affidavits dated 24.4.2021, 6.7.2021, 1.12.2021, 2.12.2021 and 4.8.2022, has filed certain additional information, with copy to the Respondents. Subsequently, this petition was heard on 30.11.2021, through video conferencing, and the order was reserved. However, as the order in the petition could not be passed prior to then Chairperson demitting the office, the Petition was re-listed and heard through virtual hearing, on 10.8.2022, and the Commission, after directing the Petitioner to file certain additional information, reserved its order in the petition. Also, in compliance to the directions in ROP dated 30.11.2021 and 10.8.2022, the Petitioner has submitted the additional information vide affidavits dated 16.2.2022 and 6.10.2022 respectively, with a copy to the Respondents. Accordingly, based on the submissions of the parties and documents available on record, and after prudence check, we proceed for truing up of the tariff of the generating station, for the period 2014-19, as stated in the subsequent paragraphs.

Commissioning Schedule and Time Overrun

7. The Commission vide order dated 8.2.2016 in Petition No. 198/GT/2013 had allowed the time overrun of 16 months for Unit-I and 18 months for Unit-II of the generating station. Further, the Commission vide its order dated 11.7.2017 in Petition No. 277/GT/2014 had examined the issue of time over run in respect of Unit-III and allowed the time over run of 18 months (out of 25 months for the generating station) and the remaining 7 months of time over run was found attributable to the Petitioner. Accordingly, the scheduled COD and the actual COD of the three units of the generating station and the time overrun allowed are summarised below:

Unit Nos.	Date of LOA	Schedule COD as per LOA	Actual COD	Time Overrun (in months)	Time overrun allowed (in months)
I	13.8.2007	10.2.2011	29.11.2012	21.63	16
II		10.8.2011	25.8.2013	24.53	18
III	28.7.2009	27.1.2013	26.2.2015	25.00	18

Impact of time overrun on contract price, IDC and IEDC etc.

8. Consequent upon time overrun involved in COD of the units and the time overrun allowed as above, the reduction in DC and IEDC is dealt with as under:

Capital Cost

9. Clause (1) of Regulation 9 of the 2014 Tariff Regulations provides that the capital cost as determined by the Commission after prudence check, in accordance with this regulation, shall form the basis of determination of tariff for existing and new projects. Clause (2) of Regulation 9 of the 2014 Tariff Regulations provides as under:

> *"(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) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period shall form part of the capital cost.*
>
> *(d) Increase in cost in contract packages as approved by the Commission;*
>
> *(e) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;*
>
> *(f) Capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;*
>
> *(g) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;*
>
> *(h) 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*
>
> *(i) adjustment of any revenue earned by the transmission licensee by using the assets before COD."*

10. The Commission vide order dated 18.4.2017 in Petition No. 28/RP/2016 (in Petition No. 198/GT/2013) had allowed the capital cost as Rs.558876.17 lakh, including IDC of Rs.73139.32 lakh, FC of Rs.329.88 lakh, and Notional IDC of Rs.1533.54 lakh, as on 31.3.2014. The same has been considered as the closing capital cost, as on 31.3.2014. Thereafter, the Commission vide its order dated 11.7.2017 in Petition No.

277/GT/2014, had approved the capital cost upto COD of Unit-III of the generating station, for the period 2014-19, considering the opening capital cost of Rs. 827217.36 lakh (on cash basis) [including Rs.260166.99 lakh capitalized for Unit-III on 26.2.2015], as on 26.2.2015. The capital cost considered after truing up exercise are detailed below.

11. The Commission while approving the tariff of the generating station, in paragraph 54, of the order dated 11.7.2017 in Petition No. 277/GT/2014, had directed the Petitioner to furnish details as shown under at the time of truing up of tariff.

> *"54. xxx*
> *The petitioner is however directed to submit the details of works asset wise/work wise included in the original scope of work along with estimate and actual expenditure, liabilities recognized to be payable at a future date and the works deferred for execution along with actual work of execution at the time of truing-up."*

12. However, the above said details have not been furnished by the Petitioner in the present Petition. Further, the Commission vide ROP of the hearing dated 30.11.2021 had once again directed the Petitioner to submit the following information:

> *(a) "Detailed breakup of capital cost as per Form-5B (clearly stating the Plant and Machinery Cost) as on cut-off date and as on 31.3.2019;*
> *(b) Details of actual additional capital expenditure claimed asset wise/work wise included in the original scope of work along with estimate and actual expenditure, liabilities recognized to be payable at a future date and the works deferred for execution along with actual work of execution under the same package heads as provided in Form-5B;"*

13. Thereafter, in compliance to the ROP of hearing dated 30.11.2021, the Petitioner vide affidavit dated 16.2.2022 submitted the following:

> *"Re. (a) Detailed breakup of capital cost as per Form-5B (clearly stating the Plant and Machinery Cost) as on cut-off date and as on 31.3.2019;*
> *xxx*
> *6. The cut-off date works to be 31.3.2018 and the tariff period ended on 31.3.2019. Form 5B pertains to the break-up of capital cost for coal/ lignite-based projects and is covered under part 1 of the checklist of forms and other information / documents for tariff filing for thermal stations. Form 5B is prepared on the actual COD / anticipated COD. And gives the break-up of the assets as per the original estimates in the investment approval vis a vis the actual capital expenditure as on actual COD / anticipated COD. The Form also contains liabilities / provisions, variation, specific reasons for variation and estimated capital expenditure upto cut-off date.*
>
> *7. The Form 5B is prepared at the time of COD of all Units. Form 5B as on station COD i.e. 26.2.2015 has already been filed by the Petitioner as part of Petition No. 277/GT/2014 vide affidavit dtd 10.7.2015. A copy of the same is attached hereto and*

marked as Annexure-1. It is respectfully stated that Form 5B is not prepared on different dates including the cut-off date and last date of the tariff period. For the purposes of truing up separate forms are prescribed in the Tariff Regulations, 2014 such as Form 9 which deals with year wise statement of additional capitalization after COD, Form 9Bi which deals with details of assets decapitalized, Form 9C which is a statement showing reconciliation of additional capitalization claimed with the capital additions as per books, Form 9D which is a statement showing the items / assets under exclusions, Form 9E which is a statement of capital cost, Form 9F which is a statement of capital works in progress etc. All these forms have been filed by the Petitioner along with the present Petition.

8. The Petitioner is willing to clarify any other specific issues with regard to its break-up of capital cost as well as additional capitalization.

***Re. (b)**: Details of actual additional capital expenditure claimed asset wise/work wise included in the original scope of work along with estimate and actual expenditure, liabilities recognized to be payable at a future date and the works deferred for execution along with actual work of execution under the same package heads as provided in Form-5B.*

9. Petitioner had projected total additional capital expenditure of Rs. 99306.53 lakh during 2015-18 (Rs. 38587.53 lakh in 2015-16, Rs. 36160.00 lakh in 2016-17 and Rs. 24559.00 lakh in 2017-18) under original scope of work in its petition no. 277/GT/2014. The Hon'ble Commission vide its order dtd 11.7.2017 in para-54 had allowed the same. Further, the Petitioner had filed a petition (being no. 67/MP/2018) for extension of cut-off date from 31.3.2018 to 31.3.2019 as certain works under original scope was being capitalized beyond cut-off date for reasons beyond the reasonable control of the Petitioner.
The Hon'ble Commission vide its order dtd 25.4.2019 in Petition no. 67/MP/2018 was pleased to allow capitalization of the expenditure for the works within the original scope of work during 2018-19.

10. Accordingly, Petitioner in the instant petition has claimed actual additional capital expenditure item wise in form-9 of respective years of the petition. The additional capitalization anticipated earlier in petition no 277/GT/2014 and actual in instant true up petition is summarized as below:

(Rs. in Crore)

	2015-16	***2016-17***	***2017-18***	***2018-19***
Anticipated expenditure at the time of filing petition no. 277/GT/2014	*385.88*	*361.60*	*245.59*	*0.0*
Actual additional capital expenditure in instant petition	*184.49*	*241.24*	*258.90*	*117.49*

It is evident from above that the actual capitalization is less than the projected capitalization. Further, the work wise actual capitalization against allowed works by Hon'ble Commission is indicated in respective Form-9 of the tariff periods.

Further, Petitioner had projected/anticipated liabilities discharge in form-18 of the petition no 277/GT/2014 for the period 2015-18. Actual liability discharge in the instant true up petition is as per form-18 of the respective years (refer page 77-89 of petition). The projected/anticipated liabilities discharge and actual liability discharge in the instant true up petition is summarized as below:

(Rs. in lakh)

	From 1.4.14 to 25.2.15	**From 26.2.15 to 31.3.15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Anticipated liability discharge at the time of filing petition no. 277/GT/2014	*8103.17*	*7288.91*	*37277.49*	*5127.41*	*1251.17*	*0.00*
Actual liability discharge in the instant petition (Total Discharge as per form-18 of instant petition)	*Allowed by Hon'ble CERC vide para 51 of order dtd 11.7.17-*	*7288.91 (refer page 77 of petition)*	*13153.89 (refer page 78-79 of petition)*	*8460.28 (refer page 80-83 of petition)*	*5273.83 (refer page 84-86 of petition)*	*5497.59 (refer page 87-89 of petition)*

As the liabilities discharged claimed in the instant petition is against already allowed works under original scope. The liabilities recognized to be discharged at future dates is indicated at Form-18. The same shall be claimed at the time of truing up for the period 2019-24 as and when discharged."

14. Since the Petitioner has not furnished revised Form 5B, as per actuals, after the cut-off date, the Commission vide ROP of hearing dated 10.8.2022, again directed the Petitioner, to furnish the actual break up of capital cost, in Form 5B (clearly stating the Plant & Machinery cost) as on the cut-off date, and as on 31.3.2019. In response, the Petitioner vide affidavit dated 7.3.2022, has furnished revised Form 5B. Based on the information available for the respective financial years, the capital cost of the project has been dealt with in this order.

<u>Interest during Construction (IDC)</u>

15. The Petitioner has claimed IDC of Rs. 156473.25 lakh as on COD of Unit-III i.e. 26.2.2015, and the break-up of the same, in Form 5B is as under:

(Rs. in lakh)

Opening IDC as on 1.4.2014	98177.19
Add: IDC in additional capitalisation during 1.4.2014 to 25.2.2015	480.59
IDC as on 25.2.2015 pertaining to 2 units (Units I&II)	98657.78
Add: IDC capitalised as on 26.2.2015 pertaining to Unit-III	57815.48
Total IDC claimed as on 26.2.2015 (COD of Unit-III)	156473.26

16. The Commission vide its order dated 11.7.2017 in Petition No. 277/GT/2014, had observed as under:

"44. It is observed that the petitioner has availed loan for the project from M/s Rural Electrification Corporation Limited. As per the balance sheet as on 26.2.2015, the total loan outstanding as on 26.2.2015 is Rs.589798.49 lakh (Rs.371464.92 lakh for Phase-I and Rs. 218333.57 lakh for Phase-II). IDC which is to be allowed for capitalisation has been calculated based on the details furnished by the petitioner such as loan agreements, drawl/ interest rate resets/ repayment etc and the same has been restricted up to the rescheduled COD (25.7.2014). The petitioner has not furnished the basis of allocation of IDC. Hence, details such as total interest charged to Profit and loss Account out of the total interest on the loan, amount of IDC transferred to fixed assets and IDC lying in CWIP as on COD of Unit-III have all been obtained from the financial statements for the generating station since inception of fund infusion till COD of the generating station. The total IDC computed till rescheduled COD of the generating station has been apportioned as under based on the proportion worked out with the above-mentioned details:

(Rs. in lakh)

	IDC Allowed
IDC allowed as on COD of Unit-I and Unit-II vide order dated 8.2.2016 in Petition No. 198/GT/2013	*73139.32 (38660.53 for Unit-I and 34478.79 for Unit-II)*
IDC allowed as on COD of Unit-III	*51969.73*
Total IDC allowed for capitalization till Scheduled COD	***125109.05***

The IDC allowed as above is subject to revision, based on the allocation details to be furnished by the petitioner at the time of truing-up in terms of Regulation 8 of the 2014 Tariff Regulations."

17. In line with the above directions, the Petitioner vide affidavit dated 3.2.2022, has submitted the basis of allocation of IDC, along with details, such as the total interest charged to Profit & Loss Account out of the total interest on the loan, the amount of IDC transferred to fixed assets, and IDC lying in CWIP, as on COD of Unit-III. The Petitioner has also submitted revised Form 5B and an amount of Rs. 98177.19 lakh is capitalized as IDC upto COD of Unit-I and II. Further, IDC amounting to Rs. 480.59 lakh, was incurred on cash basis, for additional capitalization from 1.4.2014 to 25.2.2015. It is further noticed that an amount of Rs. 57815.48 lakh (pertaining to Unit-III) is capitalized as IDC upto COD of Unit-III. However, the Petitioner in the present petition, has not furnished the detailed computation of IDC capitalized upto actual COD of the generating station (i.e. upto 25.2.2015, COD being on 26.2.2015) and in the absence of the same, we find it prudent to consider the IDC as approved in order dated 11.7.2017 in Petition No. 277/GT/2014 i.e. Rs. 51969.73 lakh for Unit-III (25.2.2015).

Normative IDC

18. The Petitioner has claimed normative IDC of Rs. 1241.76 lakh from 1.4.2014 to 25.2.2015, based on the deployment of equity in excess of 30% of the total expenditure. The Commission vide its order dated 11.7.2017 in Petition No. 277/GT/2014, based on the details, namely, actual deployment of debt and equity on quarterly basis, cash expenditure incurred and rate of interest on actual loan portfolio furnished by the Petitioner, had allowed Notional IDC of Rs. 435.75 lakh from 1.4.2014 to 25.2.2015. The Petitioner in the present Petition, with respect to deduction of notional IDC, has submitted that the Appellate Tribunal for Electricity ('APTEL') vide its judgment dated 3.10.2019 in Appeal No. 231 of 2017, had observed that the additional capitalisation is entitled to be compensated in terms of normative IDC. The relevant portion of the order is extracted below:

> *"ix) The Central Commission should have taken into consideration the aspect that whatever be the types of funds it is never free of cost. There is always a cost of funding. The argument that no actual loan for additional capital expenditure was taken and therefore it is not admissible for any normative IDC is wrong. It is the commercial decision of the Appellant whether to borrow the money from the market for the purpose of additional capitalisation or use its internal accruals. In either case, the capitalisation deserves to be given the Interest During Construction. For the simple reasons that if the internal accruals were not to be used as additional capital than it would have been invested in the market in any interest earning instrument. Additional capitalisation is therefore entitled to be compensated in terms of normative IDC. The Central Commission should have considered this aspect that no funds are free funds."*

19. *The Petitioner has further submitted that it has filed Appeals before APTEL challenging the Commission's tariff orders relating to the period* 2009-14 *and has accordingly sought* liberty to *approach the Commission, based on the final decision in the said appeals. The prayer of the Petitioner for grant of liberty is accepted.* Further, from the submissions of the Petitioner, it is not clear as to whether notional IDC for the period 2014-19 has been claimed by the Petitioner. however, pending final decision of APTEL in the said appeals, we consider and allow the Notional IDC of Rs. 435.75 lakh as considered and allowed vide order dated 11.7.2017 in Petition No. 277/GT/2014.

Incidental Expenditure during Construction (IEDC)

20. The Petitioner has claimed Incidental Expenditure during Construction of Rs. 30430.76 lakh. The Commission vide its order dated 11.7.2017 in Petition No. 277/GT/2014, had considered the pro-rata reduction of Rs. 1520.23 lakh, for calculating the capital cost as on COD of Unit-III, after directing the Petitioner to submit details of the increase in IDC and IEDC, for Unit-III from scheduled COD to the actual COD, along with break-up of expenditure, at the time of truing- up of tariff. The Petitioner, in the present Petition, has however, not furnished details of IDC and IEDC. Therefore, in absence of such details, we consider the IEDC cost as on Station COD (as allowed by order dated 11.7.2017 in Petition No. 277/GT/2014), amounting to Rs 13519.17 lakh (Rs 15039.40 – 1520.23 lakh).

Initial Spares

21. Regulation 13 of the 2014 Tariff Regulations provides as under:

> *"13. Initial Spares: Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:*
> *(a) Coal-based/lignite-fired thermal generating stations - 4.0%*
> *(b) Gas Turbine/Combined Cycle thermal generating stations - 4.0%*
> *Provided that:*
>
> *i. where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost by the Commission, such norms shall apply to the exclusion of the norms specified above:*
>
> ……………………………
>
> *iv. for the purpose of computing of initial the cost spares, plant and machinery cost shall be considered as project cost as on cut-off date excluding IDC, IEDC, Land Cost and cost of civil works. The transmission licensee shall submit the break-up of head wise IDC & IEDC in its tariff application."*

22. The COD of the Unit-III of the generating station is 26.2.2015 and accordingly, the cut-off date of the generating station is 31.3.2018. The Commission vide its order dated 11.7.2017 in Petition No. 277/GT/2014, had considered initial spares of Rs. 10872 lakh as claimed by the Petitioner, upto cut-off date of the generating station, on projection basis. The observations of the Commission are as under:

"48. The Commission vide order dated 8.2.2016 in Petition No.198/GT/2013 had allowed the capitalization of initial spares amounting to Rs.1190.00 lakh as on actual date of COD of Unit-I and Rs.982.00 lakh as on actual date of COD of Unit-II. Accordingly, the total initial spares capitalized as on COD of Units-I&II (combined) is Rs.2172.00 lakh. The COD of the Unit-III of the generating station is 26.2.2015 and accordingly, the cut-off date of the generating station is 31.3.2018. The petitioner vide affidavit dated 10.7.2015 has claimed Initial spares of Rs.8700 lakh during 2015-18 (Rs.1600 lakh in 2015-16, Rs.3500 lakh in 2016-17 and Rs.3600 lakh in 2017-18) on projection basis. Thus, the total initial spares up to cut-off date of the generating station works out to Rs.10872 lakh (2172+8700). The petitioner vide Form 5B of the affidavit dated 10.7.2015 has furnished the anticipated Plant and Machinery cost of Rs.500369.49 lakh up to 31.3.2018. Therefore, the projected initial spares of Rs.10872 lakh claimed by the petitioner up to cut off date of the generating station works out to 2.17% of the Plant & Machinery cost which is within the ceiling limit specified under the above regulations and hence allowed. The petitioner is however directed to furnish the break-up of actual plant & machinery cost and the details of initial spares capitalized up to the cut-off date at the time of truing-up."

23. In order dated 11.7.2017 in Petition No. 277/GT/2014, the Commission had also directed the Petitioner to furnish the detailed break up of actual Plant & Machinery cost along with details of the initial spares capitalized up to the cut-off date of the generating station, at the time of truing up of tariff. The Petitioner vide affidavit dated 7.3.2022 has submitted that Plant & Machinery cost (excluding spares) as on cut-off date, amounts to Rs. 819545.65 lakh and the Plant & Machinery cost (including spares) capitalized upto the cut-off date (31.3.2018) is Rs. 846782.41 lakh. The Petitioner has capitalized initial spares amounting to Rs. 27236.76 lakh, upto the cut-off date, to arrive at the capital cost.

24. On perusal of the breakup details of the Plant & Machinery cost, furnished by the Petitioner vide affidavit dated 7.3.2022, it is observed that Plant & Machinery cost, excluding spares, as on the cut-off date, is Rs. 819545.65 lakh, which include heads like land, total civil work packages like chimney, cooling towers etc, which are not in nature of Plant & Machinery cost. However, it is observed from the revised Form 5B submitted by the Petitioner vide affidavit dated 7.3.2022, that the total Plant & Machinery cost, excluding land and site development cost, as on the cut-off date (31.3.2018) is Rs.

487255.97 lakh. However, as per Regulation 13 of the 2014 Tariff Regulations, for the purpose of computing initial spares, the Plant & Machinery cost, shall be considered as the project cost, as on the cut-off date, excluding IDC, IEDC, land cost and cost of civil works. Accordingly, the Plant & Machinery cost considered to work out and allow the initial spares (@4%) is as under:

(Rs.in lakh)

Total P&M Cost upto the cut-off date	**Initial Spares allowable (4% of P&M Cost)**
487255.97	19490.24

Infirm Power

25. The Commission vide its order dated 11.7.2017 in Petition No. 277/GT/2014 had recognized that the net revenue earned from the sale of infirm power, from Unit-III of the project, till the COD of Unit-III is Rs.1740.86 lakh, which has already been adjusted as on the COD of Unit-III / Station COD, and therefore no separate adjustments are made in this regard. In the present Petition, the Petitioner has submitted the audited financial statements, wherein, it is noted that net pre-commissioning income / expenditure, has been adjusted directly in the cost of related assets and systems. In view of this, no adjustment has been made in the capital cost, towards the revenue earned from sale of infirm power.

Liquidated Damages (LD)

26. The Petitioner has furnished the details of the Liquidated Damages amounting to Rs 1102.48 lakh, in terms of the directions in order dated 11.7.2017 in Petition No. 277/GT/2014 in respective Form 9D's of the present Petition. As stated earlier, out of total time-over run of 21.63 months in the commissioning of Unit-I, 24.53 months in commissioning of Unit-II and 25-months in commissioning of Unit-III, time overrun of 16 months, 18 months and 18 months respectively, have been condoned. Accordingly,

IEDC and IDC, for the portion of the time overrun period condoned has been allowed. Therefore, the LD recovered corresponding to the time overrun allowed, works out to Rs.805.63 lakh [((16+18+18)/ (21.63+24.53+25)) x1102.48] and the same is deducted from the capital cost as on COD of Unit-III i.e. 26.2.2015. The balance recovered LD for Rs.296.85 lakh, corresponding to the portion of time over-run of 5.63 months for Unit-I, 6.53 months for Unit-II and 7 months for Unit-III, which was not condoned, is permitted to be retained by the Petitioner.

Unexplained Gap

27. The Commission vide its order dated 11.7.2017 in Petition No. 277/GT/2014, had considered the funding gap of Rs. 37629.15 lakh, as undischarged liability, and had deducted the same from the capital cost, as on the COD of Unit-III, with liberty to the Petitioner, to reconcile the actual cash expenditure and project funding, as on COD of the generating station, along with the date wise details regarding conversion of the share application money in to share capital, at the time of truing up of tariff. Accordingly, the Petitioner, in the present Petition, has submitted the details of the funds available with the Petitioner for project execution till the station COD i.e. 26.2.2015 as under:

(Rs. in lakh)

A) Net Loan outstanding as on 25.2.2015	589798.41
B) a)Share Capital as on 25.2.2015	253121.22
b) Share application Money	11999.00
Total Equity infused as on COD of the Station (a+b)	265120.22
C) Internal Cash accruals for 2012-13 and 2013-14 (between COD of Unit – I to 31.3.2014)	45648.33
Total funds available for Project Execution till COD of the Station (i.e. 26.2.2015) (A+B+C)	900566.96

28. The Petitioner has also submitted the date-wise details of the conversion of share application money. It is observed that the Petitioner has considered the debt equity ratio of 70:30 as on the Station COD, for calculation of normative loan and equity. The Petitioner has also submitted that it has used its internal accruals like PAT / Depreciation for funding the project. In order to ascertain whether sufficient internal cash accruals

were available with the Petitioner for funding the project, the duly audited financial statements including the cash flow statement for the relevant financial years (2012-13 till Station COD i.e..26.2.2015) was relied upon. On perusal of the Audited Balance sheet and cash flow statements submitted by the Petitioner, as on station COD (26.2.2015), it is observed that the Net cash flow from operating activities, less the financing charges, pertaining to the above-mentioned years, is sufficient for funding the project, as on COD of the generating station. Hence, the contention of the Petitioner that internal accruals were used for funding the gaps, holds good and therefore, the funding gap of Rs. 37629.15 lakh, as on COD of Unit-III i.e. 26.2.2015, is allowed.

Additional Capital Expenditure

29. The Petitioner has claimed additional capital expenditure of Rs. 71.03 lakh during the period from 1.4.2014 to 25.2.2015. It has also submitted that liabilities amounting to Rs. 8103.17 lakh during the said period, has been discharged. Accordingly, these amounts have been considered and allowed in the capital cost of the generating station.

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

> *"14. Additional Capitalization and De-capitalization:*
>
> *(1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*
>
> *(i) Un-discharged liabilities recognized to be payable at a future date;*
>
> *(ii) Works deferred for execution;*
>
> *(iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;*
>
> *(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and*
>
> *v) Change in law or compliance of any existing law:*
>
> *Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.*
>
> *(2) The capital expenditure incurred or projected to be incurred in respect of the new project on the following counts within the original scope of work after the cut-off date may be admitted by the Commission, subject to prudence check:*

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

(ii) Change in law or compliance of any existing law;

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

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

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

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

(ii) Change in law or compliance of any existing law;

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

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

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

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

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

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

(ix) In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to 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-capitalisation 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 de-capitalisation shall be deducted from the vale of gross fixed asset and corresponding loan as well as equity shall be deducted from the outstanding loan and the equity respectively in the year such de-capitalisation takes place, duly taking into consideration the year in which it was capitalised."

31. The Commission in its order dated 11.7.2017 in Petition No. 277/GT/2014 had allowed the projected additional capital expenditure of Rs. 38587.53 lakh in 2015-16, Rs. 36160.00 lakh in 2016-17 and Rs. 24559.00 lakh in 2017-18 respectively. The head wise details of the same is as under:

(Rs. in lakh)

S. No.	Head of work / Equipment	2015-16	2016-17	2017-18	2018-19
1	Preliminary investigation & Site development	0.00	1250.00	0.00	0.00
2	Steam Generator Island	1759.28	0.00	0.00	0.00
3	Turbine Generator Island	2433.99	0.00	0.00	0.00
4	DM water Plant	241.00	0.00	0.00	0.00
5	Chlorination plant	17.10	0.00	0.00	0.00
6	Ash Handling system	8299.01	0.00	2760.57	0.00
7	Coal Handling Plant	7809.00	0.00	0.00	0.00
8	Air Conditioning & Ventilation system	877.70	0.00	259.50	0.00
9	Firefighting system	126.00	0.00	0.00	0.00
10	Workshop lab (incl pp)	25.00	725.00	250.00	0.00
11	Transformer package	1223.55	0.00	0.00	0.00
12	C & I Package (incl. instn. Cable)	1384.36	251.00	96.00	0.00
13	Initial spares	1600.00	3500.00	3600.00	0.00
14	Main plant / Adm. building	5701.00	7857.00	4876.00	0.00
15	CW System	90.00	0.00	0.00	0.00
16	Ash disposal area development	1550.55	12400.00	6500.00	0.00
17	Township & colony	4182.00	9577.00	5667.00	0.00
18	Temporary Construction & enabling works	350.00	0.00	0.00	0.00
19	Chimney	416.00	0.00	0.00	0.00
20	Tools& Plant	502.33	600.00	550.00	0.00
	Total	**38587.53**	**36160.00**	**24559.00**	**0.00**

Reconciliation of additional capital expenditure

32. The reconciliation of the actual additional capital expenditure with books of accounts, as submitted by the Petitioner, for the period 2014-19, is as under:

(Rs. in lakh)

Sl No		2014-15	2015-16	2016-17	2017-18	2018-19
1	Closing Gross Block as per IGAAP Audited Balance Sheet as on 31.3.2016			915524.77	942750.14	976369.77
2	Capital spares capitalized			1554.79		
3	Opening Gross Block as per IGAAP 1st April (row 1+2)	892587.32	894241.05	917079.56	942750.14	976369.77
4	Add: Additions as per Note-2	NA		26864.02	24657.13	17838.66
5	Add: Additions as per Note-2 out of adjustment column (Ind-AS)			1,063.43	11573.72	691.37
6	Less: Decapitalisation as per Note-2 out of adjustment column (Ind-AS)			385.40	1,796.55	4,548.85
7	**Total Addition as per Ind AS Balance Sheet (4 + 5 - 6)**			**27542.05**	**34434.30**	**13981.18**
IND AS Adjustments						
8	Add: Vendor discounting out of assets in the year					
9	Less: Unwinding expenses Capitalised					
10	Less: IND AS adjustment of Decapitalisation out of ROW 6 (Mitigating the impact of carrying cost exemption to arrive)					
11	Less: Total addition in capital OH asset class (including adjustments also)			1871.47	814.68	2911.96
12	Add: Decapitalisation of capital Overhauling during the year					
13	Add/Less: Any other IND AS adjustment having impact on Property, Plant & Equipment's - Capital spares adjusted in Opening balance					
14	**Subtotal IND AS ADJ (8-9-10-11+12+13)**			(-)1871.47	(-)814.68	(-)2911.96
15	Closing Gross Block as per IGAAP (row 3+4+5-6+14)	894241.05	915524.77	942750.14	976369.77	987438.99
16	Addition as per IGAAP (row 15 - 3)	1653.73	21283.72	25670.58	33619.62	11069.22
17	Exclusions (Items not allowable/not claimed) (accrual basis)	(-)259.76	(-)50.62	(-)198.86	(-)1796.15	(-)1471.87
18	Net Additional Capital Expenditure Claimed (accrual basis) (row 16 - 17)	1913.49	21334.34	25869.44	35415.77	12541.09
19	Less: Undischarged liabilities	102.53	2885.55	1745.22	9525.79	3828.14
20	Net Additional Capital Expenditure Claimed (cash basis)	1810.95	18448.79	24124.22	25889.98	8712.95
21	Liability Discharged	7029.16	13129.69	8328.16	5139.29	5352.09
22	**Total Claimed Additional Capitalization (20+21)**	**8840.11**	**31578.47**	**32452.38**	**31029.26**	**14065.04**

Actual Additional Capital Expenditure for the period 2014-19

33. The station COD is 26.2.2015, and the cut-off date of the generating station is

31.3.2018 (except for the works allowed in Petition No. 67/MP/2018). Also, as the relevant details in Form 5B (as discussed in para 14 above) had not been furnished by the Petitioner, the additional capitalization claims have been dealt with, based on the information furnished in Form 9A and Form 18. The claims of the Petitioner for actual additional capital expenditure for the period 2014-19, is examined year-wise, based on the submission of the parties and the documents available on record and on prudence check, as under:

2014-15

34. The additional capital expenditure claimed by the Petitioner, on cash basis, are as under:

(Rs. in lakh)

S. No.	Head of work / Equipment	Additional Capital Expenditure claimed	Regulations
		2014-15 (26.2.2015 to 31.3.2015)	
Approved in order dated 11.7.2017 in Petition No. 277/GT/2014 on projection basis			
1	Construction of Stores Office Building with Gate	1.43	Regulation 14 (1)(ii)
2	Steam Generator	121.56	
3	Turbine Generator	1,021.36	
4	External Coal Handling Plant	0.91	
5	Capitalisation of MBOA	431.26	
6	Misc/ Important works within the original scope of work	234.44	
	Total	**1810.95**	
7	Discharge of liabilities	7029.16	Regulation 14 (1)(i)
8	**Total additional Capitalization claimed**	**8840.11**	

35. The Petitioner has claimed total additional capital expenditure of Rs. 8840.11 lakh in 2014-15, including discharge of liabilities for Rs. 7029.16 lakh. The additional capitalization claimed comprises of works namely construction of stores office building with gate, Steam generator, Turbine generator, External coal handling plant, capitalization of MBOA and Miscellaneous works within the original scope of work in

terms of Regulation 14(i)(ii) of the 2014 Tariff Regulations. The Petitioner, in justification of the same, has submitted that the Commission vide its order dated 11.7.2017 in Petition No. 277/GT/2014, had approved these assets and these works are deferred work within the original scope of work of the project. The Petitioner has also submitted that the amount of Rs.1551.20 lakh, has already been approved for the above-mentioned assets / works vide order dated 11.7.2017 in Petition No. 277/GT/2014. The Petitioner vide affidavit dated 4.8.2022, has submitted the detailed bifurcation of Miscellaneous works, amounting to Rs. 234.44 lakh, within the original scope of work. In view of the above, we have considered the additional capitalization against the head of miscellaneous works and has allowed the same. Accordingly, the additional capital expenditure of Rs. 1810.95 lakh is allowed under Regulation 14(1)(ii) of the 2014 Tariff Regulations and the liabilities discharged for Rs. 7029.16 lakh is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations for 2014-15.

2015-16

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

(Rs. in lakh)

S. No.	**Head of work / Equipment**	**Additional Capital Expenditure claimed**	**Regulations**
		2015-16	
Approved in order dated 11.7.2017 in Petition No. 277/GT/2014 on projection basis			
1	Freehold Land-Plant/Office	215.82	Regulation 14 (1)(ii)
2	Permanent Roads-Plant Area	19.41	
3	Permanent Roads-Township	168.55	
4	Main Plant Buildings	169.95	
5	Off Site Buildings	29.12	
6	Buildings Temporary Construction Office Stores and Sheds.	1.44	
7	Steam Generator	1567.26	
8	Turbine Generator - Including Eot Cranes	1923.58	
9	Coal Handling System	682.08	
10	Ash Handling System	57.35	
11	Cooling Water System Including Cooling Towers	135.84	
12	Control and Instrumentation Equipment’s	9.86	
13	Service and General Station Equipment’s	289.20	
14	Electrical and Auxiliary Equipment’s	179.88	

S. No.	Head of work / Equipment	Additional Capital Expenditure claimed	Regulations
		2015-16	
Approved in order dated 11.7.2017 in Petition No. 277/GT/2014 on projection basis			
15	Chimney	233.71	
16	Water Treatment Plant	881.59	
17	Power Station Switchyard	21.90	
18	Main Electrical Equipment's	762.37	
19	Mechanical & Auxiliary Equipment's	163.97	
20	Capitalisation of MBOA	465.51	
21	Misc./ Important works within the original scope of work	10471.01	
	Total	**18449.38**	
23	Discharge of liabilities	13129.69	Regulation 14 (1)(i)
24	**Total additional Capitalization claimed**	**31579.06**	

37. The Petitioner has claimed total additional capitalization of Rs. 31579.06 lakh in 2015-16, including discharge of liabilities for Rs.13129.69 lakh. The additional capitalization claimed in 2015-16, comprises of works namely Roads, Buildings, Temporary constructions, Steam generator, Turbine generator, Coal handling plant, Ash Handling Plant, Cooling water system, Control and Instrumentation Equipment's, Service and general station equipment's, Electrical and auxiliary equipment's, chimney, water treatment plant, power station switchyard, main electrical equipment, mechanical and auxiliary equipment, capitalization of MBOA and Miscellaneous works within the original scope of work in terms of Regulation 14(i)(ii) of the 2014 Tariff Regulations. The Petitioner, in justification of the same, has submitted that the Commission vide its order dated 11.7.2017 in Petition No. 277/GT/2014, had approved these works, which are deferred works, within the original scope of work of the project. The Petitioner has also submitted that the amount of Rs. 99306.53 lakh during the period 2015-18 had already approved against the above-mentioned assets / works vide order dated 11.7.2017 in Petition No. 277/GT/2014. The Petitioner, vide affidavit dated 4.8.2022 has submitted the detailed bifurcation of the Miscellaneous works, amounting to Rs. 10471.01 lakh, which are within the original scope of work. In view of the above, the additional

capitalization is considered against the head 'miscellaneous works' and is allowed. The Petitioner has further submitted that in 2015-16, an amount of Rs. 465.51 lakh is claimed for capitalization of MBOA items and Rs. 12393.32 lakh for "Misc /important works" which are within the original scope of work, thereby totalling Rs 12858.83 lakh. However, some of the items in MBOA are similar in nature to those claimed under "Misc / Important works within the original scope of work" and therefore, the Petitioner has merged the same, in the breakup of "Misc/ Important works within the original scope of work". Accordingly, the Petitioner has revised its claim of MBOA items to Rs. 222.71 lakh and Rs 12636.12 lakh for Misc / Important work i.e. totalling Rs. 12858.83 lakh. Considering the submissions of the Petitioner and on prudence check, we allow the additional capital expenditure of Rs. 18449.38 lakh claimed, under Regulations 14(1)(ii) of the 2014 Tariff Regulations and the liabilities discharged for Rs. 13129.69 lakh is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations for 2015-16.

2016-17

38. The additional capital expenditure claimed by the Petitioner, on cash basis, are as under:

(Rs. in lakh)

S. No.	Head of work / Equipment	Additional Capital Expenditure claimed	Regulations
		2016-17	
Approved in order dated 11.7.2017 in Petition No. 277/GT/2014 on projection basis			
1	Freehold Land-Plant/Office	0.00	Regulation 14 (1)(ii)
2	Permanent Roads-Plant Area	2287.40	
3	Permanent Roads-Township	37.84	
4	Bridges & Culverts Plant Area	131.72	
5	Main Plant Buildings	4984.45	
6	Off Site Buildings	157.71	
7	Service Buildings Including Mgr Workshop buildings	0.64	
8	Buildings Temporary Construction - Auxiliary Building	1.84	
9	Buildings Temporary Construction Office Stores and Sheds	168.68	
10	Residential Buildings Township	6.99	

S. No.	Head of work / Equipment	Additional Capital Expenditure claimed	Regulations
		2016-17	
Approved in order dated 11.7.2017 in Petition No. 277/GT/2014 on projection basis			
11	Service Buildings - Township,	25.54	
12	Int. Elec. Work- Service Buildings	0.98	
13	Boundary Wall	4.19	
14	Sewerage & Effluent Disposal Sys -Plant	91.14	
15	Sewerage and Drainage System-Township	171.29	
16	Steam Generator	734.37	
17	Turbine Generator - Including Eot Cranes	144.55	
18	SG-TG Capital Expenditure	34.35	
19	Coal Handling System	1223.84	
20	Ash Handling System	8779.27	
21	Cooling Water System Including Cooling Towers	245.25	
22	Control and Instrumentation Equipment's	48.04	
23	Service and General Station equipment's	900.64	
24	Electrical and Auxiliary equipment's	45.66	
25	Chimney	17.78	
26	Water Treatment Plant	1228.64	
27	Power Station Switchyard	1.50	
28	Main Electrical equipment's	11.68	
29	Township Power Supply System	21.94	
30	Capitalisation of MBOA	171.24	
31	Misc/ Important works within the original scope of work	2447.00	
	Total	**24126.15**	
32	Discharge of liabilities	8328.16	Regulation 14 (1)(i)
33	**Total additional Capitalization claimed**	**32454.31**	

39. The Petitioner has claimed total additional capital expenditure for Rs. 32454.31 lakh in 2016-17, including discharge of liabilities for Rs. 8328.16 lakh. The additional capitalization claimed in 2016-17 comprises of works namely Roads, Buildings, Temporary constructions, Residential building township, service building township, Steam generator, Turbine generator, sewerage and effluent disposal system, boundary wall, Coal handling plant, Ash Handling Plant, Cooling water system, Control and Instrumentation Equipment's, Service and general station equipment's, Electrical and auxiliary equipment's, chimney, water treatment plant, power station switchyard, main electrical equipment, Township power supply system, capitalization of MBOA and

Miscellaneous works within the original scope of work in terms of Regulation 14(i)(ii) of the 2014 Tariff Regulations. The Petitioner, in justification of the same, has submitted that the Commission vide its order dated 11.7.2017 in Petition No. 277/GT/2014, had approved these works and these works are deferred works, within the original scope of work of the project. The Petitioner has also submitted that the amount of Rs. 99306.53 lakh during the period 2015-18 had already been approved against the above-mentioned assets / works vide order dated 11.7.2017 in Petition No. 277/GT/2014. The Petitioner vide affidavit dated 4.8.2022, has submitted the detailed bifurcation of Miscellaneous works amounting to Rs. 2447.00 lakh, which are within the original scope of work. In view of the above, we consider the additional capitalization against the head of 'miscellaneous works' and allow the same. Accordingly, the additional capital expenditure of Rs. 24126.15 lakh is allowed under Regulation 14(1)(ii) of the 2014 Tariff Regulations and the liabilities discharged for Rs. 8328.16 lakh is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations, for 2016-17.

2017-18

40. The additional capital expenditure claimed by the Petitioner, on cash basis, are as under:

(Rs. in lakh)

S. No.	**Head of work / Equipment**	**Additional Capital Expenditure claimed**	**Regulations**
		2017-18	
Approved in order dated 11.7.2017 in Petition No. 277/GT/2014 on projection basis			
1	Freehold Land-Plant/Office	0.00	Regulation 14 (1)(ii)
2	Permanent Roads-Plant Area	40.25	
3	Main Plant Buildings	4702.14	
4	Off Site Buildings	4.33	
5	Off Site Buildings	7.22	
6	Residential Buildings Township	1.03	
7	Residential Buildings Township	2290.35	
8	Int. Elec. Work- Residential Building Township	72.17	

S. No.	Head of work / Equipment	Additional Capital Expenditure claimed	Regulations
		2017-18	
Approved in order dated 11.7.2017 in Petition No. 277/GT/2014 on projection basis			
9	Int. Elec. Work- Temp Building Construction Labour Colony	7.48	
10	Boundary Wall	3.92	
11	Sewerage & Effluent Disposal Sys -Plant	127.73	
12	Steam Generator	153.53	
13	Turbine Generator - Including Eot Cranes	257.47	
14	Coal Handling System	5.22	
15	Ash Handling System	1884.16	
16	Cooling Water System Including Cooling Towers	252.31	
17	Control and Instrumentation equipment's	3.57	
18	Service and General Station equipment's	219.19	
19	Service and General Station equipment's	65.90	
20	Water Treatment Plant	754.90	
21	Water Treatment Plant	8.40	
22	Main Electrical equipment's	3.95	
23	Capitalisation of MBOA	367.38	
24	Misc./ Important works within the original scope of work	10975.34	
25	Other Misc. Works	3682.04	
	Total	**25889.98**	
26	Discharge of liabilities	5139.29	Regulation 14 (1)(i)
27	**Total additional Capitalization claimed**	**31029.26**	

41. The Petitioner has claimed total additional capital expenditure of Rs. 31029.26 lakh in 2017-18, including discharge of liabilities for Rs. 5139.29 lakh. The additional capitalization claimed in 2017-18 comprises of works namely Roads, Buildings, Temporary constructions, Residential building township, service building township, Steam generator, Turbine generator, sewerage and effluent disposal system, boundary wall, Coal handling plant, Ash Handling Plant, Cooling water system, Control and Instrumentation Equipment's, Service and general station equipment's, Electrical and auxiliary equipment's, chimney, water treatment plant, power station switchyard, main electrical equipment, Township power supply system, capitalization of MBOA and Miscellaneous works within the original scope of work in terms of Regulation 14(i)(ii) of the 2014 Tariff Regulations. The Petitioner, in justification of the same, has submitted

that the Commission vide its order dated 11.7.2017 in Petition No. 277/GT/2014, had approved these works and these works are deferred works, within the original scope of work of the project. The Petitioner has also submitted that the amount of Rs. 99306.53 lakh during the period 2015-18, had already been approved against the above-mentioned assets / works vide order dated 11.7.2017 in Petition No. 277/GT/2014. The Petitioner vide affidavit dated 4.8.2022, has submitted the detailed bifurcation of items claimed under “Miscellaneous / Important Works within the original scope of works” and Other Misc. works” totalling Rs. 14657.38 lakh, which are within the original scope of work. In view of the above, we consider the additional capitalization against the head of miscellaneous works and allow the same. Accordingly, the additional capital expenditure of Rs. 25889.98 lakh is allowed under Regulation 14(1)(ii) of the 2014 Tariff Regulations and the liabilities discharged for Rs. 5139.29 lakh is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations for 2017-18.

2018-19

42. The additional capital expenditure claimed by the Petitioner, on cash basis, are as under:

(*Rs. in lakh*)

S. No.	Head of work / Equipment	Additional Capital Expenditure claimed	Regulations
		2018-19	
Approved in order dated 11.7.2017 in Petition No. 277/GT/2014 on projection basis and in Order dated 25.04.2019 in Petition No. 67/MP/2018			
1	BOP Mech (Earthmoving Equipment)	134.53	Regulation 14 (1)(ii)
2	BOP Mech (External coal handling plant package) Balance work	0.00	
3	BOP Mech (Final Reconciliation Payment - Desalination plant package)	0.40	
4	BOP Mech (Supply and Erection of Stream Generator - Balance work)	54.16	
5	BOP Mech (Supply and Erection of Stream Turbine Generator - Balance work)	36.11	
6	BOP Mech / Coal Handling Plant (Satellite Communication System for CHP)	10.26	

S. No.	Head of work / Equipment	Additional Capital Expenditure claimed	Regulations
		2018-19	
Approved in order dated 11.7.2017 in Petition No. 277/GT/2014 on projection basis and in Order dated 25.04.2019 in Petition No. 67/MP/2018			
7	BOP Mech / CW System (CW System Erection - Balance work	4.73	
8	BOP Mech/Coal Transportation incl locos (Skid Steer Loader Machine)	15.87	
9	BOP Mech/Workshop & Lab (Laboratory Equipment)	79.23	
10	BOP Mech/Workshop (Portable Core Drilling Machine with Magnetic Base)	5.94	
11	BOP Mech/Workshop (Workshop Equipment)	125.20	
12	Capitalisation of Spares	27.02	
13	-do-	3.97	
14		7.37	
15		0.38	
16		1.07	
17		0.19	
18	Civil / (Construction of Chimney Phase -1) Balance work	41.92	
19	Civil / Ash Dyke Lagoon II	18.74	
20	Civil / Bridge Over Creek	0.00	
21	Civil / Bridge Over Creek (Providing bridge between drive house and bridge)	2.68	
22	Civil / CW System (Pond Ash filling with levelling in low lying areas in IDCT)	6.04	
23	Civil / Temp Construction & Enabling Works (Wind Barrier)	333.60	
24	Civil / Township (Construction of road to township eastern entrance)	2.23	
25	Civil / Township (Electro Mechanical Works in STP at Township)	3.50	
26	Civil / Township (Hospital Equipment)	2.83	
27	Civil / Township (Internal Communication Equipment for Township)	27.21	
28	Civil /Main Plant & Admin Building (Internal Communication Equipment for Service Bldg.)	25.91	
29	Civil /Township (Completion of Balance work of D-2 Quarters in township)	6.48	
30	Civil/ Main Plant & Admin Building - (Concrete Encasing of ESP & DSM Structural columns - LOA 2434)	12.39	
31	Civil/ Main Plant & Admin Building (Construction of Safety Centre Building)	68.16	
32	Civil/ Road & Drainage (20MT Lighting Mast)	21.91	
33	Civil/ Road & Drainage (Construction of Storm Water drainage with service road)	101.83	

S. No.	Head of work / Equipment	Additional Capital Expenditure claimed	Regulations
		2018-19	
Approved in order dated 11.7.2017 in Petition No. 277/GT/2014 on projection basis and in Order dated 25.04.2019 in Petition No. 67/MP/2018			
34	Civil/ Road & Drainage (Rainwater Harvesting)	69.67	
35	Civil/ Road & Drainage (Supply and Erection of 6 no. 30 mtr Lighting Mast)	72.58	
36	Civil/ Temp Construction & Enabling Works (Boundary Wall)	179.30	
37	Civil/ Temp Construction & Enabling Works (Cap on Concrete Paving between grade slab at CHP Coal Yard)	1.46	
38	Civil/ Temp Construction & Enabling Works (Construction of Additional Storage Yard with all round fencing)	2.17	
39	Civil/ Temp Construction & Enabling Works (Construction of Parking Shed in CHP Area)	48.99	
40	Civil/ Temp Construction & Enabling Works (Construction of Storage Shed)	25.23	
41	Civil/ Temp Construction & Enabling Works (Construction work at CISF Armoury)	9.18	
42	Civil/ Temp Construction & Enabling Works (Contract Worker Labour Colony)	119.24	
43	Civil/ Temp Construction & Enabling Works (Occupational Health Care Centre)	2.25	
44	Civil/ Temp Construction & Enabling Works (Portable Toilet Block)	2.97	
45	Civil/ Township (Electrical work in Township)	753.94	
46	Civil/Ash Dyke (Laying of Ash Slurry Pipeline at Lagoon II)	1.51	
47	Civil/Coal Handling Plant (Providing RCC Paving behind CHP Building)	44.38	
48	Civil/Main Plant & Admin Building (Seating for Service Building)	48.43	
49	Civil/Main Plant & Admin Building (Supplying and laying of HDPE Pipes for using treated effluent from STP)	14.53	
50	Civil/Road & Drainage (Paving Works in the shoulders of main plant peripheral roads - LOA 2544)	60.15	
51	Civil/Road & Drainage (Ash Dyke Road)	15.93	
52	Civil/Road & Drainage (Construction of Balance Concrete Roads and Drains)	81.31	
53	Civil/Road & Drainage (Laying of balance roads inside main plant)	0.19	
54	Civil/Road & Drainage (Paving work in Stores Area LOA 1546)	11.56	
55	Civil/Temp Construction & Enabling works (Bio Toilet / Bio-Digester Tank)	7.35	

S. No.	Head of work / Equipment	Additional Capital Expenditure claimed	Regulations
		2018-19	
Approved in order dated 11.7.2017 in Petition No. 277/GT/2014 on projection basis and in Order dated 25.04.2019 in Petition No. 67/MP/2018			
56	Civil/Temp Construction & Enabling works (Bio-toilets)	8.50	
57	Civil/Temp Construction & Enabling works (Construction of Aluminium Partition in AAQMS Building)	3.30	
58	Civil/Temp Construction & Enabling works (Operator Cabin of size 4 Mtr X 3 mtr X 2.6 mtr(LXWXH))	11.80	
59	Civil/Temp Construction & Enabling works (Cabin for Operators of size 4MX2.8MX2.6M(LXWXH))	2.24	
60	Civil/Township (Construction of Township)	5672.00	
61	Freehold Land	0.00	
62	Turbine (Portable Data Acquisition System for Calculating Turbine Efficiency)	24.73	
63	Turbine (Supply, Installation and Commissioning of Vapour Absorption Chiller)	69.62	
64	Power Station Switchyard	0.00	
65	Capitalisation of Spares	3183.33	
66	Capitalisation of MBOA	29.75	
67	Misc./ Important works within the original scope of work	30.48	
	Total	**11789.92**	
68	Discharge of liabilities	5352.09	Regulation 14 (1)(i)
	Total additional Capitalization claimed	**17142.02**	

43. The Petitioner has claimed total additional capital expenditure of Rs. 17142.02 lakh in 2018-19, including discharge of liabilities for Rs. 5352.09 lakh. The additional capitalization in 2018-19, after the cut-off date, comprising of works namely BoP Mechanical, Civil works related to chimney, Roads, Buildings, Temporary constructions etc., Turbine generator, power station switchyard, Capitalization of spares, capitalization of MBOA and Miscellaneous works within the original scope of work in terms of Regulation 14(i)(ii) of the 2014 Tariff Regulations. The Petitioner, in justification of the same, has submitted that the Commission vide its order dated 25.4.2019 in Petition No. 67/MP/2018, had approved these works and these works are deferred works, which are within the original scope of work of the project.

44. The Petitioner had filed Petition No. 67/MP/2018 before this Commission, for extension of cut-off date of the generating station, beyond 31.3.2018 i.e. upto 31.3.2019, as the capitalization of certain works under the original scope of work were envisaged to be spilled over beyond the cut-off date. The Commission vide its order dated 25.4.2019 in Petition No. 67/MP/2018, had considered the capitalization of additional expenditure of Rs. 38577.07 lakh in 2018-19 without relaxing the cut-off date in general.

45. The details of the additional capitalization allowed by order dated 25.4.2019 in Petition No. 67/MP/2018 are extracted below:

"15. xxx

Sl. No.	***Heads of Expenditure***	***Approved Revised Estimate***	***Anticipated Capital Expenditure beyond cut-off date (Cash basis)***	***Reasons for delay***
1.	*Land & Site Development*	*25,767.00*	*2,088.82*	*1. Shortage of sand and building aggregates* *2. Land price finalisation by DIPP, GoI* *3. Delay due to floods in Dec'15* *4. Cyclone Vardah during Dec'16*
q	*Steam Generator Island*	*2,34,096.00*	*218.00*	*1. Delay due to floods in Dec'15* *2. Cyclone Vardah during Dec'16*
3.	*Turbine Generator Island*	*143,134.00*	*2,550.06*	*1. Delay due to floods in Dec'15* *2. Cyclone Vardah during Dec'16*
4.	*BOP Mechanical*	*1,23,613.00*	*2,820.23*	*1. Delay due to floods in Dec'15* *2. Cyclone Vardah during Dec'16*
5.	*BOP Electrical*	*36,428.00*		
6.	*C&I Package {Incl Instn Cable)*	*5,868.00*	*94.30*	
7.	*Initial Spares*	*7,000.00*		
8.	*Civil Works & Construction Expenses*	*2,18,695.00*	*30,805.66*	*1. Shortage of sand and building aggregates* *2. Delay due to floods in Dec'15* *3. Cyclone Vardah during Dec'16*
9.	*Overheads*	*42,594.40*		
10.	*IDC, FC, FERV & Hedging Cost*	*1,42,789.00*		
	Capital cost Including IDC, FC, FERV & hedging Cost	*9,79,984,50*	*38,577.07*	

xxxx

27. Based on the above discussions, we are inclined to consider the capitalization of the expenditure of Rs 38,577.07 lakh for the listed works within the original scope of work as these works were already allowed by the Commission in its order dated 11.07.2017 in Petition No. 277/GT/2014, subject to making these expenditures and its capitalization during 2018-19. The Power to Relax under Regulation 54 of the 2014 Tariff Regulation is invoked to this extent only, without relaxing the cut-off date in general."

46. The Petitioner, in 2018-19, has claimed an amount of Rs. 466.42 lakh under BOP mechanical works, Rs. 7945.61 lakh under Civil works and Construction expenses, Rs. 94.35 lakh for Turbine generator island, Rs. 3223.33 lakh towards Capitalization of spares and Rs.29.75 lakh under Capitalization of MBOA and Rs. 30.47 lakh under Misc. / Important works, within the original scope of work. In line with the order dated 25.4.2019 in Petition No. 67/MP/2018, wherein, the capitalization of works, after the cut-off date in 2018-19, were allowed in exercise of the power to relax under Regulation 54 of the 2014 Tariff Regulations, we allow the works falling into the above referred categories of BOP Mechanical, Turbine generator island, Steam generator island, Land and site development works, C&I works and civil works and construction expenses.

47. As regards Capitalization of spares, the Commission vide ROP of hearing dated 30.11.2021, directed the Petitioner to furnish detailed reasons for capitalization of spares amounting to Rs. 3223.33 lakh, after the cut-off date, in addition to the capital spares consumed for Rs. 3036.13 lakh, in Form 17. The Petitioner, vide affidavit dated 16.2.2022, has submitted that the capitalization of spares (Rs. 3223.33 lakh) has been claimed, in line with the order dated 25.4.2019 in Petition No. 67/MP/2018, wherein, certain works within the original scope of works (including spares) were allowed to be capitalized after the cut-off date in 2018-19. The Petitioner has also submitted that spares are procured for works within the original scope of work, and fall within the ceiling limit of 4% of Plant & Machinery cost, as on the cut-off date. The Petitioner has further submitted that in order dated 8.1.2021 in Petition No. 408/GT/2020, the Commission,

had allowed the capitalization of initial spares, within the ceiling limit of 4%, after the cut-off date, since the procurement of those spares, was initiated prior to the cut-off date and that the OEM had delayed the delivery of the same. In the present case, the procurement of spares was initiated much before the cut-off date, but the delivery of the same, was delayed by the OEM. As regards the Capital spares consumed, the Petitioner has submitted that it has de-capitalized the same in 2018-19 i.e. decapitalized in Form-9A of the same year. Since these spares were part of the capital cost that have become unserviceable, accordingly the same have been decapitalized and reduced from the capital cost.

48. As stated, Petition No. 67/MP/2018, was filed by the Petitioner, for relaxation of the cut-off date of the generating station. The Commission vide its order dated 25.4.2019, while rejecting the prayer for extension of cut-off date, allowed the capitalization of the expenditure for Rs 38577.07 lakh, in respect of works (listed below) which are within the original scope of work, as these works were allowed by order dated 11.7.2017 in Petition No. 277/GT/2014, subject to the Petitioner incurring the said expenditure and its capitalization in 2018-19. The details of the works allowed by order dated 25.4.2019 in Petition No. 67/MP/2018 is extracted below:

Sl. No.	Heads of Expenditure	Approved Revised Estimate	Anticipated Capital Expenditure beyond the cut-off date (cash basis)
1	Land & Site Development	25,767.00	2,088.82
2	Steam Generator Island	2,34,096.00	218.00
3	Turbine Generator Island	143,134.00	2,550.06
4	BOP Mechanical	1,23,613.00	2,820.23
5	BOP Electrical	36,428.00	
6	C&I Package (Incl. Instn Cable)	5,868.00	94.30
7	Initial Spares	7,000.00	
8	Civil Works & Construction Expenses	2,18,695.00	30,805.66
9	Overheads	42,594.40	
10	IDC, FC, FERV & Hedging cost	1,42,789.00	
	Capital cost Including IDC, FC, FERV & hedging Cost	9,79,984,50	38,577.07

49. The Petitioner, in Petition No.67/MP/2018, had not claimed any initial spares in 2018-19 i.e. beyond the cut-off date and hence, no initial spares were allowed to the generating station in 2018-19. The Petitioner vide affidavit dated 6.10.2022, has submitted that initial spares were part of the above-mentioned listed works in Petition No. 67/MP/2018, but the value against the initial spares was inadvertently missed by the Petitioner in its submission in Petition No. 67/MP/2018. Accordingly, the Petitioner has now claimed capitalization of spares amounting to Rs 3223.33 lakh in 2018-19. The Petitioner has also submitted the details of purchase orders issued from 2012 to 2017 and has submitted that though majority of spares were received before the cut-off date, only few spares amounting to Rs 3223.33 lakh were capitalized in 2018-19.

50. We have examined the details furnished by the Petitioner, The Petitioner in Form 5B, submitted vide affidavit dated 6.10.2022, has claimed total initial spares for Rs 14117.09 lakh, as on the cut-off date i.e. 31.3.2018. The Petitioner has claimed initial spares for Rs 3223.33 lakh in 2018-19. Also, in Form-5B, the Petitioner has claimed total Plant & Machinery cost of Rs 503544.41 lakh as on the cut-off date. However, it is noticed that the Petitioner has also included the cost of Rs 16288.44 lakh, towards land & site development in the Plant & Machinery cost. By excluding the cost of land & site development, the total Plant & Machinery cost of the generating station, as on 31.3.2018 is Rs 487255.97 lakh. In view of above, the total initial spares allowable to the generating station, as on cut-off date, is Rs 19490.24 lakh (refer para 24 above). The Petitioner has claimed total initial spares of Rs 17340.42 lakh (i.e. 14117.09 lakh upto cut-off date and Rs. 3223.33 lakh in 2018-19). Considering the fact that the total initial spares of Rs 17340.42 lakh claimed is lower than the allowable limit of Rs 19490.22 lakh, the total initial spares of Rs.17340.42 lakh, including Rs.3223.33 lakh claimed in 2018-19 is allowed.

51. The Petitioner has not furnished the details of the MBOA items amounting to Rs.29.75 lakh and Miscellaneous works amounting to Rs. 30.48 lakh and no relaxation was given vide order dated 25.4.2019 in Petition No. 67/MP/2018, for capitalization of MBOA items beyond the cut-off date. In the absence of details under the head Miscellaneous works and MBOA, we are not inclined to allow the Miscellaneous works amounting to Rs. 30.48 lakh and MBOA items amounting to Rs.29.75 lakh. Accordingly, the same has not been considered for additional capitalization.

52. In view of the above, we, on prudence check, allow the additional capital expenditure of Rs.11729.70 lakh under Regulation 14(1)(ii) of the 2014 Tariff Regulations and the liabilities discharged for Rs.5352.09 lakh under Regulation 14(1)(i) of 2014 Tariff Regulations for 2018-19.

Discharges and Un-discharged liabilities

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

	2014-15		**2015-16**	**2016-17**	**2017-18**	**2018-19**
	1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
Opening Un-discharged liabilities as on 1.4.2014 (a)	33988.35	47164.71	39978.34	29710.01	22994.95	27247.14
Addition during the year (b)	21279.54	102.53	2885.55	1745.22	9526.02	3828.14
Discharges during the period (c)	8103.17	7029.16	13129.69	8328.16	5139.29	5352.09
Reversal of liabilities out of liabilities added during the period (d)	0.00	259.76	24.20	132.12	134.54	145.49
Total (Discharges + Reversal) (e)=(c)+(d)	8103.17	7288.91	13153.89	8460.28	5273.83	5497.59
Closing Un-discharged liabilities (f) = (a)+(b)-(e)	**47164.71**	**39978.34**	**29710.01**	**22994.95**	**27247.14**	**25577.70**

54. In terms of the above, the balance un-discharged liabilities corresponding to

admitted capital cost, as on 31.3.2019, works out as Rs. 25577.70 lakh. As discussed above, the year wise additional capitalization and discharge of liabilities allowed are summarised below:

(Rs. in lakh)

		2014-15 (26.2.215 to 31.3.2015)	2015-16	2016-17	2017-18	2018-19
A	**Additional Capitalization**	1,810.95	18,449.38	24,126.15	25889.98	11,729.70
B	Discharge of liabilities	7,029.16	13129.69	8,328.16	5139.29	5,352.09
	Total	**8,840.11**	**31,579.07**	**32,454.31**	**31,029.27**	**17,081.79**

De-capitalization

55. The Petitioner has claimed de-capitalization on account of computers along with the accessories and spares for the period 2014-19. The claim for de-capitalization considered is as under:

(Rs. in lakh)

		2014-15	2015-16	2016-17	2017-18	2018-19
A	De-capitalization of PC	0.00	0.59	1.93	0.00	40.85
B	De-capitalization of Spares	0.00	0.00	0.00	0.00	3036.13
	Total	**0.00**	**0.59**	**1.93**	**0.00**	**3076.98**

Exclusions

56. The Petitioner has sought for the exclusion of capitalization of following items for the period 2014-19.

(Rs. in lakh)

S. No.	Head of Work/ Equipment	Additional Capital Expenditure claimed under Exclusion				
		2014-15	2015-16	2016-17	2017-18	2018-19
A	Reversal of Liabilities	259.76	24.20	132.12	134.54	145.49
B	LD recovered	0.00	26.42	66.74	192.62	816.69
C	Inter Unit Transfer	0.00	0.00	0.00	0.00	509.68
D	De-capitalization, other than de-capitalization of Spares	0.00	0.00	0.00	1468.99	0.00
	Total	**259.76**	**50.62**	**198.86**	**1796.15**	**1471.87**

(A) Reversal of Liabilities

57. The Petitioner has claimed exclusion on account of reversal of liabilities amounting to Rs. 696.11 lakh during the period 2014-19. In justification for the same, the Petitioner has submitted that as per practice, liabilities are excluded for the purpose of tariff and hence, reversal of liabilities has been considered as exclusions. Since the reversal of liabilities shall not impact the capital cost considered for the purpose of tariff which is determined on cash basis, the exclusion of reversal of liabilities is in order and is allowed.

(B) LD Recovered

58. The Petitioner has claimed exclusion on account of LD recovered for Rs. 1102.47 lakh during the period 2014-19. The Petitioner has submitted that the amount pertains to LD recovery and the Commission vide order dated 11.7.2017 in Petition No. 277/GT/2014 had observed that LD/insurance proceeds, if any, received could be retained by the Petitioner. However, the Commission vide order dated 11.7.2017 had directed the Petitioner to furnish the details of LD and the Petitioner has submitted the same in respective Form 9Ds of the present Petition. The treatment of LD has been dealt with in paragraph 26 above, and accordingly the exclusion is in order and is allowed.

(C) Inter unit Transfer

59. The Petitioner has excluded amount of Rs.509.68 lakh in 2018-19, on account of Inter-Unit transfer. The Petitioner has claimed exclusion of inter unit transfer to Talcher Super Thermal Power Station (TSTPS) towards Turbine generator and accessories. The Petitioner has submitted that the items under inter-unit transfer are not being considered by the Commission for the purpose of tariff and, hence, kept under exclusion. The Commission is of the view that both positive and negative entries arising out of inter unit-transfers of temporary nature are ignored for the purpose of tariff. However, in this case the Petitioner is carrying out inter unit transfer of turbine generator

& accessories from the generating station to TSTPS, and the same cannot be considered as inter unit transfer of temporary nature. In view of above, the exclusion of inter-unit transfer as claimed by the Petitioner is not allowed.

(D) De-capitalization other than de-capitalization of spares

60. The Petitioner has claimed exclusion of decapitalization of Rs.1468.99 lakh in 2017-18 on assets other than decapitalization of spares.

61. The generating station has achieved commercial operation on 26.2.2015, i.e. during the period 2014-19 and accordingly the cut-off date of the generating station is 31.3.2018. The Petitioner has not provided any justification or details of the assets decapitalized and claimed under exclusion. Further, the Petitioner has not established the fact that the amount of exclusion is not part of approved capital cost and the reason of claiming the exclusion within the cut-off date of the generating station. In view of above, we are not inclined to allow the exclusion of Rs 1468.99 lakh during 2017-18 for decapitalization, other than decapitalization of spares.

62. Based on the above discussions, the summary of exclusions allowed / not allowed for the period 2014-19 for the purpose of tariff, is as under:

(Rs. in lakh)

S. No.	**Head of Work/ Equipment**	**Additional Capital Expenditure claimed under Exclusion**				
		2014-15 (26.2.2015 to 31.3.2015)	**2015-16**	**2016-17**	**2017-18**	**2018-19**
A	Reversal of Liabilities claimed	259.76	24.20	132.12	134.54	145.49
	Reversal of Liabilities **allowed**	259.76	24.20	132.12	134.54	145.49
B	LD Recovered Claimed	0.00	26.42	66.74	192.62	816.69
	LD Recovered **allowed**	0.00	26.42	66.74	192.62	816.69
C	Inter Unit Transfer claimed	0.00	0.00	0.00	0.00	509.68
	Inter Unit Transfer **allowed**	0.00	0.00	0.00	0.00	0.00
D	De-capitalization, other than de-capitalization of spares claimed	0.00	0.00	0.00	1468.99	0.00
	De-capitalization, other than de-capitalization **allowed**	0.00	0.00	0.00	0.00	0.00

Capital cost allowed for the period 2014-19

63. Based on above, the capital cost allowed for the generating station for the period 2014-19, is as under:

(Rs. in lakh)

	2014-15 1.4.2014 to 25.2.2015	2014-15 26.2.2015 to 31.3.2015	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	558876.17	827217.36	827401.13	858979.60	891431.98	920992.26
Less: IDC/FC/FERV claimed as on Unit-III COD	0.00	58051.10	0.00	0.00	0.00	0.00
Less: Notional IDC included in capital cost claimed	0.00	1241.76	0.00	0.00	0.00	0.00
Add: IDC allowed on COD of Unit-III	0.00	51969.73	0.00	0.00	0.00	0.00
Add: FC allowed on COD of Unit-III	0.00	372.24	0.00	0.00	0.00	0.00
Add: FERV allowed on COD of Unit-III	0.00	235.62	0.00	0.00	0.00	0.00
Add: Notional IDC allowed	0.00	435.75	0.00	0.00	0.00	0.00
Less: Pro-rata reduction in IEDC	0.00	1520.23	0.00	0.00	0.00	0.00
Less: Pro-rata reduction in two packages	0.00	50.96	0.00	0.00	0.00	0.00
Less: LD recovered	0.00	805.63	0.00	0.00	0.00	0.00
Less: Revenue of sale from Infirm Power	0.00	0.00	0.00	0.00	0.00	0.00
Less: Excess initial spares disallowed	0.00	0.00	0.00	0.00	0.00	0.00
Total Opening cost	**558876.17**	**818561.02**	**827401.13**	**858979.60**	**891431.98**	**920992.26**
Add: Additional capital expenditure	71.03	1,810.95	18,449.38	24,126.15	25889.98	11,729.70
Add: Liabilities discharged	8103.17	7,029.16	13129.69	8,328.16	5139.29	5,352.09
Less: De-capitalization	0.00	0.00	0.59	1.93	0.00	3076.98
Less: Exclusions disallowed	0.00	0.00	0.00	0.00	1468.99	509.68
Closing capital cost	**567050.37**	**827401.13**	**858979.60**	**891431.98**	**920992.26**	**934487.39**

Debt-Equity Ratio

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

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

Provided that:
(i) where equity actually deployed is less than 30% of the capital cost actual equity shall be considered for determination of tariff:
(ii) the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
(iii) any grant obtained for the execution of the project shall not be considered as a part

of capital structure for the purpose of debt-equity ratio.

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

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

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

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

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as may be admitted by the Commission as additional capital expenditure for determination of tariff and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation."

65. Further, the Commission vide its order dated 11.7.2017 in Petition No. 277/GT/2014 as observed the following:

"65. It appears from the above that the share application money pending allotment as reflected in the balance sheet as on 25.2.2015 was converted into equity share capital subsequently. Conversion of the said sum into equity has since been achieved and there has been increase in position of equity capital albeit after the date of COD to tune of ₹11999.00 lakh, the denial of return on such sum as equity capital for the entire project life of 25 years, in our view, is not justified. In view of the above, we, in exercise of power to relax under Regulation 54 of the 2014 Tariff Regulations, allow the revision of debt-equity ratio post COD. Similar view has been taken by the Commission in Petition no. 129/GT/2015 vide order dated 30.3.2017. Since the petitioner has not furnished the exact date of such conversion, the same has been considered w.e.f 1.4.2015 considering the balance sheet presented as on 31.3.2015. Accordingly, the debt- equity ratio as on 1.4.2015 is as under:

Equity (share capital)	*265121.22*
Debt	*589281.57*
Equity%	*31.03%*
Debt%	*68.97%*

As the equity as on 1.4.2015 is more than 30%, as per Regulation 19 quoted as above debt- equity ratio for the purpose of calculation of tariff has been considered as 70:30.

66. The debt-equity ratio allowed as above is subject to revision based on the reconciliation of actual cash expenditure and project funding as on COD of the *generating station and date wise details regarding conversion of the share application money into share capital to be furnished by the petitioner at the time of truing-up of the tariff of the generating station.*

66. It is evident from the aforesaid order that the date of conversion of share application money is after the COD of the generating station/Unit-III i.e. on 31.3.2015. Accordingly, the debt equity ratio, as on COD of the generating station (26.2.2015) is allowed as 70.39:29.61, in line with order dated 11.7.2017 in Petition No. 277/GT/2014. Accordingly, on the basis of the capital cost of Rs 818561.02 lakh, allowed as on 26.2.2015 (Unit-III/Station COD), the gross normative loan and equity amounting to Rs. 576204.23 lakh and Rs.242356.79 lakh, respectively, has been considered. Further, with effect from 1.4.2015, the debt equity ratio is considered as 70:30, in terms of Regulation 19 of the 2014 Tariff Regulations. The additional capital expenditure allowed with effect from 1.4.2015, has been allocated to debt and equity in the ratio of 70:30.

Return on Equity

67. Regulation 24 of the 2014 Tariff Regulation provides as under:

"24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.
(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:
Provided that:

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

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

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

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

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

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

68. 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."

69. The Petitioner has not claimed grossing up of ROE in the years 2014-15 and 2015-16, but has grossed up ROE for rest of the years (2016-17 to 2018-19) with the applicable MAT rate. It is noticed from the financial statements of the generating station in 2014-15 and 2015-16, that there is no taxable income for the said years. As such, the claim of the Petitioner is in order and the ROE for the said years have not been allowed to be grossed up. However, for the rest of the years (2016-17 to 2018-19), the Petitioner has claimed grossing up of ROE. In terms of the 2014 Tariff Regulations, ROE is to be

grossed up with the effective tax rate. Accordingly, ROE has been grossed up with the effective tax rate from 2016-17 to 2018-19 and is accordingly, s worked out and allowed as under:

(Rs. in lakh)

	2014-15		2015-16	2016-17	2017-18	2018-19
	1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
Notional Equity- Opening	1,62,512.91	2,42,356.79	2,48,220.34	2,57,693.88	2,67,429.59	2,76,297.68
Addition of Equity due to additional capital expenditure	2,376.94	2,617.35	9,473.54	9,735.71	8,868.08	4,048.54
Normative Equity – Closing	1,64,889.85	2,44,974.14	2,57,693.88	2,67,429.59	2,76,297.68	2,80,346.22
Average Normative Equity	1,63,701.38	2,43,665.46	2,52,957.11	2,62,561.74	2,71,863.64	2,78,321.95
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%	15.500%
Effective Tax Rate	0.00%	0.00%	0.000%	21.342%	21.342%	21.549%
Rate of Return on Equity (Pre-tax)	15.500%	15.500%	15.500%	19.705%	19.705%	19.758%
Return on Equity (Pre-tax) - (annualized)	**23,010.14**	**3,518.13**	**39,208.35**	**51,737.79**	**53,570.73**	**54,990.85**

Interest on loan

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

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

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

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

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

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

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute: Provided that the beneficiaries or the long term transmission customers /DICs shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan."

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

(i) The gross normative loan amounting to Rs.576204.23 lakh has been considered as on COD of Unit-III (26.2.2015);

(ii) Cumulative repayment of Rs. 54002.81 lakh as on COD of Unit-III has been considered as on 26.2.2015;

(iii) Accordingly, the net normative opening loan as on COD of unit-III works out to Rs. 522201.42 lakh;

(iv) Addition to normative loan on account of additional capital expenditure allowed above has been considered;

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

(vi) Based on the submission of the petitioner, the calculation of WAROI on loan has been revised in line with 2014 Tariff Regulation.

72. Necessary calculation for interest on loan is as under:

(Rs. in lakh)

	2014-15		**2015-16**	**2016-17**	**2017-18**	**2018-19**
	1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
Gross opening loan	3,96,363.26	5,76,204.23	5,79,180.79	6,01,285.72	6,24,002.38	6,44,694.58
Cumulative repayment of loan upto previous year / period	28,392.61	54,002.81	57,867.57	1,00,416.26	1,44,570.92	1,89,896.96
Net Loan Opening	**3,67,970.65**	**5,22,201.42**	**5,21,313.22**	**5,00,869.46**	**4,79,431.46**	**4,54,797.62**

	2014-15		2015-16	2016-17	2017-18	2018-19
	1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
Addition on account of additional capital expenditure	5,797.26	6,222.76	22,104.93	22,716.66	20,692.20	9,446.59
Repayment of loan during the year	25,610.20	3,864.76	42,548.75	44,154.94	45,592.77	46,532.94
Less: Repayment adjustment on account of de-capitalization	-	-	0.06	0.27	266.74	822.50
Net Repayment	25,610.20	3,864.76	42,548.69	44,154.67	45,326.03	45,710.44
Net Loan Closing	3,48,157.71	5,24,559.42	5,00,869.46	4,79,431.46	4,54,797.62	4,18,533.78
Average Loan	3,58,064.18	5,23,380.42	5,11,091.34	4,90,150.46	4,67,114.54	4,36,665.70
Weighted Average Rate of Interest on Loan	11.4530%	11.4536%	10.7700%	9.7445%	9.7263%	9.8445%
Interest on Loan	**37,188.96**	**5,583.98**	**55,044.54**	**47,762.71**	**45,432.96**	**42,987.55**
Interest Capitalized	-	-	-	-	-	646.96
Net Interest on Loan	**37,188.96**	**5,583.98**	**55,044.54**	**47,762.71**	**45,432.96**	**42,340.60**

Depreciation

73. 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 on1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2014 from the gross depreciable value of the assets.

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

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

74. Cumulative depreciation amounting to Rs.28392.61 lakh, as on 1.4.2014, has been considered. Since, as on 1.4.2014, the elapsed life of the generating station is 0.35 years, which is less than 12 years from the effective station COD of 26.11.2013. Therefore, depreciation is calculated by considering the weighted average rate of depreciation (WAROD) during the period 2014-19, and is enclosed as **Annexure-I** to this order. Accordingly, depreciation is worked out and allowed as under:

(Rs. in lakh)

	2014-15		**2015-16**	**2016-17**	**2017-18**	**2018-19**
	1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
Opening Capital Cost (A)	5,58,876.17	8,18,561.02	8,27,401.13	8,58,979.60	8,91,431.98	9,20,992.26
Add: Additional capital expenditure (B)	8,174.20	8,840.11	31,578.47	32,452.38	29,560.28	13,495.13
Closing Capital Cost [C=A+B]	**5,67,050.37**	**8,27,401.13**	**8,58,979.60**	**8,91,431.98**	**9,20,992.26**	**9,34,487.39**
Average Capital Cost D= (Average A&C)	5,62,963.27	8,22,981.07	8,43,190.36	8,75,205.79	9,06,212.12	9,27,739.82

Value of freehold land included above (E)	10,307.63	9,311.98	9,950.82	10,753.26	10,916.86	10,916.86
Aggregated depreciable value F=(D-E)*90%	4,97,390.08	7,32,302.18	7,49,915.59	7,78,007.27	8,05,765.73	8,25,140.67
Remaining aggregate depreciable value at the beginning of the year [G= F- Cumulative Depreciation upto Previous Year]	4,68,997.47	6,78,299.38	6,92,048.02	6,77,591.02	6,61,194.81	6,35,243.71
Balance Useful Life of the plant at the beginning of the year (H)	24.65	23.75	23.65	22.65	21.65	20.65
Weighted Average Rate of Depreciation (WAROD) [J]	5.0165%	5.0413%	5.0462%	5.0451%	5.0311%	5.0157%
Depreciation during the year (K=D*J)	**25,610.20**	**3,864.76**	**42,548.75**	**44,154.94**	**45,592.77**	**46,532.94**
Cumulative Depreciation at the end of the year (before adjustment for de-capitalization) (L)	54,002.81	57,867.57	1,00,416.31	1,44,571.19	1,90,163.69	2,36,429.90
Less: Depreciation adjustment on account of de-capitalization (M)	-	-	0.06	0.27	266.74	822.50
Cumulative depreciation at the end [O=L-M]	**54,002.81**	**57,867.57**	**1,00,416.26**	**1,44,570.92**	**1,89,896.96**	**2,35,607.40**

**Cumulative Depreciation as on 1.4.2014 is Rs. 28392.61 lakh*

O&M Expenses

75. Regulation 29(1) (a) of the 2014 Tariff Regulations provides the following O & M norms for coal based generating stations of 500 MW capacity:

(Rs. in lakh/MW)

2014-15	2015-16	2016-17	2017-18	2018-19
16.00	17.01	18.08	19.22	20.43

76. Proviso to Regulation 29(1) (a) of the 2014 Tariff Regulations provides as under:

> *"Provided that the above norms shall be multiplied by the following factors for arriving at norms of O&M expenses for additional units in respective sizes for the units whose COD occurs on or after 1.4.2014 in the same station:*
> *500 MW and above Additional 3rd& 4th units 0.90*
> *Additional 5th& above units 0.85"*

77. The Petitioner has claimed O & M expenses as under:

(Rs. in lakh/MW)

2014-15		2015-16	2016-17	2017-18	2018-19
1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
14509.59	2161.10	24664.50	26216.00	27869.00	29623.50

78. We have examined the matter. The CODs of the Units-I and II of the generating station are 29.11.2012 and 25.8.2013 respectively, and are within the period 2009-14. However, the COD of Unit-III is 26.2.2015 and falls during the period 2014-19, and is covered within the scope of the 2014 Tariff Regulations. Accordingly, the multiplication factor of 0.90 is considered for working out the normative O&M expenses (annualized) for Unit-III of the generating station for the period 2014-19 and is allowed as claimed by the Petitioner.

<u>Additional O & M Expenses for desalination plant</u>

79. The Petitioner has claimed additional O & M expenses for Rs. 444.26 lakh in 2014-15, Rs. 777.95 lakh in 2015-16, Rs. 766.47 lakh in 2016-17, Rs. 1010.72 lakh in 2017-18 and Rs. 1068.16 lakh in 2018-19 on actual basis, towards chemicals, filters and membranes used in the desalination plant. The Petitioner has submitted that the plant is located near seacoast and there will be no water charges, as the water will be made available from the sea itself.

80. The matter has been examined. It is noticed that the Commission vide its order dated 11.7.2017 in Petition No. 277/GT/2014, had allowed additional O&M expenses towards desalination plant as under:

> *"81. The matter has been examined. It is noticed that the normative O & M allowed under the 2014 Tariff Regulations do not include expenses towards desalination plant. In view of this, the O & M expenses for desalination plant as claimed by the petitioner has been allowed. This is however subject to revision based on all relevant details to be furnished by the petitioner at the time of truing-up of tariff of the generating station in terms of Regulation 8 of the 2014 Tariff Regulations.*

(Rs. in lakh)

2014-15		***2015-16***	***2016-17***	***2017-18***	***2018-19***
1.4.2014 to 25.2.2015	***26.2.2015 to 31.3.2015***				
399.92	*41.08*	*468.84*	*498.33*	*529.75*	*563.10*

81. The Petitioner has furnished the break-up of the actual additional O&M expenses (materials, wages and salaries and R&M) incurred towards Desalination plant for the period 2014-19. We find that the special feature of this coastal generating station is required for smooth and efficient operation of the generating station. Moreover, the normative O&M expenses allowed for this generating station, does not include the additional feature of de-salination plant. Even though the actual expenses claimed are more than the projected expenses, we are inclined to allow the additional O&M expenses, considering the requirement of this feature for this generating station, in line with the decision vide order dated 11.7.2017 in Petition No. 277/GT/2014. Accordingly, the O & M expenses for desalination plant, as claimed by the Petitioner, is allowed in exercise of the power under Regulation 54 of the 2014 Tariff Regulations, as under.

(Rs. in lakh)

2014-15		**2015-16**	**2016-17**	**2017-18**	**2018-19**
1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
402.88	41.38	777.95	766.47	1010.72	1068.16

Water Charges

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

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

83. In terms of the first proviso to the above regulations, water charges are to be allowed based on water consumption depending upon type of plant, type of cooling water system etc., subject to prudence check of the details furnished by the Petitioner. The Petitioner has submitted that, at present, the generating station is using sea water and is not paying any water charges. Since the Petitioner has not claimed any water charges for the period 2014-19, the same has not been considered in this order.

Capital spares

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

> *"29. (2) The Water Charges and capital spares for thermal generating stations shall be allowed separately:*
>
> *xxxx*
>
> *Provided that the generating station shall submit the details of year wise actual capital spares consumed at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance or special allowance or claimed as a part of additional capitalization or consumption of stores and spares and renovation and modernization"*

85. As regards Capital spares, the Petitioner has submitted that in order to meet the customers demand and maintain high machine availability at all times, by the generating station, the units / equipment is taken under overhaul / maintenance and inspected regularly for wear and tear. It has stated that during such works, the spares parts of equipment which became damaged / unserviceable are replaced / consumed, so that the machine continue to perform at expected efficiency, on a sustained basis. The Petitioner has therefore requested to allow the capital spares for Rs3036.13 lakh in 2018-19, consumed by the generating station in terms of the last proviso to Regulation 29(2) of the 2014 Tariff Regulations.

86. The Petitioner has submitted that the details of capital spares have been provided in Form-17 of the Petition and further, the additional capitalization of spares and exclusion of amounts pertaining to de-capitalization of Capital spares after the cut-off

date is explained in Form 9Bi and Form 9D. In response to the queries raised by the Commission vide ROP of hearing dated 30.11.2021, the Petitioner has clarified that capital spares amounting to Rs. 3036.13 lakh, has been de-capitalized in 2018-19 i.e. de-capitalized in Form-9A of the same year. The Petitioner has further submitted that these spares form part of the capital cost and since they have become unserviceable, the same were de-capitalized and reduced from capital cost.

87. In respect of capital spares which form part of the capital cost of the project, the Petitioner has been recovering tariff since their procurement and, therefore, the same cannot be allowed as part of the additional O&M expenses. Accordingly, only those capital spares, which do not form part of the capital cost of the project, are being considered. It is pertinent to mention that as the Capital spares consumed become unserviceable and since the same have been de-capitalized (as furnished by the Petitioner vide affidavit dated 16.2.2022), the same has not been considered for the purpose of additional O&M expenses. Based on this, the details of the capital spares considered and allowed for the period 2014-19 is summarized as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Capital spares part of capital cost claimed	0.00	0.00	0.00	0.00	3036.13
Capital spares not part of capital cost claimed	0.00	0.00	0.00	0.00	0.00
Total value of capital spares considered	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Additional O&M Expenses towards Painting works

88. The Petitioner has claimed additional O&M expenses for Rs.702.55 lakh in 2016-17, Rs. 1482.81 lakh in 2017-18 and Rs.1078.19 lakh in 2018-19, on account of payment towards painting expenses. The Petitioner vide affidavit dated 17.1.2020 has submitted the supporting documents, such as details of the painting expenditure for the period 2016-19, the structural audit report of M/s FL Smidth, the Inspection report of

distressed trestle supporting the coal conveyor dated March 2017, from CSIR-Structural Engineering Research Centre. It has further submitted that the Petitioner has awarded structural painting works based on conditions of the Coal Conveyor Trestle and Crusher house. The Petitioner has further submitted that moisture/water particles mix in the surrounding atmosphere, which comes in contact with the trestle & other structures results in corrosion. It has also submitted that the Crusher House building was also impacted due to the moisture stagnation, because of high humid condition in the coastal area. Accordingly, the petitioner has submitted that based on the depleting conditions of columns, bracings, welding joints, gusset and cladding runners etc., it was left with no other option, but to award for painting works. The Petitioner has added that the works awarded for painting, were solely towards the damage caused by severe corrosion, due to adverse climate condition. The Petitioner, has, therefore prayed to allow the additional O&M expenses towards Painting works @0.73 lakh/MW/year.

89. The Respondent TANGEDCO has pointed out that the Petitioner has claimed total expenditure of Rs. 3263.55 lakh, towards structural paintings works on coal conveyor Trestle and crusher house. It has further submitted that it is the responsibility of the Petitioner to carry out the painting activities under the provisions of existing O&M expenses and has accordingly prayed that such claims may be disallowed.

90. We have considered the matter The Petitioner has claimed additional O&M expenses towards Paining works from 2016-17 onwards, which is within the cut-off date of the generating station. In our considered view, painting of external structure is recurring in nature and is covered under the Normative O&M expenses allowed to the generating station. It is observed that similar claim of the Petitioner, Udupi Power Corporation Limited in Petition No. 251/GT/2017 was disallowed by the Commission vide order dated 22.1.2020 as under:

"79. The Petitioner has claimed additional O&M expense of Rs.370.27 lakh towards conditioning and painting of external structures in 2014-15 after escalation @ 6.29% over the actual amount in 2013-14. Since the work of conditioning and painting of external structures is recurring in nature and covered in the normative O&M expenses under Regulation 29(1) of 2014 Tariff Regulations, the claim of the Petitioner is rejected."

91. In line with the above decision, the additional O&M expenses claimed by the Petitioner, towards painting works is not allowed.

Additional O&M Expenses towards GST

92. The Petitioner vide affidavit dated 20.4.2021, has claimed additional O&M expenses for Rs.431.87 lakh in 2017-18 and Rs.535.57 lakh in 2018-19, on account of payment towards GST. The Respondent, TANGEDCO and KSEBL have has submitted that the Petitioner's claim for GST expenses will lead to additional burden on the consumers and the GST expenses towards O&M expenses are applicable only if a service is outsourced. The Respondents have also submitted that services are outsourced because of efficiency issue or lack of expertise within the company, and it will obviously be lower than the cost of doing that job internally, further the O&M operating norms are the ceiling norms and generating companies are required to manage within these limits. The Respondent, TANGEDCO has submitted that through enactment of GST Act, GOI has rationalized the tax regime by subsuming various taxes/cess/duties, this has generally resulted in reduction of overall applicable tax rate in the country and therefore, the claim of the Petitioner is not in order. In its rejoinder, the Petitioner has submitted that it is a settled position of law that promulgation of GST is change in law event, and falls within the purview of Regulation 3(9) read with Regulation 14(3) of the 2014 Tariff Regulations. it has further stated that the amount claimed is only on account of differential rate of tax for taxable services relating to O&M i.e. under erstwhile service tax 15% and in GST 18%.

93. The submissions of the parties have been considered. It is observed that the

Commission while specifying the O&M expense norms for the period 2014-19 had considered taxes to form part of the O&M expense calculations and accordingly, had factored the same in the said norms. This is evident from paragraph 49.6 of the SOR (Statement of Objects and Reasons) issued with the 2014 Tariff Regulations, which is extracted hereunder:

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

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

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

95. The Petitioner has submitted that the Commission, while specifying the 2014 Tariff Regulations, has noted in the Statement of Objects and Reasons (SOR) that the increase in the employee expenses, on account of pay revision shall be considered appropriately, on case-to-case basis, balancing the interest of generating stations and consumers. The Petitioner has, therefore, claimed additional O&M expenses of Rs.35.41 lakh in 2015-16, Rs.517.64 lakh of in 2016-17, Rs.1863.88 lakh in 2017-18 and Rs.2233.39 lakh in 2018-19 towards impact of wage revision of employees of CISF from 1.1.2016 and the employees of the Petitioner posted in the generating station, with effect from 1.1.2017. In this regard the Petitioner vide affidavit dated 16.2.2022 has submitted the following:

(a) Detailed break-up of the actual O&M expenses booked by the Petitioner for the period 2014-19 for the whole generating station.

(b) Detailed break-up of actual O&M expense of the Corporate Centre and its allocation to various generating stations, for the period 2014-19.

(c) Break-up of claimed wage revision impact on employee cost, expenses on corporate centre and on salaries of CISF & Kendriya Vidyalya employee of the generating station for the period 2014-19.

96. We have examined the submissions and the documents available on record. As stated, the Petitioner has claimed total amount of Rs.4650.30 lakh (Rs.35.41 lakh in 2015-16, Rs.517.64 lakh of in 2016-17, Rs.1863.88 lakh in 2017-18 and Rs.2233.39 lakh in 2018-19) as impact of wage revision of employees of CISF and Kendriya Vidyalya staff from 1.1.2016 and for employees of the Petitioner posted at the generating station with effect from 1.1.2017.

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

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

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

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

(a) The norms are framed based on the averaging of the actual O&M expense of past five years to capture the year on year variations in sub-heads of O&M;

(b) Certain cyclic expenditure may occur with a gap of one year or two years and as such adopting a longer duration i.e. five years for framing of norms also captures such expenditure which is not incurred on year to year basis;

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

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

100. The Petitioner has furnished the detailed breakup of the actual O&M expenses incurred during the period 2014-19 for Vallur Thermal Power Station (VTPS). It is noticed that the total O&M expenses incurred for generating station is more that the normative O&M expenses recovered during each year of the period 2014-19. The impact of wage revision/ pay revision could not be factored by the Commission while

framing the O&M expense norms under the 2014-19 Tariff Regulations since the pay/ wage revision came into effect from 1.1.2016 (CISF & KV employees) and 1.1.2017 (employees of the Petitioner) respectively. As such, in terms of SOR to the 2014 Tariff Regulations, the following approach has been adopted for arriving at the allowable impact of pay revision:

(a) Comparison of the normative O&M expenses with the actual O&M expenses incurred for the period from 2015-16 to 2018-19, commensurate to the period for which wage revision impact has been claimed. For like-to-like comparison, the components of O&M expenses like productivity linked incentive, water charges, filing fee, ex-gratia, loss of provisions, prior period expenses, community development store expenses, ash utilization expenses, RLDC fee & charges and other Miscellaneous (without breakup/details) which were not considered while framing the O&M expense norms for the period 2014-19, have been excluded from the yearly actual O&M expenses. Having done so, if the normative O&M expenses for the period 2015-19 are higher than the actual O&M expenses (normalized) for the said period, then the impact of wage revision (excluding PRP and ex-gratia) as claimed for the said period is not admissible/allowed as the impact of pay revision gets accommodated within the normative O&M expenses. However, if the normative O&M expenses for the period 2015-19 are lesser than the actual O&M expenses (normalized) for the same period, the wage revision impact (excluding PRP and ex-gratia) to the extent of under recovery or wage revision impact (excluding PRP and Exgratia), whichever is lower, is required to be allowed as wage revision impact for the period 2015-19.

101. The details as furnished by the Petitioner for actual O&M expenses incurred for VTPS (3x500 MW) for the period from 1.4.2014 to 31.3.2019, and the wage revision impact (excluding PRP and ex-gratia) for the generating station (Stage-II 1000 MW) are as under:

(Rs. in lakh)

Year	Actual O&M expenses for whole VTPS, excluding water charges & capital spares	Wage revision impact claimed for the generating station i.e. VTPS (3x500 MW)
2014-15	14330.16	0.00
2015-16	21607.43	35.41
2016-17	24256.49	517.64
2017-18	34545.53	1863.86
2018-19	34056.35	2233.39
Total		**4650.30**

102. As a first step, the expenditure against sub-heads of O&M expenses as indicated

above have been excluded from the actual O&M expenses incurred to arrive at the actual O&M expenses (normalized) for the VTPS (3x500 MW). Accordingly, the comparison of the normative O&M expenses versus the actual O&M expenses (normalized) along with the wage revision impact claimed by the Petitioner for the generating station i.e. VTPS (1500 MW) for the period 2015-19 is as follows:

(Rs. in lakh)

	2015-16	**2016-17**	**2017-18**	**2018-19**	**Total**
Actual O&M expenses – (a)	22204.76	25135.08	36098.86	36185.20	119623.90
Actual O&M expenses (normalized) VTPS – (b)	21139.52	23659.12	33782.87	33414.55	111996.06
Normative O&M expenses for VTPS including additional O&M Expenses allowed under power to relax as shown under para 73 and 82 and as per Regulation 29(1) of the 2014 Tariff Regulations – (c)	25442.45	27685.02	30362.53	31769.85	115259.85
Under/(Excess) recovery for the generating station (d)=(b)-(c)	(-)5080.88	(-)5494.92	926.81	(-)501.65	(-)10150.64

103. It is observed that for wage revision impact during the period 2015-19, the normative O&M expenses including the additional O&M expenses allowed under power to relax is higher than that of actual O&M expenses (normalized) and the excess recovery is to the tune of Rs. 10150.64 lakh which is higher than the wage revision impact of Rs. 4650.30 lakh claimed (excluding PRP/ex-gratia) by the Petitioner. As such, in terms of methodology described above, the wage revision impact (excluding PRP/ex-gratia) is not allowed for this generating station. Accordingly, the total O&M expenses allowed to the generating station for the period 2014-19 is as under:

(Rs. in lakh)

	2014-15		**2015-16**	**2016-17**	**2017-18**	**2018-19**
	1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
Normative O&M expenses claimed under Regulation 29(1)(a) of the 2014 Tariff Regulations **(a)**	14509.59	2161.10	24664.50	26216.00	27869.00	29623.50
Normative O&M expenses allowed under Regulation 29(1)(a) of the 2014 Tariff Regulations (b)	14509.59	2161.10	24664.50	26216.00	27869.00	29623.50

	2014-15		2015-16	2016-17	2017-18	2018-19
	1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
Additional O&M Expenses for desalination plant claimed (c)	402.88	41.38	777.95	766.47	1010.72	1068.16
Additional O&M Expenses for desalination plant **allowed** (d)	402.88	41.38	777.95	766.47	1010.72	1068.16
Additional Expenses towards painting claimed (e)	0.00	0.00	0.00	702.55	1482.81	1078.19
Additional Expenses towards painting **allowed** (f)	0.00	0.00	0.00	0.00	0.00	0.00
Capital Spares consumed claimed under Regulation 29(2) of the 2014 Tariff Regulations **(g)**	0.00	0.00	0.00	0.00	0.00	3036.13
Capital Spares consumed allowed under Regulation 29(2) of the 2014 Tariff Regulations (h)	0.00	0.00	0.00	0.00	0.00	0.00
Total O&M expenses claimed under Regulation 29 of the 2014 Tariff Regulations (a + c + e+g)	14912.47	2202.48	25442.45	27685.02	30362.53	34805.98
Total O&M expenses allowed under Regulation 29 of the 2014 Tariff Regulations (b + d +h)	14912.47	2202.48	25442.45	26982.47	28879.72	30691.66
Impact of Wage revision claimed (i)	0.00	0.00	**35.41**	**517.64**	**1863.86**	**2233.39**
Impact of Wage revision allowed (j)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Impact of GST claimed (k)	0.00	0.00	0.00	0.00	**431.87**	**535.57**
Impact of GST allowed (l)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Operational Norms

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

Normative Annual Plant Availability Factor

105. In terms of Regulation 36(A)(a) of the 2014 Tariff Regulations, the Commission vide its order dated 11.7.2017 in Petitioner No. 277/GT/2014 had allowed the Normative Annual Plant Availability Factor (NAPAF) of 83% for the period 2014-17 and 85% for

the period from 2017-19. The same is considered for the purpose of revision of tariff.

Gross Station Heat Rate (kCal/kWh)

106. In terms of Regulation 36(C)(a) of the 2014 Tariff Regulations, the Gross Station Heat Rate (GSHR) of 2351.25 kCal/kWh as allowed vide Commission's order dated 11.7.2017 in Petitioner No. 277/GT/2014, is considered for the purpose of revision of tariff.

Specific Oil Consumption

107. In terms of Regulation 36(D)(a) of the 2014 Tariff Regulations, the secondary fuel oil consumption of 0.50 ml/kWh as allowed vide Commission's order dated 11.7.2017 in Petitioner No. 277/GT/2014, is considered for the purpose of revision of tariff.

Auxiliary Power Consumption

108. In terms of the Regulation 36(E)(a) of the 2014 Tariff Regulations, the auxiliary power consumption of 6.69% as allowed vide Commission's order dated 11.7.2017 in Petitioner No. 277/GT/2014 after relaxing under power to relax due to the additional desalination plant, cross country pipe conveyor system and grab unloader at jetty is considered for the purpose of revision of tariff.

Interest on Working Capital

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

> *"28 (1) The working capital shall cover:*
>
> *(a) Coal-based/lignite-fired thermal generating stations*
>
> *(i) Cost of coal or lignite and limestone towards stock, if applicable, for 15 days for pit-head generating stations and 30 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;*
>
> *(ii) Cost of coal or lignite and limestone for 30 days for generation corresponding to the normative annual plant availability factor;*
>
> *(iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;*

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

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

(vi) Operation and maintenance expenses for one month."

Fuel Cost and Energy Charges in Working Capital

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

111. Regulation 30(6)(a) of the 2014 Tariff Regulations provides as under:

"30. Computation and Payment of Capacity Charge and Energy Charge for Thermal Generating Stations:

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

(a) For coal based and lignite fired stations

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

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF = Gross calorific value of primary fuel as received, in kCal per kg, per litre or per standard cubic metre, as applicable.

CVSF = Calorific value of secondary fuel, in kCal per ml.

ECR = Energy charge rate, in Rupees per kWh sent out.

GHR = Gross station heat rate, in kCal per kWh.

LC = Normative limestone consumption in kg per kWh.

LPL = Weighted average landed price of limestone in Rupees per kg.

LPPF = Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable during the month.

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

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

112. Therefore, in terms of the above regulation, for determination of the Energy charges in working capital, the GCV on 'as received' basis is to be considered.

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

"(7) The generating company shall provide to the beneficiaries of the generating station the details of parameters of GCV and price of fuel i.e. domestic coal, imported coal,

eauction coal, lignite, natural gas, RLNG, liquid fuel etc., as per the forms prescribed at Annexure-I to these regulations:

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

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

114. The Regulations for computation of energy charges was challenged by the Petitioner and other generating issue of 'as received' GCV specified in Regulation 30 of the 2014 Tariff companies through various writ petitions filed before the Hon'ble High Court of Delhi (W.P. No.1641/2014-NTPC v CERC). The Hon'ble Court directed the Commission to decide the place from where the sample of coal should be taken for measurement of GCV of coal on 'as received' basis on the request of Petitioners. In terms of the directions of the Hon'ble High Court, the Commission vide order dated 25.1.2016 in Petition No. 283/GT/2014 (approval of tariff of Kahalgaon STPS for the period 2014-19) decided as under:

"58. In view of the above discussion the issues referred by the Hon'ble High Court of Delhi are decided as under:

"(a) There is no basis in the Indian Standards and other documents relied upon by NTPC etc. to support their claim that GCV of coal on as received basis should be measured by taking samples after the crusher set up inside the generating station in terms of Regulation 30(6) of the 2014 Tariff regulations.

(b)The samples for the purpose of measurement of coal on as received basis should be collected from the loaded wagons at the generating stations either manually or through the Hydraulic Auger in accordance with provisions of IS 436(Part1/Section1)-1964 before the coal is unloaded. While collecting the samples the safety of personnel and equipment as discussed in this order should be ensured. After collection of samples the sample preparation and testing shall be carried out in the laboratory in accordance with the procedure prescribed in IS 436(Part1/Section1)-1964 which has been elaborated in the CPRI Report to PSERC."

115. The Review Petition No.11/RP/2016 filed by the Petitioner against the aforesaid order dated 25.1.2016 in Petition No. 283/GT/2014 was rejected by the Commission vide order dated 30.6.2016. The Petitioner has also filed Petition No. 244/MP/2016 before this Commission inter alia praying for removal of difficulties in view of the issues

faced by it in implementing the Commission's orders dated 25.1.2016 and 30.6.2016 with regard to sampling of coal from loaded wagon top for measurement of GCV. The Commission by its order dated 19.9.2018 disposed of the preliminary objections of the respondents therein and held that the petition is maintainable. Against this order, some of the respondents have filed appeal before the APTEL in Appeal Nos. 291/2018 (GRIDCO v NTPC & ors) and the same is pending adjudication.

116. In Petition No. 327/GT/2014 filed by the Petitioner for determination of tariff of this generating station for the period 2014-19, the Petitioner had furnished GCV of coal on 'as billed' and not on 'as received' basis for the preceding 3 months i.e. for January 2014, February 2014 and March 2014 that were required for determination of Interest on Working Capital (IWC). Therefore, the Commission vide its order dated 6.2.2017 in Petition No.327/GT/2014 had considered GCV of coal on 'as billed' basis and provisionally allowed adjustment for total moisture while allowing the cost of coal towards generation & stock and two months' energy charges in the working capital.

117. As per the Commission's order dated 25.1.2016 in Petition No. 283/GT/2014, the Petitioner in Form-13 F has considered the average GCV of coal on "as received basis" i.e. from wagon top for the period from October 2016 to March 2019 for the purpose of computation of working capital for the period 2014-19. The Petitioner has further submitted that CEA vide letter dated 17.10.2017 has opined that a margin of 85-100 kCal/kg for pit-head station and a margin of 105-120 kCal/kg for non-pit head station is required to be considered as loss of GCV of coal on "as received" and on "as fired basis respectively. Accordingly, the Petitioner has considered a margin of 100 kCal/kg on average GCV of coal for the period from October 2016 to March 2019 for computation of working capital of the generating station. The cost of fuel component in the working capital of the generating station based on (i) 'as received' GCV of coal for 30 months

from October 2016 to March 2019 with adjustment of 100 kCal/kg towards storage loss, (ii) landed price of coal for preceding three months i.e. January 2014 to March 2014 and (iii) GCV and landed price of Secondary fuel oil procured for the preceding three months i.e. January 2014 to March 2014 for the generating station, the cost of fuel component claimed by the Petitioner in the working capital is as under:

(Rs. in lakh)

	2014-15		**2015-16**	**2016-17**	**2017-18**	**2018-19**
	1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
Cost of Coal towards stock (15 days)	11736.11	1808.28	19412.44	19412.44	19880.21	19880.21
Cost of Coal towards Generation (30 days)	11736.11	1808.28	19412.44	19412.44	19880.21	19880.21
Cost of Secondary fuel oil 2 months	276.83	42.65	459.15	457.90	468.93	468.93

118. The Petitioner has claimed Energy Charge Rate (ECR) ex-bus of 234.786 paise/kWh for the generating station based on GCV and price of fuel (coal and secondary fuel oil) as indicated above.

119. The Petitioner has submitted the additional details on the GCV on 'as received' basis which is sought by the Commission in other similar matters for the months of January 2014 to March 2014 which was uploaded in the website of the Petitioner and shared with the beneficiaries. The Petitioner vide affidavit dated 6.7.2021 has submitted that though the computation of energy charges moved from 'as fired' basis to 'as received' basis with effect from 1.4.2014 in terms of Regulation 30(6) of the 2014 Tariff Regulations, for calculation of IWC under Regulation 28(2) of the 2014 Tariff Regulations, the GCV should be as per 'actuals' for the three months preceding the first month for which tariff is to be determined. It has further submitted that for the period 2014-19, Regulation 28(2) of the 2014 Tariff Regulations unequivocally provide that the actual cost and GCV of the preceding three months shall be considered and for these preceding three months (January 2014 to March 2014) by virtue of it falling under the

2009 Tariff Regulations shall be computed on the basis of ‘as fired’ GCV. Referring to the judgment of the Hon’ble Supreme Court in PTC India v CERC (2010) 4 SCC 603 and the judgment of APTEL in NEEPCO v TERC (2006) APTEL 148, the Petitioner has submitted that the Commission is bound by the provisions of the tariff regulations and that purposive interpretation ought to be given to the 2014 Tariff Regulations and interest on working capital ought to be computed in terms of Regulation 28(2) of the 2014 Tariff Regulations on actual GCV i.e. ‘as fired’ GCV. The Petitioner has submitted that without prejudice to the above submissions, it has furnished the details of GCV on ‘as received’ basis for the months of January 2014 to March 2014 in compliance with the directions of the Commission in other similar matters as under:

Sl. No.	Month	Weighted Average GCV of coal received (EM basis) (kcal/kg) **(A)**	Total Moisture TM) (in %) **(B)**	Equilibrated Moisture (EM) (in %) **(C)**	Weighted Average GCV of coal received (TM basis) (kcal/kg) **D=A*(1-B%)/(1-C%)**
1	January 2014	4315	19.55	11.13	3906.17
2	February 2014	3959	21.66	10.27	3456.46
3	March 2014	3888	18.34	10.48	3546.63
	Average				**3643.50**

120. The submissions have been considered. The Petitioner in Form-13F, has considered the average GCV of coal on “as received basis” i.e. from wagon top for the period from January 2014 to Mach 2014 for the purpose of computation of working capital for the period 2014-19. In addition to the average GCV, it has also considered a margin of 100 kCal/kg for computation of the working capital of the generating station.

121. Regulation 28(2) of the 2014 Tariff Regulations provides that the computation of cost of fuel as a part of IWC is to be based on the landed price and gross calorific value of the fuel, as per actuals, for the three months preceding the first month for which the tariff is to be determined. Thus, calculation of IWC for the period 2014-19 is to be based on such values for months of January 2014, February 2014 and March 2014. Also, the consideration of loss of GCV of 100 kCal/kg cannot be considered, as the same is not

as per provisions of the 2014 Tariff Regulations.

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

> "*The following provisos shall be added under Clause (6) of Regulation 21 of the Principal Regulations as under namely:*
> *Provided that generating company shall provide to the beneficiaries of the generating station the details of parameters of GCV and price of fuel i.e. domestic coal imported coal e-auction coal lignite natural gas RLNG liquid fuel etc. as per the form 15 of the Part-I of Appendix I to these regulations:*
>
> *Provided further that the details of blending ratio of the imported coal with domestic coal proportion of e-auction coal and the weighted average GCV of the fuels as received shall also be provided separately along with the bills of the respective month:*
>
> *Provided further that copies of the bills and details of parameters of GCV and price of fuel i.e. domestic coal imported coal e-auction coal lignite natural gas RLNG liquid fuel etc. details of blending ratio of the imported coal with domestic coal proportion of e-auction coal shall also be displayed on the website of the generating company. The details should be available on its website on monthly basis for a period of three months."*

123. Thus, in terms of the above amendment to the 2014 Tariff Regulations, the details regarding the weighted average GCV of the fuels on 'as received' basis was also required to be provided by the Petitioner along with bills of the respective month. Also, bills detailing the parameters of GCV and price of fuel were to be displayed by the Petitioner on its website, on monthly basis.

124. As per SOR to the 2014 Tariff Regulations, we note that the main consideration of

the Commission while moving from ‘as fired’ GCV to ‘as received’ GCV for the purpose of energy charges under Regulation 30(6) of the 2014 Tariff Regulations for the 2014-19 tariff period was to ensure that GCV losses which might occur within the generating station after receipt of coal are not passed on to the beneficiaries on account of improper handling and storage of coal by the generating companies. As regards the allowable (normative) storage loss within the generating station, CEA had observed that there is negligible difference between ‘as received’ GCV and ‘as fired’ GCV. As such, for the purpose of calculating energy charges, the Commission moved from ‘as fired’ GCV to ‘as received’ GCV under Regulation 30(6) of the 2014 Tariff Regulations without allowing any margin between the two measurements of GCV. Thus, ‘as received’ GCV was made applicable for the purpose of calculating working capital requirements based on the actual GCV of coal for the preceding three months of the first month for which tariff is to be determined in terms of Regulation 28(2) of 2014 Tariff Regulations. In case the submission of the Petitioner that ‘as fired’ is to be considered ‘at actuals’ for the preceding three months for purpose of IWC, the same would mean allowing (and passing through) all storage losses which would have occurred during the preceding three months (January 2014 to March 2014) for the period 2014-19. This, according to us, defeats the very purpose of moving from ‘as fired’ GCV to ‘as received’ GCV in the 2014 Tariff Regulations. In this background and keeping in view that in terms of amended Regulation 21(6) of the 2009 Tariff Regulations, the Petitioner was required to share details of the weighted average GCV of the fuel on ‘as received’ basis, we consider the fuel component and energy charges based on ‘as received’ GCV of the preceding three months (January 2014 to March 2014) for the purpose of computation of IWC in terms of Regulation 28(2) of the 2014 Tariff Regulations.

125. The Petitioner has calculated GCV 3635 kCal/kg which represents average of

GCVs of preceding three months. The weighted average GCV for three months based on the net coal quantities as per Form-15 of the petition and the monthly GCVs as submitted by the Petitioner (in table at paragraph 129 above) works out to 3643.50 kCal/kg.

126. Accordingly, the cost for fuel components in working capital has been computed considering the fuel details (price) as per Form-15 of the petition except for 'as received' GCV of coal, which is considered as 3643.50 kCal/kg as discussed above. All other operational norms such as Station Heat Rate, Auxiliary Energy Consumption and Secondary Fuel Cost have been considered as per the 2014 Tariff Regulations for calculation of fuel components in working capital.

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

(Rs. in lakh)

	2014-15		**2015-16**	**2016-17**	**2017-18**	**2018-19**
	1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
Cost of Coal towards stock (30 days) corresponding to NAPAF	10416.44	1604.95	17229.61	17229.61	17644.78	17644.78
Cost of Coal towards Generation (30 days) corresponding to NAPAF	10416.44	1604.95	17229.61	17229.61	17644.78	17644.78
Cost of Secondary fuel oil 2 months corresponding to NAPAF	276.53	42.61	458.66	457.41	468.43	468.43

Working Capital for Maintenance Spares

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

(Rs. in lakh)

2014-15		2015-16	2016-17	2017-18	2018-19
1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
2982.49	440.50	5088.49	5396.49	5775.94	6138.33

Working Capital for Receivables

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

(Rs. in lakh)

	2014-15		2015-16	2016-17	2017-18	2018-19
	1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
Variable Charges - for two months corresponding to NAPAF	21400.14	3297.30	35494.50	35397.52	36250.47	36250.47
Fixed Charges - for two months corresponding to NAPAF	18249.10	2751.55	29449.78	30888.73	31424.04	31619.97
Total	**39649.24**	**6048.85**	**64944.28**	**66286.25**	**67674.51**	**67870.45**

O&M Expenses (1 month) for computation of working capital

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

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

(Rs. in lakh)

2014-15		2015-16	2016-17	2017-18	2018-19
1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
1242.71	183.54	2120.20	2248.54	2406.64	2557.64

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

(Rs. in lakh)

	2014-15		2015-16	2016-17	2017-18	2018-19
	1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
Working Capital for Cost of Coal towards Stock (15 days) corresponding to NAPAF	10416.44	1604.95	17229.61	17229.61	17644.78	17644.78
Working Capital for Cost of Coal towards Generation (30 days) corresponding to NAPAF	10416.44	1604.95	17229.61	17229.61	17644.78	17644.78
Working Capital for Cost of Secondary fuel oil (2 months) corresponding to NAPAF	276.53	42.61	458.66	457.41	468.43	468.43
Working Capital for Maintenance Spares @ 20% of O&M expenses	2982.49	440.50	5088.49	5396.49	5775.94	6138.33
Working Capital for Receivables – 2 months corresponding to NAPAF	39649.24	6048.85	64944.28	66286.25	67674.51	67870.45
Working Capital for O&M expenses – 1 month	1242.71	183.54	2120.20	2248.54	2406.64	2557.64
Total Working Capital	**64983.86**	**9925.39**	**107070.86**	**108847.92**	**111615.09**	**112324.42**
Rate of Interest	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%
Interest on Working Capital	**8772.82**	**1339.93**	**14454.57**	**14694.47**	**15068.04**	**15163.80**

Annual Fixed Charges

133. Accordingly, the annual fixed charges approved in this petition for the period 2014-

19 for the generating station is summarized as under:

(Rs. in lakh)

	2014-15		2015-16	2016-17	2017-18	2018-19
	1.4.2014 to 25.2.2015	**26.2.2015 to 31.3.2015**				
Depreciation	25,610.20	3,864.76	42,548.75	44,154.94	45,592.77	46,532.94
Interest on loan	37,188.96	5,583.98	55,044.54	47,762.71	45,432.96	42,340.60
Return on Equity	23,010.14	3,518.13	39,208.35	51,737.79	53,570.73	54,990.85
Interest on Working Capital	8,772.82	1,339.93	14,454.57	14,694.47	15,068.04	15,163.80
O&M Expenses	14,912.47	2,202.48	25,442.45	26,982.47	28,879.72	30,691.66
Total	**1,09,494.58**	**16,509.27**	**1,76,698.65**	**1,85,332.37**	**1,88,544.22**	**1,89,719.85**

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

134. The difference between the annual fixed charges already recovered in terms of the Commission's order dated 11.7.2017 in Petitioner No. 277/GT/2014 and the annual fixed charges determined by this order shall be adjusted in terms of Regulation 8(13) of the 2014 Tariff Regulations.

Summary

135. The annual fixed charges allowed for the period 2014-19 are summarized below:

(Rs. in lakh)

2014-15		2015-16	2016-17	2017-18	2018-19
1.4.2014 To 25.2.2015	**26.2.2015 to 31.3.2015**				
109494.58	16509.27	176698.65	185332.37	188544.22	189719.85

136. Annexure-I enclosed forms part of the order.

137. Petition No. 576/GT/2020 is disposed of in terms of the above.

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

Annexure I

											DEPRECIATION					
Sl.No.	Name of the Assets	Gross block as on 31.03.2014	Gross block as on 26.02.2015 (COD Of Unit III)	Gross Block as on 31.03.2015	Gross Block as on 31.03.2016	Gross Block as on 31.03.2017	Gross Block as on 31.03.2018	Gross Block as on 31.03.2019	Depreciation Rates as per CERC's Depreciation Rate Schedule	As on 31.03.2014	As on 26.02.2015	As on 31.03.2015	As on 31.03.2016	As on 31.03.2017	As on 31.03.2018	As on 31.03.2019
1	Land :															
2	Freehold	15786.77	11585.68	11585.68	11801.50	12017.32	12240.94	12462.80	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Leasehold	2420.87	2420.87	2420.87	2420.87	2420.87	2420.87	2420.87	3.34%	80.86	80.86	80.86	80.86	80.86	80.86	80.86
4	Roads,bridges, culverts	7286.31	7880.57	7880.57	8082.18	10735.97	13399.29	13863.65	3.34%	243.36	263.21	263.21	269.94	358.58	447.54	463.05
5	Building :	50434.12	75895.31	76058.73	77899.38	83661.85	93765.49	103314.84	3.34%	1684.50	2534.90	2540.36	2601.84	2794.31	3131.77	3450.72
6	Temporary erection	242.80	245.00	245.00	246.72	246.72	256.65	288.71	100.00%	242.80	245.00	245.00	246.72	246.72	256.65	288.71
7	Water supply, drainage & sewerage system	1480.57	1804.71	1804.71	1804.71	2088.42	2416.66	2691.62	5.28%	78.17	95.29	95.29	95.29	110.27	127.60	142.12
8	Plant and machinery	529565.00	787949.83	788984.49	809075.59	824136.33	830381.70	829851.52	5.28%	27961.03	41603.75	41658.38	42719.19	43514.40	43844.15	43816.16
9	Furniture and fixtures	711.47	777.87	778.54	908.29	980.19	1093.88	1267.50	6.33%	45.04	49.24	49.28	57.49	62.05	69.24	80.23
10	Vehicles including speedboats	21.57	16.58	16.58	18.24	48.58	60.08	60.08	9.50%	2.05	1.57	1.57	1.73	4.62	5.71	5.71
11	Office equipment	135.56	191.85	197.52	243.71	301.58	342.40	355.05	6.33%	8.58	12.14	12.50	15.43	19.09	21.67	22.47
12	IT Equipments	179.73	228.32	228.69	347.20	351.97	477.53	464.04	15.00%	26.96	34.25	34.30	52.08	52.80	71.63	69.61
13	Construction equipments	375.80	426.24	823.06	823.06	1070.82	1070.82	1205.35	5.28%	19.84	22.51	43.46	43.46	56.54	56.54	63.64
14	Electrical Installations	889.11	1010.55	1010.55	1025.53	1053.36	1057.56	1104.22	5.28%	46.94	53.36	53.36	54.15	55.62	55.84	58.30
15	Communication Equipments	43.00	51.41	51.49	71.82	76.94	86.47	139.60	6.33%	2.72	3.25	3.26	4.55	4.87	5.47	8.84
16	Hospital Equipments	0.43	0.43	0.43	2.26	2.26	9.64	12.47	5.28%	0.02	0.02	0.02	0.12	0.12	0.51	0.66
17	Assets not owned by the company	985.79	1349.94	1401.98	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	Intangible Assets	746.50	752.16	752.16	753.71	753.71	821.27	823.08	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	Capital Spares				0.00	2803.25	16468.51	17113.59	5.28%	0.00	0.00	0.00	0.00	148.01	869.54	903.60
	Total	**611305.37**	**892587.32**	**894241.05**	**915524.77**	**942750.14**	**976369.77**	**987438.99**		**30442.88**	**44999.36**	**45080.86**	**46242.84**	**47508.83**	**49044.72**	**49454.67**
											5.0165%	5.0413%	5.0462%	5.0451%	5.0311%	5.0157%