CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 223/GT/2021

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

Date of Order: 8th December, 2023

IN THE MATTER OF

Petition for truing-up of tariff for the period 2014-19 and for determination of tariff for the period 2019-24 in respect of Teesta Low Dam-IV Power Station (160 MW).

AND

IN THE MATTER OF

NHPC Limited,
NHPC Office Complex, Sector-33,
Faridabad (Haryana)- 121003 **…Petitioner**

Vs

West Bengal State Electricity Distribution Company Limited,
Vidhyut Bhawan (8th Floor)Block-DJ, Sector-II, Salt Lake,
Kolkata- 700091 (West Bengal) **…Respondent**

Parties Present:

Shri Rajiv Shankar Dvivedi, Advocate, NHPC
Shri Mohd. Faruque, NHPC
Shri R.D. Shende, NHPC
Shri Piyush Kumar, NHPC
Ms. Anushree Bardhan, Advocate, WBSEDCL
Ms. Surbhi Kapoor, Advocate, WBSEDCL
Ms. Tanya Sareen, Advocate, WBSEDCL
Shri Aneesh Bajaj, Advocate, WBSEDCL

ORDER

This Petition has been filed by the Petitioner, NHPC for truing-up of tariff of Teesta Low Dam-IV power station (160 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 (in short "the 2014 Tariff Regulations") and for determination of tariff of the generating station for the period 2019-24, in accordance with the provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (in short "the 2019 Tariff Regulations").

2. The generating station is located in the State of West Bengal and supplying power to its sole beneficiary West Bengal since the Commercial operation of first unit (i.e. w.e.f 11.3.2016) having installed capacity of 160 MW, which comprises of four units of 40 MW capacity each. The date of commercial operation of the units/ generating station are as under:

Unit no.	Date of Commercial operation
Unit -1	11.3.2016
Unit -2	31.3.2016
Unit -3	17.7.2016
Unit -4/generating station	19.8.2016

3. The Petitioner had filed tariff Petition No. 354/GT/2018 for determination of tariff of the generating station from COD of first unit i.e. 11.3.2016 to 31.3.2019 and the Commission vide order dated 24.1.2021 had approved the capital cost and annual fixed charges of the generating station as under:

Capital Cost allowed

(Rs. in lakh)

	11.3.2016 to 30.3.2016	**31.3.2016 to 31.3.2016**	**1.4.2016 to 16.7.2016**	**17.7.2016 to 18.8.2016**	**19.8.2016 to 31.3.2017**	**2017-18**	**2018-19**
Opening Capital Cost	38877.22	79914.51	79914.51	121221.32	162240.93	165798.57	166484.46
Net additional capital expenditure allowed	0.00	0.00	0.00	0.00	2527.65	478.58	2879.39
Discharge of liabilities	0.00	0.00	0.00	0.00	1029.99	207.31	522.21
Capital Cost allowed	**38877.22**	**79914.51**	**79914.51**	**121221.32**	**165798.57**	**166484.46**	**169886.06**

Annual Fixed Charges allowed

(Rs. in lakh)

	11.3.2016 to 30.3.2016	31.3.2016 to 31.3.2016	1.4.2016 to 16.7.2016	17.7.2016 to 18.8.2016	19.8.2016 to 31.3.2017	2017-18	2018-19
Return on Equity	133.69	13.74	1474.28	689.71	6362.83	10455.45	10611.82
Interest on Loan	130.88	14.11	1503.84	652.78	5968.28	9228.24	8915.64
Depreciation	54.63	5.61	601.90	280.11	2583.33	4246.27	4301.54
Interest on Working Capital	12.03	1.25	134.00	57.77	539.25	892.40	915.12
O&M Expenses	84.69	8.71	934.02	436.97	4176.09	7224.37	7704.07
Total	**415.92**	**43.42**	**4648.05**	**2117.34**	**19629.77**	**32046.74**	**32448.19**

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. Accordingly, in terms of the above regulations, the Petitioner has claimed the capital cost and annual fixed charges vide affidavit dated 27.9.2021 for the period 2014-19, as under:

Capital Cost claimed

(Rs. in lakh)

	11.3.2016 to 30.3.2016	31.3.2016 to 31.3.2016	1.4.2016 to 16.7.2016	17.7.2016 to 18.8.2016	19.8.2016 to 31.3.2017	2017-18	2018-19
Opening capital cost	42801.47	85666.61	85666.61	128798.39	171980.81	175538.45	176224.34
Net additional capital expenditure allowed	-	-	-	-	2528.12	604.55	3043.35
Less: De-capitalization during the year	-	-	-	-	0.47	125.97	133.37
Add: Discharge of liabilities	-	-	-	-	1029.99	207.31	522.21
Capital cost allowed	42801.47	85666.61	85666.61	128798.39	175538.45	176224.34	179656.53

Annual Fixed Charges claimed

(Rs. in lakh)

	11.3.2016 to 30.3.2016	31.3.2016 to 31.3.2016	1.4.2016 to 16.7.2016	17.7.2016 to 18.8.2016	19.8.2016 to 31.3.2017	2017-18	2018-19
Depreciation	1100.61	2201.14	2200.97	3291.63	4439.28	4494.82	4550.50
Interest on Loan	2636.92	5535.08	5499.04	7670.76	10255.89	9768.15	8826.91
Return on Equity	2714.47	5432.98	5390.06	8103.87	10932.78	11140.68	11315.41
Interest on Working Capital	247.71	501.52	499.70	736.45	986.68	1007.86	1019.60
O&M expenses	1795.61	3591.22	3591.22	5386.82	7182.43	7659.35	8167.93
Annual fixed charges (Annualised)	8495.32	17261.94	17180.98	25189.53	33797.06	34070.86	33880.34
Annual fixed charges (Pro-rata)	**464.23**	**47.16**	**5036.62**	**2277.41**	**20833.80**	**34070.86**	**33880.34**

6. The Respondent, WBSEDCL has filed its reply vide affidavit dated 22.3.2023, no rejoinder has been filed by the Petitioner. The Petition was heard on 16.3.2023 and the Commission after directing the Petitioner to file certain additional information, reserved its order in the matter. In response, the Petitioner has filed the additional information vide affidavit dated 19.4.2023, with copy to the Respondent. Based on the submissions of the parties and documents available on record we proceed to examine the claims of the Petitioner, in this Petition, on prudence check, as stated in the subsequent paragraphs.

Capital Cost

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

> *"9. Capital Cost:*
> *(3) The Capital cost of an existing project shall include the following:*
> *(a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;*
> *(b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and*
> *(c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15."*

8. The Commission vide its order dated 24.1.2021 in Petition No. 354/GT/2018 had disallowed the capital expenditure amounting to Rs. 97.40 crores on account of IDC, IEDC, Normative IDC, FC, Undischarged Liabilities and Infirm Power. The

Petitioner, in this petition, has requested to allow the deducted capital expenditure in view of the justification submitted by the Petitioner as under:

***IDC and IEDC*:**

9. As per the order dated 24.1.2021 against the time overrun of 83 months in the completion of the project, delay of only 53.7 months was condoned and the delay of 29.3 months (Jan,12 to Aug,12 & Mar,13 to Dec,14) was not condoned. Accordingly, IDC of Rs.57.20 crore and IEDC of Rs.21.03 crore were disallowed.

10. The Petitioner has submitted to re-consider the deduction for IDC of Rs. 57.20 crore and IEDC of Rs. 21.03 crore in the capital cost for the period 2014-19. The Respondent has submitted that the IDC and IEDC should be restricted for the period 2014-19 only and no additional amounts be allowed to the Petitioner for any delay beyond 53.7 months. The Respondent has further submitted since the Petitioner did not appeal against the order dated 24.1.2021 and pursued the Respondent for compliance of the said order, the Petitioner now cannot by way of the true up petition seek to challenge the findings of the Commission and claim any further relief going beyond the order dated 24.1.2021.

11. The matter has been considered. The Commission order in Petition no. 354/GT/2018 dated 24.1.2021 has disallowed the IDC (Rs. 57.20 crore) & IEDC (Rs.21.03 crore) on the basis of non-condoned delay of 29.3 months. Therefore, the actual IDC & IEDC allowed in order dated 24.1.2021 is correct and is being considered in this petition.

Normative IDC

12. The Petitioner has submitted that as per the order dated 24.1.2021 the Commission has (i) restricted the normative IDC upto schedule COD i.e. 30.9.2009 (ii)

considered loan of Rs.102 crores in 2007-08 and (iii) not included NIDC for FY 2004-05 citing the reason that the copy of balance sheet is not legible.

13. The Petitioner has submitted that CCEA approval for the generating station was accorded on 30.9.2005 and the construction work of the project started thereafter (i.e. after taking over land from forest department) however the Commission has restricted the normative IDC upto the scheduled COD as per the 2014 Tariff Regulations. The Petitioner has further submitted that the construction work started before the issue of the 2014 Tariff Regulations and the Petitioner incurred the expenditure (including normative loan) for the construction work. Accordingly, it is submitted by the Petitioner that the normative IDC may be allowed till actual COD of the generating station i.e. up to 19.8.2016.

14. It has further submitted that from the phasing of loan reflected in Form 14, Annexure to Form 8 and the loan considered in calculation of Normative IDC, it is clear that for 2007-08, loan of Rs.50 crore is to be taken and the same has been submitted in calculation of Normative IDC, however, the Commission has considered Rs.102 crore during 2007-08, instead of Rs.50 crore in the order dated 24.1.2021. Further, as per the direction of the Commission the legible copy of balance sheet for 2004-05 as Appendix-IV has been furnished in the truing up Petition. In view of the above, Petitioner has requested to allow the entire deducted NIDC of Rs. 12.76 crore.

15. The Respondent has submitted that the Commission has already disallowed time overrun of 29.3 months out of 83 months claimed by the Petitioner for completion of the project and since the delay has not been challenged/Appealed by the Petitioner, IDC amounting to Rs. 57.20 crore and IEDC of Rs. 21.03 crore and further the NIDC of Rs. 12.76 crore for the period upto COD cannot be allowed in the present true-up

proceedings. Therefore, the Respondent has stated that the claim of the Petitioner is unjustified, imprudent and against the interest of consumers.

16. The matter has been considered. It is noticed that in line with second proviso of Regulation 11 (A)(2) of 2014 Tariff Regulation, only IDC on actual loan may be allowed beyond the SCOD to the extent the delay is found beyond the control of generating company or the transmission licensee, as the case may be, after due prudence and considering prudent phasing of funds. Thus, the normative IDC has been allowed up to scheduled COD only.

17. The actual loan amounting of Rs.50.00 crores during 2007-08 has been considered instead of Rs.102.00 crore, as per Annexure to Form-14 furnished by the Petitioner while calculating normative IDC.

18. The Petitioner has furnished the balance sheet for the period 2004-05 in legible manner. Therefore, on the basis of prudence check, the normative IDC for the year 2004-05 has been allowed.

19. Further, the Petitioner's claim towards 'Notional IDC' for the period prior to the first date of drawl of 'actual loan', the Petitioner has submitted that 'Weighted Average of Actual Rate of Interest' for the 'actual loan' drawn for the Petitioner has been considered as 'Weighted Average Rate of Interest' during 2003-04 to 2006-07, due to unavailability of actual loan in this project. However, the Commission while computing the IDC is of the view that 'Annual Weighted Average SBI Base Rate' as applicable for the relevant financial year is to be considered for the purpose of calculating 'Normative IDC' during 2003-04 to 2006-07, in line with computation of 'Notional IDC' for the period from 'Investment Approval' date till infusion of 'Actual Loan' in order dated 18.7.2023 in Petition No. 421/GT/2020. Further, 'Base Rate' was first released

on 1.7.2010, therefore the 'Annual Weighted Average SBI Benchmark Prime Lending Rate' i.e. 'BPLR' is adjusted with the spread (based on difference between SBI BPLR and SBI Base Rate as on 1.7.2010) to arrive at an equivalent SBI 'Base Rate'. Therefore, Rs.4.067 crore is allowed out of the total deduction of Rs.12.76 crore after rectification of the above documents.

Financing Charges

20. The Petitioner has submitted that as per the order dated 24.1.2021 financing charges (FC) of Rs.2.77 crore was not allowed since the documentary evidence furnished in support of the claim of FC was rejected. The Petitioner has requested for reconsideration of the furnished documents in support of claim of FC of Rs. 2.77 crore. The Petitioner has submitted auditor's certificate also in support of the same. In addition of above, the same financing charges have also been matched with the Audited Balance Sheet of the Petitioner. Hence the amount of Rs.2.77 crore is allowed in respect of finance charges.

Undischarged liability

21. The Petitioner has submitted that as per the order dated 24.1.2021, excess undischarged liability of Rs.3.57 crore has been considered in the capital cost. Further, the Petitioner has furnished the liability reconciliation as on 30.9.2016, 31.3.2017, 31.3.2018 and 31.3.2019 from the audited books of accounts and the detail of retention money and requested to consider the liability as per reconciled sheet and allow the deducted amount of Rs.3.57 crore in the capital cost.

22. The matter has been considered. It is noticed that in order dated 24.1.2021 the claim of the Petitioner was Rs.1137.81 lakh and the liabilities as on COD amounting to Rs.1494.82 lakh was considered. The Petitioner was given liberty to provide proper

reconciliation of the un-discharged liabilities considered for tariff along with the balance sheet at the time of truing-up. In this regard the Petitioner has submitted the reconciliation statement duly certified by the auditor showing that the un-discharged liabilities are Rs.1137.81 lakh. Therefore, based on the reconciliation statement submitted by the Petitioner, the un- discharged liabilities amounting to Rs.1137.81 lakh has been considered as on COD and the difference of Rs. 3.57 crores (Rs.1494.82 lakhs – Rs.1137.81 lakhs) has been rectified.

Infirm Power

23. The Petitioner has submitted that as per order dated 24.1.2021 an amount of Rs. 0.07 crore were disallowed from the capital cost. The matter has been considered. It is noted that the Petitioner has submitted that it has accounted Rs.7.41 lakh, as on 31.3.2017. Therefore, with regard to adjustment of infirm power, the Commission in order dated 24.1.2021 has adjusted an amount of Rs.107.77 lakh for sale of infirm power. Therefore, the Commission has already adjusted this amount as on COD of the station i.e.19.8.2016.

Capital Cost as on COD of units/Station

24. Based on the above discussion, the capital cost allowed for the purpose of tariff as on COD of the units is as under:

(Rs. In lakh)

	11.3.2016	**31.3.2016**	**17.7.2016**	**19.8.2016**
Hard cost	32478.64	64965.13	97527.74	130109.34
IDC	8325.89	16704.99	25357.57	34105.76
NIDC	574.87	1145.32	1615.64	2029.95
FC	62.13	124.26	200.60	276.94
Total Capital Cost	41441.53	82939.70	124701.55	166521.98
Less: Undischarged liability	284.45	568.90	853.35	1137.81
Less: IEDC disallowed	2102.54	2102.54	2102.54	2102.54
Capital cost allowed for the purpose of tariff	**39054.54**	**80268.26**	**121745.66**	**163281.64**

Additional Capital Expenditure

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

14. Additional Capitalisation and De-capitalisation:
(1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

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

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.

(2) The capital expenditure incurred or projected to be incurred in respect of the new project on the following counts within the original scope of work after the cut-off date may be admitted by the Commission, subject to prudence check:

(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;
(ii) Change in law or compliance of any existing law;
(iii) Deferred works relating to ash pond or ash handling system in the original scope of work; and
(iv) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.

(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:
(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;
(ii) Change in law or compliance of any existing law;
(iii) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;
(iv) Deferred works relating to ash pond or ash handling system in the original scope of work;
(v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;
(vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;
(vii) Any additional capital expenditure which has become necessary for efficient operation of generating station other than coal / lignite based stations or transmission system as the case may be. The claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by

an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;

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

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

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

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

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

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

(4) In case of de-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 value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalisation takes place, duly taking into consideration the year in which it was capitalised."

26. The actual additional capital expenditure claimed by the Petitioner for the period 2014-19 is as under:

(Rs. in lakh)

Year	**2016-17 (19.8.2016 to 31.3.2017)**	**(2017-18)**	**2018-19**
Addition during the year / period (A) (allowed in order dated 24.1.2021)	2528.12	604.55	3043.35

Less: De-capitalisation during the year / period(B)	0.47	125.97	133.37
Add: Discharges during the year / period(C)	1029.99	207.31	522.21
Net Addition D= (A-B+C)	**3557.64**	**685.89**	**3432.19**

27. In its order dated 24.1.2021, the capital cost for the period 2016-19 was determined on the basis of audited, actual capital expenditure. The Petitioner has requested to consider the additional capital expenditure of Rs. 30.59 lakh during the period 2018-19 for supply and installation of solar system for lighting of the generating station, which was not allowed in order dated 24.1.2021. The Respondent has submitted that the Petitioner has not provided any technical justification or documentary evidence to substantiate its claim for installation of solar system for lighting of generating station, Vidyut Nagar. Further, it has stated that the additional capital expenditure of Rs. 30.59 lakh for installation of solar lighting in township was earlier disallowed vide order dated 24.1.2021 and the Petitioner did not further challenge the order dated 24.1.2021. Therefore, the Respondent has submitted that the claim of the Petitioner is unjustified, imprudent and against the interest of consumers.

28. The matter has been considered. It is noticed that the Commission has already taken a similar view in many petitions, similar to what has been decided in order dated 24.1.2021 and not allowed the capitalization pertaining to supply and installation of solar system for lighting. Accordingly, the same is not allowed.

29. It is noticed that the Petitioner has claimed an amount of Rs.1663.31 lakh out of total claim of Rs. 3012.76 lakh during 2018-19 for assets/works under the original scope of work/RCE for various heads such as, power house building, dam, tail race channel, hydro mechanical works, dam & barrages and main generating equipment. The same were also allowed in order dated 24.1.2021. Further, it is noticed that the

Petitioner in justification to above claim has mentioned that the expenditure pertains to impact of pay regularization of below board level executives of NHPC Limited, for the period from 1.1.2007 to 31.3.2019. The matter has been examined. Petitioner had filed petition no. 343/MP/2019 with regard to claim of impact of pay/ wage revision of its employees for the period from 1.1.2007 to 31.3.2019. Commission vide order dated 28.1.2023 had disposed of the Petition No.343/MP/2019. It is also observed that the Petitioner in petition no. 343/MP/2019 has already claimed an amount of Rs. 586.73 lakh pertaining to impact of pay/ wage revision of its employees for the period from 1.1.2007 to 31.3.2019 for instant generating station. As such, we consider the balance amount of Rs. 1076.58 lakh (1663.31-586.73) as claimed by the Petitioner under the head assets/works under the original scope of work/RCE and allow the same excluding amount of Rs. 586.73 lakh pertaining to wage revision arrear claimed by the Petitioner in 343/MP/2019.

30. Accordingly, we consider the additional capital expenditure claimed by the Petitioner for the period 2016-19 except the above disallowed amount of Rs. 586.73 lakh (pertaining to impact of pay/ wage revision of its employees for the period from 1.1.2007 to 31.3.2019). In view of above, we allow the following additional capital expenditure (additions excluding discharge of liabilities):

(Rs. in lakh)

Year	**11.3.2016 to 31.3.2017**	**2017-18**	**2018-19**
Additional Capital Expenditure allowed in this Petition (Additions excluding discharge of Liabilities)	2528.12	604.55	2426.03

De-capitalization

31. As regards de-capitalization, Regulation 14(4) of the 2014 Tariff Regulations, provides as under:

"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 value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalisation takes place, duly taking into consideration the year in which it was capitalised."

32. The Petitioner has claimed following de-capitalization during 2016-19 and since the same is already allowed by the Commission in order dated 24.1.2021 on actual basis, the same is considered in this order mentioned as under:

(Rs. in lakh)

2016-17	2017-18	2018-19
0.47	125.97	133.37

Discharge of liabilities

33. The Petitioner has claimed the following discharge of liabilities:

(Rs. in lakh)

(19.8.2016 to 31.3.2017)	2017-18	2018-19
1029.99	207.31	522.21

34. The un-discharged liabilities for the period 2016-19, corresponding to the assets/works allowed, has been considered with their respective discharges made by the Petitioner on prudence check. Accordingly, the discharge of liabilities allowed for the period 2016-19, is as under:

(Rs. in lakh)

	(19.8.2016 to 31.3.2017)	2017-18	2018-19
Opening liabilities corresponding to allowed capital cost	1137.81	634.07	1129.60
Add: Liability additions corresponding to allowed capital cost (Form 9A)	526.26	702.85	627.83
Less: Discharges of liabilities corresponding to allowed capital cost	1029.99	207.31	522.21
Closing liabilities corresponding to allowed capital cost	634.07	1129.60	1235.21

35. Accordingly, we consider the additional capital expenditure claimed by the Petitioner for the period 2016-18, as allowed in order dated 24.1.2021 and revise the additional capital expenditure for 2018-19. Based on the above, the net additional capital expenditure allowed for the period 2016-19, is as under:

(Rs. in lakh)

	2016-17 (19.8.2016 to 31.3.2017)	2017-18	2018-19
Addition during the year / period (A)	2528.12	604.55	2426.03
Less: De-capitalisation during the year / period (B)	0.47	125.97	133.37
Add: Discharges during the year / period (C)	1029.99	207.31	522.21
Net Addition D= (A-B+C)	**3557.64**	**685.89**	**2814.87**

Capital cost allowed

36. Accordingly, the capital cost allowed for the period 2014-19 (11.3.2016 to 31.3.2019) is as under:

(Rs. in lakh)

	11.3.2016 to 30.3.2016	31.3.2016 to 31.3.2016	1.4.2016 to 16.7.2016	17.7.2016 to 18.8.2016	19.8.2016 to 31.3.2017	2017-18	2018-19
Opening capital cost (a)	39054.54	80268.26	80268.26	121745.66	163281.64	166839.28	167525.17
Add: ACE	0.00	0.00	0.00	0.00	3557.64	685.89	2814.87
Closing capital cost	39054.54	80268.26	80268.26	121745.66	166839.28	167525.17	170340.04
Average capital cost	39054.54	80268.26	80268.26	121745.66	165060.46	167182.22	168932.60

Debt Equity Ratio

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

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

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

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

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

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

(2) The generating company or the transmission licensee shall submit the resolution of the Board of the company or approval from Cabinet Committee on Economic Affairs

(CCEA) regarding infusion of fund from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

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

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

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

38. Based on the debt and equity position furnished by the Petitioner, the debt-equity ratio of 70:30 has been allowed. The opening and closing debt and equity is as under:

(Rs. in lakh)

	As on COD (19.8.2016)		**Additional Capitalization**		**As on 31.3.2019**	
	Amount	**(%)**	**Amount**	**(%)**	**Amount**	**(%)**
Debt	114297.15	70.00%	4940.88	70.00%	119238.03	70.00%
Equity	48984.49	30.00%	2117.52	30.00%	51102.01	30.00%
Total	**163281.64**	**100.00%**	**7058.40**	**100.00%**	**170340.04**	**100.00%**

Return on Equity

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

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

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

Provided that:

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

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

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

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

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

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

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

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

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

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

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

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

41. The base rate of Return on Equity (ROE) has been grossed up, based on the MAT rate for the period 2014-19. Hence, in terms of the above regulations, ROE has been computed as under:

(Rs. in lakh)

	11.3.2016 to 30.3.2016	**31.3.2016 to 31.3.2016**	**1.4.2016 to 16.7.2016**	**17.7.2016 to 18.8.2016**	**19.8.2016 to 31.3.2017**	**2017-18**	**2018-19**
Opening Equity (A)	11716.36	24080.48	24080.48	36523.70	48984.49	50051.78	50257.55
Addition of Equity due to additional capital expenditure (B)	0.00	0.00	0.00	0.00	1067.29	205.77	844.46
Equity- Closing (C) =(A) + (B)	11716.36	24080.48	24080.48	36523.70	50051.78	50257.55	51102.01
Average Equity (D)=(A+C)/2	11716.36	24080.48	24080.48	36523.70	49518.14	50154.67	50679.78
Base Rate (%) (E)	16.500%	16.500%	16.500%	16.500%	16.500%	16.500%	16.500%
Effective Tax Rate (%) (F)	21.342%	21.342%	21.342%	21.342%	21.342%	21.342%	21.549%
Effective ROE Rate (%) (G)	20.977%	20.977%	20.977%	20.977%	20.977%	20.977%	21.032%
Return on Equity (H)= (G)*(D) (Pro-rata Basis)	**134.30**	**13.80**	**1480.81**	**692.69**	**6403.20**	**10520.94**	**10658.97**

Interest on Loan

42. 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."

43. The Interest on loan has been computed as under:

i) The opening gross normative loan as on COD has been arrived at in accordance with Regulation 26 of the 2014 Tariff Regulations;

ii) The weighted average rate of interest has been worked out on the basis of the actual loan portfolio of respective year applicable to the project;

iii) 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-capitalization of assets considered for the purpose of tariff.

iv) The interest on loan has been calculated on the normative average loan of the year by applying the weighted average rate of interest.

44. Accordingly, Interest on Loan has been worked out as under:

(Rs. in lakh)

	11.3.2016 to 30.3.2016	**31.3.2016 to 31.3.2016**	**1.4.2016 to 16.7.2016**	**17.7.2016 to 18.8.2016**	**19.8.2016 to 31.3.2017**	**2017-18**	**2018-19**
Gross opening loan (A)	27338.18	56187.78	56187.78	85221.96	114297.15	116787.49	117267.62
Cumulative repayment of loan up to previous year (B)	0.00	54.88	60.51	665.08	946.40	3546.15	7814.78
Net Loan Opening C= (A-B)	27338.18	56132.90	56127.27	84556.88	113350.74	113241.35	109452.84

	11.3.2016 to 30.3.2016	31.3.2016 to 31.3.2016	1.4.2016 to 16.7.2016	17.7.2016 to 18.8.2016	19.8.2016 to 31.3.2017	2017-18	2018-19
Addition due to additional capital expenditure (D)	0.00	0.00	0.00	0.00	2490.35	480.12	1970.41
Repayment of loan during the year (E)	54.88	5.64	604.57	281.32	2599.75	4272.91	4320.23
Less: Repayment adjustment on account of de-capitalization (F)	0.00	0.00	0.00	0.00	0.01	4.28	7.87
Net Repayment of loan during the year (G=E-F)	54.88	5.64	604.57	281.32	2599.74	4268.63	4312.36
Net Loan Closing (H= C+D-G)	27283.30	56127.27	55522.70	84275.56	113241.35	109452.84	107110.90
Average Loan (I= (C+H)/2)	27310.74	56130.09	55824.98	84416.22	113296.05	111347.09	108281.87
Weighted Average Rate of Interest of loan (J)	8.81%	9.24%	9.23%	8.59%	8.60%	8.34%	7.74%
Interest on Loan (K= I*J)	**131.48**	**14.17**	**1510.50**	**655.60**	**6006.24**	**9286.35**	**8381.02**

Depreciation

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

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

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

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

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

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

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

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

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

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets.

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

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

46. The Petitioner has claimed uniform spreading of depreciation over the useful life of project during the period 11.3.2016 (COD of Unit 1) to 31.3.2019. Accordingly, in line with order dated 24.1.2021, depreciation has been computed as under:

(Rs. in lakh)

	11.3.2016 to 30.3.2016	**31.3.2016 to 31.3.2016**	**1.4.2016 to 16.7.2016**	**17.7.2016 to 18.8.2016**	**19.8.2016 to 31.3.2017**	**2017-18**	**2018-19**
Opening Gross block (A)	39054.54	80268.26	80268.26	121745.66	163281.64	166839.28	167525.17
Net Additional capital expenditure during 2014-19 (B)	0.00	0.00	0.00	0.00	3557.64	685.89	2814.87
Closing gross block (C=A+B)	39054.54	80268.26	80268.26	121745.66	166839.28	167525.17	170340.04
Average gross block (D)=(A+C)/2	39054.54	80268.26	80268.26	121745.66	165060.46	167182.22	168932.60
Value of Free Hold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciable Value (E= (D-Land value) *90%))	35149.09	72241.43	72241.43	109571.09	148554.41	150464.00	152039.34
Remaining Depreciable Value at the beginning of the year (F=E-Cum Dep at 'L' at the end of previous year)	35149.09	72186.56	72180.92	108906.01	147608.01	146917.85	144224.57
Rate of Depreciation (G)	2.57%	2.57%	2.57%	2.57%	2.57%	2.57%	2.57%
Balance useful Life (H)	35.00	35.00	35.00	35.00	35.00	34.38	33.38

	11.3.2016 to 30.3.2016	31.3.2016 to 31.3.2016	1.4.2016 to 16.7.2016	17.7.2016 to 18.8.2016	19.8.2016 to 31.3.2017	2017-18	2018-19
Depreciation (I=F/H) (Pro-rated)	**54.88**	**5.64**	**604.57**	**281.32**	**2599.75**	**4272.91**	**4320.23**
Cumulative Depreciation at the end of the year (J=I+ Cum Dep at 'L' at the end of previous year)	54.88	60.51	665.08	946.40	3546.15	7819.06	12135.00
Less: Depreciation adjustment on account of de-capitalization (K)	0.00	0.00	0.00	0.00	0.01	4.28	7.87
Cumulative Depreciation at the end of the year (L)	**54.88**	**60.51**	**665.08**	**946.40**	**3546.15**	**7814.78**	**12127.13**

Operation & Maintenance Expenses

47. Regulation 29(3)(d) of the 2014 Tariff Regulations, provides as under:

> *"29. ………*
> *(d) In case of the hydro generating stations declared under commercial operation on or after 1.4.2014, operation and maintenance expenses shall be fixed at 4% and 2.50% of the original project cost (excluding cost of rehabilitation & resettlement works) for first year of commercial operation for stations less than 200 MW projects and for stations more than 200 MW respectively and shall be subject to annual escalation of 6.64% per annum for the subsequent year."*

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

(Rs. in lakh)

	11.3.2016 to 30.3.2016 (pro rata)	31.3.2016 (pro rata)	1.4.2016 to 16.7.2016 (pro rata)	17.7.2016 to 18.8.2016 (pro rata)	19.8.2016 to 31.3.2017 (pro rata)	2017-18	2018-19
	01 units	02 units	02 units	03 units	04 units	04 units	04 units
O&M Expenses (annualized)	1795.61	3591.22	3591.22	5386.82	7182.43	7659.35	8167.93
O&M Expenses (Pro-rata)	**98.12**	**9.81**	**1052.77**	**487.03**	**4427.53**	**7659.35**	**8167.93**

49. The COD of the generating Station is 19.8.2016 and cut-off date is 31.3.2019. The capital expenditure allowed, as on cut-off date of the generating station (31.3.2019) allowed by the Commission is Rs.170340.04 lakh. With regard to Rehabilitation and Resettlement (R&R) expenses, Commission has calculated O&M expenses considering the R&R cost of Rs.522.45 lakh, in order dated 24.1.2021. However, the Petitioner in this Petition in Form 5E(i) has submitted R&R cost of

Rs.95.71 lakh, up to the cut-off date i.e. 31.3.2019 and has claimed revised O&M expenses. Since, revised R&R cost of Rs. 95.71 lakh is duly certified by the auditor, the same is considered for the purpose of O&M calculation. Accordingly, O&M expenses for the period 2016-19 (11.3.2016 to 31.3.2019) has been computed as under:

(Rs. in lakh)

	11.3.2016 to 30.3.2016	**31.3.2016**	**1.4.2016 to 16.7.2016**	**17.7.2016 to 18.8.2016**	**19.8.2016 to 31.3.2017**	**2017-18**	**2018-19**
Annualized O & M for the units/station @4% for first year of COD & 6.64% for subsequent year	1702.44	3404.89	3404.89	5107.33	6809.77		
No. of days	20	1	107	33	225		
O&M Expenses (Pro-rated)	**93.03**	**9.30**	**998.14**	**461.76**	**4197.81**	**7261.94**	**7744.14**

<u>Additional O&M Expenses</u>

Impact of wage revision

50. The Petitioner has submitted that it has filed Petition No. 230/MP/2019 claiming the recovery of impact of wage revision of its employees, deputed employees of KV staff/ DAV and Central Industrial Security Force (CISF) in respect of this generating station for the period from 1.1.2016 to 31.3.2019. It is noticed that the Commission vide its order dated 30.12.2022 in Petition No. 230/MP/2019 had disposed of the prayers of the Petitioner in the said petition. Accordingly, the claims of the Petitioner, under this head, in this petition, has not been considered and will be guided by our decision in the said order dated 30.12.2022.

Goods & Services Tax

51. The Petitioner, has also claimed reimbursement of additional tax paid due to implementation of GST, in respect of generating station, as additional O&M expenses and for this purpose, it has requested for relaxation of the provisions of Regulation 29(3) in exercise of the powers vested under Regulation 54 and Regulation 55 of the

2014 Tariff Regulations. Further, it is submitted that the implementation of GST is a "Change in law" event and the impact of the same should be passed-through in tariff. As such, the tax paid in O&M expenditure of plants (service portion) is claimed over and above the O&M expenses of the respective power stations. The Petitioner has submitted that it had filed Petition No. 133/MP/2019, which was disposed of by the Commission vide its order dated 22.8.2019, granting liberty to the Petitioner to raise the claim for reimbursement of additional tax on O&M expenses due to implementation of GST Act, 2017 along with the truing up petition for the period 2014-19. The additional impact of GST in 2017-18 (1.7.2017 to 31.3.2018) and 2018-19 as submitted by the Petitioner, duly certified by statutory auditors, are as under:

(Rs. in lakh)

Additional Impact of GST on O&M Expenses			
2017-18	**2018-19 (1.4.2018 to 31.12.2018)**	**2018-19 (1.1.2019 to 31.3.2019)**	**Total**
3415212	5770460	2501950	11687622

52. The Respondent has submitted that under 2014 Tariff Regulations, the variation in taxes and duties are taken care of under the normative O&M expenses allowed and any change in taxes is not admissible separately. Normative O&M expenses under regulation 29(4)(d) provides as under:

> *(d) In case of the hydro generating stations declared under commercial operation on or after 1.4.2014, operation and maintenance expenses shall be fixed at 4% and 2.50% of the original project cost (excluding cost of rehabilitation & resettlement works) for first year of commercial operation for stations less than 200 MW projects and for stations more than 200 MW respectively and shall be subject to annual escalation of 6.64% per annum for the subsequent year.*

53. The Respondent has further stated that the escalation rates considered in the normative O&M expenses is only after consideration of the variations, which also takes care of such variation in taxes. It has also stated that in case of reduction of taxes or duties, the Petitioner is not required to reimburse any taxes in tariff. Therefore, for any increase in taxes and duties, the Petitioner is not entitled to claim any additional

expenses and therefore additional O&M expenses on account of GST are not admissible separately.

54. The matter has 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) to 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..."*

55. Further, the escalation rates considered in the O&M expense norms under the 2014 Tariff Regulations is only after accounting for the variations during the past five years of the 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 allow the prayer for grant of additional O&M expenses towards payment of GST.

Interest on Working Capital

56. Clause (3) of Regulation 28 of the 2014 Tariff Regulations provides as under:

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

57. Since Units-I and II of the generating station has been commissioned during the year 2015-16 (i.e. on 11.3.2016 and 31.3.2016 respectively), the rate of interest in respect of these two units have been considered as 13.50% i.e. SBI base rate as on

1.4.2015 plus 350 points. In respect of the Units-III and IV which have been commissioned during the year 2016-17 (i.e. on 17.7.2016 and 19.8.2016 respectively), the rate of interest for these two units have been considered as 12.80% i.e. SBI base rate as on 1.4.2016 plus 350 points. Accordingly, in terms of the above regulations, interest on working capital is worked out as under:

(Rs. in lakh)

	11.3.2016 to 30.3.2016	31.3.2016 to 31.3.2016	1.4.2016 to 16.7.2016	17.7.2016 to 18.8.2016	19.8.2016 to 31.3.2017	2017-18	2018-19
Working capital for Maintenance Spares (15% of operation and maintenance expense)	13.95	1.40	149.72	69.26	629.67	1089.29	1161.62
Working capital for O&M Expenses (one month of O&M Expenses)	7.75	0.78	83.18	38.48	349.82	605.16	645.34
Working capital for Receivables (two months of fixed cost)	71.03	7.37	788.66	358.51	3292.30	5374.49	5336.45
Total working capital	92.74	9.54	1021.56	466.25	4271.79	7068.95	7143.42
Rate of Working Capital (%)	13.50%	13.50%	13.50%	12.80%	12.80%	12.80%	12.80%
Interest on Working Capital	**12.52**	**1.29**	**137.91**	**59.68**	**546.79**	**904.83**	**914.36**

Annual Fixed Charges for the period 2014-19

58. Based on the above, the annual fixed charges approved for the generating station for the period 2014-19 (11.3.2016 to 31.3.2019), is summarized as under:

(Rs. in lakh)

	11.3.2016 to 30.3.2016	31.3.2016 to 31.3.2016	1.4.2016 to 16.7.2016	17.7.2016 to 18.8.2016	19.8.2016 to 31.3.2017	2017-18	2018-19
Depreciation	54.88	5.64	604.57	281.32	2599.75	4272.91	4320.23
Interest on Loan	131.48	14.17	1510.50	655.60	6006.24	9286.35	8381.02
Return on Equity	134.30	13.80	1480.81	692.69	6403.20	10520.94	10658.97
Interest on Working Capital	12.52	1.29	137.91	59.68	546.79	904.83	914.36
O&M Expenses	93.03	9.30	998.14	461.76	4197.81	7261.94	7744.14
Total	**426.21**	**44.20**	**4731.94**	**2151.05**	**19753.79**	**32246.97**	**32018.71**

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.

59. The difference between the annual fixed charges recovered by the Petitioner in terms of order dated 24.1.2021 in Petition No. 354/GT/2018 and the annual fixed charges determined by this order, shall be adjusted in terms of the provisions of Regulation 8(13) of the 2014 Tariff Regulations.

Normative Annual Plant Availability Factor

60. The Petitioner has claimed Normative Annual Plant Availability Factor (NAPAF) of 85% as allowed by the Commission in order dated 24.1.2021.

61. It is noticed that the Petitioner has not submitted the actual PAF data as directed in order dated 8.11.2016 in Petition No. 107/GT/2016. However, considering the fact that the Commission in order dated 24.1.2021 has allowed NAPAF 85% for the period 19.8.2016 to 31.3.2019, we allow the same i.e. 85% for the purpose of recovery of fixed charges and not for incentive purposes. Incentive shall be allowed to the generating station on achieving actual PAF beyond 90%.

Design Energy

62. CEA vide letter 18.10.2017 has approved the Design Energy of 717.717 MU for the generating station. The same has been considered and the details as per month-wise are mentioned as under:

Month		**Design Energy (MUs)**
April	I	11.904
	II	11.486
	III	13.033
May	I	22.633
	II	15.027
	III	18.397
June	I	18.243
	II	21.939
	III	36.480
July	I	36.480
	II	36.480
	III	40.128

August	I	36.480
	II	34.824
	III	40.128
September	I	34.762
	II	36.480
	III	36.089
October	I	32.597
	II	27.333
	III	25.345
November	I	12.942
	II	11.820
	III	10.500
December	I	9.534
	II	9.162
	III	9.070
January	I	7.513
	II	7.145
	III	7.480
February	I	8.343
	II	8.051
	III	6.433
March	I	6.738
	II	7.319
	III	9.399
Total		**717.717**

DETERMINATION OF TARIFF FOR THE PERIOD 2019-21

63. In line with Regulation 9(2), 10(1) and 12 of the 2019 Tariff Regulations, the tariff petition is to be submitted for the period 2019-24 along with the truing up petition for the period 2014-19. The relevant extract of regulation 9(2) & 12 of 2019 Tariff Regulations is reproduced as under:

> ***"9 Application for determination of tariff***
> *…………..*
> *(2) In case of an existing generating station or unit thereof, or transmission system or element thereof, the application shall be made by the generating company or the transmission licensee, as the case may be, by 31.10.2019, based on admitted capital cost including additional capital expenditure already admitted and incurred up to 31.3.2019 (either based on actual or projected additional capital expenditure) and estimated additional capital expenditure for the respective years of the tariff period 2019-24 along with the true up petition for the period 2014-19 in accordance with the CERC (Terms and Conditions of Tariff) Regulations, 2014."*
>
> ***12 Truing up of tariff for the period 2014-19***

The tariff of the generating stations and the transmission systems for the period 2014-19 shall be trued up in accordance with the provisions of Regulation 8 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 along with the tariff petition for the period 2019-24. The capital cost admitted as on 31.3.2019 based on the truing up shall form the basis of the opening capital cost as on 1.4.2019 for the tariff determination for the period 2019-24."

64. As per Clause (2) of Regulation 9 of the 2019 Tariff Regulations, the tariff petition for the period 2019-24 should be filed, based on projected additional capital expenditure along with the truing up petition for the period 2014-19 by 31.10.2019. However, the tariff petition in respect of the generating station for the period 2014-19 was pending for disposal with the Commission as on the above deadline and accordingly, the Petitioner was not in a position to finalize truing up petition for the period 2014-19 and tariff petition for the period 2019-24. The Commission vide its order dated 28.10.2019 in Petition No 331/MP/2019 (in exercise of its power under Regulation 76 of 2019 Tariff Regulations) has permitted the generating companies / transmission licensees where tariff orders for the generating units/ transmission assets for the period 2014-19 were not yet issued, to file tariff petition for those generating units/ transmission assets for the period 2019-24 along with the truing up petition for the period 2014-19 within three months of issuance of final tariff order for the period 2014-19.

65. Since the tariff order in respect of the generating station for the period 2014-19 was issued by the Commission on 24.1.2021, the Petitioner was supposed to submit the tariff petition (2014-19 truing up & Petition for the period 2019-24) by 23.4.2021, in line with the above direction. However, due to Covid-19 pandemic the Commission granted extension of time upto 23.6.2021, for filing of truing up (2014-19) and tariff petition (2019-24), on the request of the Petitioner. Further, due to eruption of second wave of Covid-19 pandemic, the Petitioner vide its IA no. 55/IA/2021 in 7/SM/2020

requested for extension of time upto 30.9.2021, which was allowed vide order dated 9.7.2021.

66. The Petitioner has submitted that it has signed PPA on 2.9.2021 with the Respondent from 11.3.2021 to 31.3.2021 on tariff as determined by the Commission and from 1.4.2021 for next 10 years with modified tariff which is in deviation from the norms and a separate Petition under Regulation 66 (Deviation from Ceiling Tariff) and Regulation 77 (Power to Remove Difficulty) of 2019 Tariff Regulations, is being submitted separately for approval of modified tariff in deviation from CERC norms w.e.f. 1.4.2021 to 31.3.2031. Accordingly, the Petitioner has further submitted that the present tariff petition is being submitted for finalization of tariff for 2019-20 and 2020-21 only, by relaxing the provisions of Regulation 9(2) of 2019 Tariff Regulations under Regulation 76 (Power to relax) of 2019 Tariff Regulations.

67. In view of the above, the Petitioner has filed the present Petition for determination of tariff of the generating station for 2019-20 and 2020-21, in terms of the provisions of the 2019 Tariff Regulations. The annual fixed charges claimed by the Petitioner for 2019-20 and 2020-21 are as under:

Annual Fixed Charges claimed

(Rs. in lakh)

	2019-20	**2020-21**
Depreciation	9099.20	9158.21
Interest on Loan	9054.13	8369.49
Return on Equity	10783.64	10860.81
Interest on Working Capital	898.07	911.41
O&M Expenses	9661.68	10122.55
Total	**39496.72**	**39422.46**

Capital Cost

68. Clause (1) of Regulation 19 of the 2019 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. However, capital cost for an existing project is governed as per clause (3) of Regulation 19 of the 2019 Tariff Regulations, which provides as under:

"The Capital cost of an existing project shall include the following:

(a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;

(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;

(c) Capital expenditure on account of renovation and modernization as admitted by this Commission in accordance with these regulations;

(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and

(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries…."

69. The Petitioner vide Form-1(i) of the petition, has claimed capital cost as follows:

(Rs. in lakh)

		2019-20	**2020-21**
A	Opening Capital Cost	179656.53	180812.21
B	Addition during the year / Period	872.05	956.59
C	De-capitalisation during the year/period	52.23	166.61
D	Discharges during the year	335.86	625.56
E	Closing Capital Cost (A+B-C+D)	180812.21	182227.75

70. The Commission, in this order, has allowed the closing capital cost of Rs. 170340.04 lakh, as on 31.3.2019. Accordingly, in terms of Regulation 19 of the 2019 Tariff Regulations, the capital cost of Rs. 170340.04 lakh, as on 31.3.2019, has been considered as the opening capital cost as on 1.4.2019, for the purpose of determination of tariff for 2019-20 and 2020-21.

Additional Capital Expenditure

71. Since the cut-off date of the project has elapsed, actual additional capital expenditure already incurred for 2019-20 and 2020-21 is being claimed under the

provisions of Regulation 25 and 26 of the 2019 Tariff Regulations which provides as under:

"25. Additional Capitalization within the original scope and after the cut-off date:

(1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:

(a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;

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

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

(d) Liability for works executed prior to the cut-off date;

(e) Force Majeure events;

(f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and

(g) Raising of ash dyke as a part of ash disposal system.

(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

(a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;

(b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;

(c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and

(d) The replacement of such asset or equipment has otherwise been allowed by the Commission.

26. Additional Capitalization beyond the original scope

(1) 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 beyond the original scope, may be admitted by the Commission, subject to prudence check:

(a) Liabilities to meet award of arbitration or for compliance of order or directions of any statutory authority, or order or decree of any court of law;

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

(c) Force Majeure events;

(d) Need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security;

(e) Deferred works relating to ash pond or ash handling system in additional to the original scope of work, on case to case basis:

Provided also that if any expenditure has been claimed under Renovation and Modernization (R&M) or repairs and maintenance under O&M expenses, the same shall not be claimed under this Regulation;

(f) Usage of water from sewage treatment plant in thermal generating station.

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

72. The Petitioner has submitted that the cut-off date of the project is 31.3.2019. However, due to unavoidable circumstances which were beyond the control of the Petitioner, balance work under original scope has been executed and considered in additional capital expenditure in 2019-20 and 2020-21. It has further submitted that the additional capital expenditure amounts include release of pay anomaly arrear/wage revision to below board level executives in line with the decision of Union Cabinet conveyed by Ministry of Power vide its letter no. F. No. 2/1/2014–H. I(Pt) dated 29.1.2019 and Petitioner office order no. 16/2009 dated 19.3.2019. This has been allocated proportionately to the respective major packages of Dam, Power House, HM and E&M of the power station. The Petitioner has also stated that the payment of arrear amount to below Board level executives of the Petitioner w.e.f. 1.1.2007 to COD of the power station has been paid during 2018-19 and 2019-20 and the arrear amount for 2018-19 has been claimed in the truing up petition for 2014-19 in Part-A & for 2019-20, the impact of arrear is claimed under 9A in the present Petition 2019-21 (Part B). Further, the Petitioner has requested to allow the additional capital expenditure on account of safety and security of the plant for 2019-20 and 2020-21 which is claimed under Regulation 26 of 2019 Tariff Regulations.

73. With regard to the additional capital expenditure claimed during the period 2019-24, the Petitioner has submitted that it could not execute the works allowed by the Commission up to the cut-off date. As such, the balance works/ supplies are in progress and the same is anticipated to be completed/ executed by 31.3.2024. The

Petitioner has, accordingly, prayed that the Commission may allow such additional capitalization which were already allowed up to cut-off date, but executed beyond the cut-off date till 31.3.2019 and, thereafter, up to 31.3.2024, during the period 2019-24.

74. We have examined the submissions of the Petitioner. It is noted that there is no provision in the 2014 Tariff Regulations for extension of cut-off date of the generating station. However, keeping in view that the works/ items could not be completed by the Petitioner on account of extreme conditions, tough location of the generating station and non-availability of resources, we are inclined to allow the additional capital expenditure of works/ items after cut-off date, which are within the original scope of work (but could not be executed/ completed), on prudence check, subject to the balance limit available for capitalization of assets/ works under the original scope.

75. It is also observed that the Petitioner has claimed the additional capital expenditure in respect of assets/ works within the original scope/RCE of the project under Regulation 25(1) of the 2019 Tariff Regulations and has not provided sub-clause. Though the claim of the Petitioner does not fall under Regulation 25(1) of the 2019 Tariff Regulations, keeping in view, our observations and considering the fact that the additional expenditure claimed is within the balance available limit of the completion cost of Rs.1622.69 lakh, as on 1.4.2019 (as per order dated 24.1.2021). Accordingly, the additional capital expenditure claimed by the Petitioner in respect of the assets/ works within the original scope of work are being dealt in following paragraphs.

76. The details of net additional capital expenditure for 2019-20 and 2020-21, claimed by the Petitioner is as under:

(Rs. in lakh)

S. No.		2019-20	2020-21
A.	Addition during the year / period	872.05	956.59
B.	Less: De-capitalisation during the year / period	52.23	166.61
C.	Add: Discharges during the year / period	335.86	625.56
D.	**Net Addition (A-B+C)**	**1155.68**	**1415.54**

Additions during 2019-20 and 2020-21

77. The Petitioner has claimed actual additional capital expenditure (additions), excluding discharge of liabilities, from 2019-20 to 2020-21 as under:

(Rs. in lakh)

S. No.		2019-20	2020-21
A.	Assets/works within the original scope of work of project (a)	352.65	207.62
B.	Assets/works other than within the original scope of work of project (b)	519.39	748.97
C.	Total (A)+(B)	**872.05**	**956.59**

(A) Assets/works under the original scope of work (2019-20 and 2020-21).

78. The Petitioner has claimed additional capital expenditure of Rs.352.65 lakh for 2019-20 and Rs.207.62 lakh for 2020-21, in respect of assets/ works such as the protection works for slope of dam, cap of cement concrete cooling area, power house building, hydromechanical works-dams and barrages, hydromechanical works-tunnels and canals, hydromechanical works-tail race including draft tube gates, construction of deep tubewell, supply of 9kl water tanker with pump, electrically operated winch 10t & 20t with wire rope, motor, VFD and electrical accessories, ALSTOM MAKE numerical relay, Static Relays, Under-Voltage Relays, Tripping Relays & Bush Housings, Protection work near DG building at Power Station, Protection work for Firefighting Tank area, Circuit Breaker, Gate Valve & Lightening Arrestor etc.

79. The matter has been considered. It is observed that the Petitioner has claimed an amount of Rs. 66.86 lakhs due to Pay Analogy arrear/Wage revision for the period from 1.1.2007 to COD of the generating station. With regard to payment of arrear of

Rs. 66.68 lakhs, it is pertinent to mention that the Petitioner had filed Petition No. 343/MP/2019 for all of its generating stations pertaining to the claim for arrears of 4% increment to below Board level executives and the Commission had considered the prayer and disposed of the same vide its order dated 28.1.2023. Hence, the claims of the Petitioner herein, has not been considered in this order.

80. With regard to additional capital expenditure claimed in 2019-20 and 2020-21 other than above expenditure. It is observed that the Petitioner has claimed the additional capital expenditure in respect of assets/ works within the original scope of work of the project. Therefore, an amount of Rs. 285.79 lakh in 2019-20 and Rs. 207.62 lakh in 2020-21, is allowed.

(B) Assets/works beyond the original scope of work after the cut-off date (2019-20 and 2020-21).

81. With regard to claim under above head, it is noticed that the Petitioner has claimed additional capital expenditure of Rs.519.39 lakh in 2019-20 and Rs.748.97 lakh in 2020-21 under Regulation 26(1)(d) of 2019 Tariff Regulations, in respect of assets/ works such as construction of security post in the left / right bank of Dam, construction of CGI sheet shed, construction of parade ground for CISF, construction of barbed wire fencing near river Teesta, construction of approach road and foot path at right bank of TLDP, submersible dewatering pumps, heavy duty drilling machine, Hydraulic Jack, Static Relays, Construction of ladder near Power House area, thermal scanner, fogging machine, CCTV camera etc. & Minor assets.

82. The matter has been considered. It is noticed that the claim under Regulation 26(1)(d) of 2019 Tariff Regulations, has to be supported with document as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security. The Petitioner has submitted supporting

documents for some claims which pertain to construction of 5(Five) nos. security post for Rs. 18.70 lakh in 2019-20 and construction of shed and extension of kitchen for Rs. 7.95 lakh and automatic water level controller cum-indicator for Rs.24.56 lakh for 2020-21. However, no supporting documents have been furnished for other claims under Regulation 26(1)(d) of 2019 Tariff Regulations. Therefore, we allow only those claims for which document has been furnished by the Petitioner and further direct the Petitioner to submit the documents for other claims under regulation 26(1)(d) of 2019 Tariff Regulations, at the time of truing up. Accordingly, an amount of Rs. 18.70 lakh for 2019-20 and Rs. 32.51 lakh (Rs. 7.95 lakh + Rs.24.56 lakh) for 2020-21 is allowed in this order.

83. In view of the above, the total additional capital expenditure (additions) allowed under original scope and other than original scope of work for 2019-20 and 2020-21 is as under:

(Rs. in lakh)

	2019-20	**2020-21**
Net Additional capital expenditure allowed during the year/ period (within the original scope) (A)	285.79	207.62
Net Additional capital expenditure allowed during the year/ period (beyond the original scope) (B)	18.70	32.51
Total Amount allowed (c)=(A)+(B)	**304.49**	**240.12**

De-capitalization

84. The Petitioner has claimed the projected de-capitalization, as per Form 9B(i), as under:

(Rs. in lakh)

2019-20	**2020-21**
52.23	166.61

85. The above decapitalization claimed are for assets/works which are not in use or inter head adjustments. Accordingly, the decapitalization claimed is considered for the purpose of tariff in this order. This is subject to truing up.

Discharge of liabilities

86. The Petitioner has claimed the following discharge of liabilities:

(Rs. in lakh)

2019-20	2020-21
335.86	625.56

87. The un-discharged liabilities for 2019-20 and 2020-21, corresponding to the assets/works allowed, has been considered with their respective discharges made by the Petitioner on prudence check. The closing balance of un-discharged liabilities as on 31.3.2021 is Rs.2978.67 lakh, subject to truing-up. Accordingly, the discharge of liabilities allowed in 2019-20 and 2020-21 is as under:

(Rs. in lakh)

	2019-20	2020-21
Opening liabilities corresponding to allowed capital cost	1235.21	1193.37
Add: Liability additions corresponding to allowed capital cost (Form 9A)	294.02	1933.41
Less: Discharges of liabilities corresponding to allowed capital cost	335.86	148.11
Closing liabilities corresponding to allowed capital cost	1193.37	2978.67

Additional capital expenditure allowed (Net) for the period 2019-21

88. In view of above, the net additional capital expenditure allowed for 2019-20 and 2020-21 is as under:

(Rs. in lakh)

S. No.		2019-20	2020-21
A	Addition during the year / period	304.49	240.12
B	Less: De-capitalisation during the year / period	52.23	166.61
C	Add: Discharges during the year / period	335.86	148.11
D	**Net Additional capital expenditure allowed (A-B+C)**	**588.12**	**221.62**

Capital cost allowed for the period 2019-21

89. Accordingly, the capital; cost allowed for the generating station, is as under:

(Rs. in lakh)

	2019-20	2020-21
Opening Capital Cost	170340.04	170928.16
Net Additional capital expenditure allowed during the year/ period	588.12	221.62
Closing Capital Cost	**170928.16**	**171149.78**

Debt-Equity Ratio

90. Regulation 18 of the 2019 Tariff Regulations provides as under:

"18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. 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, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt:equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of a generating station or a transmission system including communication, system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30%shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 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."

91. In terms of the above regulations, the debt equity ratio is considered as 70:30, for the purpose of additional capitalization. De-capitalization of assets has been deducted from the corresponding loan as well as equity, taking into consideration the debt equity ratio, applied in the year in which it was capitalized. Accordingly, the details of debt-equity ratio in respect of the generating station as on 1.4.2019 and as on 31.3.2021, are as under:

(Rs. in lakh)

	Capital cost as on 1.4.2019		**Additional Capital Expenditure**		**Capital cost as on 31.3.2021**	
	Amount	**(%)**	**Amount**	**(%)**	**Amount**	**(%)**
Debt	119238.03	70.00%	566.82	70.00%	119804.85	70.00%
Equity	51102.01	30.00%	242.92	30.00%	51344.93	30.00%
Total	**170340.04**	**100.00%**	**809.74**	**100.00%**	**171149.78**	**100.00%**

Return on Equity

92. Regulations 30 and 31 of the 2019 tariff Regulations provide as under:

*"**30. Return on Equity***

(1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.

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

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

Provided further that:

i. In case of a new project, the rate of return on equity shall be reduced by 1.00% 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) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

iii. in case of a thermal generating station, with effect from 1.4.2020:

a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.

31. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations 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 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 paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:
Rate of pre-tax return on equity = Base rate / (1-t)
Where "t" is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.
Illustration-
(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess: Rate of return on equity = 15.50/(1-0.2155) = 19.758%
(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:
(a) Estimated Gross Income from generation or transmission business for 2019-20 is Rs. 1,000 Crore;
(b) Estimated Advance Tax for the year on above is Rs. 240 Crore;

(c) Effective Tax Rate for the year 2019-20 = Rs. 240 Crore/Rs. 1000 Crore = 24%;
(d) Rate of return on equity = 15.50/ (1-0.24) = 20.395%.
(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 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 customers, as the case may be, on year to year basis."

93. The Return on Equity (ROE) for the existing asset base and the additional capital expenditure allowed, in this order for asset/works within the original scope of work, has been calculated by grossing up the base RoE at MAT rate of 17.472% as submitted by the Petitioner. Further, based on the additional capital expenditure which are beyond the original scope excluding due to change in law and allowed in this order, has been calculated considering the weighted average rate of interest claimed by the Petitioner. Accordingly, ROE has been worked out and allowed as under:

ROE at Normal Rate:

(Rs. in lakh)

	2019-20	**2020-21**
Opening Equity (A)	51102.01	51272.84
Addition of Equity due to ACE (B)	170.83	56.73
Closing Equity (C) =(A)+(B)	51272.84	51329.57
Average Equity (D)=(A+C)/2	51187.42	51301.20
Base rate (%) (E)	16.500%	16.500%
Effective Tax rate (%) (F)	17.472%	17.472%
Effective ROE rate (%) (G) =E/(1-F)	19.993%	19.993%
Return on Equity (H)=(D)*(G)	10233.90	10256.65
Return on Equity at WAROI		
Opening Equity (A)	0.00	5.61
Addition of Equity due to ACE beyond scope of work (B)	5.61	9.75
Closing Equity (C)=(A)+(B)	5.61	15.36
Average Equity (D)=(A+C)/2	2.81	10.49
Base rate (%) (E)	8.32%	8.32%
Effective Tax rate (%) (F)	17.472%	17.472%
Effective ROE rate (%) (G) =E/(1-F)	10.08%	10.08%
Return on Equity (H)=(D)*(G)	0.28	1.06

Total ROE allowed:

(Rs. in lakh)

	2019-20	**2020-21**
Return on Equity at Normal Rate (A)	10233.90	10256.65
Return on Equity at WAROI (B)	0.28	1.06
Total Return on Equity allowed (C= A+B)	**10234.18**	**10257.71**

Interest on Loan

94. Regulation 32 of the 2019 Tariff Regulations provides as under:

"32. Interest on loan capital:

(1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2019-24 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 changes to the terms and conditions of the loans shall be reflected from the date of such re-financing."

95. Interest on Loan has been computed as under:

i) The gross normative loan amounting to Rs.119238.03 lakh, as on 31.3.2019, as considered in this order has been considered as the opening gross normative loan as on 1.4.2019;

ii) Cumulative repayment amounting to Rs.12127.13 lakh, as on 31.3.2019, as considered in this order has been considered as on 1.4.2019;

iii) Accordingly, the net normative opening loan as on 1.4.2019 works out to Rs.107110.90 lakh;

iv) Addition to normative loan on account of additional capital expenditure approved above have been considered;

v) The Petitioner has claimed interest on loan considering weighted average rate of interest (WAROI) of 8.32% in 2019-20 and 2020-21. The same has been considered for tariff.

vi) Depreciation allowed has been considered as repayment of normative loan during the respective year of the 2019-20 and 2020-21. Further, repayments have been adjusted for de-capitalization of assets considered for the purpose of tariff.

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

(Rs. in lakh)

	2019-20	2020-21
Gross opening loan (A)	119238.03	119649.71
Cumulative repayment of loan upto previous year (B)	12127.13	20736.63
Net Loan Opening (C=A-B)	107110.90	98913.08
Addition due to additional capital expenditure (D)	411.68	155.13
Repayment of loan during the year (E)	8614.53	8629.41
Less: Repayment adjustment on account of de-capitalization (F)	5.03	24.39
Net Repayment of loan during the year (G=E-F)	8609.50	8605.02
Net Loan Closing (H = C+D-G)	98913.08	90463.20
Average Loan (I= (C+H)/2)	103011.99	94688.14
Weighted Average Rate of Interest of loan (J)	8.32%	8.32%
Interest on Loan (K= I*J)	**8570.60**	**7878.05**

Depreciation

97. Regulation 33 of the 2019 Tariff Regulations provides as under:

"33. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. 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:

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 a 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 the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

Provided also 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 unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or 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-I to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2019 from the gross depreciable value of the assets.

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

(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."

98. Accordingly, the cumulative depreciation amounting to Rs.12127.13 lakh, as on 31.3.2019, has been considered for the purpose of tariff. The COD of the generating station is 19.8.2016. Therefore, the generating station has not completed 12 years of operation, as on 1.4.2019. Further, in terms of 2014 Tariff Regulations, the useful life of a hydro generating station was 35 years. However, the 2019 Tariff Regulations stipulates that the useful life of a hydro generating station is 40 years. Accordingly, the balance useful life of the generating station as on 1.4.2019 has been considered as 37.38 years in line with the 2019 Tariff Regulations. The weighted average rate of depreciation as claimed by the petitioner has been allowed subject to truing-up. Accordingly, depreciation has been computed as under:

(Rs. in lakh)

	2019-20	**2020-21**
Opening Gross block (A)	170340.04	170928.16
Net Additional capital expenditure during 2019-24 (B)	588.12	221.62
Closing gross block (C=A+B)	170928.16	171149.78
Average gross block (D)=(A+C)/2	170634.10	171038.97
Land Value	0.00	0.00
Depreciable Value [E=(D-Land Value) *90%)]	153570.69	153935.07

	2019-20	2020-21
Remaining Depreciable Value at the beginning of the year (F=E-Cum Dep at 'L' at the end of previous year)	141443.56	133198.44
Rate of Depreciation (G)	5.049%	5.045%
Balance useful Life (H)	37.38	36.38
Depreciation (I=D*G)	**8614.53**	**8629.41**
Cumulative Depreciation at the end of the year (J=I+ Cum Dep at 'L' at the end of previous year)	20741.66	29366.04
Adjustment on account of decapitalization (K)	5.03	24.39
Cumulative Depreciation at the end of the year (L=J-K)	20736.63	29341.65

Operation & Maintenance Expenses

99. The Petitioner has claimed the following additional O&M Expenses:

(Rs. in lakh)

	2019-20	2020-21
O&M Expenses calculated as per regulation 35(2)(c) of 2019 Tariff Regulations	8557.54	8965.73
Impact of Wage Revision excluding impact of CISF expenses.	1017.48	1066.01
Impact of GST	86.67	90.80
Total O&M Expenses	**9661.68**	**10122.55**

100. Regulation 35(2)(c) of the 2019 Tariff Regulations provides as under:

> *"(c) In case of hydro generating stations which have not completed a period of three years as on 1.4.2019, operation and maintenance expenses for 2019-20 shall be worked out by applying escalation rate of 4.77% on the applicable operation and maintenance expenses as on 31.3.2019. The operation and maintenance expenses for subsequent years of the tariff period shall be worked out by applying escalation rate of 4.77% per annum."*

101. The generating station has not completed a period of three years, as on 1.4.2019. The O&M expenses for 2019-20 and 2020-21 has to be allowed applying escalation rate of 4.77% on the applicable operation and maintenance expenses as on 31.3.2019. The O&M expenses allowed for 2018-19 (31.3.2019) is Rs.7744.14 lakh, as such, in terms of above Regulation, the O&M expenses for 2019-20 and 2020-21 is allowed as under:

(Rs. in lakh)

	2019-20	2020-21
O&M Expenses calculated as per Regulation 35(2)(c) of 2019 Tariff Regulations	8113.53	8500.55

Additional O&M Expenses

102. The Petitioner has claimed additional O&M expenses on account of the impact of wage/ pay revision and GST as under:

(Rs. in lakh)

	2019-20	2020-21
Impact of Wage Revision excluding Impact of CISF expenses.	1017.48	1066.01
Impact of GST	86.67	90.80

Impact of wage revision

103. With regard to impact of wage revision, Regulation 35(2)(a) of the 2019 Tariff Regulations provides '*The impact in respect of revision of minimum wage, wage revision and GST, if any, will be considered at the time of determination of tariff*'.

104. The Petitioner has claimed an amount of Rs. 1017.48 lakh in 2019-20 and Rs. 1066.01 lakh in 2020-21 as additional O&M expenses due to pay revision of the Petitioners' staff, based on impact of pay revision of Petitioners staff during 2018-19 considering additional O&M Expenses of Rs. 971.15 lakh due to 7th Pay Commission. In this regard, it is pertinent to mention that in Petition No. 230/MP/2019 filed by the Petitioner seeking recovery of the additional O&M expenses for the generating station due to impact of wage/ pay revision for the period 2014-19, the Commission vide its order dated 30.12.2022 had allowed an amount of Rs. 971.15 lakh as impact of wage revision in 2018-19. As such, the impact of wage revision in 2019-20 (after escalating @ 4.77% the above amount allowed in 2018-19) works out to Rs. 1017.48 lakh. Accordingly, the claim of the Petitioner for Rs 1017.48 lakh in 2019-20 is considered and is thereafter escalated @4.77% per annum during the relevant years of the period 2019-24 and allowed as additional O&M expenses due to pay revision of the Petitioner's staff as under:

(Rs. in lakh)

2019-20	2020-21
1017.48	1066.01

Goods & Service Tax

105. The Petitioner has claimed impact of GST for 2019-20 and 2020-21 on the basis of the actual impact of GST in 2018-19. The Petitioner has submitted the total GST amount of Rs. 116.88 lakh for the period from 1.7.2017 to 31.3.2019, based on actual audited accounts for 21 months (Rs. 34.15 lakh in 2017-18 and Rs.82.72 lakh in 2018-19). On scrutiny of the details, it is noticed that the claim of Petitioner also includes impact of GST on security expenses which is summarized as under:

(Rs. in lakh)

S. No.	Year	Security Services	Operational Services	Total
1	2017-18	16.59	17.56	34.15
2	2018-19 (till Dec.18)	16.76	40.94	57.70
3	2018-19 (1.1.19 to 31.03.19)	7.32	17.70	25.02
	Total	**40.67**	**76.20**	**116.88**

106. As per Regulation 35(2)(d) of the 2019 Tariff Regulations, security expenses shall be allowed separately after prudence check. Hence, excluding the security expenses, this same works out as Rs. 76.20 lakh as shown in the table above, for the period from 1.7.2017 to 31.3.2019. This has been normalized and an amount of Rs. 45.62 lakh has been worked out for 2019-20 (after escalating above amount of Rs. 43.54 lakh @ 4.77%). Accordingly, the base value of 2019-20 has been escalated @4.77% and GST impact has been worked out and allowed for the period 2020-21, as per Regulation 35(2)(a) of the 2019 Tariff Regulations is as under:

(Rs. in lakh)

2019-20	2020-21
45.62	47.80

107. Accordingly, the O&M expenses allowed for the generating station are as under:

(Rs. in lakh)

	2019-20	2020-21
Normative O&M expenses (a)	8113.53	8500.55
Impact of wage Revision (b)	1017.48	1066.01

	2019-20	2020-21
GST (c)	45.62	47.80
Total expenses excluding Security expenses (d=a+b+c)	**9176.63**	**9614.35**

Interest on Working Capital

108. Sub-section (c) of clause (1) of Regulation 34 of the 2019 Tariff Regulations provides as under:

> *"34. Interest on Working Capital: (1) The working capital shall cover*
>
> *(c) For Hydro generating station (Including Pumped Storage Hydro Generating Station) and transmission system:*
>
> *(i) Receivables equivalent to 45 days of annual fixed cost;*
>
> *(ii) Maintenance spares @ 15% of operation and maintenance expense including security expenses; and*
>
> *(iii) Operation and maintenance expenses including security expenses for one month"*

109. Regulation 34(3) of the 2019 Tariff Regulations provides as under:

> *"34(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later." Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24."*

Receivables for Working Capital

110. The Receivable component of working capital has been worked out based on 45 days of fixed cost as under:

(Rs. in lakh)

2019-20	2020-21
4599.37	4579.78

Maintenance Spares for Working Capital

111. Maintenance spares @15% of O&M expenses are worked out and allowed as under:

(Rs. in lakh)

2019-20	2020-21
1376.49	1442.15

O&M Expenses for Working Capital

112. O&M expenses for 1 month for the purpose of working capital are as under:

		(Rs. in lakh)
	2019-20	**2020-21**
	764.72	801.20

Rate of Interest on Working Capital

113. In accordance with Regulation 34(3) of the 2019 Tariff Regulations, the rate of interest on working capital considered on projection basis, for the period 2019-20 is 12.05% (i.e., 1-year SBI MCLR of 8.55% as on 1.4.2019 + 350 basis points). As the tariff of the generating station for 2020-21, SBI MCLR as on 1.4.2020 (7.75%) is also available which is lower in comparison to the rates as on 1.4.2019 (8.55%). Since the rate of interest on working capital is subject to revision at the time of truing-up of tariff, based on the bank rate as on 1st April of each financial year, we find it prudent to allow the rate of interest as on 1.4.2020 for 2020-21. Accordingly, the rate of interest for the year 2019-20 @ 12.05% and for 2020-21 @11.25% has been considered (i.e., 1-year SBI MCLR of 7.75% as on 1.4.2020 + 350 basis points). Accordingly, Interest on working capital is allowed as under:

(Rs. in lakh)

	2019-20	**2020-21**
Working capital for Maintenance Spares	1376.49	1442.15
Working capital for O&M expenses (one month)	764.72	801.20
Working capital for Receivables	4599.37	4579.78
Total Working capital	6740.58	6823.13
Rate of interest (%)	12.05%	11.25%
Interest on Working capital	**812.24**	**767.60**

Annual Fixed Charges for the period 2019-21

114. Based on the above, the annual fixed charges approved for the generating station for 2019-20 and 2020-21, are summarized as under:

(Rs. in lakh)

	2019-20	**2020-21**
Depreciation	8614.53	8629.41
Interest on loan	8570.60	7878.05
Return on Equity	10234.18	10257.71
Interest on Working capital	812.24	767.60

O&M Expenses	8113.53	8500.55
Additional O&M expenses	1063.10	1113.81
Total	**37408.18**	**37147.12**

Note: (1) All figures are on annualized basis. (2) All figures under each head have been rounded. The figure in total column in each year is also rounded. As such the sum of individual items may not be equal to the arithmetic total of the column.

115. The annual fixed charges allowed as above, are subject to truing-up, in terms of Regulation 13 of the 2019 Tariff Regulations.

Normative Annual Plant Availability Factor

116. The Petitioner has claimed Normative Annual Plant Availability Factor (NAPAF) of 85% for 2019-20 and 2020-21 as allowed by the Commission in order dated 24.1.2021. In this regard it is to mention that Commission has provided station wise NAPAF for hydro stations based on actual PAF for past years of operations. Since, the COD of the generating station is 19.8.2016, NAPAF for the generating station has not been provided in 2019 Tariff Regulation.

117. The matter has been examined. Since, actual data for the period 2017-18 to till date is not available in the petition, we consider the NAPAF of 85% as allowed for the period 2014-19. However, the same is subject to review based on scrutiny of the actual operation data for the period 2016-17 to 2020-21. The above NAPAF is 85% is allowed for the purpose of recovery of fixed charges and not for incentive purposes. Incentive shall be allowed to the generating station on achieving actual PAF beyond 90%.

Design Energy

118. The Commission in this order had considered the Design Energy (DE) of 717.717 million units for the period 2014-19 in respect of this generating station. The same has been allowed for the period 2019-24 as per month-wise details as under:

Month		Design Energy (MUs)
April	I	11.904
	II	11.486

	III	13.033
May	I	22.633
	II	15.027
	III	18.397
June	I	18.243
	II	21.939
	III	36.480
July	I	36.480
	II	36.480
	III	40.128
August	I	36.480
	II	34.824
	III	40.128
September	I	34.762
	II	36.480
	III	36.089
October	I	32.597
	II	27.333
	III	25.345
November	I	12.942
	II	11.820
	III	10.500
December	I	9.534
	II	9.162
	III	9.070
January	I	7.513
	II	7.145
	III	7.480
February	I	8.343
	II	8.051
	III	6.433
March	I	6.738
	II	7.319
	III	9.399
Total		**717.717**

Application Fee and Publication Expenses

119. The Petitioner has sought the reimbursement of fees paid by it for filing the tariff petition and for publication expenses in respect of the same. Accordingly, in terms of the Regulation 70(1) of the 2019 Tariff Regulations, the Petitioner shall be entitled for the reimbursement of filing fees and publication expenses in connection with the present petition, directly from the beneficiaries, on pro-rata basis.

120. Similarly, RLDC fees & charges paid by the Petitioner in terms of the Central Electricity Regulatory Commission (Fees and Charges of Regional Load Dispatch Centre and other related matters) Regulations, 2015, shall be recovered from the beneficiaries. In addition, the Petitioner is entitled recovery of statutory taxes, levies, duties, cess etc. levied by the statutory authorities in accordance with the 2019 Tariff Regulations.

121. Petition No. 223/GT/2021 is disposed of in terms of the above.

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