CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 575/GT/2020

Coram:

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

Date of Order: 29th April 2023

In the matter of

Petition for truing up tariff for the period 2014-19 and for determination of tariff for the period 2019-24 in respect of Raghunathpur Thermal Power Station (RTPS) Phase-I Units-1 and 2 (1200 MW)

And

In the matter of

Damodar Valley Corporation,
DVC Towers, VIP Road, Kolkata-700054 **...Petitioner**

Vs

1. Haryana Power Purchase Centre,
   Shakti Bhawan, Sector-6,
   Panchkula-134109

2. Punjab State Power Corporation Limited,
   Interstate Billing, Shed No. TI-A,
   Patiala- 147001

3. Kerala State Electricity Board,
   8th Floor, Vydyuthi Bhawan,
   Thiruvananthapuram–695004

4. West Bengal State Electricity Distribution Company Limited,
   Block 'DJ' Sector-11, Salt Lake City,
   Kolkata-700091 **...Respondents**

5. Damodar Valley Power Consumers Association,
   9, A J C Bose Road, 4th Floor, Kolkata – 700017 ....**Objector**

Parties Present:

Ms. Anushree Bardhan, Advocate, DVC
Ms. Srishti Khindaria, Advocate, DVC
Shri Manik Rakshi, DVC
Shri Sandip Pal, DVC
Shri Samit Mandal, DVC
Shri Arnab Kr. Sinha, DVC
Ms. Suparna Srivastava, Advocate, PSPCL
Shri Tushar Mathur, Advocate, PSPCL
Ms. Soumya Singh, Advocate, PSPCL
Shri Rajiv Yadav, Advocate, DVPCA

ORDER

This petition has been filed by the Petitioner, Damodar Valley Corporation, for truing-up of tariff of Raghunathpur TPS, Units-I to II (2 x 600 MW) (in short "the generating station") for the period 2016-19, 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 Petitioner is a statutory body established by the Central Government under the Damodar Valley Corporation Act, 1948 (hereinafter referred to as the 'DVC Act') for the development of the Damodar Valley, with three participating Governments, namely, the Central Government, the Government of West Bengal and the Government of Jharkhand. The generating station is a non-pit head station, with a total capacity of 1200 MW, comprising of two units of 600 MW each. The date of commercial operation of the units of the generating station are as under:

	Actual COD
Unit – I	31.3.2016
Unit – II	31.3.2016

Background

3. The Commission vide its order dated 28.9.2017 in Petition No. 224/GT/2015 had approved the capital cost and the annual fixed charges for the period 2016-19 as under:

Capital cost allowed

(Rs. in lakh)

	2016-17	2017-18	2018-19
Opening Capital Cost (A)	518014.58	562480.70	596583.70
Add: Additional Capital Expenditure allowed (B)	44466.13	34103.00	0.00
Closing Capital Cost (C) = (A) + (B)	562480.70	596583.70	596583.70
Average Capital Cost (D) = (A+C) / 2	540247.64	579532.20	596583.70

Annual fixed charges allowed

(Rs. in lakh)

	2016-17	2017-18	2018-19
Depreciation	40481.30	43424.93	44702.61
Interest on loan	40243.43	38474.79	34730.26
Return on Equity	25121.52	26927.05	27698.75
Interest on Working Capital	8893.38	9163.84	9204.43
O&M Expenses	19524.00	20760.00	22056.00
Sub-Total (A)	**134263.62**	**138750.61**	**138392.05**
Additional O&M on account of Ash Evacuation, Mega Insurance, CISF Security and Share of subsidiary activities	0.00	0.00	0.00
Sinking fund contribution	4180.03	1086.70	1162.77
Sub-Total (B)	**4180.03**	**1086.70**	**1162.77**
Total Annual Fixed Charges (C = A+B)	**138443.65**	**139837.31**	**139554.82**

4. Aggrieved by the said order, the Petitioner has filed Appeal No. 7/2018 before the Appellate Tribunal for Electricity (APTEL) on various issues like Pension & Gratuity contribution, Subsidiary activities etc. and the same is pending. The tariff determined by this order, is however, subject to final decision of APTEL in the said appeal.

TRUING-UP OF TARIFF FOR THE PERIOD 2014-19

5. Regulation 8(1) of the 2014 Tariff Regulations provides as follows:

"(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."

6. In terms of the above Regulation, the Petitioner, in present petition, has claimed the capital cost (in Form 1(I) and the annual fixed charges for the period 2016-19 as under:

Capital Cost claimed

(Rs. in lakh)

	2016-17	**2017-18**	**2018-19**
Opening Capital Cost (A)	536386.92	551536.82	554196.39
Add: Addition during the year / period (B)	10030.41	3778.35	3953.61
Less: De-capitalization during the year / period (C)			
Less: Reversal during the year / period (D)			
Less: Undischarged liabilities (E)	951.26	1345.52	535.17
Add: Discharges during the year / period (F)	6070.75	226.74	1636.91
Closing Capital Cost (G)=(A+B-C-D-E+F)	551536.82	554196.39	559251.74
Average Capital Cost (H)=(A+G/2)	**543961.87**	**552866.60**	**556724.06**

Annual fixed charges claimed (as per Form 1)

(Rs in lakh)

	2016-17	**2017-18**	**2018-19**
Depreciation	41232.44	41920.19	42148.72
Interest on loan	40216.11	33301.86	28644.81
Return on Equity	32157.06	32683.47	32998.44
Interest on Working Capital	9696.44	9780.58	9536.42
O&M Expenses	19524.00	20760.00	22056.00
Water Charges	295.08	334.97	407.12
Compensation Allowance	0.00	0.00	0.00
Sub-Total (A)	**143121.13**	**138781.08**	**135791.50**
Capital Spares	0.00	70.85	274.28
DVC's share of savings in interest cost due to loan restructuring	521.76	1601.30	1257.31
Impact of Pay Revision due to recommendation of 7th Pay Commission	1457.55	1834.53	1292.18
Impact of GST as change in law	0.00	59.46	170.04
Interest & Contribution on Sinking Fund (As per section 40, Part IV of DVC Act)	3181.47	827.10	885.00
Share of P&G expenses	5024.37	11374.93	2149.25
Share of Common Office Expenditure	185.93	201.34	215.45
Expenses due to Mega insurance, CISF expenditure & Expenditure for Subsidiary activity	2922.32	3234.59	2772.70
Sub-Total (B)	**13293.40**	**19204.11**	**9016.21**
Total annual fixed charges claimed (C = A+B)	**156414.53**	**157985.19**	**144807.71**

7. The present petition was filed by the Petitioner/ for truing-up of tariff for the

period 2016-19 and for determination of tariff for the period 2019-24 of the generating station vide affidavit dated 21.1.2020. Subsequently, the Petitioner vide affidavit dated 15.11.2021 submitted additional information along with the revised forms for 2016-19 tariff period after correction of certain inadvertent errors in the forms. It is observed that the Petitioner while submitting the information vide affidavit dated 15.11.2021, had submitted certain additional information and has revised the Form-1 and Form-13B. However, the Petitioner has not made the corresponding revisions in the other applicable forms.

8. The Objector, Damodar Valley Power Consumers Association (DVPCA) has filed its objections vide affidavit dated 19.4.2021 and the Petitioner vide affidavit dated 16.7.2021 has filed its response to the same. The Respondent No.2, PSPCL has filed its reply vide affidavit dated 10.7.2021 and the Petitioner has filed its rejoinder to the said reply. The Respondent No.3, KSEBL has filed its reply vide affidavit dated 18.5.2021 and the Petitioner has filed its rejoinder to the same, vide affidavit dated 16.7.2021. The Petition was heard through video conferencing on 25.5.2021 and the Commission had directed the Petitioner to file certain additional information. The Petitioner, in compliance to the same, has filed the additional information vide affidavit dated 1.7.2021 after serving copies to the Respondents/Objector. The Petition was thereafter heard through video conferencing on 15.3.2022, and the Commission, after directing the Petitioner to file certain additional information, reserved its order in the petition The Petitioner has filed its note of arguments (of the hearing dated 15.3.2022) after serving copy to the Respondents/Objector. The Objector DVPCA has also filed its written note of submissions on 2.5.2022. The Petitioner, in compliance to the directions vide ROP of the hearing dated 15.3.2022, has filed the additional information, vide affidavit dated 19.4.2022 after serving copies on the

Respondents/Objector. The Objector, DVPCA has also filed its written note of submissions on 2.5.2022 and the Petitioner has filed its response to the same on 10.5.2022. Considering the submissions of the parties and the documents available on record, we proceed to examine the claims of the Petitioner, in this petition, on prudence check, as stated in the subsequent paragraphs.

Capital Cost

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

"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.
xxx…"

10. The Commission vide its order dated 28.9.2017 in Petition No. 224/GT/2015 had allowed the closing capital cost of Rs.518014.58 lakh, as on 31.3.2016. However, the Petitioner has sought revision of the opening capital cost, as on 1.4.2016, to Rs.536386.92 lakh (Rs.518014.58 lakh + Rs.3588.32 lakh + Rs.14784.02 lakh) by adding Rs.3588.32 lakh, which is a differential amount between the provisional capital cost of Rs.809390.12 lakh, claimed by the Petitioner in Petition No. 224/GT/2015 and the actual capital cost of Rs.812978.44 lakh, booked in audited accounts. In addition, the Petitioner has prayed for consideration of Rs.14784.02 lakh, which is a difference of notional IDC computed as on station COD of 31.3.2016 and the actual IDC of Rs.287058.32 lakh as per audited accounts.

11. As regards the differential capital cost of Rs.3588.72 lakh claimed, the Respondents KSEBL and PSPCL have submitted that the Petitioner has not furnished any justification including the auditor's certificate for the additional capital cost claimed

over and above the approved capital cost. They have also pointed out that the Petitioner has also not provided complete details of works/assets which were included in the original scope of work and despite the direction of the Commission, the Petitioner has also failed to furnish the details of liquidated damages recovered by it from the contractors, without which its claim for additional capital cost, cannot be adjudicated. As regards the Petitioner's claim towards the allowance of notional IDC of Rs. 14784.02 lakh, as per the order dated 6.5.2015 in Petition No. 229/2010 and order dated 29.4.2019 in Petition No. 12/RP/2015, the Respondents have submitted that notional IDC shall not be allowed before the actual drawl of loan and therefore, the notional IDC for the period when there was no actual drawl of loan may be disallowed.

12. The matter has been considered. It is observed that the Petitioner has claimed additional capital cost of Rs.3588.32 lakh, as on COD i.e., 31.3.2016. The Commission, on the prudence check of the audited accounts and respective forms submitted by the Petitioner, as part of the Petition, has verified that the actual capitalized expenditure as on COD of the generating station i.e., 31.3.2016 is Rs.812978.44 lakh. Thus, the claims of the Petitioner towards the additional capital cost of Rs.3588.32 lakh is found to be in order. In this background, the Petitioner's claim for additional capital cost of Rs.3588.32 lakh, is allowed.

13. It is also observed that the Petitioner, in its claim for additional capital expenditure in 2018-19 has adjusted the additional capitalisation by way of rectification entry of (-) Rs.3586.59 lakh towards 'Access Roads'. However, the Petitioner has neither provided any justification for claiming such adjustment nor has linked it to the corresponding positive entry of same amount during the year, previous to the year of rectification entry i.e., 2018-19. In this background, it has been decided

to adjust such additional capitalisation in the opening capital cost as on COD i.e., 31.3.2016.

IDC, IEDC and Finance Charges (FC)

14. As regards the claim for notional IDC of Rs.14784.02 lakh, it is observed that the Petitioner, in Petition No. 224/GT/2015, had not claimed notional IDC. The notional IDC claimed represents the difference between IDC computed, on notional basis, (by considering equity beyond 30% as notional loan) and the actual IDC as per books. The calculations as submitted by the Petitioner towards the claim for notional IDC is found to be in order. However, considering the fact that Commission, vide order dated 28.9.2017 in Petition No. 224/GT/2015, had revised the SCOD of Unit-I and Unit-II as 25.6.2011 and 25.9.2011, respectively after examining at length, the issue of time overrun and accordingly allowed the IDC of Rs.44730.84 lakh up to the revised SCODs as mentioned above. As such, the notional IDC till the revised SCODs can only be allowed as a part of the capital cost, as on station COD. Accordingly, after verifying the computation of IDC, on notional basis, as submitted by the Petitioner, it is observed that, the IDC, including notional IDC, up to the revised SCOD of Unit-I and Unit-II i.e., 25.6.2011 and 25.9.2011, respectively, works out to Rs. 45764.74 lakh, as against the provisionally allowed IDC of Rs.44730.84 lakh, vide order dated 28.9.2017 in Petition No. 224/GT/2015. Accordingly, the additional notional IDC allowed works out to Rs.1033.90 lakh (Rs.45764.74 lakh-Rs.44730.84 lakh) as against the Petitioner's claimed notational IDC of Rs.14784.02 lakh. In this background, the IDC charges of Rs.45764.74 lakh is allowed as against the provisionally allowed IDC of Rs.44730.84 lakh as part of the capital cost.

15. As regards IEDC charges, the Commission vide its order dated 28.9.2017 in Petition No. 224/GT/2015 had provisionally allowed an amount of Rs.14709.41 lakh as

against the IEDC of Rs.33356.00 lakh, claimed by Petitioner. However, while examining the IEDC computations, some minor variations have bene observed, wherein, the IEDC charges are worked out as Rs.14721.06 lakh, as against the provisionally allowed IEDC charges of Rs.14709.41 lakh in the said order. In this background, the IEDC charges of Rs.14721.06 lakh is allowed as part of the capital cost.

16. As regards Finance Charges (FC), the Petitioner, had claimed the actual FC of Rs.4553.00 lakh, as part of the capital cost, which was provisionally allowed vide order dated 28.9.2017 in Petition No. 224/GT/2015. The Petitioner was directed to furnish the actual break-up of FC during true up and accordingly the Petitioner has revised the actual FC claims from Rs.4553.00 lakh (provisionally allowed in petition No.224/GT/2015 dated 28.9.2017) to Rs.5879.52 lakh. The Petitioner, in justification of the same, has submitted that the additional charges of Rs.1326.52 lakh (i.e.Rs.5879.52 lakhs- Rs.4553 lakh), pertains to DVC Bonds and though the payments were made in the year 2014-15, it was inadvertently missed while filing the tariff petition for this generating station. The Petitioner has also submitted the auditor certificate as the supporting document for its claim. Against the total IDC claim of Rs.301411.47 lakh upto actual COD, the petitioner has been allowed total IDC of Rs.45764.74 lakh which works out to 15.18% of the IDC claimed amount. On the same lines after verifying the Petitioner's claim, the actual FC has been allowed for Rs.892.72 lakh which is 15.18% of the FC claimed amount of Rs.5879.52 lakh (i.e. the same percentage of IDC allowed vis a vis IDC claimed).

17. Thus, the capital cost, as on COD, allowed for the purpose of truing-up of tariff is as under:

(Rs. in lakh)

	Capital Cost allowed
Capital Cost allowed as on COD (A) (Order in Petition No. 224/GT/2015)	518014.58
Less: IDC allowed (B) (Order in Petition No. 224/GT/2015)	44730.84
Less: FC allowed (C) (Order in Petition No. 224/GT/2015)	4553.00
Less: IEDC allowed (D) (Order in Petition No. 224/GT/2015)	14709.41
Capital Cost as on COD (E = A-B-C-D) (excluding IDC/IEDC/FC allowed in Order in Petition No. 224/GT/2015)	**454021.33**
Add: IDC allowed	45764.74
Add: IEDC allowed	14721.06
Add: FC allowed	892.72
Add: Differential capital cost allowed	3588.32
Add: Rectification entry claimed under additional capital expenditure in 2018-19	(-)3586.59
Total Capital Cost allowed as on COD (incl. IDC, IEDC, FC)	**515401.58**

Additional Capital Expenditure

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

"14. Additional Capitalization and De-capitalization:

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

(i) Un-discharged liabilities recognized to be payable at a future date;

(ii) Works deferred for execution;

(iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;

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

(v) Change in law or compliance of any existing law:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

19. The projected additional capital expenditure allowed vide order dated 28.9.2017 in Petition No. 224/GT/2015 is summarized below:

(Rs. in lakh)

	2016-17	2017-18
Cost of Land & Site Development		
Land	0.00	0.00
Rehabilitation & Resettlement (R&R)	100.00	2300.00
Preliminary Investigation & Site Development	0.00	430.00
Social Obligation Programme	153.00	45.00
Green Belt	300.00	100.00
Total Land & Site Development	**553.00**	**2875.00**
Plant & Equipment (Main Plant Package)-EPC	**3976.00**	**1108.00**
Water System	4681.00	0.00
Coal Handling Plant (System)	347.80	0.00
Total Plant & Equipment excluding taxes & Duties	**9004.80**	**1108.00**
Civil Works		
Township & Colony	5000.00	15091.00
Temporary construction & enabling works (Shifting / Modification of 132/220/400 kV Transmission Lines to Facilitate Rail Infrastructure requirement of RTPS)	761.00	0.00
Road & Drainage (Approach Road from SH-37 to Plant)	6000.00	4485.00
Railway Infrastructure by RITES	20000.00	10506.00
Total Civil works	**31761.00**	**30082.00**
Construction & Pre- Commissioning Expenses		
Operator's Training	80.00	0.00
Office Furniture's	165.00	0.00
Computerization & Networking	250.00	38.00
Total Construction & Pre- Commissioning Expenses	**495.00**	**38.00**
Overheads		
Statutory fees, Regulatory charges etc.	64.93	0.00
Establishment	2400.00	0.00
Contingency	171.00	0.00
RTPS Dispensary/Hospital	16.40	0.00
Total Overheads	**2652.33**	**0.00**
Total Capital cost excluding IDC & FC	**44466.13**	**34103.00**

20. The Petitioner, in the present petition, has claimed the actual additional capital expenditure, based on the Revised Cost Estimates (RCE) of Rs.939787 lakh, as per sanction order dated 18.10.2017, which conveys the approval of the Board of DVC. It is pertinent to mention that the Commission had allowed capital cost (excluding notional IDC) of Rs.518014.58 lakh, as on COD, against the capital expenditure of Rs.812978.44 lakh, booked till COD, as per audited accounts. As such, the disallowed cost as on COD of the station i.e., 31.3.2016 stands at Rs.294963.86 lakh, reducing the same from the final RCE of Rs.939787.00 lakh, the maximum allowable capital cost works out as Rs.644823.14 lakh (Rs. 939787.00 lakh – Rs.294963.86 lakh), Further, considering the capital cost allowed till COD, the maximum additional capital expenditure is allowable for assets/works of original scope works out to Rs.126808.56 lakh (Rs.644823.14 lakh – Rs.518014.58 lakh). Accordingly, the additional capital expenditure claimed by the Petitioner, for the period 2016-19, is as under:

(Rs. in lakh)

	Regulations	2016-17	2017-18	2018-19
Land & Land Rights:				
Cost of land (0111010101)	14 (1) (i) and (ii)	**0.00**	**0.00**	879.53
Total of Land & Land Rights		**0.00**	**0.00**	**879.53**
Buildings:				
Residential Building (0111020127)	14 (1) (i) and (ii)	2201.06	71.49	226.77
Hospital Building (0111020119)		-	-	11.44
Water Works & Water Supply Sys (0111020134)	14 (1) (i) and (ii)	104.25	0.00	0.00
Colony Roads (0111020141)	14 (1) (i) and (ii)	202.98	0.00	0.00
Total of Buildings		**2508.30**	**71.49**	**238.21**
Road Culverts & Railway Sidings:				
Access road (0111030101)		-	-	4174.98
003/01 Access Roads (0111032106)	14 (1) (i) and (ii)	251.00	237.25	-3586.59
Total of Road Culverts & Rly. Sidings		**251.00**	**237.25**	**588.39**
Power House Plant & Machinery:				
008/01 Boiler & Accessory Equip. RTPS PH I(0111080701)	14 (1) (i) and (ii)	468.69	341.24	44.51
008/02 Turbo Generation & Accessory-RTPS PH I(0111080702)	14 (1) (i) and (ii)	788.88	131.76	20.45
008/03/Electrical Equipment – RTPS PH I(0111080703)	14 (1) (i) and (ii)	1059.07	165.86	25.75

	Regulations	2016-17	2017-18	2018-19
008/04 Accessory Mechanical Equipment-RTPS PH I(0111080704)	14 (1) (i) and (ii)	519.24	-355.54	12.55
008/04/02 and 008/04/02/01 Instrumentation & Control (0111080705 and 0111080706)	14 (1) (i) and (ii)	191.79	30.04	57.33
008/11 Ash Handling Equip. (0111084110)	14 (1) (i) and (ii)	71.57	134.20	0.00
Oil Equipment (0111080266)	14 (1) (i) and (ii)	9.16	0.00	0.00
008/15/06 Tools and Plants-RTPS PH I(0111080709)	14 (1) (i) and (ii)	2.43	0.38	0.73
008/15 Misc. Power Plant Equip-RTPS PH I (0111080708)	14 (1) (i) and (ii)	1155.33	180.93	6.80
Coal Handling Plant (0111080260)	14 (1) (i) and (ii)	1097.59	621.06	0.00
008/08/01 Water System -RTPS PH I(0111080707)	14 (1) (i) and (ii)	553.06	444.61	35.24
Pollution Control Equipment (0111080120)	14 (1) (v)	0.00	0.00	60.31
Initial Spares embedded in different packages:				
008/01 Boiler & Accessory Equip. RTPS PH I(0111080701)	14 (1) (iii)	733.96	140.67	0.00
Coal Handling Plant (0111080260)	14 (1) (iii)	71.82	113.66	37.52
008/08/01 Water System -RTPS PH I (0111080707)	14 (1) (iii)	0.00	8.70	0.00
008/15 Misc. Power Plant Equip-RTPS PH I (0111080708)	14 (1) (iii)	0.00	0.00	4.20
Sub-total - Initial Spares embedded in different packages		**805.79**	**263.02**	**41.72**
Balance Initial Spares procured separately:				
008/02 Turbo Generation & Accessory-RTPS PH I(0111080702)	14 (1) (iii)	81.73	0.00	231.03
008/01 Boiler & Accessory Equipment RTPS PH I(0111080701)	14 (1) (iii)	0.00	859.92	502.76
008/03/Electrical Equipment - RTPS PH I(0111080703)	14 (1) (iii)	0.00	0.00	290.82
008/04 Accessory Mechanical Equipment-RTPS PH I (0111080704)	14 (1) (iii)	0.00	0.00	141.71
008/15 Misc. Power Plant Equip-RTPS PH I(0111080708)	14 (1) (iii)	0.00	0.00	334.34
008/08/01 Water System -RTPS PH I(0111080707)	14 (1) (iii)	0.00	0.00	71.96
Coal Handling Plant (0111080260)	14 (1) (iii)	0.00	161.09	305.07
Sub-total - Balance Initial Spares procured separately		**81.73**	**1021.01**	**1877.68**
Total of Power House Plant & Machinery		**6804.34**	**2978.57**	**2183.06**
Substation Equipment:				
012 Sub Station Equipment (0111125606)	14 (1) (i) and (ii)	4.57	1.12	0.18
Total of Substation Equipment		**4.57**	**1.12**	**0.18**
IT Software				

	Regulations	2016-17	2017-18	2018-19
019-Intangible Assets-Engineering Software (0113010202)	14 (1) (i) and (ii)	339.72	0.00	0.00
Total of IT Software		**339.72**	**0.00**	**0.00**
Other Assets				
Office Furniture-Steel (O/assets) (0111160101)	14 (1) (i) and (ii)	22.44	1.37	18.02
Office Furniture-Wooden (O/assets) (0111160102)	14 (1) (i) and (ii)			8.12
Office Furniture-Elec. (O/assets) (0111160103)	14 (1) (i) and (ii)		0.70	0.00
Office Equipment (O/assets) (0111160301)	14 (1) (i) and (ii)	66.32	5.95	0.58
Scientific/lab. Instrument (0111160306)	14 (1) (i) and (ii)		435.63	2.12
Weighing Machine (O/assets) (0111160315)	14 (1) (i) and (ii)		33.54	8.37
Residential Furniture. (O/assets) (0111160104)	14 (1) (i) and (ii)	31.81	0.00	11.54
Miscellaneous (O/assets) (0111160399)	14 (1) (i) and (ii)	1.92	12.73	15.47
Total of Other Assets		**122.49**	**489.92**	**64.24**
Grand Total		**10030.41**	**3778.35**	**3953.61**

21. The Objector, DVPCA has submitted that the Petitioner has not provided appropriate justification and / or documentary evidence in terms of Regulation 14(3) of the 2014 Tariff Regulations. It has also submitted that the Petitioner has claimed certain additional capitalization under Regulation 54 (power to relax) and Regulation 55 (power to remove difficulty) of the 2014 Tariff Regulations, which can be exercised by the Commission in rare cases, but the Petitioner has not presented / cited any extra ordinary circumstance for the same. A comparative table indicating the additional capital expenditure claimed in the petition and the claims that may be allowable, as per DVPCA, is as under:

(Rs. in lakh)

	2016-17		**2017-18**		**2018-19**	
	Claimed	**As per DVPCA**	**Claimed**	**As per DVPCA**	**Claimed**	**As per DVPCA**
Land & Site Development	-	-	-	-	880	-
Plant & Equipment (Main Plant Package)-EPC	4266	3976	629	629	168	168
Water System	558	553	446	-	35	-
Coal Handling Plant (System)	1098	348	621	-	-	-

	2016-17		2017-18		2018-19	
	Claimed	**As per DVPCA**	**Claimed**	**As per DVPCA**	**Claimed**	**As per DVPCA**
Total Plant & Equipment excluding taxes & Duties	5921	4877	1696	629	204	168
Total Initial Spares	888	888	1284	1284	1919	1919
Township & Colony	2759	2759	309	309	827	827
Office furniture	122	89	76	-	64	-
Computerization & Networking	340	250	-	-	-	-
Total Additional Capital expenditure	**10030**	**8862**	**3778**	**2298**	**3954**	**2914**

22. The Respondent, PSPCL has submitted that the Petitioner has merely claimed additional capital expenditure for the said years, without providing any justification for delayed payments of the same in the absence of which the claims of the Petitioner cannot be considered by the Commission. In response, the Petitioner has submitted that the additional capitalization claimed, the liability created and discharged has been duly reconciled with the books of account and audited by the Comptroller & Auditor General (C&AG) of India. It has also submitted that justification against each of the items of additional capital expenditure has been furnished along with documentary evidence, wherever necessary. The Petitioner has further submitted that the additional capital expenditure claimed is for ensuring plant's security and safety, based on recommendations from technical audit report, and for ensuring reliable & efficient operation of the generating station.

23. The matter has been considered. Based on the submissions and documents on the record, RCE dated 18.10.2017 and on prudence check, the claim of the Petitioner for additional capital expenditure claimed for the period 2016-19, is examined and allowed as under:

2016-17

(Rs in lakh)

Sr. No.	Asset/Work	Amount claimed	Regulation	Petitioner Submission	Reason for admissibility	Amount allowed
2016-17						
1	**Buildings**					
	Residential Building	2201.06	14 (1) (i) and (ii)	This expenditure is towards the work within the original scope (under Sl. No. 5(4) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date	The works pertaining to Buildings are allowed under Regulation 14(1)(ii) of the 2014 Tariff Regulations as this expenditure incurred is towards the works which are within the original scope and have been executed and capitalized within the cut-off date.	2201.06
	Water Works & Water Supply Sys	104.25	14 (1) (i) and (ii)			104.25
	Colony Roads	202.98	14 (1) (i) and (ii)			202.98
	Total	**2508.30**				**2508.30**
2	**Road Culverts & Railway Sidings:**					
	Access Roads	251.00	14 (1) (i) and (ii)	This expenditure is towards the work within the original scope (under Sl. No. 5(4) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.	The works pertaining to Road Culverts & Rly. Sidings are allowed under Regulation 14(1)(ii) as this expenditure is towards the works within the original scope which have been executed and capitalized within the cut-off date.	251.00
	Total	**251.00**				**251.00**
3	**Powerhouse Plant & Machinery:**					
	Boiler & Accessory Equip. RTPS PH I	468.69	14 (1) (i) and (ii)	This expenditure is towards the work within the original scope (under Sl. No. 3(i) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.	The works pertaining to Powerhouse Plant & Machinery are allowed under Regulation 14(1)(ii) as this expenditure is towards the works within the original scope which have been executed and capitalized within the cut-off date.	468.69
	Turbo Generation & Accessory-RTPS PH I	788.88				788.88
	Electrical Equipment - RTPS PH I	1059.07				1059.07
	Accessory Mechanical Equipment-RTPS PH I	519.24	14 (1) (i) and (ii)			519.24
	Instrumentation & Control	191.79				191.79
	Ash Handling Equip.	71.57				71.57
	Oil Equipment	9.16				9.16
	Tools and Plants-RTPS PH I	2.43				2.43
	Misc. Power Plant Equip-	1155.33				1155.33

Sr. No.	Asset/Work	Amount claimed	Regulation	Petitioner Submission	Reason for admissibility	Amount allowed
2016-17						
	RTPS PH I					
	Coal Handling Plant	1097.59				1097.59
	Water System - RTPS PH I	553.06				553.06
	Initial Spares embedded in different packages:					
	Boiler & Accessory Equip. RTPS PH I	733.96	14 (1) (iii)	This is under the original scope (under Sl. No. 3(i) of the Sanction Order of RTPS dt. 18.10.2017), as capitalized within the cut-off date.	The Initial Spares are allowed under Regulation 14(1)(iii) as this expenditure is towards the initial spares which have been procured and capitalized within the cut-off date and within the ceiling limit as prescribed in Regulation 13.	733.96
	Coal Handling Plant	71.82	14 (1) (iii)			71.82
	Balance Initial Spares procured separately:					
	Turbo Generation & Accessory-RTPS PH I	81.73	14 (1) (iii)	This expenditure is towards the work within the original scope (under Sl. No. 3(ii) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.	Initial Spares are allowed under Regulation 14(1)(iii) of the 2014 Tariff Regulations, as the expenditure is towards initial spares which have been procured and capitalized within the cut-off date and is also within the ceiling limit as prescribed in Regulation 13. Of the 2014 Tariff Regulations	81.73
	Total	**6804.34**				**6804.34**
4	**Substation Equipment**					
	Sub St. Equipment	4.57	14 (1) (i) and (ii)	This expenditure is towards the work within the original scope (under Sl. No. 3(iii) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.	The works pertaining to substation equipment's are allowed under Regulation 14(1)(ii) as this expenditure is towards the works within the original scope which have been executed and capitalized within the cut-off date.	4.57
	Total	**4.57**				**4.57**
5	**IT Software**					

Sr. No.	Asset/Work	Amount claimed	Regulation	Petitioner Submission	Reason for admissibility	Amount allowed
2016-17						
	019-Intangible Assets-Engineering Software	339.72	14 (1) (i) and (ii)	This expenditure is towards the work within the original scope (under Sl. No. 5(6) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.	The works pertaining to IT Software are allowed under Regulation 14(1)(ii) as this expenditure is towards the works within the original scope which have been executed and capitalized within the cut-off date.	339.72
	Total	**339.72**				**339.72**
6	**Other Assets**					
	Office Furniture-Steel (O/assets)	22.44	14 (1) (i) and (ii)	This expenditure is towards the works / materials within the original scope (under Sl. No. 5(5) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.	The works pertaining to Other Assets are allowed under Regulation 14(1)(ii) as this expenditure is towards the works within the original scope which have been executed and capitalized within the cut-off date.	22.44
	Residential Furniture. (O/assets)	66.32				66.32
	Office Equipment (O/assets)	31.81				31.81
	Miscellaneous (O/assets)	1.92				1.92
	Total	**122.49**				**122.49**
	Total amount claimed	**10030.41**				
	Total amount allowed					**10030.41**

2017-18

(Rs in lakh)

Sr. No.	Asset/Work	Amount claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount allowed
2017-18						
1	**Buildings**					
	Residential Building	71.49	14 (1) (i) and (ii)	This expenditure is towards the work within the original scope (under Sl. No. 5(4) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.	The works pertaining to Buildings are allowed under Regulation 14(1)(ii) as this expenditure is towards the works within the original scope which have been executed and capitalized within the cut-off date.	71.49
	Total	**71.49**				**71.49**

Sr. No.	Asset/Work	Amount claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount allowed
2017-18						
2	**Road Culverts & Railway Sidings**					
	Access Roads	237.25	14 (1) (i) and (ii)	This expenditure is towards the work within the original scope (under Sl. No. 5(4) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.	The works pertaining to Road Culverts & Rly. Sidings are allowed under Regulation 14(1)(ii) as this expenditure is towards the works within the original scope which have been executed and capitalized within the cut-off date.	237.25
	Total	**237.25**				**237.25**
3	**Powerhouse Plant & Machinery**					
	Boiler & Accessory Equip RTPS PH I	341.24	14 (1) (i) and (ii)	This expenditure is towards the work within the original scope (under Sl. No. 3(i) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.	The works pertaining to Powerhouse Plant & Machinery are allowed under Regulation 14(1)(ii) as this expenditure is towards the works within the original scope which have been executed and capitalized within the cut-off date.	341.24
	Turbo Generation & Accessory-RTPS PH I	131.76				131.76
	Electrical Equipment - RTPS PH I	165.86				165.86
	Accessory Mechanical Equipment-RTPS PH I	(-)355.54				(-)355.54
	Instrumentation & Control	30.04				30.04
	Ash Handling Equip.	134.20				134.20
	Tools and Plants-RTPS PH I	0.38				0.38
	Misc. Power Plant Equip-RTPS PH I	180.93	14 (1) (i) and (ii)			180.93
	Coal Handling Plant	621.06		This expenditure is towards the work within the original scope (under Sl. No. 3(ii) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.		621.06

Sr. No.	Asset/Work	Amount claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount allowed
2017-18						
	Water System - RTPS PH I	444.61		This expenditure is towards the work within the original scope (under Sl. No. 3(iii) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.		444.61
	Initial Spares embedded in different packages					
	Boiler & Accessory Equip RTPS PH I	140.67	14 (1) (iii)	This is under the original scope (under Sl. No. 3(i) of the Sanction Order of RTPS dt. 18.10.2017), as capitalized within the cut-off date.	The Initial Spares are allowed under Regulation 14(1)(iii) as this expenditure is towards the initial spares which have been procured and capitalized within the cut-off date and within the ceiling limit as prescribed in Regulation 13 of the 2014 Tariff Regulations	140.67
	Coal Handling Plant	113.66		This is under the original scope (under Sl. No. 3(ii) of the Sanction Order of RTPS dt. 18.10.2017), as capitalized within the cut-off date.		113.66
	Water System - RTPS PH I	8.70		This is under the original scope (under Sl. No. 3(iii) of the Sanction Order of RTPS dt. 18.10.2017), as capitalized within the cut-off date.		8.70
	Balance Initial Spares procured separately					
	Boiler & Accessory Equip RTPS PH I	859.92	14 (1) (iii)	This is under the original scope (under Sl. No. 3(v) of the Sanction Order of RTPS dt. 18.10.2017), as capitalized within the cut-off date.	The Initial Spares are allowed under Regulation 14(1)(iii) as this expenditure is towards the initial spares which have been procured and capitalized within the cut-off date and within the ceiling limit as prescribed in Regulation 13 of the 2014 Tariff Regulations.	859.92
	Coal Handling Plant	161.09				161.09
	Total	**2978.57**				**2978.57**

Sr. No.	Asset/Work	Amount claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount allowed
2017-18						
4	**Substation Equipment**					
	Sub Station Equipment	1.12	14 (1) (i) and (ii)	This expenditure is towards the work within the original scope (under Sl. No. 3(iii) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.	The works pertaining to Substation Equipment are allowed under Regulation 14(1)(ii) as this expenditure is towards the works within the original scope which have been executed and capitalized within the cut-off date.	1.12
	Total	**1.12**				**1.12**
5	**Other Assets**					
	Office Furniture-Steel (O/assets)	1.37	14 (1) (i) and (ii)	This expenditure is towards the works / materials within the original scope (under Sl. No. 5(5) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.	The works pertaining to Other Assets are allowed under Regulation 14(1)(ii) as this expenditure is towards the works within the original scope which have been executed and capitalized within the cut-off date.	1.37
	Office Furniture-Elec. (O/assets)	0.70				0.70
	Office Equipment (O/assets)	5.95				5.95
	Scientific/lab. Instrument	435.63				435.63
	Weighing Machine (O/assets)	33.54		This expenditure is towards the balance construction works for two no's of Road Weigh Bridges for weighment of coal transported by road to the plant. The work is within the original scope (under Sl. No. 3(ii) of the Sanction Order of RTPS dt. 18.10.2017).		33.54
	Miscellaneous (O/assets)	12.73	14 (1) (i) and (ii)	Miscellaneous expenditure involves the expenditure for various emergency activities required to maintain the plant efficiency and for purchasing the equipment / materials.		12.73
	Total	**489.92**				**489.92**
	Total Amount	**3778.35**				

Sr. No.	Asset/Work	Amount claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount allowed
2017-18						
	claimed					
	Total Amount allowed					**3778.35**

2018-19

(Rs in lakh)

Sr. No.	Asset/Work	Amount claimed	Regulations	Petitioner Submission	Reason for Admissibility	Amount allowed
2018-19						
1	**Land & Land Rights**					
	Cost of land	879.53	14 (1) (i) and (ii)	This expenditure is towards the work within the original scope (under Sl. No. 1 of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.	The works pertaining to Land and Land Rights are allowed under Regulation 14(1)(ii) as this expenditure is towards the works within the original scope which have been executed and capitalized within the cut-off date.	**879.53**
	Total	**879.53**				**879.53**
	Buildings					
	Residential Building	226.77	14 (1) (i) and (ii)	This expenditure is towards the work within the original scope (under Sl. No. 5(4) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.	The works pertaining to Buildings are allowed under Regulation 14(1)(ii) as this expenditure is towards the works within the original scope which have been executed and capitalized within the cut-off date.	226.77
	Hospital Building	11.44	14 (1) (i) and (ii)			11.44
	Total	**238.21**				**238.21**
2	**Road Culverts & Railway Sidings**					
	Access road (0111030101)	4174.98	14 (1) (i) and (ii)	This expenditure is towards the work within the original	The works pertaining to Road Culverts & Rly. Sidings are allowed under Regulation	4174.98

Sr. No.	Asset/Work	Amount claimed	Regulations	Petitioner Submission	Reason for Admissibility	Amount allowed
2018-19						
				scope (under Sl. No. 3(iii) and Sl. No. 5(4) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.	14(1)(ii) as this expenditure is towards the works within the original scope which have been executed and capitalized within the cut-off date.	
	Access Roads (0111032106)	(-)3586.59		Rectification entry	The negative entry is adjusted with the opening capital cost as on COD in absence of linkage with corresponding positive entry during previous years	0.00
	Total	**588.39**				**4174.98**
3	**Powerhouse Plant & Machinery**					
	Boiler & Accessory Equip RTPS PH I	44.51	14 (1) (i) and (ii)	This expenditure is towards the work within the original scope (under Sl. No. 3(i) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.	The works pertaining to Powerhouse Plant & Machinery are allowed under Regulation 14(1)(ii) as this expenditure is towards the works within the original scope which have been executed and capitalized within the cut-off date.	44.51
	Turbo Generation & Accessory-RTPS PH I	20.45				20.45
	Electrical Equipment - RTPS PH I	25.75				25.75
	Accessory Mechanical Equipment-RTPS PH I	12.55	14 (1) (i) and (ii)			12.55
	Instrumentation & Control	57.33				57.33
	Tools and Plants- RTPS PH I	0.73				0.73
	Misc. Power Plant Equip-RTPS PH I	6.80				6.80
	Coal Handling Plant	0.00		This expenditure is towards the work within the original scope (under Sl. No. 3(ii) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date		0.00

Sr. No.	Asset/Work	Amount claimed	Regulations	Petitioner Submission	Reason for Admissibility	Amount allowed
2018-19						
	Water System -RTPS PH I	35.24		This expenditure is towards the work within the original scope (under Sl. No. 3(iii) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.		35.24
	Pollution Control Equipment	60.31	14 (1) (v)	This expenditure is toward installation of one set of CAAQMS device to comply with the pollution control statues / stipulations.	The works pertaining to Pollution control equipment is allowed under Regulation 14(1)(v) as this expenditure is towards the asset which has been procured and capitalized for meeting pollution norms/stipulations.	60.31
	Initial Spares embedded in different packages					
	Misc. Power Plant Equip-RTPS PH I	4.20	14 (1) (iii)	This is under the original scope (under Sl. No. 3(i) of the Sanction Order of RTPS dt. 18.10.2017), as capitalized within the cut-off date.	The Initial Spares are allowed under Regulation 14(1)(iii) as this expenditure is towards the initial spares which have been procured and capitalized within the cut-off date and within the ceiling limit as prescribed in Regulation 13.	4.20
	Coal Handling Plant	37.52	14 (1) (iii)	This is under the original scope (under Sl. No. 3(ii) of the Sanction Order of RTPS dt. 18.10.2017), as capitalized within the cut-off date.		37.52
	Balance Initial Spares procured separately:					0.00
	Boiler & Accessory Equipm RTPS PH I	231.03	14 (1) (iii)	This is under the original	The Initial Spares are allowed under	231.03

Sr. No.	Asset/Work	Amount claimed	Regulations	Petitioner Submission	Reason for Admissibility	Amount allowed
2018-19						
	Turbo Generation & Accessory-RTPS PH I	502.76		scope (under Sl. No. 3(v) of the Sanction Order of RTPS dt. 18.10.2017), as capitalized within the cut-off date.	Regulation 14(1)(iii) as this expenditure is towards the initial spares which have been procured and capitalized within the cut-off date and within the ceiling limit as prescribed in Regulation 13.	502.76
	Electrical Equipment - RTPS PH I	290.82				290.82
	Accessory Mechanical Equipment-RTPS PH I	141.71				141.71
	Misc. Power Plant Equip-RTPS PH I	334.34				334.34
	Coal Handling Plant	305.07				305.07
	Water System -RTPS PH I	71.96				71.96
	Total	**2183.06**				**2183.06**
4	**Substation Equipment**					
	Substation - Testing Lab Equipment (0111120121)	0.18	14 (1) (i) and (ii)	This expenditure is towards the work within the original scope (under Sl. No. 3(i) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.	The works pertaining to substation equipment are allowed under Regulation 14(1)(ii) as this expenditure is towards the works within the original scope which have been executed and capitalized within the cut-off date.	0.18
	Total	**0.18**				**0.18**
5	**Other Assets (FA)**					
	Office Furniture-Steel (O/assets)	18.02	14 (1) (i) and (ii)	This expenditure is towards the works / materials within the original /scope (under Sl. No. 5(5) of the Sanction Order of RTPS dt. 18.10.2017), as executed and capitalized within the cut-off date.	The works pertaining to Other Assets are allowed under Regulation 14(1)(ii) as this expenditure is towards the works within the original scope which have been executed and capitalized within the cut-off date.	18.02
	Office Furniture-Wooden (O/assets)	8.12				8.12
	Residential Furniture. (O/assets)	0.58				0.58
	Office Equipment (O/assets)	2.12				2.12
	Scientific/lab. Instrument	8.37				8.37
	Weighing Machine (O/assets)	11.54		This expenditure is towards the		11.54

Sr. No.	Asset/Work	Amount claimed	Regulations	Petitioner Submission	Reason for Admissibility	Amount allowed
2018-19						
				balance construction works for two nos of Road Weigh Bridges for weighment of coal transported by road to the plant. The work is within the original scope (under Sl. No. 3(ii) of the Sanction order dated 18.10.2017).		
	Miscellaneous (O/assets)	15.47	14 (1) (i) and (ii)	Miscellaneous expenditure involves the expenditure for various emergency activities required to maintain the plant efficiency and for purchasing the equipment / materials.	The works towards Miscellaneous Assets are not allowed since, the justification provided by the Petitioner is not sufficient to allow the same as part of the Original Scope of works.	0.00
	Total	**64.24**				**48.76**
	Total Amount claimed	**3953.61**				
	Total Amount allowed					**7524.72**

24. The total additional capital expenditure allowed for the period 2016-19 is as under:

(Rs. in lakh)

	2016-17	2017-18	2018-19	Total
Land	0.00	0.00	879.53	**879.53**
Buildings	2508.30	71.49	238.21	**2818.00**
Roads, Culverts & Railway Sidings	251.00	237.25	4174.98	**4663.22**
Initial Spares	805.79	263.02	41.72	**1110.53**
Powerhouse Plant & Machinery	6804.34	2978.57	2183.06	**11965.97**
Sub-station Equipment	4.57	1.12	0.18	**5.87**
IT Software	339.72	0.00	0.00	**339.72**
Other Assets	122.49	489.92	48.76	**661.18**
Total	**10030.41**	**3778.35**	**7524.72**	**21333.48**

<u>Initial Spares</u>

25. The Petitioner has submitted that, the Commission vide order dated 28.9.2017 in Petition No. 224/GT/2015 had directed the Petitioner to submit details of the initial spares capitalized under different packages at the time of truing up. The Petitioner has submitted that the total Plant & Machinery cost as per sanction order dated 18.10.2017 is Rs.438198 lakh (Total EPC cost of Rs.472499 lakh – Taxes, Duties, ERV etc. of Rs.30824 lakh – Balance Initial Spares of Rs.3477 lakh). Therefore, the ceiling limit for initial spares can be derived as 4% of the Plant & Machinery cost as per Regulation 13 of the 2014 Tariff Regulations, and the same works out to be Rs. 17528 lakh (4% of Rs. 438198 lakh). The Petitioner has further submitted that the initial spares capitalized up to COD of the generating station is Rs. 9477.07 lakh and up to the cut-off date (i.e., 31.3.2019) is Rs.13568.02 lakh. The actual initial spares capitalized is therefore within the ceiling limit. Hence, the Petitioner has requested to allow the actual capitalization of initial spares up to the cut-off date. The Package-wise break-up of initial spares capitalized up to COD and up to the RTPS cut-off date was submitted along with the Petition.

26. The matter has been considered. It is observed that, the Petitioner has worked out the ceiling limit of its Initial spares as per Regulation 13 of the 2014 Tariff Regulations @ of 4% of Plant & Machinery cost of Rs.438198 lakh excluding Taxes and Duties as per RCE dated 18.10.2017. However, as per the fourth proviso of Regulation 13, the computation for ceiling limit of initial spares shall be based on the Plant and Machinery (P&M) cost approved as on cut-off date and for this purpose P&M cost shall be arrived at by excluding IDC, IEDC, Land Cost and cost of civil works from the project cost as on cut-off date. In this background, for arriving at the ceiling limit of Initial Spares, the Commission has considered the total P&M cost of Rs. 425136.77 lakh by excluding expenditure allowed under IDC, IEDC, Land Cost

and cost of civil works from the project cost approved as on cut-off date, i.e., 31.3.2019. Thus, the ceiling limit of the initial spares up to the cut-off date i.e., 31.3.2019 works out to Rs.17148.70 lakh. Accordingly, the Commission observes that the expenditure on initial spares i.e., Rs.13568.03 lakh as approved by the Commission till cut-off date, is within the ceiling limit of initial spares of Rs.17148.70 lakh. The summary of the Initial spares allowed up to the cut-off date is provided as under:

(Rs. in lakh)

Particulars	**Amount**
Initial Spares as part of Additional Capitalization	4090.96
Initial Spare part of the Capital Cost as on COD	9477.07
Total Initial Spares allowed	**13568.03**
Total Plant and Machinery cost considered up to the cut-off date 31.3.2019	425136.77
Initial Spares @4% of the P&M cost {(432326.93-13568.03) x 4/96)}	17148.70
Initial Spares allowed up to cut-off date 31.3.2019	**13568.03**

Un-discharged liabilities

27. The total addition of undischarged liabilities furnished by the Petitioner for the period 2016-19 is Rs.2831.95 lakh (Rs.951.26 lakh in 2016-17, Rs.1345.52 lakh in 2017-18, and Rs.535.17 lakh in 2018-19). The Petitioner has submitted that IDC and 'Undischarged liabilities' were consolidated and maintained on year-to-year basis, but was not maintained item-wise and thus the additional capital expenditure claimed for each item, is on accrual basis. The Commission vide order dated 28.9.2017 in petition no. 224/GT/2015 had directed the Petitioner to submit details of the undischarged liability towards the works pending. However, it is observed that the Petitioner has not complied with the directions given by the Commission in this present petition. The Commission while verifying the liability statement observed that, the Petitioner has claimed the opening liability of Rs.29747.42 lakh, which included the undischarged

liability towards the Earnest Money Deposit of Rs.141.68 lakh. Since the Petitioner has not provided any justification for consideration of such Earnest Money Deposit, while knowing the fact that, such booked cost, which are of the nature of refundable deposit cannot form part of the additional capitalisation. In this background, the Commission has not considered discharge of Rs.141.68 lakh against EMD as part of the opening liability. Thus, the Commission allows the opening liability as Rs.29605.75 lakh instead of Petitioner's claimed opening liability of Rs.29747.42 lakh. It is also observed that information submitted by the Petitioner is not in line with the 2014 Tariff Regulations i.e., item-wise details of undischarged/discharged liabilities has not been furnished. In the absence of item-wise availability of undischarged liability, the same is determined on a *pro-rata* basis, considering the admitted additional capital expenditure against the claimed additional capital expenditure, during each year of the period 2016-19. Accordingly, as against an un-discharged liability of Rs.2831.95 lakh claimed by the Petitioner, a corresponding amount of Rs.2829.86 lakh, has been allowed.

Discharge of liabilities

28. The Petitioner has submitted the year-wise total liability discharged for Rs.7934.40 lakh during the period 2016-19 (Rs.6070.75 lakh in 2016-17; Rs.226.74 lakh in 2017-18; and Rs.1636.91 lakh in 2018-19), instead of the item-wise liability discharges. It is observed that, Petitioner has claimed total of Rs.98.67 lakh discharges towards the Earnest Money Deposit. Since the Petitioner has not provided any justification for consideration of such Earnest Money Deposit, while knowing the fact that, such booked cost, which are of the nature of refundable deposit cannot form part of the additional capitalisation. In this background, the Commission has not considered any discharges towards EMD i.e., of Rs.98.67 lakh during the period 2016-

19. It is also observed that information submitted by the Petitioner does not contain the item-wise discharge of liabilities. In the absence of the item-wise availability of liabilities discharged, the same is determined on a *pro-rata* basis, considering the admitted additional capital expenditure against the claimed expenditure, during each year of the period 2016-19. Accordingly, the discharge of liabilities, allowed as part of additional capital expenditure, corresponding to the assets allowed, are as under:

(Rs. in lakh)

	2016-17	**2017-18**	**2018-19**
Opening Un-discharged liabilities (A)	29605.75	24434.67	25541.06
Additions during the period 2016-19 (corresponding to allowed additional capital expenditure) (B)	951.26	1345.52	533.08
Discharges during the period 2016-19 (corresponding to allowed additional capital expenditure) (C)	5981.55	222.03	1632.02
Reversal of Liabilities out of liabilities added during the period 2016-19 (corresponding to allowed additional capital expenditure) (D)	0.00	0.00	0.00
Net Provisional Adjustment (E)	140.78	17.11	16.55
Closing Un-discharged liabilities (F) = (A+B-C-D-E)	**24434.67**	**25541.06**	**24425.56**

Capital cost allowed for the period 2016-19

29. Accordingly, the capital cost approved for the period 2016-19 in respect of the generating station is as under:

(Rs. in lakh)

	2016-17	**2017-18**	**2018-19**
Opening Capital Cost (A)	515401.58	530523.46	533182.57
Add: Addition during the year / period (B)	10030.41	3778.35	7524.72
Less: De-capitalization / Assumed Deletion during the year /period (C)	0.00	0.00	0.00
Less: Undischarged liabilities (D)	951.26	1345.52	533.08
Add: Discharges during the year /period (E)	5981.55	222.03	1632.02
Closing Gross Block (F) = (A+B-C-D+E)	**530462.27**	**533117.13**	**541740.79**
Average Gross Block (F) = (A+F)/2	**522931.93**	**531789.70**	**537428.96**

Debt-Equity Ratio

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

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

Provided that

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

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

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

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

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

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

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

31. The gross normative loan and equity amounting to Rs.360781.10 lakh and Rs. 154620.47 lakh allocated in the ratio of 70:30 has been considered based on the revised opening capital cost as on COD, as discussed above. Further, the additional capital expenditure admitted as above, has been allocated in the debt-equity ratio of 70:30. Accordingly, the details of debt-equity ratio, in respect of the generating station, as on 1.4.2016 and as on 31.3.2019, are as follows:

	Capital Cost as on 1.4.2016 (Rs. in lakh)	**%**	**Net Additional Capital Expenditure for period 2016-19** ***(Rs. in lakh)***	**%**	**Capital Cost as on 31.3.2019** ***(Rs. in lakh)***	**%**
Debt	360781.10	70%	18437.45	70%	379218.55	70%
Equity	154620.47	30%	7901.76	30%	162522.24	30%
Total	**515401.58**	**100%**	**26339.21**	**100%**	**541740.79**	**100%**

Return on Equity

32. Regulation 24 of the 2014 Tariff Regulations provides as follows:

"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:

xxxx"

33. Regulation 25 of the 2014 Tariff Regulations provides as follows:

"25. Tax on Return on Equity:

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

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

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

Illustration.

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

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

(a)Estimated Gross Income from generation or transmission business for FY 2014-15 is Rs 1000 crore.
(b)Estimated Advance Tax for the year on above is Rs 240 crore.
(c) Effective Tax Rate for the year 2014-15 = Rs 240 Crore/Rs 1000 Crore = 24%
(d)Rate of return on equity = 15.50/ (1-0.24) = 20.395%

(2) 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."

34. The base rate of Return on Equity (ROE), as allowed under Regulation 24 of the 2014 Tariff Regulations, is to be grossed up with the effective tax rate of the respective financial years. Also, in terms of Regulation 25(3) of the 2014 Tariff Regulations, the generating company, shall true up the grossed-up rate of ROE, 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 2016-19 tariff period, on actual gross income of any financial year.

35. The Respondent KSEBL has submitted that ROR for the period may be allowed only after deducting the disallowed capital expenditure. It has also submitted that as per details furnished by the Petitioner, it is observed that, no tax was paid by Petitioner for the period from 2014-15 to 2017-18. The Respondent has further submitted that the tax paid by the Petitioner for 2018-19 is related to the deferred tax for the period 2012-13, which is not admissible as per Regulation 49 of the 2014 Tariff Regulations. The Respondent has also pointed out that the 2014 Tariff Regulations, stipulates that the rate of ROE, shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station has not implemented Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load despatch centre or protection system based on the report submitted by the respective RLDC. The Respondent has added that since the Petitioner has not furnished the details of above mandatory requirements, the rate of ROE may be fixed only based on the achievement of the

operation of RGMO/FGMO, data telemetry and communication system. The Objector, DVPCA has submitted that though the Petitioner has considered the effective tax rate of 19.610%, 19.705%, 19.705%, 19.705% and 19.758% for computation of ROE for the period 2016-19, the Audited accounts reveals that the Petitioner has not paid any actual tax during the 2014-18 period. It has stated that for the year 2018-19, it is apparent that the deferred tax liability which gets materialised in the year pertains to the year 2012-13. Referring to Regulation 49 of the 2014 Tariff Regulations, the Respondent, DVPCA has stated that the claim is in contravention to the 2014 Tariff Regulations and ROE is to be allowed at a rate of 15.50% only, without considering any effective tax rate. In response, the Petitioner, has clarified that there is no income tax liability on the Petitioner for the period 2016-19. However, it has sought leave of the Commission, to claim income tax liability, if any, which may arise in future.

36. The matter has been considered. Since the Petitioner has not been paying any income tax in any of the financial year of the period 2016-19, 'Nil' rate has been considered as the effective tax rate for the purpose of grossing up of ROE, in terms of the 2014 Tariff Regulations. Accordingly, ROE has been worked out as under:

(Rs. in lakh)

	2016-17	**2017-18**	**2018-19**
Normative Equity-Opening (A)	154620.47	159138.68	159935.14
Addition of Equity due to additional capital expenditure (B)	4518.21	796.46	2587.10
Normative Equity-Closing (C) = (A) + (B)	159138.68	159935.14	162522.24
Average Normative Equity (D) = (A+C)/2	156879.58	159536.91	161228.69
Return on Equity (Base Rate) (E)	15.50%	15.50%	15.50%
Effective Tax Rate (F)	0.00%	0.00%	0.00%
Rate of Return on Equity (Pre-Tax) (G) = (E)/(1-F)	15.50%	15.50%	15.50%
Return on Equity (Pre-Tax) annualized (H) = (D)*(G)	**24316.33**	**24728.22**	**24990.45**

Interest on Loan

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

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

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

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of Decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalization of such asset

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

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

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

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

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

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

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

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

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

38. The Respondent KSEBL has submitted that the interest on loan for the period may be allowed, only after deducting the disallowed additional capital expenditure. The Objector DVPCA has submitted that the Petitioner has claimed the Interest on loan for Rs.102161.99 lakh for the period 2016-19. It has also submitted that based on

aforesaid proposed disallowance on additional capitalization, the loan balances have got changed and as a result interest on loan amount has also undergone change. Thus, the Objector DVPCA has prayed to allow interest on loan to the tune of Rs. 94266 lakh only, as against the claim of Rs.102162 lakh claimed by the Petitioner. In response, the Petitioner has submitted that the additional capitalisation for the period 2016-17 to 2018-19 as submitted by DVPCA, is based on their arbitrary assumptions of disallowance which are devoid of any merits and may be rejected by the Commission.

39. Considering the submissions of the parties, Interest on loan has been worked out as under:

a. The gross normative loan of Rs.360781.10 lakh has been considered as on 1.4.2016, in the line with the approved capital cost as on COD as stated above. In addition to this, the loan component towards additional capitalization has been considered as per the approved debt equity ratio.

b. Cumulative repayment of loan has been considered as 'zero' as on 1.4.2016 since the station COD is 31.3.2016.

c. Addition to normative loan on account of additional capital expenditure approved above has been considered on year-to-year basis.

d. Depreciation allowed has been considered as repayment of normative loan during the respective years of the period 2016-19.

e. In line with the Regulations, the weighted average rate of interest (WAROI) has been calculated by applying the actual loan portfolio existing as on 1.4.2016 along with subsequent additions during the period 2016-19, if any, for the generating station. In case of loans carrying floating rate of interest the rate of interest as provided by the petitioner has been considered for the purpose of tariff. The necessary calculation for interest on loan is as follows:

(Rs in lakh)

	2016-17	**2017-18**	**2018-19**
Gross opening loan (A)	360781.10	371323.59	373181.99
Cumulative repayment of loan up to previous year (B)	0.00	39638.37	79960.44
Net Loan Opening (C) = (A) - (B)	360781.10	331685.22	293221.55
Addition due to additional capital expenditure (D)	10542.49	1858.40	6036.56
Repayment of loan during the year (E)	39638.37	40322.07	40687.92
Less: Repayment adjustment on account of de-capitalization (F)	0.00	0.00	0.00
Net Repayment (G) = (E) - (F)	39638.37	40322.07	40687.92

	2016-17	2017-18	2018-19
Net Loan Closing (H) =(C) +(D) -(G)	331685.22	293221.55	258570.20
Average Loan (I) = (C+H)/2	346233.16	312453.38	275895.87
Weighted Average Rate of Interest of loan (J)	11.1663%	10.2526%	10.0339%
Interest on Loan (K) = (I)*(J)	**38661.33**	**32034.57**	**27683.16**

40. Further, the Petitioner has claimed its share of savings due to loan restructuring (i.e., one-third share) amounting Rs.521.76 lakh, Rs.1601.30 lakh and Rs.1257.31 lakh for the year 2016-17, 2017-18 and 2018-19, respectively, in terms of Regulation 26(7) of the 2014 Tariff Regulations. In this regard, it is observed that the sharing of savings in interest due to re-financing of loan, if any, must be undertaken between the parties, on actual basis, in accordance with the provisions of Regulation 26 (7) of the 2014 Tariff Regulations. However, in case of any dispute, the parties may approach the Commission, in terms of Regulation 26(9) of the 2014 Tariff Regulations.

Depreciation

41. Regulation 27 of the 2014 Tariff Regulations provides as follows:

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

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

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

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

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

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

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

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

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

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

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

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

42. Regulation 53(2)(iii) of the 2014 Tariff Regulations provides as follows:

"53. Special Provisions relating to Damodar Valley Corporation. (1) Subject to clause (2), these regulations shall apply to determination of tariff of the projects owned by Damodar Valley Corporation (DVC).

(2) The following special provisions shall apply for determination of tariff of the projects owned by DVC:

(i)xx….

(ii)xx

(iii) Depreciation: The depreciation rate stipulated by the Comptroller and Auditor General of India in terms of section 40 of the Damodar Valley Corporation Act, 1948 shall be applied for computation of depreciation of projects of DVC."

43. The cumulative depreciation as on 1.4.2016 is considered as 'zero' as the station COD is 31.3.2016. The weighted average rate of depreciation calculated (as per Annexure-I to this order) in terms of the Regulation 53(2)(iii) read with Regulation 27

of the 2014 Tariff Regulations, has been considered for calculation of depreciation. Accordingly, depreciation is worked out and allowed as under:

(Rs. in lakh)

	2016-17	2017-18	2018-19
Average Capital Cost (A)	522931.93	531789.70	537428.96
Value of freehold land included in average capital cost (B)	13584.56	13584.56	14024.32
Aggregated Depreciable Value (C)= (A-B)*90%	458412.63	466384.63	471064.17
Remaining aggregate depreciable value at the beginning of the year (D) = [(C) - (Cumulative Depreciation of Previous year)]	458412.63	426746.26	391103.73
No. of completed years at the beginning of the year (E)	0.00	1.00	2.00
Balance useful life at the beginning of the year (F) = 25 - (E)	25.00	24.00	23.00
Weighted Average Rate of Depreciation (WAROD) (G)	7.58%	7.58%	7.57%
Combined Depreciation during the year/ period (H) = Minimum of [(A)*(G) or (D)]	**39638.37**	**40322.07**	**40687.92**
Cumulative depreciation at the end of the year (before adjustment for de-capitalisation) (I) = (H) + (K of the previous year)	39638.37	79960.44	120648.36
Less: Depreciation adjustment on account of de-capitalisation (J)	0.00	0.00	0.00
Cumulative depreciation at the end of the year (K) = (I) - (J)	**39638.37**	**79960.44**	**120648.36**

Operation & Maintenance Expenses

44. Regulation 29(1) (a) of the 2014 Tariff Regulations provides the following O&M norms for the generating station of the Petitioner:

(Rs in lakh/MW)

2016-17	2017-18	2018-19
16.27	17.30	18.38

45. The O&M expenses claimed by the Petitioner are as follows:

(Rs. in lakh)

2016-17	2017-18	2018-19
19524.00	20760.00	22056.00

46. The normative O&M expenses claimed for the period 2016-19 is in terms of Regulation 29(1)(a) of the 2014 Tariff Regulations and hence allowed.

Water Charges

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

> "*29 (2) The Water Charges and capital spares for thermal generating stations shall be allowed separately:*
>
> *Provided that water charges shall be allowed based on water consumption depending upon type of plant, type of cooling water system etc., subject to prudence check. The details regarding the same shall be furnished along with the petition:*

48. The water charges claimed by the Petitioner is as under:

(Rs. in lakh)

2016-17	**2017-18**	**2018-19**
295.08	334.97	407.12

49. The Petitioner has furnished the detailed break-up of the expenses incurred towards water charges along with justifications for the same. The cumulative Water charges claimed is Rs. 1037.17 lakh for the period 2016-19. The details of the water charges incurred has been duly certified by the auditor in the present case.

50. The matter has been considered. Regulation 29(2) of the 2014 Tariff Regulations, provides for consideration of the actual consumption of water depending upon the type of plant, type of cooling water system etc, subject to prudence check. The Petitioner, has furnished the computation for actual water consumption along with the audited water charges incurred for the period 2016-19. The details of water charges claimed are as under:

	Water Use	**Quantity of water consumed (M^3)**	**Rate of water charges (Rs/M^3)**	**Water Charges as per rate *(Rs.in lakh)***	**Water Charges apportioned as per annual accounts *(Rs. in lakh)***
2016-17	Industrial	5134403	5.70	292.66	295.08
	Domestic	210233	1.15	2.42	
	Total	**5344635**		**295.08**	
2018-19	Industrial	6799429	5.70	387.57	334.97
	Domestic	204494	1.15	2.35	
	Total	**7003923**		**389.92**	
2019-20	Industrial	8885956	5.70	506.50	407.12
	Domestic	208488	1.15	2.40	

	Water Use	Quantity of water consumed (M^3)	Rate of water charges (Rs/M^3)	Water Charges as per rate *(Rs.in lakh)*	Water Charges apportioned as per annual accounts *(Rs. in lakh)*
	Total	**9094444**		**508.90**	
Total for the period 2016 -19		**21443003**		**1193.89**	**1037.17**

51. It is observed that the water charges determined based on consumption and rate, thereof, are at variance with the apportioned audited water charges. The Petitioner, has however, claimed Water charges for Rs. 1037.17 lakh, as booked in the audited accounts. Accordingly, the audited water charges have been considered. It is also noticed that the water consumption includes domestic water consumption, charges for which are being recovered from its employees. As the water charges for domestic usage are not allowable, the same has been excluded from the audited apportioned water charges. Accordingly, water charges claimed and those allowed are as under:

(Rs. in lakh)

	2016-17	2017-18	2018-19
Claimed	295.08	334.97	407.12
Allowed	**292.66**	**332.62**	**404.72**

Capital Spares

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

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

53. The Petitioner has claimed total actual expenditure of Rs. 345.13 lakh for capital spares consumed during the period 2016-19 ('nil' in 2016-17, Rs. 70.85 lakh in 2017-18 and Rs. 274.28 lakh in 2018-19) and has prayed that the capital spares replaced /

consumed by the generating station during the period 2016-19 may be allowed.

54. The Respondent PSPCL has submitted that the Petitioner may be directed to submit the year-wise details of the actual capital spares consumed with appropriate justification for incurring the same. It has stated that though the Petitioner, in Form-17 has provided the break-up and justification for the use of said spares, it has failed to provide any justification for claiming capital spares for such a new plant within the period of 4-5 years of service, when it has already made a claim for initial spares as well. Accordingly, the Respondent has submitted that the claim of the Petitioner may be subjected to strict scrutiny at the time of prudence check. In response, the Petitioner has clarified that the details of capital spares have been furnished in Form-17 for the period 2016-19. It has also stated that in order to ensure the reliable and efficient operation of the generating station at all times, the units / equipment's are taken under overhaul / maintenance and is inspected regularly for wear and tear and during such works, spares parts of equipment which become damaged / unserviceable are replaced /consumed, so that the machine continue to perform at expected efficiency, on sustained basis. It has also submitted that it has been confirmed in Form-17, that no part of capital spares has been funded through compensatory allowance or special allowance or claimed as part of additional capitalization or stores and spares.

55. It is pertinent to mention that capital spares comprise of two categories i.e. (i) spares which form part of the capital cost and (ii) spares which do not form part of the capital cost of the project. In respect of capital spares which form part of the capital cost of the project, tariff is being recovered since their procurement and, therefore, the same cannot be allowed as part of additional O&M expenses. Accordingly, only those

capital spares, which do not form part of the capital cost of the project, are to be considered. It is pertinent to mention that the term 'capital spares' has not been defined in the 2014 Tariff Regulations. The term capital spares, in our view, is a piece of equipment or a spare part, of significant cost that is maintained in inventory for use in the event that a similar piece of critical equipment fails or must be rebuilt.

56. It is observed that, the cut-off date of the generating station is 31.3.2019 and all spares capitalized till this date, has been allowed as 'Initial spares' in the capital cost as on COD and additional capitalization post COD. As such, we notice that the expenditure on capital spares consumed and claimed as part of O&M expenses by the Petitioner already form part of the capital cost for the purpose of tariff. In this background, since, the Petitioner has already claimed initial spares as part of the capital cost, as on COD and as additional capitalisation, we are not inclined to allow the capital spares claimed by Petitioner, as part of O&M expenses for the respective years. Accordingly, the O&M expenses allowed for the period 2016-19 is tabulated below:

(Rs. in lakh)

		2016-17	2017-18	2018-19
Installed Capacity (MW) (A)		1200	1200	1200
O&M Expenses under Regulation 29(1) *(Rs in lakh / MW)* (B)		16.27	17.30	18.38
Total O&M Expenses (in Rs. lakh) (C) = (A)*(B)	Claimed	19524.00	20760.00	22056.00
	Allowed	**19524.00**	**20760.00**	**22056.00**
Water Charges (in Rs. lakh) (D)	Claimed	295.08	334.97	407.12
	Allowed	**292.66**	**332.62**	**404.72**
Capital Spares consumed (in Rs. lakh) (E)	Claimed	0.00	70.85	274.28
	Allowed	**0.00**	**0.00**	**0.00**
Total O&M Expenses allowed (F) = (C+D+E)	**Claimed**	**19819.08**	**21165.82**	**22737.40**
	Allowed	**19816.66**	**21092.62**	**22460.72**

Operational Norms

57. The operational norms for the generating station as claimed by the Petitioner are as under:

	2016-17	2017-18	2018-19
Normative Annual Plant Availability Factor (NAPAF) (%)	60%	60%	60%
Gross Station Heat Rate (kCal/kWh)	2339.78	2339.78	2339.78
Auxiliary Power Consumption (%)	5.25%	5.25%	5.25%
Specific Oil Consumption (ml/kWh)	0.50	0.50	0.50

(a) Normative Annual Plant Availability Factor (NAPAF)

58. Regulation 36 of the 2014 Tariff Regulations provides as follows:

> *"(A) Normative Annual Plant Availability Factor(a) All Thermal generating stations, except those covered under clauses (b),(c),(d) &(e)- 85%.*
>
> *Provided that in view of the shortage of coal and uncertainty of assured coal supply on sustained basis experienced by the generating stations, the NAPAF for recovery of fixed charges shall be 83% till the same is reviewed.*
>
> *The above provision shall be reviewed based on actual feedback after 3 years from 1.4.2014.*

59. The Petitioner has prayed for consideration of relaxation in NAPAF of the generating station to 60% for the period from 2016-17 to 2018-19, considering the coal shortage scenario, in exercise of the 'power to relax' under Regulation 54 of the 2014 Tariff Regulations.

60. The Objector DVPCA and the Respondent KSEBL have submitted that the arrangement of adequate coal supply, is the sole responsibility of the Petitioner. They have also submitted that since coal supply is being governed by a separate bilateral Fuel Purchase Agreement (FPA) signed between the Petitioner and Coal Supplier, the beneficiaries are in no way responsible for coal shortage and such burden should not be passed on to the beneficiaries for any lapses, which is attributable to the Petitioner / Coal Supplier. In response, the Petitioner has submitted that it has provided the detailed justification, along with documentary evidence for coal shortage and subsequent PAF loss of RTPS since COD.

61. The matter has been considered. Considering the nationwide coal shortage

scenario, Regulation 36(A) of 2014 Tariff Regulations, provides for relaxed NAPAF of 83% for first three (3) years i.e., from 2014-15 to 2016-17 and for review of the same thereafter. In line with this, the coal availability was reviewed and it was observed that the availability of coal to the thermal generating stations, in the country, became normal and therefore, the NAPAF of 85% for 2017-18 and 2018- 19 has been adopted by the Commission for all thermal generating stations whose tariff is regulated by this Commission. In our view, the non-availability of coal to the generating station of the Petitioner, is a localised or a plant specific issue and cannot be a factor to reduce NAPAF, particularly, keeping in view that arrangement of coal supply is the sole responsibility of the generator (Petitioner). Thus, the Petitioner's claim for considering the NAPAF at 60% cannot be allowed. Accordingly, the NAPAF of 83% for 2016-17 and 85% for 2017-18 and 2018-19 has been allowed in accordance with the provisions of Regulation 36 (A) of the 2014 Tariff Regulations.

(b) Gross Station Heat Rate

62. The Petitioner has claimed the Gross Station Heat Rate (GSHR) as 2339.78 kCal /kWh. As the Gross Station Heat Rate claimed by the Petitioner is in accordance with the provisions of Regulation 36(C)(b) of the 2014 Tariff Regulations, the same is allowed.

(c) Auxiliary Energy Consumption

63. The Petitioner has claimed Auxiliary Energy Consumption (AEC) of 5.25%. The Regulation 36(E)(a)(ii) of the 2014 Tariff Regulations provides for AEC of 5.25% for coal based generating stations of 500 MW sets and above with Steam driven boiler feed pumps. Since the AEC of 5.25%, is in line with the regulations above, the same is allowed.

(d) Secondary Fuel Oil Consumption

64. The Petitioner has claimed secondary fuel oil consumption as 0.5 ml / kWh. Regulation 36(D)(a) of the 2014 Tariff Regulations provides for secondary fuel oil consumption of 0.5 ml/kWh, for coal based generating stations. As the secondary fuel oil consumption claimed by the Petitioner is in line with the 2014 Tariff Regulations, the same is allowed.

65. Based on the above, the operational norms allowed are as under:

	2016-17	**2017-18**	**2018-19**
Normative Annual Plant Availability Factor (NAPAF) (%)	83%	85%	85%
Gross Station Heat Rate (kCal/kWh)	2339.78	2339.78	2339.78
Auxiliary Power Consumption (%)	5.25%	5.25%	5.25%
Specific Oil Consumption (ml/kWh)	0.5	0.5	0.5

Interest on Working Capital

66. Regulation 28 of the 2014 Tariff Regulations provides as follows:

"28. Interest on Working Capital:

(1) The working capital shall cover:

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

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

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

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

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

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

(vi) Operation and maintenance expenses for one month.

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

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

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

67. The Petitioner has revised its claims for Interest on working capital due to the revision of its P&G contribution claims. Accordingly, the interest on working capital claimed by the Petitioner is as under:

(Rs. in lakh)

	2016-17	**2017-18**	**2018-19**
Cost of Coal / Lignite for Stock and Generation (A)	19757.62	19757.62	19757.62
Cost of oil for 2 months (B)	312.86	312.86	312.86
O&M expenses - 1 month (C)	1651.59	1757.91	1871.93
Maintenance Spares- 20% of O&M expenses (D)	3963.82	4218.99	4492.62
Receivables - 2 months (E)	46129.04	46367.79	44203.60
Total Working Capital (F) = (A+B+C+D+E)	**71814.93**	**72415.18**	**70638.64**
Rate of Interest (G)	13.5%	13.5%	13.5%
Total Interest on Working capital (H) = (F)x(G)	**9695.02**	**9776.05**	**9536.22**

(a) Fuel Cost for Working Capital

68. Sub-clauses (i), (ii) and (iii) of Regulation 28(1) of the 2014 Tariff Regulations provides cost of coal towards stock for 30 days, 30 days of cost of coal towards generation and cost of secondary oil for two months respectively, to be considered for computation of working capital and in terms of Regulation 28(2) of the 2014 Tariff Regulations. Further, the computation of cost of fuel is to be based on the landed price and gross calorific value of the fuel, as per actuals, for the period from January, 2014 to March, 2014. Regulation 30 (6) of the 2014 Tariff Regulations provides as follows:

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

(6) Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be

determined to three decimal places in accordance with the following formula:

(a) For coal based and lignite fired stations

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

(b) xxxxx

Where,
AUX =Normative auxiliary energy consumption in percentage.

*CVPF=(a) Weighted Average Gross calorific value of coal **as received**, in kCal per kg for coal based stations*

> *(b) Weighted Average Gross calorific value of primary fuel **as received**, in kCal per kg, per litre or per standard cubic meter, as applicable for lignite, gas and liquid fuel based stations.*
>
> *(c) In case of blending of fuel from different sources, the weighted average Gross calorific value of primary fuel shall be arrived in proportion to blending ratio.*

CVSF =Calorific value of secondary fuel, in kCal per ml.
ECR = Energy charge rate, in Rupees per kWh sent out.
GHR =Gross station heat rate, in kCal per kWh.

LC = Normative limestone consumption in kg per kWh.

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

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

SFC = Normative Specific fuel oil consumption, in ml per kWh.

LPSFi=Weighted Average Landed Price of Secondary Fuel in Rs./ml during the month

69. Therefore, in terms of the above Regulations, for determination of working capital, the GCV on 'as received 'basis is to be considered. Further, Regulation 30 (7) of the 2014 Tariff Regulations provides as follows:

> *"(7) The generating company shall provide to the beneficiaries of the generating station the details of parameters of GCV and price of fuel i.e. domestic coal, imported coal, e-auction coal, lignite, natural gas, RLNG, liquid fuel etc., as per the forms prescribed at Annexure-I to these regulations:*
> *Provided that the details of blending ratio of the imported coal with domestic coal, proportion of e-auction coal and the weighted average GCV of the fuels as received shall also be provided separately, along with the bills of the respective month:*
> *Provided further that copies of the bills and details of parameters of GCV and price of fuel i.e. domestic coal, imported coal, e-auction coal, lignite, natural gas, RLNG, liquid fuel etc., details of blending ratio of the imported coal with domestic coal, proportion of e-auction coal shall also be displayed on the website of the generating company. The details should be available on its website on monthly basis for a period of three months."*

70. The Petitioner has furnished the average GCV of coal as 4020.72 kcal/kg on 'as received' basis for the period from January, 2016 to March, 2016.

71. As stated above, the Petitioner, in Form-15, has considered the average GCV of coal on "as received" basis i.e., from Wagon top, for the period from January 2016 to March 2016, for the purpose of computation of working capital for the period 2016-19. Accordingly, the cost for fuel components in working capital has been computed considering the fuel details (price and GCV) as per Form-15 A (Coal), which is 4020.72 kCal/kg. It is observed that the transit & handling loss of coal, GCV and price of primary and secondary fuel claimed by the Petitioner are in line with the regulations. Accordingly, the weighted average cost and GCV of primary and secondary fuel for computation of working capital is allowed as under:

	Allowed
Weighted Average GCV of Oil (kcal/ltr)	10275.32
Weighted Average cost of Oil (Rs/kl)	59525.16
Weighted Average GCV of Coal (kcal/kg)	4020.72
Weighted Average cost of Coal (Rs/Tonne)	3236.92

72. Based on the operational norms, GCV and price of primary and secondary fuel allowed as above, the cost of fuel components in working capital is worked out and allowed as under:

(Rs. in lakh)

	2016-17	**2017-18**	**2018-19**
Cost of Coal towards stock (30 days - Corresponding to NAPAF)	13478.48	13803.27	13803.27
Cost of Coal towards Generation (30 days - Corresponding to NAPAF)	13478.48	13803.27	13803.27
Cost of Secondary fuel oil 2 months (Corresponding to NAPAF)	432.80	443.22	443.22

(b) Working capital for Maintenance Spares

73. The Petitioner has claimed maintenance spares in working capital as under:

(Rs. in lakh)

2016-17	**2017-18**	**2018-19**
3963.82	4218.99	4492.62

74. It is noticed that the Petitioner has claimed working capital for maintenance spares by excluding the capital spares. Regulation 28(1)(a)(iv) of the 2014 Tariff Regulations provide for maintenance spares @ 20% of the O&M expense, including water charges and capital spares. Accordingly, the cost of maintenance spares @ 20% of the operation & maintenance expenses including water charges and capital spares, allowed are as follows:

(Rs. in lakh)

2016-17	2017-18	2018-19
3963.33	4218.52	4492.14

(c) Working Capital for O&M Expenses

75. O&M expenses for 1 month claimed by the Petitioner for the purpose of working capital is as follows:

(Rs. in lakh)

2016-17	2017-18	2018-19
1651.59	1757.91	1871.93

76. It is noticed that the Petitioner has claimed working capital for O & M expenses for one month, by excluding capital spares. However, Regulation 28(a)(vi) of the 2014 Tariff Regulations provides for O&M expenses for one month for coal based generating station as a part of working capital, inclusive of water charges and capital spares. Accordingly, the one-month O&M expenses, inclusive of water charges and capital spares, allowed is as under:

(Rs. in lakh)

2016-17	2017-18	2018-19
1651.39	1757.72	1871.73

(d) Energy Charge Rate (ECR) for Working Capital

77. The Petitioner has claimed Energy Charge Rate (ECR) ex-bus of 201.51 Paise/ kWh for the generating station, based on the landed cost of coal, GCV of coal & GCV and price of Oil for the preceding three months of 2016-19 for the generating station.

The GCV and price of Coal and Oil as claimed by the Petitioner have been allowed under paragraph 77 above. Accordingly, the ECR allowed is as under:

	Unit	2016-19
Capacity	MW	1200
Gross Station Heat Rate	kCal/kWh	2339.78
Aux. Energy Consumption	%	5.25%
Weighted average GCV of oil	Kcal/lit	10275.32
Average GCV of Coal for Jan to March 2016	Kcal/kg	4020.72
Weighted average price of oil	Rs. /KL	59525.16
Weighted average price of Coal	Rs. /MT	3236.92
Rate of Energy Charge ex-bus (rounded off to 3 decimals)	Rs. /kWh	2.015

78. Energy charges for 2 months as a part of working capital have been calculated on the following basis:

a) ECR of Rs. 2.015/kWh as calculated above (rounded off to three places as per Regulation 30(6) of the 2014 Tariff Regulations).

b) Ex-bus energy (two months), corresponding to the installed capacity of 1200 MW, normative availability of 83% for first year and 85% for last two years, and Auxiliary Energy Consumption of 5.25%.

79. The Energy Charges for two months for the purpose of working capital has been worked out as under:

(Rs. in lakh)

2016-17	2017-18	2018-19
27763.00	28431.99	28431.99

(e) Working Capital for Receivables

80. Receivables equivalent to two months of capacity charge and energy charge has been worked as follows:

(Rs.in lakh)

	2016-17	2017-18	2018-19
Variable Charges - for two months Corresponding to NAPAF (A)	27763.00	28431.99	28431.99
Fixed Charges – for two months (B)	22273.88	21587.27	21194.61
Total (C) = (A+B)	**50036.88**	**50019.26**	**49626.61**

(f) Rate of interest on working capital

81. In terms of clause (3) of Regulation 28 of the 2014 Tariff Regulations, the rate of

interest on working capital has been considered as 13.50% (Bank rate 10.00% + 350 bps). Accordingly, Interest on working capital has been computed as follows:

(Rs. in lakh)

	2016-17	**2017-18**	**2018-19**
Cost of Coal for stock (30 days generation Corresponding to NAPAF) (A)	13478.48	13803.27	13803.27
Cost of Coal for generation (30 days generation Corresponding to NAPAF) (B)	13478.48	13803.27	13803.27
Cost of oil for 2 months Corresponding to NAPAF (C)	432.80	443.22	443.22
Maintenance Spares - 20% of O&M expenses (D)	3963.33	4218.52	4492.14
Receivables - 2 months (E)	50036.88	50019.26	49626.61
O&M expenses - 1 month (F)	1651.39	1757.72	1871.73
Total Working Capital (G) = (A+B+C+D+E+F)	**83041.37**	**84045.26**	**84040.23**
Rate of Interest (H)	13.50%	13.50%	13.50%
Total Interest on Working capital (I) = (G)*(H)	**11210.58**	**11346.11**	**11345.43**

Additional O&M Expenses

82. The Petitioner has also claimed additional O&M expenses over and above the normative O&M expenses, allowable to the generating station, in accordance with the provisions of the 2014 Tariff Regulations. These expenditure heads include Mega Insurance, Expenses for CISF Security, Impact of GST, Impact of Pay Revision, Share of Pension & Gratuity (P&G) and Share of Subsidiary activities. To examine and decide as to whether the claims of the Petitioner for additional O&M expenses are over and above the normative O&M expenses allowed to the generating station, in terms of the 2014 Tariff Regulations, we rely on the duly audited financial statements of the Petitioner. In the Financial statements, all O&M expenses are covered in Notes to Financial Statements i.e., Note No. 29 under O&M and General administration charges and Note No. 27 of the Annual accounts under Employee Benefit Expenses. Accordingly, we examine the head-wise claims of the Petitioner as detailed in the subsequent paragraphs.

(A) Mega Insurance Expenses

83. The Petitioner has claimed total amount of Rs. 536.03 lakh (Rs. 129.75 lakh in 2016-17, Rs. 296.91 lakh in 2017-18 and Rs. 109.37 lakh in 2018-19) during the period 2016-19, towards Mega Insurance expenses, as additional O&M expenses for the generating station. In justification of the same, the Petitioner has submitted that the generating station is in high alert security zone and therefore, the Petitioner has to ensure substantial safeguard measures through Mega Insurance, against damage or destruction of the assets. The Petitioner has also submitted that the Commission in its order dated 13.12.2005 in Petition No. 163/2004 (approval of tariff in respect of Tanda TPS) has allowed expenditure on Mega Insurance.

84. The Objector, DVPCA has submitted that the Commission in its earlier orders had disallowed the expenditure on Mega Insurance and the same is to be recovered as part of the normative O&M expenses. It has stated that the actual O&M expenses, including the mega insurance expenses for the period 2016-19, is lower than the normative O&M expenses specified under the 2014 Tariff Regulations, and thus, the normative O&M expenses are sufficient to cover such expenses. Accordingly, the Objector has stated that the claim of the Petitioner may not be considered separately. In response, the Petitioner has submitted that the said expenditure is necessitated due to 'substantial increase in the risk profile of power plants' on account of various issues (including lenders covenants), natural calamities, law and order etc, and it protects the customers from any tariff shock, in the event of any substantial loss, arising out of damage or destruction of the power plant. Accordingly, it has prayed that the expenditure may be allowed as an additional pass-through, over and above, the said norms. The Petitioner has further submitted that the Commission in its various orders (i.e., order dated 13.12.2005 in Petition No. 163/2004, order dated 9.7.2013 in

Petition No. 269/GT/2012, order dated 29.7.2016 in Petition No. 465/GT/2014, order dated 7.8.2013 in Petition No. 275/GT/2012 and order dated 29.7.2016 in Petition No. 470/GT/2014) while determining tariff had allowed expenses towards Mega Insurance.

85. The Respondent KSEBL has submitted that the Petitioner may be directed to meet the above expenses from the normative O&M expenses allowed. The Respondent PSPCL submitted that based on the premise that the site-specific norms in case of thermal generating stations may not serve much purpose, as there is a set of advantages and disadvantages associated with every site, which average out, and the proposed norms are also based on multiple stations with wide geographical spread and therefore, such aspects are already factored in the norms. Accordingly, the Respondent has submitted that the claim may not be permitted at the stage of a truing-up of tariff.

86. The matter has been considered. As regards the submission of the Petitioner that the Commission had allowed expenses towards Mega insurance to Mejia 1, 2 & 3, CTPS 1, 2 & 3 etc, over and above the O&M expenses norms, it is noticed that the grant of Mega insurance was for the period prior to the period 2014-19, and in exercise of its Power to Relax. However, the same was not allowed for other projects of the Petitioner. It is pertinent to mention that the Commission, while specifying the O&M norms for the 2014-19 tariff period, had considered insurance expenses as part of the O&M expense calculations and had factored the same in the said norms. Considering the above, we do not find any reason to allow expenses towards Mega Insurance over and above the O&M expense norms. Accordingly, the expenses claimed towards Mega Insurance is not allowed.

(B) CISF Security Expenses

87. The Petitioner has claimed total amount of Rs.6583.19 lakh (Rs. 2107.30 lakh in

2016-17, Rs. 2278.29 lakh in 2017-18 and Rs. 2197.61 lakh in 2018-19) during the period 2016-19, towards CISF security expenses, as additional O&M expenses for the generating station. In justification of the same, the Petitioner has made identical submissions:

(a) The generating station is located in high alert security zone and any untoward situation arising due to the terrorist attack or theft, may cause loss of property and prolonged interruption of generation. The concerned Ministry, from time to time has directed the Petitioner, to take appropriate security arrangements at hydro generating stations, dams etc. and to strengthen the physical security of various generating stations and tighten personal security.

(b) The Ministry of Home Affairs, GOI, had granted approval for creation of additional security personnel posts to be stationed at the generating station. Thus, accordingly, the Petitioner has deployed CISF personnel in its plants, to ensure adequate security at the plants, as well as to comply with the directives, on security measures. Accordingly, the Petitioner has been incurring expenses towards CISF security for deployment of CISF personnel and associated CISF activities.

(c) The Commission had allowed the CISF expenses in case of Mejia Thermal Power Station Units-1 to 3 vide order dated 9.7.2013 in Petition No. 269/GT/2012 and order dated 29.7.2016 in Petition No. 465/GT/2014 and for Chandrapura TPS (Units 1 to 3) vide dated 7.8.2013 in Petition No. 275/GT/2012 and order dated 29.7.2016 In Petition No. 470/GT/2014. Accordingly, the Commission may allow the CISF expenses as incurred by and apportioned to the generating station during the period 2014-19 to be recovered in full, in exercise of the 'Power to Relax' under the 2014 Tariff Regulations, similar to the Commission's treatment in the aforesaid orders

88. The Objector, DVPCA has submitted that the actual O&M expenses, including the security expenses, for the period 2016-19 is lower than the normative O&M expenses specified under the 2014 Tariff Regulations. It has further submitted that the provisions of the 2014 Tariff Regulations, does not allow security expenses over and above the O & M norms. The objector has also stated that CISF security expenses was not claimed by Petitioner in previous tariff order in Petition No. 224/GT/2015 which was disposed of vide order dated 28.9. 2017.

89. The matter has been considered. As regards the submission of the Petitioner that the Commission had allowed expenses towards CISF security in order dated 29.7.2016 in Petition No. 465/GT/2014 and order dated 29.7.2016 in Petition No. 470/GT/2014, it is observed that the CISF expenses, over and above the O&M expenses norms was allowed only for Mejia Therma Power Station (Units 1-3) and Chandrapur Thermal Power Station (Units-1 to 3) projects of the Petitioner during the 2009-14 tariff period in exercise of the power to relax, but was not allowed for other projects of the Petitioner. Further, the Commission while specifying the O&M expense norms for the period 2016-19, had considered security expenses for the generating station, as part of the O&M expenses and had factored the same in the said norms. Considering the above, we do not find any reason to allow additional O&M expenses towards CISF security.

(C) Impact of Goods and Service Tax (GST)

90. The Petitioner has claimed additional O&M expenses of Rs. 59.46 lakh in 2017-18 and Rs. 170.04 lakh in 2018-19 as impact towards Goods and Service Tax (GST), including the apportioned impact with respect to DVC HQ, during the period 2016-19. The Objector, DVPCA has submitted that the Petitioner's claim is extraneous to the provisions of 2014 Tariff Regulations and various orders of the Commission. In response, the Petitioner has clarified that the Commission in order dated 14.3.2018 in Petition No. 13/SM/2017 and order dated 17.12.2018 in Petition No. 01/SM/2018 had considered the implementation of GST as "change in law".

91. The submissions have been considered. It is observed that the Commission while specifying the O&M expense norms for the period 2014-19 had considered taxes to form part of the O&M expense calculations and accordingly, had factored the

same in the said norms. This is evident from paragraph 49.6 of the SOR (Statement of Objects and Reasons) issued with the 2014 Tariff Regulations, which is extracted hereunder:

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

92. Further, the escalation rates considered in the O&M expense norms is only after accounting for the variations during the past five years of the period 2016-19, which in our view, takes care of any variation in taxes also. It is pertinent to mention that in case of reduction of taxes or duties, no reimbursement is ordered. In this background, we find no reason to grant additional O&M expenses towards impact of GST.

(D) Share of Subsidiary Activities

93. The Petitioner has claimed total amount of Rs.1810.39 lakh (Rs. 685.27 lakh in 2016-17, Rs. 659.40 lakh in 2017-18 and Rs. 465.72 lakh in 2018-19) during the period 2016-19, towards 'Share of Subsidiary activities' as additional O&M expenses. In justification of the same, the Petitioner has submitted that it has been undertaking various subsidiary activities in terms of Section 12 of the DVC Act, 1948. It has also submitted that in terms of the judgment of APTEL dated 23.11.2007 in Appeal No. 273 of 2006 & batch, the expenses with regard to Subsidiary activities are to be allowed as a pass-through element in tariff. The Petitioner has stated that above judgment of APTEL has been affirmed by the Hon'ble Supreme Court vide its judgment dated 23.7.2018 in Civil Appeal Nos. 971-973 of 2008 along with Civil Appeal Nos. 4289 of 2008 (Bhaskar Shrachi Alloys Ltd. Vs. DVC) referred to in (2018) 8 SCC 281. The Petitioner has further submitted that the expenses toward share of subsidiary activities allowed in case of this generating station vide order dated 9.7.2013 in Petition No. 269/GT/2012 and order dated 29.7.2016 in Petition No. 465/GT/2014 and for

Chandrapura TPS, Units-1 to 3 vide order dated 7.8.2013 in Petition No. 275/GT/2012 and order dated 29.7.2016 in Petition No. 470/GT/2014, in relaxation of the provisions of the Tariff Regulations. Accordingly, the Petitioner has prayed that the Commission may allow the expenses toward share of subsidiary activities, as incurred and apportioned to the generating station during the period 2016-19 for recovery in full, in exercise of the power to relax' under the 2014 Tariff Regulations.

94. The Objector, DVPCA has submitted that the Petitioner has also claimed expenses towards subsidiary activities including additional capital, O&M, Return on Equity, Interest on loan and Depreciation. It has submitted that the contribution to subsidiary fund is not allowable as the Return on Equity, Interest on loan and Depreciation, on common assets, have been claimed separately. The Respondent has further submitted that the Commission had dealt with the issue of expenditure of subsidiary activities, while framing the 2014 Tariff Regulations and had specifically disallowed such expenses to be charged as additional O&M expenses, vide order dated 28.09.2017 in Petition No. 224/GT/2015. It has stated that the actual O&M expenses including the share of subsidiary expenses are lower than the normative O&M expenses and thus, there is no requirement of allowing the share of subsidiary expenses additionally. In response, the Petitioner has clarified as under:

> (a) DVC has been undertaking multifarious functions in the Damodar Valley area in terms of Section 12 of the DVC Act, 1948 with the obligation to undertake development of Damodar Valley, which falls in the provinces of West Bengal and Jharkhand. The activities of DVC are not restricted to generation and sale/supply of electricity. The functions of the DVC include promotion and operation of schemes for irrigation, water supply and drainage, flood control and improvement of flow conditions in the Hooghly River, navigation in the Damodar River and its tributaries and channels, afforestation and control of soil erosion and promotion of public health and agricultural, industrial, economic and general well-being in the Damodar Valley under its areas of operation. Thus, DVC is engaged in number of activities which are not commercial in nature and where no significant revenue accrues to DVC.

(b) DVC cannot generate required revenue from the users of service in regard to schemes such as drainage, flood control, improvement in the flow conditions, navigation, afforestation and control of soil erosion or the promotion of public health and general well-being in the Damodar Valley. The main revenue earning activity performed by DVC is generation and sale of power. DVC is undertaking various activities in a comprehensive manner for the betterment of Damodar Valley and using the revenues earned from various sources including generation and sale of electricity for the above varied purposes for which DVC has been established. In the facts and circumstances mentioned herein above, DVC occupies a special position.

(c) The activities of DVC are akin to the activities undertaken by the Governments, Central, State or Municipalities. Therefore, it is critical that the expenses incurred by DVC in undertaking the various subsidiary activities be recovered in suitable manner so as to not create financial burden on DVC.

(d) Section 32 of the DVC Act 1948 allows DVC to incur expenditure on activities other than power, irrigation and flood control. The APTEL's judgment dated 23.11.2007 in Appeal No. 271, 272, 273 and 275 of 2006, had allowed the recovery of these expenses through tariff. The said judgment was upheld by the Hon'ble Supreme Court vide order dated 23.7.2018 in Bhaskar Shrachi Alloys Ltd. vs. Damodar Valley Corporation (2018) 8 SCC 281, whereupon, the Hon'ble Supreme Court has reiterated the fact that the other activities undertaken by DVC are statutory in nature and provided for recovery of related expenses.

95. The submissions have been considered. The expenses of subsidiary activities include multipurpose dams and other heads. In this regard, Regulation 53 of the 2014 Tariff Regulations provides as under:

"53. Special Provisions relating to Damodar Valley Corporation:

(1) Subject to clause (2), this regulation shall apply to determination of tariff of the projects owned by Damodar Valley Corporation (DVC).

(2) The following special provisions shall apply for determination of tariff of the projects owned by DVC:

(i) Capital Cost: The expenditure allocated to the object 'power', in terms of sections 32 and 33 of the Damodar Valley Corporation Act, 1948, to the extent of its apportionment to generation and inter-state transmission, shall form the basis of capital cost for the purpose of determination of tariff:

Provided that the capital expenditure incurred on head office, regional offices, administrative and technical centers of DVC, after due prudence check, shall also form part of the capital cost.

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(iv) Funds under section 40 of the Damodar Valley Corporation Act, 1948: The Fund(s) established in terms of section 40 of the Damodar Valley Corporation Act, 1948 shall be considered as items of expenditure to be recovered through tariff.

(3) The provisions in clause (2) of this regulation shall be subject to the decision of the Hon'ble Supreme Court in Civil Appeal No 4289 of 2008 and other related appeals pending in the Hon'ble Court and shall stand modified to the extent they are inconsistent with the decision.

96. It is noticed that the Commission in its various tariff orders in respect of the other generating stations of the Petitioner for the period 2014-19, had observed that as per SOR to the 2014 Tariff Regulations, the site specific norms in case of thermal generating stations may not serve much purpose as there is a set of advantages and disadvantages associated with every site, which average out, and the proposed norms are also based on multiple stations with wide geographical spread and therefore, such aspects are already factored in the norms and accordingly, the additional O&M expenses claimed by the Petitioner, including share of subsidiary activities was not allowed. In this regard the relevant sections of DVC Act 1948 are as follows:

"*32. Expenditure on objects other than irrigation, power and flood control: The Corporation shall have power to spend such sums as it thinks fit on objects authorised under this Act other than irrigation, power and flood control and such sums shall be treated as common expenditure payable out of the Fund of the Corporation before allocation under Section 33.*

33. Allocation of expenditure chargeable to project on main objects: The total capital expenditure chargeable to a project shall be allocated between the three main objects, namely, irrigation, power and flood control as follows, namely:

1) expenditure solely attributable to any of these objects, including a proportionate share of overhead and general charges, shall be charged to that object, and

2) expenditure common to two or more of the said objects, including a proportionate share of overhead and general charges shall be allocated to each of such objects in proportion to the expenditure which, according to the estimate of the Corporation, would have been incurred in constructing a separate structure solely for that object, less any amount determined under clause (1) in respect of that object.

37. Disposal of profits and deficits. —

(1) Subject to the provisions of sub-section (2) of section 40, the net profit, if any, attributable to each of the three main objects, namely, irrigation, power and flood control, shall be credited to the participating Governments in proportion to their respective shares in the total capital cost attributed to that object.

(2) The net deficit, if any, in respect of any of the objects shall be made good by the Governments concerned in the proportion specified in sub-section (1):

Provided that the net deficit in respect of flood control shall be made good entirely by the Government of West Bengal and the Central Government shall have no share in such deficit."

97. It is noticed that APTEL vide its judgement dated 23.11.2007 had observed that the expenditure incurred by the Petitioner, on objects other than irrigation, power and flood control, are non-commercial in nature and accrue little or no revenue and is not likely to sub serve the objectives of Section 41 and 51 of the Act and therefore, can be allocated to these three heads as per section 32 and 33 of DVC Act, 1948 and the expenditure so allocated to power object, should be allowed to be recovered through the electricity tariff. Subsequently, the Hon'ble Supreme Court vide its judgment dated 23.7.2018 in Civil Appeal No. 4289 of 2008 and batch thereof, upheld the decision of APTEL as under:

"55. In so far as the issue of allowance of cost relating to 'other activities' of the Corporation to be recovered through tariff on electricity is concerned, we have taken note of the objection(s) raised in this regard which in sum and substance is that Sections 32 and 33 of the Act of 1948 are in direct conflict with Sections 41 and 51 of the 2003 Act and, therefore, recovery of cost incurred in "other works" undertaken by the Corporation through power tariff is wholly untenable. Apart from reiterating the basis on which we have thought it proper to affirm the findings of the learned Appellate Tribunal on the purport and scope of the fourth proviso to Section 14 of the 2003 Act and the continued operation of the provisions of the Act of 1948 which are not inconsistent with the provisions of the 2003 Act, we have also taken note of the specific provisions contained in Sections 41 and 51 of the 2003 Act which, inter alia, require maintenance of separate accounts of the other business undertaken by transmission/distribution licensees so as to ensure that the returns from the transmission/distribution business of electricity do not subsidize any other such business. Not only Sections 41 and 51 of the 2003 Act contemplate prior approval of the Appropriate Commission before a licensee can engage in any other business other than that of a licensee under the 2003 Act, what is contemplated by the aforesaid provisions of the 2003 Act is some return or earning of revenue from such business. In the instant case, the "other activities" of the Corporation are not optional as contemplated under Sections 41/51 of the 2003 Act but are mandatorily cast by the statute i.e. Act of 1948 which, being in the nature of socially beneficial measures, per se, do not entail earning of any revenue so as to require maintenance of separate accounts. The allowance of recovery of cost incurred in connection with "other activities" of the Corporation from the common fund generated by tariff chargeable from the consumers/customers of electricity as contemplated by the provisions of the Act of 1948, therefore, do not collide or is, in any manner, inconsistent.

98. In view of the above, the expenses towards the sharing for subsidiary activity is

allowed as claimed by the Petitioner during the period 2016-19.

(E) Impact of Pay Revision and P&G contribution

99. The Petitioner has claimed expenses pertaining to impact of Pay Revision on account of 7th Central Pay Commission and Pension & Gratuity (P&G), over and above, the normative O&M expenses allowable to the generating station. It is noticed that the Petitioner, in its tariff petitions for truing-up of tariff for the period 2009-14 had made additional claims towards P&G liability based on actuarial valuation. This prayer was, however, rejected by the Commission by its various orders, on the ground that the P&G liability formed part of the O&M expense norms specified under the 2009 Tariff Regulations. Aggrieved by this decision, the Petitioner has filed Appeal Nos.268-275 of 2016 before APTEL and the same is pending. The Petitioner has made similar prayers in tariff petitions for the period 2014-19, which was also rejected by the Commission on the ground that the Petitioner's contribution to P&G fund is required to be met through the normative O&M expenses, allowed to the generating stations. However, the Commission in order dated 20.9.2016 in Petition No.353/GT/2014 (approval of tariff for Panchet Hydel Power Station, Units-I &II for the 014-19 tariff period) granted liberty to the Petitioner to claim the said relief through a separate application along with all relevant details, so that a holistic view can be taken in the matter, in accordance with law. Accordingly, the Petitioner had filed Petition No.197/MP/2016, wherein P&G contribution of Rs.3228.86 crore and impact of pay revision from January, 2016 as Rs.420.27 crore for 2014–19 was claimed over and above the normative O&M expenses specified under Regulation 29 of the 2014 Tariff Regulations. The Commission, vide its order dated 4.9.2019, while holding that the said petition was maintainable, disposed of the same as under:

100. *"25……The employee expenses, in general, form a considerable part of O&M expenses and includes all types of employee related expenses like Salary,*

contribution to CPF, gratuity, pension, etc., However, the submission of the Petitioner that no part of P&G contribution related to power business were factored in the O&M expenses during the base years cannot be appreciated in the absence of any supporting details/data being furnished by the Petitioner. As stated, the normative O&M expenses were specified under Regulation 29 of the 2014 Tariff Regulations after giving due consideration of the requirements of various generating companies. The Petitioner DVC has argued that in so far as the liability of pension for its employees is concerned, it is unique and different from those prevalent in other central generating stations regulated by this Commission since the revision of pension from time to time, is based on the decision of the Central Govt. However, the information/details available on record do not support the aforesaid submission of the Petitioner that it incurs extra expenditure on terminal benefits to the employees over and above the normative O&M expenses under the 2014 Tariff Regulations. In the above background and in the absence of any supporting details/data, the prayer of the Petitioner cannot be granted in this order. However, the Petitioner is at liberty to claim the said relief with all relevant information/ documents including the (a) actuarial valuation; (b)actual data duly audited and certified by the auditor and (c) annual accounts of the pension fund, at the time of truing up of tariff in terms of Regulation 8 of the2014 Tariff Regulations.

26.xxxxx

27. We notice that subsequently, the Petitioner has implemented the recommendations of the 7th Pay Commission for its employees with effect from 1.1.2016. In view of this, the impact of pay revision, after implementation of the 7th Pay Commission, is required to be examined on actual basis, on prudence check of the information/ details to be submitted by the Petitioner. Accordingly, we direct the Petitioner to furnish the actual impact of pay revision based on the recommendations of the 7th CPC, effective from 1.1.2016, along with details of HRA and transport allowance from July, 2017. The aforesaid details/information shall be furnished by the Petitioner at the time of truing up of tariff and the same will be considered in accordance with law."

101. Based on the above, the Petitioner, has submitted its claim for P&G contribution and for impact of pay revision, as additional O&M expenses, for the period 2016-19, which are examined below:

(i) Impact of Pay revision

102. The Petitioner has claimed total amount of Rs. 4584.26 lakh (Rs. 1457.55 lakh in 2016-17, Rs. 1834.53 lakh in 2017-18 and Rs. 1292.18 lakh in 2018-19) towards impact on account of Pay revision during the period 2016-19, due to recommendations of 7th Pay Commission. The Petitioner has also submitted that the Commission, while specifying the 2014 Tariff Regulations, has in the SOR observed that the increase in employee expenses on account of pay revision shall be

considered appropriately on case-to-case basis, balancing the interest of generating stations and consumers.

103. In the present case, the Commission *vide* ROP of the hearing dated 25.5.2021, directed the Petitioner to furnish the following additional information:

> ***"True-up for period 2014-19***
>
> *"i. Break-up of the actual O&M expenses of the generating station under various subheads (as per Annexure-A enclosed) after including the pay revision impact (employees, CISF and Corporate Centre) and wage revision impact (minimum wages), if applicable. (in both MS Excel and PDF format).*
>
> *ii. Break-up of the actual O&M expenses of Corporate Centre/other offices including pay revision impact (as per Annexure-B enclosed) for the generating station along with the allocation of the total O&M expenses to the various generating stations under construction, operational stations and any other offices/business activity, along with basis of allocating such expenditure (in both MS Excel and PDF format).*
>
> *iii. Breakup of the pay revision impact claimed in respect of employees of the Petitioner Company, Security personnel stationed at the generating station and Corporate Centre/other offices employee cost allocated to the generating station. (as per Annexure-C enclosed in both MS Excel and PDF format)."*

104. In compliance to the aforesaid directions, the Petitioner *vide* affidavit dated 1.7.2021, has furnished the information and submitted that additional O&M expenses including P&G liability claimed as elements of Part B of the total annal fixed charges and the same were not considered, while preparing the data as per Annexure-A, i.e., in pay revision. Accordingly, the total O&M expenses claimed by the Petitioner, in respect of the generating station, as per Annexure-A, for the 2016-19 tariff period is as follows:

(Rs. in lakh)

2016-17	2017-18	2018-19
9096.43	13036.18	12488.43

105. The Petitioner has further submitted that in line with the methodology adopted by the Commission, while approving the common office expenditure for the period 1.4.2014 to 31.3.2019 in order dated 27.9.2016 in Petition No.350/GT/2014, the actual O&M expenses of Corporate Centre/ other offices has already been apportioned

between O&M expenses of DVC’s transmission business & generating stations and is further apportioned to the O&M expenses of various generating stations in operation. The O&M expenses of Corporate Centre / other offices are also apportioned in above manner and considered in Annexure-A. The Petitioner has also stated that it has claimed total Security expenses including the impact of pay revision of the security personnel, however, as per direction of the Commission vide ROP for hearing dated 25.5.2021, the breakup of the impact of pay revision claimed in respect of the Security personnel stationed at the generating station and the apportioned cost of security expenses at Corporate Centre / other offices allocated to the generating station, as per Annexure-C, has been submitted. The Petitioner has further submitted that due to frequent transfer of employees from one generation station to other generating station/ T&D wing, on same post or to the higher post, due to promotion, during the period from 1.1.2016 to 31.3.2019 and due to the delayed implementation of pay revision in DVC, it is difficult to find out the station-wise impact of pay revision. Accordingly, the impact of pay revision of DVC employees has been determined in totality towards Power business and thereafter apportioned to transmission and generation based on the capital cost and further apportioned to various generators, based on their installed capacity, as per methodology adopted by the Commission, while approving the common office expenditure vide order dated 20.9.2016 in Petition No. 352/GT/2014.

106. DVPCA has submitted that the impact of pay revision claimed by the Petitioner may not be allowed, as the same is to be considered to be within the normative O&M expenses and also actual O&M expenses, including pay revision expenses, are well within the limit of normative O&M expenses. DVPCA has compared the overall claimed O&M expenses by the Petitioner, in its various generation tariff petitions with the overall actual O&M expenses and submitted that the actual O&M expenses are

lower than the normative O&M expenses and thus, there is no requirement of allowing pay revision expenses additionally.

107. In response, the Petitioner has stated that the recovery of impact of pay revision is to be considered and allowed in line with tariff principles enshrined under Section 61(d) of the Act. It has also mentioned that the norms for O&M expenses under the 2014 Tariff Regulations, were determined on the basis of the actual O&M expenses for the years 2008-09 to 2012-13 and the 2014 Tariff Regulations, were notified by the Commission on 21.2.2014 i.e., prior to the implementation of the pay revision (7th CPC). Accordingly, it has submitted that while arriving at the O&M norms for the period 2014-19, the Commission had no occasion to consider the impact of pay revision w.e.f. 1.1.2016. The Petitioner has further submitted that the Commission while specifying the 2014 Tariff Regulations, was of the view that the increase in employee expenses on account of pay revision, in case of central generating stations and private generating stations are to be considered appropriately and therefore, the Commission decided that the said costs shall be examined on case-to-case basis so that the interest of generating stations and consumers remains balanced. Accordingly, the Commission vide its order dated 4.9.2019 in Petition No. 197/MP/2016 had directed the Petitioner to furnish the actual impact of pay revision at the time of truing up of tariff.

(ii) Share of P&G Contribution

108. The Petitioner has claimed share of P&G Contribution for the 2016-19 tariff period as under:

(Rs. in lakh)

2016-17	2017-18	2018-19
5024.37	11374.93	2149.25

109. The Petitioner, in terms of the directions contained in order dated 4.9.2019 in

Petition No.197/MP/2016, has furnished the following data, duly certified by auditor:

a. *actuarial valuation of pension and gratuity;*
b. *actual data as per books of accounts on terminal benefits; and*
c. *annual accounts of pension funds for the period 2014-19.*

110. The Petitioner has further submitted that as per recommendations of the 7th Pay Commission, the Cabinet on 12.9.2017, had cleared the Payment of Gratuity (Amendment Bill 2017), wherein, the upper ceiling of gratuity has been enhanced from the present value of Rs.10 lakh to Rs.20 lakh, effective from 1.1.2016. It has submitted, that since the impact due to enhancement of upper ceiling of gratuity has not been considered / factored by the Commission, while fixing the normative O&M expenses for the period 2014-19, the Commission may consider the impact while considering the P&G contribution for the period 2016-19.

111. DVPCA has submitted that the Petitioner has claimed normative O&M expenses, in accordance with the 2014 Tariff Regulations and the same is being allowed, the additional expenses claimed by the Petitioner, over and above the normative O&M expenses, under the heads, P&G, Pay revision, Ash Evacuation expenses, CISF Security expenses, Expenditure for subsidiary activities, Mega Insurance expenses, impact of GST on O&M may be disallowed. In response, the Petitioner in its response has clarified as follows:

a. DVC as a statutory body is required to maintain appropriate scheme for meeting the Terminal Benefits of the employees i.e., Pension (wherever the appointment of employees is on pension basis), Gratuity, Contributory Provident Fund i.e., CPF (wherever the employment of the employees is on Provident Fund contribution basis instead of pension). The CPF scheme being an alternative to the pension scheme, is for those who have not opted or otherwise not eligible for pension scheme and DVC makes contribution to the CPF. In addition to the above, there is also a General Provident Fund (GPF), wherein, fund is contributed only by the employees but not by DVC. Thus, Provident Fund schemes are of two types, namely, the CPF and the GPF.

b. The article 16 and 17 of Employees Provident Funds and Miscellaneous Provisions Act, 1952 provides for administration of Provident Fund Scheme.

Accordingly, DVC is maintaining Provident Fund, both CPF and GPF, in respect of each of the employees with individual account of the employees duly reflecting (a) the contribution apportioned to such employees or the contribution made by DVC, wherever applicable, (b) apportionment to such employees, apportionment of the interest earned on the money invested from the Provident Fund Scheme in approved securities and (c) contribution made by the employees to the GPF. Such contributions are maintained in a separate account of each of the employees as per the applicable scheme.

c. The Pension & Gratuity Fund accounts are maintained separately by the Trust. The contributions to the Pension and Gratuity Trust are made based on actuarial valuation undertaken from time to time by actuaries appointed for the purpose. The actuarial valuation is in regard to all the employees and workmen of DVC.

d. No part of the amount related to Pension or Gratuity Fund contribution is used by DVC for its business activities in any of the years commencing from 01.4.2006 i.e., for the period in which the tariff is being determined by this Hon'ble Commission, upon coming into force of the Electricity Act, 2003. The contribution to the Pension & Gratuity Fund made by DVC is considered in the audited accounts of the DVC for the respective financial years.

e. In regard to the Provident Fund, the amount contributed is maintained by DVC but is dedicated to the benefit of DVC's employees and workmen. As in the case of Pension & Gratuity Fund, no part of the Provident Fund amount is to the account of DVC or to be utilised for the business activities of DVC. In line with the Employees Provident Funds and Miscellaneous Act, 1952, DVC is investing CPF and GPF amount in approved securities and the interest thereof is apportioned to employees. This has been reflected in Schedule 27 with two corresponding entries, namely, interest payable and interest recoverable on investment. DVC is required to duly account for all such interest.

f. The amount contributed by DVC to the Pension & Gratuity Fund is invested by the Trust in the name of the trust and not in the name of DVC. The interest accrued on this investment is considered as the income of the Trust. No part of the interest income is realized by DVC or appropriated by DVC in any manner and nowhere it is reflected in the audited accounts of DVC.

g. In view of the above, there is a difference between the Pension & Gratuity Contribution of DVC as compared to the Contributory Provident Fund.

112. The Petitioner has also submitted that the O&M expenses inclusive of employees cost and Contributory Provident Fund will not cover the revenue requirements of the DVC on account of the P&G contribution on following grounds:

a. The Contributory Provident Fund is in respect of the actual amount of contribution during the relevant year and does not involve adjustments for that year in future years, however, the Pension and Gratuity Contribution is to be constantly adjusted for past period of services also and is dependent on actuary valuation to be undertaken from time to time. The period of past services rendered by the employees of DVC including the deficit amount of contribution in the past in order to meet the pension payment to the employees upon their retirement need to be necessarily considered. Similarly, in case the contribution already made is in excess of the requirement, suitable adjustment is made through actuary valuation. Thus, the contribution to P&G cannot be restricted to current year.

b. The amount of Pension & Gratuity contribution in the case of DVC is significantly more in the recent past i.e., from 1.1.2006 onwards, on account of the following factors:

   i. Earlier, as there was no fund maintained for receiving the Pension and Gratuity Contribution, the same was being discharged by DVC on revenue basis pay as you go as in the case of any other Government Department. However, as per the mandate of the Comptroller and Auditor General and in accordance with the directions given by the Central Government, now, DVC has to maintain the Pension and Gratuity Fund. Accordingly, the contributions are being made not only for the present year working of the employees but also for all the past years of services including for persons who have retired from DVC in the past;

   ii. There has been a substantial increase in Pension and Gratuity payment to the employees on account of wage revision pursuant to the decision taken by the Central Government, firstly, in the year 2006 and secondly in the year 2016. These higher contributions to be made are not confined to the current year but also relates to the payment for the past services including the services rendered by the retired employees;

   iii. The liability under Contributory Provident Fund ceases with the year in which it is contributed. There is no actuary valuation or adjustment for upward revision on account of any wage revision etc. however, the pension payment is payable by DVC after the retirement of the employees on a continuous basis along with the revision to the pension from time to time as per the decision of the Central Government applicable to all retired employees; further the pension payment liability continues even after the death of the employee. The family pension needs to be given to the widows and other eligible members under the pension scheme.

c. Thus, the matter relating to Pension & Gratuity Contribution and other aspects of Terminal Benefit liabilities to the employees including the increase in such Pension and Gratuity contribution on account of actuarial valuation undertaken from time to time cannot be inter-mixed with the normative O&M expenditure provided for in the Tariff Regulations.

d. The normative O&M expenses determined by the Commission is based on the normalized actual quantum of expenditure incurred by the Utilities in the past period and escalation of thereof on account of inflation and other factors. Such normative expenditure would consider matters such as contribution to the Provident Fund etc. where the amount of contribution is duly factored as a percentage of the salaries and wages paid to the employees and is adopted by Central Power Sector Utilities who do not maintain a Pension scheme such as NTPC, NHPC etc, however, it cannot be ipso facto adopted for DVC, wherein, some of its employees are under Pension Scheme, as admissible to the Government departments.

e. The contribution which DVC has to make towards the Pension and Gratuity Fund from time to time based on the actuarial valuation including for increase in the Pension and Gratuity Contribution related to the past period on account of pay revision, is not factored into in the determination of the employees cost as part of the normative O&M cost decided by this Hon'ble Commission from time to time. These are also not part of any specific tariff elements given in the Regulation 21 and 14 of the 2009 and 2014 Tariff Regulations, respectively.

f. APTEL and the Hon'ble Supreme Court in the orders dated 23.11.2007 and 23.7.2018 respectively have directed in favour of full recovery of the P&G contribution. Further, the Commission vide order dated 04.09.2019 in Petition no. 197/MP/2016 granted liberty to DVC to claim the Pension and Gratuity contribution along with relevant details at the time of truing up.

g. The principle for apportionment of the contribution towards Pension & Gratuity fund to the different generating stations and T&D system of DVC, based on capital cost and installed capacity has been already approved by the Commission for the 2006- 09 period and the same principle has been followed by DVC in its true-up petitions for the period 2014-19.

h. As regards linking the recovery of Pension & Gratuity contribution to Plant Availability Factor (PAF), the APTEL in its judgment dated 23.11.2007 had directed for recovery of the entire amount of the Pension & Gratuity contribution from the consumers through tariff. The said judgment of APTEL dated 23.11.2007 was upheld by the Hon'ble Supreme Court vide its order dated 23.7.2018. The State Commissions of West Bengal and Jharkhand in their different orders, had also allowed the full recovery of the Pension & Gratuity contribution of the Petitioner.

113. Accordingly, the Petitioner has submitted that the contentions of the Objector may be rejected, and the amount claimed towards contribution to Pension & Gratuity for the period 2016-19 may be allowed to be recovered in full, on sharing basis.

<u>Analysis and Decision</u>

114. The submissions have been considered. As regards pay revision, it is noticed that the Petitioner has prayed and claimed the impact of pay revision on account of

7th pay commission. However, in respect of P&G, it is noted that the Petitioner has primarily not pleaded for impact of pay revision on P&G but have claimed the actual P&G. It is observed that the normative O&M expenses includes a gratuity and CPF of public sector undertakings. Accordingly, the O&M norms under the regulations account for gratuity and a part of pension pertaining to serving employees of Petitioner. However, the Petitioner has the liability of Pension for retired employees as well. Thus, the actual impact of pension needs to be assessed to examine the additional O&M claim by the Petitioner. It is observed that the Petitioner is maintaining the audited accounts of its entire power vertical, which consists of 15 generating stations, transmission system and distribution system, on consolidated basis. In this regard, the Petitioner has submitted that due to frequent transfer of employees from one generation station to other generating station / T&D wing, on same post, or to the higher post, due to promotion during the period from 1.1.2016 to 31.3.2019, delayed implementation of pay revision etc., the Petitioner has expressed its difficulty to provide the station-wise impact of pay revision separately but determined it in totality for Power business and thereafter, apportioned as per methodology adopted by the Commission, while approving the common office expenditure vide order dated 20.9.2016 in Petition No.352/GT/2014.

115. In view of the above, to assess the impact of pay revision on O&M expenses and P&G contribution, it was decided to adopt a holistic approach i.e., to compare the actual normalised O&M expenses of power vertical of DVC as per audited accounts, with the normative O&M expenses specified under the 2014 Tariff Regulations. In case the normative O&M expenses are in excess of the actual normalised O&M expenses associated with power vertical, the additional expenditure claimed by the Petitioner shall not be allowed and in case of any, under-recovery, if any, to the extent

of impact of pay revision and expenses on account of P&G contribution shall be allowed, in relaxation of O&M norms under the 2014 Tariff Regulations.

116. In order to ascertain the justification for additional O&M expenses, over and above the normative O&M expenses allowed, a comparative analysis of the actual O&M expenses, was undertaken, including the additional normalised claims and the normative O&M expenses allowable under the various tariff petitions for truing up filed by the Petitioner. It is observed that during the period 2014-19, the total normative O&M expenses allowed as per the Tariff Regulations for the various tariff petition (both Generation and Transmission) is Rs.1044745.04 lakh. Further, as per audited financial statements water charges for Rs.38226.00 lakh (in terms of Regulation 29(2) of the 2014 Tariff Regulations) and Ash Evacuation expenses of Rs.61182.00 lakh (as change in law) has been incurred by the Petitioner, during the period 2014-19. However in line with the MoEF&CC notification dated 25.1.2016, the ash transportation charges have been allowed from 26.1.2016 to 31.3.2019 which works out to Rs.39334.64 lakh Since the Petitioner maintains separate accounts for each generating station and the Petitioner is granted liberty to claim the ash evacuation expenses separately, the total amount allowable to the Petitioner against O&M, Water charges and allowable Ash Evacuation charges is Rs.1122305.68 lakh (Rs.1044745.04 lakh + Rs.38226.00 lakh+Rs.39334.64 lakh) whereas, the actual O&M expenses, as per DVC Financial statements for the 2014-19 period is Rs.1219786.00 lakh (including subsidiary activities), which indicates that the actual O&M expenses exceeds the normative O&M expenses, by Rs.97480.32 lakh. However, we note that the actual O&M expenses of Rs.1219786 lakh also includes Provisions for Loss, Doubtful claims & Advances, Doubtful debts, and Shortage/Obsolescence in stores etc. amounting to Rs.77573 lakh, and Rebates &

Discount allowed to consumers for Rs.49937 lakh, out of which rebate of Rs.40820 lakh pertain to firm consumers (breakup submitted by the Petitioner vide ROP dated 22.4.2022). When the actual O&M expenses are normalised, by excluding the provisions amounting to Rs.77573 lakh (being a non-cash expenditure and Rebates & Discounts for Rs.40820 lakh pertaining to firm consumers, as stated above, the actual O&M expenses work out to Rs.1101392.70 lakh (i.e., Rs.1219786 - Rs.77573 - Rs.40820.30 lakh). The computation of the normalised actual O&M expenses is as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19	TOTAL
A. ACTUAL O&M AS PER DVC AUDITED FINANCIAL STATEMENTS						
Note No.27-Employee	81960.00	96738.00	126691.00	159010.00	109249.00	573648.00
Note No.29-O&M a	93447.00	117668.00	132286.00	169568.00	133169.00	646138.00
TOTAL (A)	**175407.00**	**214406.00**	**258977.00**	**328578.00**	**242418.00**	**1219786.00**
B. PROVISIONS-NOTE NO 29-POWER SEGMENT						
Provision for Loss on Fixed Assets	446.00	191.00	6544.00	4293.00	0.00	11474.00
Provision for Doubtful Claims and Advances	4586.00	1308.00	0.00	0.00	0.00	5894.00
Provision for Doubtful Debts	205.00	733.00	9126.00	41657.00	8299.00	60020.00
Provision for Shortage /Obsolescence in Stores	12.00	8.00	13.00	128.00	24.00	185.00
TOTAL (B)	**5249.00**	**2240.00**	**15683.00**	**46078.00**	**8323.00**	**77573.00**
C. REBATE & DISCOUNT ALLOWED TO FIRM CUSTOMERS (as per Petitioner submission)						
Rebate & Discount Allowed	3821.32	8983.93	8766.85	8393.73	10854.47	40820.30
TOTAL (C)	**3821.32**	**8983.93**	**8766.85**	**8393.73**	**10854.47**	**40820.30**
NORMALISED ACTUAL O&M AS PER AUDITED STATEMENT OF ACCOUNTS (A-B-C):-	**166336.68**	**203182.07**	**234527.15**	**274106.27**	**223240.53**	**1101392.70**

117. A comparison of the normative O&M expenses (including allowable water charges) with the normalized actual O&M expenses in respect of the various truing-up generation and transmission tariff petitions filed by the Petitioner for the period

2014-19 and allowed for the period 2014-19 (in this petition) is as under:

(Rs. in lakh)

Petition No.	Generating Station / Transmission Petitions	Normative O&M expenses claimed
574/GT/2020	Bokaro Thermal Power Station-A	20741.38
569/GT/2020	Bokaro Thermal Power Station-1-3	64499.08
565/GT/2020	Chandrapur Thermal Power Station 1-3	56979.30
570/GT/2020	Chandrapur Thermal Power Station 7-8	67755.00
573/GT/2020	Durgapur Steel Thermal Power Station 1-2	90740.00
567/GT/2020	Durgapur Steel Thermal Power Station 3-4	38527.32
564/GT/2020	Koderma Thermal Power Station 1-2	89118.08
577/GT/2020	Mejia Thermal Power Station 1-3	85371.30
205/GT/2020	Mejia Thermal Power Station 4	28457.10
571/GT/2020	Mejia Thermal Power Station 5-6	67755.00
568/GT/2020	Mejia Thermal Power Station 7-8	90740.00
575/GT/2020	Raghunathpur Thermal Power Station	62340.00
578/GT/2020	Maithon Hydel Station 1-3	10931.64
566/GT/2020	Panchet Hydel Station 1-2	8830.12
572/GT/2020	Tilaiya Hydel Station1-2	3991.24
713/TT/2020	New Elements of Transmission	1154.65
466/TT/2020	Non-ISTS 400 kV Transmission Lines of Transmission and Distribution (T&D) System	1724.30
482/TT/2020	Existing Transmission and Distribution (T&D)System (allowed)	255089.53
(A) Total Normative O&M Expenses allowable		**1044745.04**
(B) Water charges as per DVC audited accounts to be considered separately under Regulation 29(2) of 2014 Tariff Regulations		38226.00
(C) Ash Evacuation expenses allowed under change in law (w.e.f. 26.1.2016 till 31.3.2019		39334.64
(D) TOTAL (A+B+C):		1122305. 68
(E) Normalized Actual O&M expenses as per audited financial statement of accounts		1101392.70
(F) Excess of Normative O&M expenses, Water Charges & Ash Evacuation charges over the normalized actual O&M Expenses (D-E):		**20912.98**

143. It is evident from the above, that the total normative O&M expenses allowable in respect of all the generation and transmission tariff petitions of the Petitioner for the period 2014-19 is Rs.1044745.04 lakh, in terms of the 2014 Tariff Regulations. Also, considering the actual water charges of Rs.38226.00 lakh and Ash Evacuation Charges w.e.f. 26.1.2016 of Rs. 39334.64 lakh, the total works out to Rs.1122305.68 lakh, which is higher than the normalised actual O&M expenses of Rs.1101392.70 lakh, as per audited financial statements pertaining to Power segment. Further, as per

Regulation 29(2) of the 2014 Tariff Regulations, capital spares are allowable separately. Since the normative O&M expenses including the actual Water charges and Ash Evacuation charges allowed separately, are in excess of the actual O&M expenses in the case of the Petitioner, we are not inclined to allow the impact of pay revision and the contribution towards P&G, Mega Insurance, CISF expenditure etc., during the period 2014-19, as sought by the Petitioner, in this petition.

<u>Other Additional Claims</u>

(A) Interest & Contribution on Sinking Fund (As per Section 40, Part IV of DVC Act)

118. The Petitioner has claimed additional expenditure towards Interest & Contribution on Sinking fund as follows:

(Rs. in lakh)

2016-17	2017-18	2018-19
3181.47	827.10	885.00

119. The Petitioner has allocated sinking fund contribution and interest for DVC Bonds of Rs. 3100 crores amongst the generating stations of DVC, during tariff period 2014-19, as follows:

(Rs. in crore)

	2014-15	2015-16	2016-17	2017-18	2018-19
Total Contribution and Interest for Debt Borrowing	**152.77**	**163.47**	**174.91**	**187.15**	**200.25**
MTPS5&6	12.22	13.08	13.99	14.97	16.02
CTPS 7&8	22.18	23.73	25.39	27.17	29.07
MTPS 7&8	20.99	22.46	24.04	25.72	27.52
DSTPS	43.37	46.40	49.65	53.13	56.85
KTPS	47.26	50.57	54.11	57.90	61.95
RTPS-I	**6.75**	**7.22**	**7.73**	**8.27**	**8.85**
BTPS-A	-	-	-	-	-
Total	**152.77**	**163.47**	**174.91**	**187.15**	**200.25**

120. In justification of the claim, the Petitioner has submitted that APTEL vide its judgment dated 23.11.2007 in Appeal No. 273 of 2006 & batch, had allowed the recovery of sinking funds and this judgment has also been affirmed by the Hon'ble Supreme Court vide its by judgement dated 23.7.2018 in Civil Appeal Nos. 971-973 of

2008 & batch matters.

121. The Objector, DVPCA has also submitted that under the 2014 Tariff Regulations, the Petitioner is allowed all expenses related to energy charges and fixed charges and also allows the funding of approved capital cost and interest/ returns on the debt/ equity components `on actual / normative basis, as the case may be. It has further submitted that the loan repayment is provided through higher depreciation for initial 12 years and interest on working capital is allowed on normative basis. The Objector has stated that the creation of funds, without any specific purpose, cannot be allowed to be recovered as an expenditure in tariff, even if it is mentioned in DVC Act and the 2014 Tariff Regulations. It also submitted that the Commission may seek details on the purpose of borrowing such funds, when all expenses related to capital funding and working capital funding are allowed. Accordingly, the Objector has prayed that the claim of the Petitioner may be disallowed. In response, the Petitioner has reiterated the submissions made in the petition. Further, it has also relied upon the APTEL's judgment dated 17.5.2019 in Appeal No.17/2014 & batch (Maithon Alloys Ltd V CERC & Ors) and submitted that, APTEL while rejecting the submissions, observed that there was no double allowance of bonds. The Petitioner also pointed out that the Objector herein has preferred review (Review Petition No. 4 of 2019) against the judgment dated 17.5.2019, before APTEL and the same is pending and since there is no stay of operation of the said order the same is binding on the parties. Accordingly, the Petitioner has prayed that the submissions of the Objector may be rejected.

122. The matter has been examined. Section 40 of the DVC Act, 1948 provides that the Petitioner shall make provision for depreciation and for reserve and other funds at such rates and on such terms as may be specified by the C&AG in consultation with

the Central Government. The APTEL in its judgment dated 23.11.2007 in Appeal No. 271/ 2006 & batch cases, decided as under:

> *"E.15 As regards sinking funds which is established with the approval of Comptroller and Accountant General of India vide letter dated December 29, 1992 under the provision of Section 40 of the DVC Act is to be taken as an item of expenditure to be recovered through tariff,*

123. Regulation 53(2)(iv) of the 2014 Tariff Regulations provides as under:

> *(iv) Funds under section 40 of the Damodar Valley Corporation Act, 1948: The Fund(s) established in terms of section 40 of the Damodar Valley Corporation Act,1948 shall be considered as items of expenditure to be recovered through tariff.*

124. DVPCA has objected to the claim of the Petitioner and has submitted that neither the provisions of the Electricity Act, 2003 nor the 2014 Tariff Regulations sanction the recovery of cost of generation assets twice over, through (a) allowance of Contribution to Sinking Fund; and (b) Depreciation and allowance of Interest on loan, by treating the amount realized through bonds, as normative debt. Per contra, the Petitioner has, however pointed out that in Appeal No.17/2014 (MAL v CERC & ors.) & batch cases, filed by HT consumers before APTEL, similar submissions raised by the appellants therein, were rejected by APTEL vide its judgment dated 17.5.2019. It is noticed from the said judgment dated 17.5.2019 that similar contention of the Objector herein, have been rejected by APTEL vide its judgement dated 17.5.2019 as under:

> *"8.5 We have carefully considered the submissions of learned counsel for the Appellants and learned counsel for Respondent Nos.1 & 2 and also took note of the various judgments relied upon by the parties. While the main contentions of the learned counsel for the Appellants are against the allowance of contribution to sinking fund to DVC and its utilisation, on the other hand, leaned counsel for the Respondents contend that the Central Commission is allowing the same as per settled position of law and its relevant regulations relating to the subject. Learned counsel for the Appellants contended that this Tribunal did not lay down that DVC could be allowed with both interest on loan as well as contribution to sinking fund which tantamount to a particular cost component being allowed twice to a generating company.*
>
> *8.6. It is relevant to note that as per Section 40 of DVC Act, 1948, DVC is entitled for provision for depreciation, reserve and other fund. This Tribunal in its judgment dated 23.11.2007 in Appeal No.271 of 2006 & batch has held*

the admissibility of sinking fundin favour of DVC which has also been upheld by the Hon'ble Supreme Court in its judgment dated 23.7.2018 reported as 2018 (8) SCC 281. Regarding the contention of alleged double counting of learned counsel for the Appellant, we find no such duplication in the considerations and findings of the Central Commission.

8.7 Further, from the Tariff Regulation of the Central Commission, it is noticed that interest on loan and interest on working capital are distinct elements of the tariff and at no point of time, the repayment of loan capital is considered as a tariff element to be serviced in the tariff. The redemption of bonds from contribution to sinking fund is a special tariff element provided for DVC under Section 40 of the DVC Act, 1948 in addition to tariff elements provided in the Tariff Regulations. This aspect has already been upheld by the Apex court vide its judgment dated 23.7.2018 (stated supra). It is also noted from the tariff regulations that depreciation and interest on loan payable are two different aspects while sinking fund contribution is an additional tariff element admissible only to DVC under the DVC Act. We, therefore, find no force in the contentions of the learned counsel for the Appellants that by allowing depreciation, interests on loan and sinking fund altogether, results into double counting and in turn yields into undue burden on consumers.

8.8 In view of above facts, we hold that the Central Commission has passed the impugned order in accordance with settled position of law and its Regulations. Thus, the instant case does not give in any manner rise to substantial question of law requiring our intervention / interference"

125. Though the Objector DVPCA, has filed review against the said judgment before APTEL, no stay of operation of the said judgement. Regulation 53(2)(iv) of the 2014 Tariff Regulations categorically provides that the funds created under Section 40 of the DVC Act, 1948 shall be considered as item of expenditure to be recovered through tariff. It is observed that the sinking funds have been created only for redemption of bonds. Accordingly, the amount claimed by the Petitioner for this generating station is allowed as under:

(Rs. in lakh)

2016-17	2017-18	2018-19
3181.47	827.10	885.00

(B) Share of Common Office Expenditure

126. The Petitioner has submitted that the expenditure pertaining to common offices such as Direction Office, Central Office, Other Offices, Subsidiary activities, IT centre and R&D caters services to all generating stations as well as composite transmission and distribution systems. In this regard, it is noted that the Petitioner *vide* affidavit

dated 9.9.2022 in Petition No. 567/GT/2020 (DTPS 3 & 4) has updated the additional capital expenditure pertaining to common offices. The revised additional capital expenditure claimed by the Petitioner towards various offices under Common offices is summarised as below:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Central Office	50.86	94.73	43.26	1,263.95	393.86
R & D	2.72	38.31	0.00	(-)550.49	0.00
Direction Office	26.85	9.17	68.62	50.07	(-)255.83
Subsidiary Activities	0.20	1.66	7.37	3.29	0.13
IT Cell	37.69	0.00	0.00	0.00	185.62
Other Offices	1.49	30.17	44.63	406.40	62.70
Total	**119.82**	**174.04**	**163.88**	**1173.22**	**386.48**

127. The head-wise additional capital expenditure claimed by the Petitioner towards common offices is summarised as below:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Land and Land Rights	2.72	0.00	0.00	508.33	70.80
Buildings	1.49	38.31	0.00	34.91	130.47
Powerhouse	0.00	0.00	38.84	0.00	5.42
Sub Station equipment	0.00	8.01	1.15	431.94	52.08
Other assets, Office Furniture and Personalcomputer	77.91	128.60	124.77	198.34	29.09
Cyber Security	0.00	0.00	0.00	0.00	97.85
EBA	37.69	0.00	0.00	0.00	0.00
Machinery & equipment	0.00	(-)0.88	(-)0.88	(-)0.01	0.00
Tower Pole & Fixtures	0.00	0.00	0.00	(-)0.28	0.00
Assets Held for Disposal	0.00	0.00	0.00	0.00	0.76
Total	**119.82**	**174.04**	**163.88**	**1173.23**	**386.48**

128. The Petitioner has computed the Return on Equity, Interest on Loan and Depreciation on the Common Assets for the period 2014-19 based on the opening capital cost as on 1.4.2014 for different offices and has apportioned them to each generating stations and T&D system in proportion to the capital cost approvedas on 31.3.2014. Further, the Petitioner has allocated the cost of common offices among generating stations of the Petitioner on the basis of installed capacity. The annual fixed charges claimed towards assets of common offices are as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Direction Office	146.09	85.91	107.01	128.92	68.70
Subsidiary Activities	113.33	113.94	114.21	114.52	114.92
Other Offices	129.97	132.58	115.82	171.39	207.12
R&D	319.84	315.43	308.45	248.10	190.53
IT	43.87	46.34	44.98	43.46	58.84
Central Office	570.62	562.94	561.83	645.87	771.37
Total	**1323.73**	**1257.14**	**1252.29**	**1352.25**	**1411.48**

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Common Office Expenditure apportioned to all generating Stations of DVC	1218.63	1157.33	1152.86	1244.88	1299.41
Common Office Expenditure apportionedto T&D	105.10	99.82	99.43	107.37	112.07
Total	**1323.73**	**1257.14**	**1252.29**	**1352.25**	**1411.48**

129. In line with the above, the Petitioner has claimed the apportioned common office expenses for this generating station as under.

(Rs. in lakh)

	2016-17	2017-18	2018-19
Common Office Expenditure apportioned to RTPS- I	185.93	201.34	215.45

130. The matter has been considered. It is observed that the Petitioner's claim for common office expenditure is in line with the Commission's methodology and decision in the previous tariff orders in respect of the generating stations of the Petitioner. Accordingly, in order to work out the common office expenditure, to be allowed, we have examined the additional capital expenditure claimed by the Petitioner, as under:

Land and Land Rights

131. The Petitioner has claimed additional capital expenditure of Rs.2.72 lakh in 2014-15 and (-) Rs.550.49 lakh in 2017-18 in R&D Centre; & Rs.1058.82 lakh in 2017-18 and Rs.70.80 lakh in 2018-19 for Central Office, under this head. However, the Petitioner has not furnished any justification for the same. In response to ROP for the hearing dated 10.8.2022 in Petition No. 567/GT/2020 (DTPS 3 & 4), the Petitioner has submitted that these expenses were incurred for transfer of land from R & D to

Central Office as per the Govt. of West Bengal (change in the type of land from educational to business), capitalization of land in Ranchi and Kolkata, decapitalization of asset from R&D etc., considering the nature of expenses, the expenditure claimed as additional capitalization and decapitalization is allowed under the 2014 Tariff Regulations.

Buildings

132. The Petitioner has claimed total additional capital expenditure of Rs.165.38 lakh during 2017-19 (i.e., Rs 34.91 lakh in 2017-18 and Rs.130.47 lakh in 2018-19) for Central Office; Also, an amount of Rs.1.49 lakh in 2014-15 has been claimed for Other Offices [including Central Relay & Instrumentation Testing Laboratory (CRITL), CMFS, Central Relay & Instrumentation Testing Mobile (CRITM), Central Service Organization (CSO) and Central Load Despatch (CLD)]; and Rs.38.31 lakh in 2015-16 for R&D Centre under this head. The Petitioner *vide* its affidavit dated 9.9.2022 in revised submissions mentioned that Rs.165.38 lakh pertains to transfer of asset from DAM to central office, stamp paper & registration of a property in Delhi: Rs. 38.31 lakh pertains to expansion of R & D building and Rs.1.49 lakh towards extension of Central Testing Laboratory building; Considering the nature of expenses, the claimed expenditure as additional capitalization is allowed under the 2014 Tariff Regulations.

Powerhouse Plant & Machinery

133. The Petitioner has claimed additional capital expenditure of Rs.38.84 lakh in 2016-17 and Rs.5.42 lakh in 2018-19 for Direction Office, towards installation of Rooftop solar power plant at DVC Head Quarters for consumption of solar power for own usage. It is observed that the Petitioner has not justified the need for the work being undertaken and as to how the same would benefit the operations of the Petitioner in general and generating stations in particular. Accordingly, the additional

capital expenditure of Rs.38.84 lakh in 2016-17 and Rs.5.42 lakh in 2018-19 for Direction Office is not allowed.

Machinery & Equipment- Workshop

134. The Petitioner has claimed an additional capital expenditure of (-) Rs.0.88 lakh in 2015-16, (-) Rs.0.88 lakh in 2016-17 and (-) Rs. 0.01 lakh in 2017-18 in Other Offices [including Central Relay & Instrumentation Testing Laboratory (CRITL), CMFS, Central Relay & Instrumentation Testing Mobile (CRITM), Central Service Organization (CSO) and Central Load Despatch (CLD)], as rectification entry under this head. In view of this, the claims are allowed.

Sub-Station Equipment

135. The Petitioner has claimed additional capital expenditure of Rs.8.01 lakh in 2015-16, Rs.1.15 lakh in 2016-17, Rs. 431.94 lakh in 2017-18 and Rs. 52.08 lakh in 2018-19 for Other Offices [including Central Relay & Instrumentation Testing Laboratory (CRITL), CMFS, Central Relay & Instrumentation Testing Mobile (CRITM), Central Service Organization (CSO) and Central Load Despatch (CLD)] and (-) Rs.5.70 lakh in 2017-18 for Direction Office under this head. As regards additional capital expenditure pertaining to Other Offices, the Petitioner has submitted that the expenditure was incurred to upgrade and equip the existing relay testing laboratory for accreditation by the National Accreditation Board for Testing and Calibration. As the additional capital expenditure incurred for NABL accreditation is not covered under the provisions of the 2014 Tariff Regulations, the additional capitalization and decapitalization claimed are not allowed.

Tower Poles & Fixatures

136. The Petitioner has claimed additional capital expenditure of (-) Rs.0.28 lakh in

2017-18 for Other Offices [including Central Relay & Instrumentation Testing Laboratory (CRITL), CMFS, Central Relay & Instrumentation Testing Mobile (CRITM), Central Service Organization (CSO) and Central Load Despatch (CLD)] under this head as a rectification entry. Accordingly, the same is allowed.

Cyber Security Devices

137. The Petitioner has claimed additional capital expenditure of Rs.97.85 lakh in 2018-19 for IT Cell–HQ towards strengthening the IT Cell to safeguard the IT equipment against any cyber threat, with the overall aim to protect data, and network secrecy to ensure smooth functioning of the system. The Petitioner has submitted that the said work is in compliance to the directives of the Ministry of Power (MOP), Government of India (GOI) dated 12.4.2010 and 2.8.2017, with regard to the steps to be taken to prevent cyber-attacks. As the work is in compliance to the directives of MOP, GOI to prevent cyber-attacks, the additional capital expenditure of Rs.97.85 lakh claimed towards procurement of cyber security devices for the period 2014-19 is allowed.

EBA- Integrated Software

138. The Petitioner has claimed additional capital expenditure of Rs.37.69 lakh in 2014-15 for IT Cell-HQ for supporting system of the integrated software used to facilitate various functions including material management, finance & accounting. It is noticed that the said work is related to ERP implementation at Head Office and hence, the additional capital expenditure claimed under this head is allowed.

Other Assets, Office Furniture and Personal Computers

139. The Petitioner has claimed following additional capital expenditure under the head 'Other Assets', 'Office Furniture' and 'Personal computer' towards procurement

of like personal computer, software, hardware, office equipment etc.

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Direction Office	26.85	9.17	29.77	55.79	(-)291.94
Subsidiary Activities	0.20	1.66	7.37	3.29	0.13
Other Offices	0.00	23.04	44.36	(-)30.96	10.62
R&D	0.00	0.00	0.00	0.00	0.00
IT	0.00	0.00	0.00	0.00	87.77
Central Office	50.86	94.73	43.26	170.21	222.52
Total	**77.91**	**128.60**	**124.77**	**198.34**	**29.09**

140. In justification for the same, the Petitioner has submitted that to fulfil the demand of valley area as well as other state utilities and distribution licensees, these items had to be additionally procured for capacity addition during the period 2016-19. The Petitioner has also submitted that the expenditure was essential to cope up with the extra volume of works associated with the huge capacity augmentation program taken up by the Petitioner and for smooth functioning of the offices. Considering the nature of these items, the additional capitalization and decapitalization is not allowed, in terms of first proviso to Regulation 14(3) of the 2014 Tariff Regulations.

Assets Held for Disposal

141. The Petitioner has claimed total amount of Rs. 0.76 lakh (negative entry of Rs. 29.93 lakh in Central office and positive entry of Rs. 30.68 lakh in Direction office) under Asset held for disposal, but has however, not furnished any justification for the same. Accordingly, the additional capitalization and decapitalization under subject head is not allowed.

142. Accordingly, the item-wise additional capital expenditure allowed towards various offices is summarised below:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Land and Land Rights	2.72	0.00	0.00	508.33	70.80
Buildings	1.49	38.31	0.00	34.91	130.47
Road Culverts & Rly. Sidings	0.00	0.00	0.00	(-)0.01	0.00
Power House Plant & Machinery	0.00	0.00	0.00	0.00	0.00

	2014-15	2015-16	2016-17	2017-18	2018-19
Machinery & Equipment-Workshop	0.00	(-)0.88	(-)0.88	(-)0.01	0.00
Sub Station Equipment	0.00	0.00	0.00	0.00	0.00
Tower Poles & Fixtures	0.00	0.00	0.00	-0.28	0.00
Cyber Security Assets	0.00	0.00	0.00	0.00	97.85
EBA - Integrated Software	37.69	0.00	0.00	0.00	0.00
Other Assets	0.00	0.00	0.00	0.00	0.00
Assets Held for Disposal	0.00	0.00	0.00	0.00	0.00
Total	**41.90**	**37.43**	**(-)0.88**	**542.94**	**299.13**

143. Based on the above, the additional capitalization allowed for various offices under common offices during the period 2014-19 is summarised as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Direction Office	0.00	0.00	0.00	(-)0.01	0.00
Subsidiary Activities	0.00	0.00	0.00	0.00	0.00
Other Offices	1.49	(-)0.88	(-)0.88	(-)0.29	0.00
R&D	2.72	38.31	0.00	(-)550.49	0.00
IT	37.69	0.00	0.00	0.00	97.85
Central Office	0.00	0.00	0.00	1093.73	201.27
Total	**41.90**	**37.43**	**(-)0.88**	**542.94**	**299.13**

144. It is observed that the Petitioner has worked out ROE by grossing up the rate of ROE with MAT rate. However, as the Petitioner has not been paying any income tax in any of the financial year of period 2014-19, 'Nil' rate has been considered as effective tax rate for respective financial year for the purpose of grossing up of ROE in terms of the provisions of the 2014 Tariff Regulations and the rate of ROE is considered as 15.50% for the period 2014-19. The annual fixed charges for Common offices have been worked out by considering the admitted opening capital cost as on 1.4.2014. The annual fixed charges of Common Offices, as worked out for the period 2014-19, have been apportioned to generating stations / T&D systems, based on the approved capital cost as on 31.3.2014. Accordingly, in line with the decision of the Commission order dated 29.7.2016 in Petition No. 465/GT/2014, the fixed charges have been computed and has been allocated to various generating stations as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	471.40	407.64	343.93	348.25	368.72

	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan	140.86	111.83	99.77	67.56	58.18
Return on Equity	548.59	550.43	551.28	563.88	583.46
Total	**1160.85**	**1069.90**	**994.98**	**979.69**	**1010.37**

(Rs. in lakh)

	Capital Cost as on 1.4.2014	2014-15	2015-16	2016-17	2017-18	2018-19
All DVC Generating Stations	2036943.91	1068.68	984.95	915.98	901.90	930.14
T&D	175678.95	92.17	84.95	79.00	77.79	80.22
Total	**2212622.86**	**1160.85**	**1069.90**	**994.98**	**979.69**	**1010.37**

145. As regards the Common office expenditure for the generating station, it is further observed that the Commission vide Order dated 3.10.2016 in Petition No. 207/GT/2015 has observed as under:

> *"61. The petitioner has claimed the projected expenditure of Rs. 208.76 lakh during 2014-15, Rs. 194.64 lakh during 2015-16, Rs. 248.00 lakh during 2016-17, Rs. 363.90 lakh during 2017-18 and Rs. 412.33 lakh during 2018-19 and apportioned to Mejia 7&8 towards Common Office Expenditure which includes expenditure on Direction Office, Central Office, Other Offices, subsidiary activities, IT and R&D. The apportioned amount of share of Common Office expenditure includes return on equity, depreciation and interest on loan on the Common assets. The generating station is a new 1000 MW station for which normative O&M as specified under the 2014 Tariff Regulation, includes Corporate Office expenses also and under Corporate Office expenses, depreciation and interest on loan has also been included. Accordingly, the normative O&M expense for 500 MW unit size as allowed to the generating station includes the expenditure for Common Offices in respect of depreciation and interest on loan. As per special provisions relating to DVC generating stations specified under the Regulation 53 of 2014 Tariff Regulations and also as per the order of Tribunal dated 27.11.2007 in Appeal no 273/2006, the Common Office expenditure are to be allowed for the purpose of determination of tariff. The petitioner has furnished the details of total "Office Expenditure" in respect of the generating stations and T&D systems are as under:*
>
> *xxx*
>
> *The Commission has considered the O&M norms for this generating station as specified for 500 MW units including the expenditure for Common Offices in respect of depreciation and interest on loan. Therefore, only return on equity has been allowed as computed in the above table. Accordingly, return on equity of Rs. 87.01 lakh in 2014-15, Rs. 93.07 lakh in 2015-16, Rs. 115.68 lakh in 2016-17, Rs. 154.82 lakh in 2017-18 and Rs. 175.65 lakh in 2018-19 is allowed as part of share of Common office expenditure and annual fixed charges for the generating station."*

146. The Commission has considered the O&M expense norms for this generating station, as specified for 500 MW and above units, including the expenditure for

Common offices in respect of depreciation and interest on loan. Therefore, only ROE has been allowed as computed in the above table. Accordingly, Share of Common office expense computed for RTPS (this generating station) is as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Total Common Office Expenditure for generating stations (A)	1068.68	984.95	915.98	901.90	930.14
Total Common Office Expenditure for T&D (B)	92.17	84.95	79.00	77.79	80.22
Total Common Office Expenditure for generating stations and T&D C=(A+B)	1160.85	1069.90	994.98	979.69	1010.37
Total Depreciation for generating stations and T&D (D)	471.40	407.64	343.93	348.25	368.72
Total Interest on loan for generating stations and T&D (E)	140.86	111.83	99.77	67.56	58.18
Total Return on equity on for generating stations and T&D (F)	548.59	550.43	551.28	563.88	583.46
Total of Depreciation, Interest on Loan and ROE of Generating Station and T&D (G)	1160.85	1069.90	994.98	979.69	1010.37
Return on equity corresponding to the generating stations only (A/C) *F (H)	505.03	506.73	507.51	519.11	537.14
Apportionment of the common office expenditure as claimed to the generating station including depreciation, interest on loan and ROE.(I)	0.00	0.00	147.73	145.87	154.23
Apportioned amount of only "Return on Equity" corresponding to the generating station (I/A)xH (J)	0.00	0.00	81.85	83.96	89.06

(Rs. in lakh)

Common Office Expenditure	2016-17	2017-18	2018-19
RTPS Phase1 U 1&2 *(this generating station)*	81.85	83.96	89.06

147. Accordingly, the annual fixed charges approved for the generating station for the period 2016-19 is summarized below:

(Rs. in lakh)

	2016-17	2017-18	2018-19
Depreciation	39638.37	40322.07	40687.92
Interest on loan	38661.33	32034.57	27683.16
Return on Equity	24316.33	24728.22	24990.45
Interest on Working Capital	11210.58	11346.11	11345.43
O&M Expenses	19524.00	20760.00	22056.00
Water Charges	292.66	332.62	404.72
Compensation Allowance	0.00	0.00	0.00
Sub-Total (A)	**133643.28**	**129523.60**	**127167.68**
Additional O&M Expenses			
Impact of Pay Revision	0.00	0.00	0.00
Impact of GST	0.00	0.00	0.00
Share of Pension & Gratuity Contribution	0.00	0.00	0.00
Share of Subsidiary Activities	685.27	659.40	465.72
Mega Insurance Expenses	0.00	0.00	0.00
CISF Security Expenses	0.00	0.00	0.00
Interest & Contribution on Sinking Fund (As per section 40, Part IV of DVC Act)	3181.47	827.10	885.00
Share of Common Office Expenses	81.85	83.96	89.06
Sub-Total (B)	**3948.59**	**1570.46**	**1439.78**
Total Annual Fixed Charges (C) = (A) + (B)	**137591.86**	**131094.05**	**128607.46**
Annual fixed charges allowed vide order dated 28.9.2017 in Petition No. 224/GT/2015	**138443.65**	**139837.31**	**139554.82**

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

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

DETERMINATION OF TARIFF FOR PERIOD 2019-24

149. The Petitioner, in this present petition, has also sought the determination of tariff of the generating station for the period 2019-24, in terms of the 2019 Tariff Regulations. Accordingly, the capital cost and the annual fixed charges claimed by the Petitioner for the period 2019-24 are as under:

Capital Cost claimed

(Rs. In lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost (A)	559251.74	642323.72	656459.47	657339.10	657552.74
Add: Addition during the year / period (B)	83131.75	14820.33	1704.11	311.58	721.73
Less: De-capitalization during the year / period (C)	59.77	684.58	824.47	97.94	77.14
Less: Reversal during the year / period (D)	0.00	0.00	0.00	0.00	0.00
Less: Undischarged liabilities (E)	0.00	0.00	0.00	0.00	0.00
Add: Discharges during the year / period (F)	0.00	0.00	0.00	0.00	0.00
Closing Capital Cost (G) = (A+B-C-D-E+F)	642323.72	656459.47	657339.10	657552.74	658197.33
Average Capital Cost (H) = (A+G)/2	**600787.73**	**649391.59**	**656899.28**	**657445.92**	**657875.04**

Annual Fixed Charges claimed

(Rs. In lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	45484.71	49164.43	49732.83	49774.21	49806.70
Interest on Loan	27475.27	26137.81	21699.44	16733.98	11747.28
Return on Equity[1]	35603.75	38475.94	38918.14	38949.91	38975.22
Interest on Working Capital	9413.21	9543.05	9559.03	9555.46	9573.81
O & M Expenses	24312.00	25164.00	26052.00	26964.00	27912.00
Water Charges	3336.58	3660.22	4026.24	4428.86	4885.09
Security Expenses	2356.69	2470.33	2589.45	2714.32	2845.20
Sub-total: A	**147982.21**	**154615.78**	**152577.14**	**149120.74**	**145745.31**
DVC's share of savings in interest cost due to loan restructuring	1691.75	1528.88	1191.38	845.07	527.15
Interest & Contribution on Sinking Fund (As per section 40, Part IV of DVC Act)	946.95	1013.23	1084.16	1160.05	1241.25
Share of P&G	4471.73	4681.93	4902.01	5132.44	5373.70
Share of Common Office Expenditure	235.98	253.26	256.45	220.55	201.03
Expenses for Ash Evacuation, Mega Insurance and Subsidiary Activities	602.82	631.89	662.36	694.30	727.78
Sub-total: B	**7949.23**	**8109.19**	**8096.37**	**8052.41**	**8070.92**
Grand Total (A+B)	**155931.44**	**162724.97**	**160673.50**	**157173.15**	**153816.23**

Capital Cost

150. Clauses (1), (3) and (5) of Regulation 19 of the 2019 Tariff Regulations provide as under:

"19. Capital Cost:

(1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.
xx
(3) 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 modernisation 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.
xx
(5) The following shall be excluded from the capital cost of the existing and new projects:
(a) The assets forming part of the project, but not in use, as declared in the tariff petition;
(b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:
Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be decapitalised only after its redeployment."

151. The opening capital cost claimed by the Petitioner, as on 1.4.2019, is Rs.559251.74 lakh. However, the closing capital cost of Rs.541740.79 lakh, as on 31.3.2019, as approved by the Commission, in this order, for the period 2014-19, is considered as the opening capital cost as on 1.4.2019, for the purpose of determination of tariff for the period 2019-24, in accordance with the 2019 Tariff Regulations.

Additional Capital Expenditure

152. Clauses (1) and (2) of Regulations 25 and Regulation 26 of the 2019 Tariff Regulations, provides as under:

“25. Additional Capitalisation 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 Capitalisation 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 Modernisation (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-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 decapitalisation 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 with corresponding adjustments in cumulative depreciation and cumulative repayment of loan, duly taking into consideration the year in which it was capitalised."

153. The year-wise projected additional capital expenditure claimed by the Petitioner for the period 2019-24 are as under:

(Rs. In lakh)

	Regulations	2019-20	2020-21	2021-22	2022-23	2023-24
BOILER AND COAL MILL MAINTENANCE SECTION						
Rotor Assembly for ID fan	25 (2) (a)	73.16	0.00	0.00	0.00	0.00
Rotor Assembly for FD fan		82.60	0.00	0.00	0.00	0.00
Rotor Assembly for PA fan		70.80	0.00	0.00	0.00	0.00
Coupling Assembly for ID fan		19.82	0.00	0.00	0.00	0.00
Coupling Assembly for FD Fan		16.52	0.00	0.00	0.00	0.00
Coupling Assembly for PA fan		16.52	0.00	0.00	0.00	0.00
Sky-Climber	76 & 77	63.96	0.00	0.00	0.00	0.00
Cup-Lock Scaffolding		206.50	0.00	0.00	0.00	0.00
Support Bearing	25 (2) (a)	73.16	0.00	0.00	0.00	0.00
Oil Cooler Complete Assembly for ID Fan		4.96	0.00	0.00	5.90	0.00
Oil Cooler Complete Assembly for FD Fan		1.68	0.00	0.00	2.36	0.00
Oil Cooler Complete Assembly for PA Fan		4.32	0.00	0.00	5.19	0.00
Oil Cooler Complete Assembly for Coal Mill		2.66	0.00	0.00	3.13	0.00
Modified Liner for Coal Mill (4 Sets)	25 (2) (c)	27.26	0.00	0.00	0.00	0.00
Modified Vane Wheel Assembly for Coal Mill (4 Sets)		40.47	0.00	0.00	0.00	0.00
Modified Bowl Extension Ring for Coal Mill (4 Sets)		31.39	0.00	0.00	0.00	0.00
Tube Bending Machine	76 & 77	6.91	0.00	0.00	0.00	0.00
Portable Tube Bevelling & Facing Machine for Boiler Tube		2.89	0.00	0.00	0.00	0.00
LRSB complete assembly	25 (2) (a)	0.00	36.58	0.00	0.00	0.00

	Regulations	2019-20	2020-21	2021-22	2022-23	2023-24
(2 NOS.)						
ERV Isolating Valve (USD)		0.00	66.32	0.00	0.00	0.00
Penion for APH Drive System		0.00	10.86	0.00	0.00	0.00
MODIFIED LINER FOR COAL MILL (12 Sets)	25 (2) (c)	0.00	81.89	0.00	0.00	0.00
Modified Vane Wheel Assembly for Coal Mill (12 Sets)		0.00	121.30	0.00	0.00	0.00
Modified Bowl Extension Ring for Coal Mill (12 Sets)		0.00	94.40	0.00	0.00	0.00
Boiler Model	76 & 77	0.00	8.14	0.00	0.00	0.00
APH Gear Box	25 (2) (a)	0.00	42.48	0.00	0.00	0.00
Hydraulic Actuation Device for ID fan		0.00	0.00	56.29	0.00	0.00
HFO Pump		0.00	0.00	41.30	0.00	0.00
LDO Pump		0.00	0.00	16.52	0.00	0.00
Complete BCP Motor		0.00	0.00	0.00	0.00	461.73
SUB-TOTAL		**745.57**	**461.97**	**114.11**	**16.58**	**461.73**
TG & AUXILIARIES SECTION						
EH oil conditioning purifier Machine Model No HNP023	76 & 77	34.70	0.00	0.00	0.00	0.00
Complete set of Trolley Mounted Oil Centrifuge Model No. MAB 206 S-24		32.30	0.00	0.00	0.00	0.00
MOP of turbine	25 (2) (a)	46.00	0.00	0.00	0.00	0.00
Journal bearing & thrust bearing assembly of BFP		30.00	0.00	0.00	0.00	0.00
CPU Butterfly Valve	25 (2) (a)	0.00	103.00	0.00	0.00	0.00
Emergency oil, Aux oil, Main oil pump assembly of Boiler Feed Pump Turbine		0.00	50.00	0.00	0.00	0.00
Journal bearings assembly, Thrust bearings assembly with pads of Booster Pump for Boiler Feed Pump		0.00	68.00	0.00	0.00	0.00
Butterfly Valves for PHE		0.00	140.00	0.00	0.00	0.00
Trim Assembly for HP Bypass Valves		0.00	134.50	0.00	0.00	0.00
Trim Assembly for LP Bypass Valve		0.00	395.00	0.00	0.00	0.00
Hydraulic Jack and Pump set	76 & 77	0.00	23.60	0.00	0.00	0.00
Induction heater		0.00	8.25	0.00	0.00	0.00
Stator Water Pump Assembly	25 (2) (a)	0.00	30.10	0.00	0.00	0.00
Complete assembly of Vacuum Breaker valve		0.00	35.30	0.00	0.00	0.00
Condenser Vacuum Pump assembly		0.00	200.00	0.00	0.00	0.00
SUB-TOTAL:		**143.00**	**1187.75**	**0.00**	**0.00**	**0.00**
C&I SECTION						

	Regulations	2019-20	2020-21	2021-22	2022-23	2023-24
Upgradation of Yokogawa Centum DCS	25 (2) (c)	0.00	625.00	625.00	0.00	0.00
Upgradation of Emerson DEH system		0.00	110.00	110.00	0.00	0.00
Upgradation / Modification of Rockwell Turbine protection system (Software & IT product)		0.00	10.00	10.00	0.00	0.00
Upgradation of LVS Controller (Software & IT product)		0.00	15.00	15.00	0.00	0.00
Upgradation of GEIP PLC HMI system for MRS		0.00	22.00	0.00	0.00	0.00
Upgradation of Rockwell PLC system		0.00	35.00	25.00	25.00	0.00
Upgradation of Schneider PLC system		0.00	0.00	25.00	25.00	0.00
Upgradation of Siemens PLC system		0.00	0.00	25.00	25.00	0.00
Electronic modules for DCS/DDCMIS	25 (2) (a)	0.00	40.00	25.00	25.00	25.00
Electronic modules for PLC		0.00	10.00	20.00	20.00	20.00
Upgradation of VMS system (Software)	25 (2) (c)	0.00	0.00	0.00	50.00	50.00
SUB-TOTAL:		**0.00**	**867.00**	**880.00**	**170.00**	**95.00**
COAL HANDLING PLANT						
Pump Complete, Type- SP 71; SR-V-EP-R90-2437761 for Haglund's drives	25 (2) (a)	0.00	14.55	0.00	0.00	0.00
Complete Pump, SP 250 SR-V-EP-2430562 for Haglund's drives		0.00	29.59	0.00	0.00	0.00
Cooling Water Pump, Model: 125/150 GSN		0.00	0.00	5.00	0.00	0.00
Fluid Coupling, Model: PST 530		0.00	0.00	15.00	0.00	0.00
Fluid Coupling, Model: PST 660		0.00	0.00	20.00	0.00	0.00
Gear Box, Model : CKB 355		0.00	0.00	20.00	0.00	0.00
Gear Box, Model : CKB 315		0.00	0.00	20.00	0.00	0.00
Gear Box, Model : CKB 250		0.00	0.00	15.00	0.00	0.00
Gear Box for Apron Feeder, Model : CKD 630		0.00	0.00	0.00	70.00	0.00
Fluid Coupling, Model: PST 1000		0.00	0.00	0.00	0.00	30.00
Gear Box, Model : CSB 450		0.00	0.00	0.00	0.00	30.00
Gear Box, Model : CSB 400		0.00	0.00	0.00	0.00	30.00
SUB-TOTAL:		**0.00**	**44.14**	**95.00**	**70.00**	**90.00**
ELECTRICAL						
Different LT Motors for Boiler Area	25 (2) (a)	9.00	0.00	0.00	0.00	0.00
Complete Actuator set for		57.90	0.00	0.00	0.00	0.00

	Regulations	2019-20	2020-21	2021-22	2022-23	2023-24
different Electrical areas						
Transformer Oil Filter machine	76 & 77	19.00	0.00	0.00	0.00	0.00
400 KV CT	25 (2) (a)	18.00	0.00	0.00	0.00	0.00
400 KV CVT		5.00	0.00	0.00	0.00	0.00
400 KV & 220 KV LA		14.00	0.00	0.00	0.00	0.00
Numerical Relays		0.00	90.00	0.00	0.00	0.00
Complete Circuit Breaker, Isolator and CT for 33 kV switchyard		0.00	25.00	0.00	0.00	0.00
Replacement of HPSVs/Fluorescents with LED light		0.00	15.00	0.00	0.00	0.00
ESP retrofitting (HV controller)		0.00	0.00	55.00	0.00	0.00
SAS upgradation	25 (2) (c)	0.00	0.00	85.00	0.00	0.00
Kits for measuring DCRM of 400 KV Circuit breaker, for Contact resistance measurement of 400 KV isolators, for measurement of third harmonic leakage current of LA	76 & 77	0.00	0.00	50.00	0.00	0.00
Energy Meter set	25 (2) (a)	0.00	0.00	4.00	0.00	0.00
LT Motors		0.00	0.00	20.00	0.00	0.00
Auxiliary Relays for Switchyard		0.00	0.00	10.00	0.00	0.00
Retrofitting of Actuator		0.00	0.00	50.00	0.00	0.00
400 KV Isolator Complete Assembly		0.00	0.00	60.00	0.00	0.00
DC Batteries for 220 V Battery bank		0.00	0.00	10.00	0.00	0.00
Replacement of HPSVs/Fluorescents with LED light	25 (2) (c), 76 & 77	0.00	0.00	20.00	0.00	0.00
Complete 400 KV Circuit Breaker Pole	25 (2) (a)	0.00	0.00	0.00	50.00	0.00
SEL Goose communication upgradation	25 (2) (c)	0.00	0.00	0.00	0.00	20.00
Retrofitting of Actuator	25 (2) (a)	0.00	0.00	0.00	0.00	30.00
Transformer Bushings of transformers for 400 KV Switchyard and Transformer yard		0.00	0.00	0.00	0.00	90.00
DC Batteries for 220 V Battery bank and 48 V Battery Bank swyd		0.00	0.00	0.00	0.00	5.00
SUB-TOTAL:		**122.90**	**130.00**	**364.00**	**50.00**	**145.00**
WATER SYSTEM						
Water System - Construction of intake well	25 (1) (e)	1108.82	0.00	0.00	0.00	0.00
Water System - Intake well electro-mechanical works	25 (1) (e)	0.00	645.00	0.00	0.00	0.00

	Regulations	2019-20	2020-21	2021-22	2022-23	2023-24
SUB-TOTAL:		**1108.82**	**645.00**	**0.00**	**0.00**	**0.00**
TOWNSHIP AND MISCELLANEOUS CIVIL WORK						
Construction of 'B' type quarters (13 blocks) and 'C' type (G+1) (2 blocks) for CISF Complex at DVC, RTPS	25 (1) (e)	17.48	0.00	0.00	0.00	0.00
Construction of internal road, area development, drain, compound wall, and other misc works at CISF complex, DVC, RTPS		78.56	0.00	0.00	0.00	0.00
Construction of 11.2 km Inspection Road along the water corridor route from intake pump house to main plant of RTPS.		115.21	0.00	0.00	0.00	0.00
Balance construction work of Security Boundary wall at CISF complex, DVC, RTPS	25 (1) (e)	96.76	0.00	0.00	0.00	0.00
Balance construction work of 5,00,000 ltr capacity overhead water tank, DVC, RTPS		106.20	79.27	0.00	0.00	0.00
Construction of Mini Market Complex at DVC, RTPS	76 & 77	132.16	134.20	0.00	0.00	0.00
Repairing of Road at Entry and Exit of Weigh Bridge 4 & 5 at RTPS, DVC		11.30	0.00	0.00	0.00	0.00
Construction of Drain from Railways Sump Pit to PWS Culvert and Guard Pond N-Pit to PWS Culvert at DVC, RTPS		8.40	0.00	0.00	0.00	0.00
Construction of perimeter fencing around Permanent Store, DVC, RTPS	26 (1) (d)	28.65	0.00	0.00	0.00	0.00
Construction of Shed (54 m x 25 m) at open cable yard, RTPS, DVC	76 & 77	102.18	0.00	0.00	0.00	0.00
Procurement of 2 nos. aqua guard (RO+UV,80 ltr capacity) with cooler for Directors Bungalow and Plant inside Canteen, DVC, RTPS		2.56	0.00	0.00	0.00	0.00
Strengthening of Outside periphery road		0.00	25.00	2.50	2.50	2.50
Strengthening of Inside periphery road		0.00	15.00	2.50	2.50	2.50
SUB-TOTAL:		**699.46**	**253.47**	**5.00**	**5.00**	**5.00**
CONSTRUCTION OF ROAD						

	Regulations	2019-20	2020-21	2021-22	2022-23	2023-24
Strengthening and widening of existing coal transportation WBM road	76 & 77	350.00	220.00	0.00	0.00	0.00
SUB-TOTAL		**350.00**	**220.00**	**0.00**	**0.00**	**0.00**
LAND						
Land	25 (1) (e)	467.00	0.00	0.00	0.00	0.00
SUB-TOTAL		**467.00**	**0.00**	**0.00**	**0.00**	**0.00**
RAILWAY						
Railway Infrastructure	25 (1) (e)	69025.00	9148.00	0.00	0.00	0.00
SUB-TOTAL:		**69025.00**	**9148.00**	**0.00**	**0.00**	**0.00**
ROADS						
Uthala Road Bridge	25 (1) (e)	1937.00	0.00	0.00	0.00	0.00
Four-Lane Road		6009.00	0.00	0.00	0.00	0.00
Road Over Bridge (ROB) over State Highway-5		2524.00	1863.00	246.00	0.00	0.00
SUB-TOTAL		**10470.00**	**1863.00**	**246.00**	**0.00**	**0.00**
Total		**83131.75**	**14820.33**	**1704.11**	**311.58**	**796.73**

154. The Respondent PSPCL submitted that the claims of the Petitioner are not within the original scope of work and are largely predictive in nature, with no administrative or technical basis to validate them. It has submitted that the generating station is a new station and has been in operation for only 4 years out of its useful life of 25 years. The Respondent has sought the reason for the Petitioner not arranging for sufficient spares for ensuring operational reliability and equipment efficiency to its optimum level during the commissioning of the station. It has pointed out that, in addition, the Petitioner has failed to set out the reasons for claiming additional capitalization claimed under Regulations 76 and 77 of the 2019 Tariff Regulations, and has put the onus on the Commission to decide and undertake the analysis of its claims. The Respondent has stated that it is well settled law that the power to relax and power to remove difficulty, are to be exercised in rare cases and not ordinarily. It has also stated that the Petitioner has not presented /cited any extra-ordinary circumstances or events which have led to incur such additional capitalization and hence, the items claimed under additional capitalization in terms of Regulations 76 and Regulation 77 may be disallowed. The Respondent KSEBL has submitted that the

claim for additional capital expenditure under Regulation 25, 26, 76 and 77 of the 2019 Tariff Regulations, relate to additional capital expenditure after the cut-off date and beyond the original scope, and therefore, the claim of the Petitioner is not in line with the said regulations and also not properly justified. It has also submitted that the Petitioner's claim under Regulation 76 and 77 of the 2019 Tariff Regulations, can only be invoked under the extra-ordinary circumstances and hence, the claim of the Petitioner may be disallowed.

155. The Objector, DVPCA has submitted the following:

a. The Petitioner has made claims of expenditure beyond the cut-off date under Force majeure (FM) without satisfying the condition of Regulation 3 (25) and Regulation 25(1)(e) of the 2019 Tariff Regulations. Force Majeure claims have been made without any documents to establish such impact. The Commission had even examined this issue of delay in previous tariff order dated 28.9.2017 in Petition No. 224/GT/2015 and based on the submissions of Petitioner at that time, had approved additional capitalization. However, it appears that Petitioner has attempted to cover up the delay in execution by claiming under Force Majeure event.

b. The Petitioner has claimed certain expenditure under Replacement of assets (Regulation 25(2)(a)) for RTPS which has achieved COD in 31.03.2016. The Objector has analyzed the de-capitalisation assets and depreciation thereof proposed by Petitioner and submits that the same is not in line with Regulation 25(2)(a). The Petitioner has depreciated only 40% of the asset as against full depreciation to be eligible for replacement of asset. Also, the replacement value of assets is approximately Rs.3500 lakh as against original cost of Rs.1740 lakh.

c. The Petitioner has claimed balance expenditure under Power to relax and Power to remove difficulty which cannot be exercised generally to allow additional capitalisation without any detailed technical justification and documentary evidence.

156. In response to the above, the Petitioner has clarified that the additional capital expenditure claimed for the period 2019-24 is on the following grounds:

i. For maintaining the minimum level of defined inventory.

ii. *Technology obsolescence and upgradation / Pool spares or critical spares;*

iii. *Critical Tools for plant to ensure reliable and efficient operation*.

157. Accordingly, the Petitioner has submitted that the additional capital expenditure claimed for the generating station is under Regulations 25 and 26 of the 2019 Tariff Regulations. It has stated that detailed justification and supporting documents have been furnished in Form-9 along with the tariff filing forms. The Petitioner has further submitted that all additional capital expenditures proposed by the Petitioner for the generating station are critical to ensure reliable, safe and efficient operation of the station and are therefore unavoidable. Accordingly, the Petitioner has prayed before this Commission to allow the claimed additional capitalization under Regulations 76 and 77 of the 2019 Tariff Regulations, wherever the same could not be claimed under the Regulations 25(2) and 26 of the 2019 Tariff Regulations.

158. The matter has been considered. Based on the submissions of the parties and documents on record, and on prudence check, the claim of the Petitioner for additional capital expenditure claimed for the period 2019-24, is examined and allowed as under:

(Rs. In lakh)

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2019-20					
	BOILER AND COAL MILL MAINTENANCE SECTION					
1	ROTOR ASSEMBLY FOR ID FAN	73.16	25 (2) (a)	The Petitioner submitted that, such claims are due to unavailability of Spares. The same is required for ensuring reduction in downtime and improved	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, applicable for the replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff	0.00
2	ROTOR ASSEMBLY FOR FD FAN	82.60	25 (2) (a)			0.00
3	ROTOR ASSEMBLY FOR PA FAN	70.80	25 (2) (a)			0.00
4	COUPLING ASSEMBLY FOR ID FAN	19.82	25 (2) (a)			0.00
5	COUPLING ASSEMBLY FOR FD FAN	16.52	25 (2) (a)			0.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2019-20					
6	COUPLING ASSEMBLY FOR PA FAN	16.52	25 (2) (a)	operational reliability.	Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage.	0.00
7	SKY-CLIMBER	63.96	76 & 77	The Petitioner submitted that the claimed assets/works will be required for inspection of boiler first pass during BTLs and short shutdowns. This will help in safe inspection of the boiler first pass and reduce downtime of the boiler.	The assets / items claimed could have been part of the original scope of works. Also, in the absence of these assets, it is not clear as to how the inspection of boiler was being carried out from the date of commissioning of boiler to this date. We therefore, find no merit in the claim of the Petitioner. Also, from the submissions of the Petitioner, we find no reason to allow the claim by invocation of Regulation 76 of the 2019 Tariff Regulations. In view of the above, the claim of the Petitioner is **not allowed**.	0.00
8	CUP-LOCK SCAFFOLDIN G	206.50	76 & 77	They are required for complete inspection of boiler first pass during AOH/COD providing complete access to the boiler first pass facilitating inspection and maintenance works.		0.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2019-20					
10	SUPPORT BEARING	73.16	25 (2) (a)	The Petitioner submitted that the works are claimed due to unavailability of Spares, where the existing spares are expected to be consumed by the time. Thus, the same is required for ensuring reduction in downtime and improved operational reliability	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, applicable for the replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage.	0.00
11	OIL COOLER COMPLETE ASSEMBLY FOR ID FAN	4.96	25 (2) (a)			0.00
12	OIL COOLER COMPLETE ASSEMBLY FOR FD FAN	1.68	25 (2) (a)			0.00
13	OIL COOLER COMPLETE ASSEMBLY FOR PA FAN	4.32	25 (2) (a)			0.00
14	OIL COOLER COMPLETE ASSEMBLY FOR COAL MILL	2.66	25 (2) (a)			0.00
15	MODIFIED LINER FOR COAL MILL (4 Sets)	27.26	25 (2) (c)	Technology obsolescence. They are modified and upgraded spares as per OEM recommendation which will enhance the operating performance of the Coal Mills.	The Petitioner has claimed the assets/items under Regulation 25(2)(c) of the 2019 Tariff Regulations which are applicable for replacement of assets on the ground of its obsolescence. It is noticed that the assets/items claimed are in nature of O & M and in the nature of Accordingly, the assets/ items claimed are not allowed at this stage. However, the Petitioner may claim the same along with supporting document under relevant regulations, after the same are put to use	0.00
16	MODIFIED VANE WHEEL ASSEMBLY FOR COAL MILL (4 Sets)	40.47	25 (2) (c)			0.00
17	MODIFIED BOWL EXTENSION RING FOR COAL MILL (4 Sets)	31.39	25 (2) (c)			0.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2019-20					
					and also to substantiate that it is not part of the O & M expenses.	
18	TUBE BENDING MACHINE	6.91	76 & 77	They will be required for fabrication of bends of boiler pressure parts and for their edge preparation. They are PMT item which will help reduce inventory and downtime of the boiler.	The expenditure claimed is in the nature of tools and tackles required for maintenance of the plant. Accordingly, we find no reason to allow the asset/items by invoking the Regulation 76 of the 2019 Tariff Regulations. Hence, the claim of the Petitioner is **not allowed**. .	0.00
19	Portable Tube Beveling & Facing Machine for Boiler Tube	2.89	76 & 77			0.00
	SUB-TOTAL:	**745.57**				**0.00**
	TG & AUXILIARIES SECTION					
20	EH oil conditioning purifier Machine Model No HNP023	34.70	76 & 77	It will be used to clean the Governing EH oil, which will improve equipment efficiency	The assets / items claimed could have been part of the original scope of works. Also, in the absence of these assets, it is not clear as to how the O&M was being carried out from the commissioning to this date. We therefore, find no merit in the claim of the Petitioner. Also, from the submissions of the Petitioner, we find no reason to allow the claim by invocation of Regulation 76 of the 2019 Tariff Regulations. In view of the above, the claim of the Petitioner is **not allowed**	0.00
21	Complete set of Trolley Mounted Oil Centrifuge Model No. MAB 206 S-24	32.30	76 & 77	It will be used to clean the TDBFP lube oil, which will improve equipment efficiency		0.00
22	MOP of turbine	46.00	25 (2) (a)	It will improve the shutdown time of	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of	0.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2019-20					
				turbine	the 2019 Tariff Regulations, applicable for the replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage.	
23	Journal bearing & thrust bearing assembly of BFP	30.00	25 (2) (a)	It will improve the shutdown time of BFP thus APC		0.00
	SUB-TOTAL:	**143.00**				**0.00**
	ELECTRICAL					
24	Different LT Motors for Boiler Area	9.00	25 (2) (a)	Replacement of Chinese make motor by Indigenous	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, applicable for the replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. Accordingly, the claim of the Petitioner is not allowed at this stage.	0.00
25	Complete Actuator set for different Electrical areas	57.90	25 (2) (a)	Replacement of Chinese make actuators by Indigenous for easy spares availability.		0.00
26	Transformer Oil Filter machine	19.00	76 & 77	New procurement as there is no Transformer	The assets / items claimed could have been part of the original scope of	0.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2019-20					
				Oil Filter machine, it is required for proper maintenance of Transformer.	works. Also, in the absence of these assets, it is not clear as to how the O&M was being carried out from the commissioning to this date. We therefore, find no merit in the claim of the Petitioner. Also, from the submissions of the Petitioner, we find no reason to allow the claim by invocation of Regulation 76 of the 2019 Tariff Regulations. In view of the above, the claim of the Petitioner is **not allowed**	
27	400 KV CT	18.00	25 (2) (a)	The Petitioner has submitted that, the claims towards the works are the Critical Spares, which is required for ensuring reduction in downtime and improved operational reliability.	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, applicable for the replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage.	0.00
28	400 KV CVT	5.00	25 (2) (a)			0.00
29	400 KV & 220 KV LA	14.00	25 (2) (a)			0.00
	SUB-TOTAL	**122.90**				
	WATER SYSTEM					

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2019-20					
30	Water System - Construction of intake well	1108.82	25 (1) (e)	The work is within the original scope (under Sl. No. 3(iii) of the Sanction Order of RTPS dt. 18.10.2017). The left-over job of M/s MBL, the Construction of Intake Well was awarded to GPT Infra-projects Limited in June 2015 with completion period of 24 months and further it was extended upto 28.2.2020, Work could not be completed within original contractual period due to high water level in Panchet Reservoir (which was under control of CWC) and due to local unrest.	Considering the said works, the expenditure claimed is **allowed** under Regulation 25(1)(e) of the 2019 Tariff Regulations, However, the Petitioner is directed to furnish the details / documents at the time of truing up of tariff, with regard to the Force Majeure events claimed in support of the same, including the steps taken to mitigate the same. The Petitioner shall also submit the breakup of the actual additional capital expenditure, including the price variation, IDC and interest if any, paid for the delay in payment, at the time of truing up of tariff.	1108.82
	SUB-TOTAL:	**1108.82**				**1108.82**
	TOWNSHIP AND MISCELLANEOUS CIVIL WORKS					
31	Construction of 'B' type quarters (13 blocks) and 'C'	17.48	25 (1) (e)	The work is within the original scope (under	Considering the said works, the expenditure claimed is **allowed** under	17.48

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2019-20					
	type (G+1) (2 blocks) for CISF Complex at DVC, RTPS			Sl. No. 5(4) of the Sanction Order of RTPS dt. 18.10.2017). Work could not be completed within scheduled time due to local unrest and land dispute at various locations. The work is within the original scope (under Sl. No. 5(4) of the Sanction Order of RTPS dt. 18.10.2017). Work could not complete within scheduled time due to local unrest.	Regulation 25(1)(e) of the 2019 Tariff Regulations, However, the Petitioner is directed to furnish the details / documents at the time of truing up of tariff, with regard to the Force Majeure events claimed in support of the same, including the steps taken to mitigate the same. The Petitioner shall also submit the breakup of the actual additional capital expenditure, including the price variation, IDC and interest if any, paid for the delay in payment, at the time of truing up of tariff.	
32	Construction of internal road, area development, drain, compound wall, and other misc works at CISF complex, DVC, RTPS	78.56	25 (1) (e)			78.56
33	Construction of 11.2 km Inspection Road along the water corridor route from intake pump house to main plant of RTPS.	115.21	25 (1) (e)			115.21
34	Balance construction work of Security Boundary wall at CISF complex, DVC, RTPS	96.76	25 (1) (e)			96.76
35	Balance construction work of 5,00,000 ltr capacity overhead water tank, DVC, RTPS	106.20	25 (1) (e)			106.20
36	Construction of perimeter fencing around Permanent Store, DVC, RTPS	28.65	26 (1) (d)	For safety /security of valuable materials at Permanent Store	Considering the nature of subject works, the expenditure claimed is **allowed** under Regulation 26(1)(d) of the 2019 Tariff Regulations. However, the Petitioner is directed to furnish supporting	28.65

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2019-20					
					documents justifying the claim, at the time of truing up of tariff.	
37	Construction of Mini Market Complex at DVC, RTPS	132.16	76 & 77	For requirement of occupants of OD, SD	Considering the nature of assets, most of these could have been a part of original scope of works and others are in the nature of O & M expenses. In view of this, we find no reason to allow the claim by invoking Regulation 76 of the 2019 Tariff Regulations. Therefore, the claims are **not allowed**.	0.00
38	Repairing of Road at Entry and Exit of Weigh Bridge 4 & 5 at RTPS, DVC	11.30	76 & 77	For smooth movement of coal dumper due to incomplete rail link		0.00
39	Construction of Drain from Railways Sump Pit to PWS Culvert and Guard Pond N-Pit to PWS Culvert at DVC, RTPS	8.40	76 & 77	Incomplete work of TRF awarded to other agent to prevent water logging in the CHP area		0.00
40	Construction of Shed (54 m x 25 m) at open cable yard, RTPS, DVC	102.18	76 & 77	To protect conveyor belt from weather effect		0.00
41	Procurement of 2 nos. aqua guard (RO+UV,80 ltr capacity) with cooler for Directors Bungalow and Plant inside Canteen, DVC, RTPS	2.56	76 & 77	To provide safe drinking water at Plant inside canteen and Directors Bungalow		0.00
	SUB-TOTAL:	**699.46**				**442.86**
	CONSTRUCTION OF ROAD					
42	Strengthening and widening of existing coal transportation WBM road	350.00	76 & 77	Due to incomplete rail link, frequent dumper movement needs strengthening and widening the existing coal	It is noted that the original scope of works includes rail link to the plant, which is yet to be completed. In order to improve the coal transportation, the Petitioner has proposed for widening of existing road. In	0.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2019-20					
				transportation WBM road from new Weigh Bridge to Track Hopper	this regard, we notice that the Petitioner has not brought out the circumstances and reasons due to which the rail link has not yet been completed. In this context, it is noticed that the said rail link is proposed to be capitalized in this year only. After completion of the same, the widening of road would be redundant and may not yield its full potential. Accordingly, we are **not inclined to allow** the additional capital expenditure on alternate infrastructure, by invoking Regulations 76 or 77 of the 2019 Tariff Regulations.	
	SUB-TOTAL:	**350.00**				**0.00**
	LAND					
43	Land	467.00	25 (1) (e)	This expenditure is towards the work within the original scope (under Sl. No. 1 of the Sanction Order of RTPS dt. 18.10.2017). Expenditure is for Cost of land for acquisition/ direct purchase/Crop compensation.	It is observed that the Petitioner has claimed the expenditure for land acquisition and crop compensation under Regulation 25 (1)(e) of the 2019 Tariff Regulations, for Force Majeure events. However, the nature of the force majeure event/ condition, has not been mentioned / submitted in justification of the same. However, considering the nature of asset claimed and since it forms part of original scope of works, the claim is **allowed** under Regulation 25 (1) (e)	467.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2019-20					
					read with Regulation 76 of the 2019 Tariff Regulations. The Petitioner shall, however, furnish the details of land acquisition / crop compensation and communication/documents and the necessary measures taken by it to mitigate the event along with the actual expenditure and interest.	
	SUB-TOTAL:	**467.00**				**467.00**
	RAILWAY					
44	Railway Infrastructure	69025.00	25 (1) (e)	The Petitioner has submitted that the claimed work is within the original scope (under Sl. No. 5(1) of the Sanction Order of RTPS dt. 18.10.2017). Such works towards the railway infrastructure could not be capitalized within the cut-off date due to local unrest as well as non-availability of required land from Govt of WB.	Considering the submissions of the Petitioner, the claim for additional capital expenditure is **allowed** under Regulation 25(1) (e) of the 2019 Tariff Regulations. However, the Petitioner is directed to furnish the details / documents at the time of truing up of tariff, with regard to the Force Majeure events claimed in support of the same, including the steps taken to mitigate the same.	69025.00
	SUB-TOTAL	**69025.00**				**69025.00**
	ROADS					
45	Uthala Road Bridge	1937.00	25 (1) (e)	The Petitioner	It is observed that the Petitioner has claimed	1937.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2019-20					
46	Four-Lane Road	6009.00	25 (1) (e)	submitted that, the claimed works is within the original scope (under Sl. No. 5(10) of the Sanction Order of RTPS dt. 18.10.2017). Such works could not be capitalized within the cut-off date due to local interest as well as non-availability of required land from govt of WB and finalization of the scheme by PWD for ROB over SH5.	the asset/item for various roads and bridges under Regulation 25 (1)(e) of the 2019 Tarif Regulations, towards. Force Majeure events. However, the Petitioner has not justified the same through documentary evidence. However, considering the nature of the assets claimed and since the assets form part of the original scope of works, the claim is **allowed** under Regulation 25 (1) (e) of the 2019 Tariff Regulations. The Petitioner is however directed to furnish the details of land acquisition and communication / documents and the steps taken by it to mitigate the event The Petitioner shall also submit the breakup details of the actual additional capital expenditure including the price variation, IDC and interest if any, paid for delay in payment, at the time of truing -up of tariff	6009.00
47	Road Over Bridge (ROB) over State Highway-5	2524.00	25 (1) (e)			2524.00
	SUB-TOTAL:	**10470.00**				**10470.00**
	Total amount claimed	**83131.75**				
	Total amount allowed					**81513.68**

(Rs. in lakh)

Sl. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2020-21					
	BOILER AND COAL MILL MAINTENANCE SECTION					
1	LRSB COMPLETE ASSEMBLY (2 NOS.)	36.58	25 (2) (a)	The Petitioner submitted that the works are claimed due to unavailability of Spares, where the existing spares are expected to be consumed by the time. Thus, the same is required for ensuring reduction in downtime and improved operational reliability.	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, which are applicable for replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage	0.00
2	ERV ISOLATING VALVE (USD)	66.32				0.00
3	PENION FOR APH DRIVE SYSTEM	10.86				0.00
4	MODIFIED LINER FOR COAL MILL (12 Sets)	81.89	25 (2) (c)	Technology obsolescence. They are modified and upgraded spares as per OEM recommendation which will enhance the operating performance of the Coal Mills.	The Petitioner has claimed the assets/items under Regulation 25(2)(c) of the 2019 Tariff Regulations which are applicable for replacement of assets on the ground of its obsolescence. It is noticed that the assets/items claimed are in nature of O & M Accordingly, the assets/ items claimed are **not allowed** at this stage. However, the Petitioner may claim the same along with supporting document under relevant regulations, after the same are put to use and also to	0.00
5	MODIFIED VANE WHEEL ASSEMBLY FOR COAL MILL (12 Sets)	121.30	25 (2) (c)			0.00
6	MODIFIED BOWL EXTENSION RING FOR COAL MILL (12 Sets)	94.40	25 (2) (c)			0.00

Sl. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2020-21					
					substantiate that it is not part of the O & M expenses.	
7	Boiler Model	8.14	76 & 77	Replication of the boiler of RTPS and to be used as display and education purpose.	The claim for expenditure for education purpose is not covered by any provision of the 2019 Tariff Regulations and hence the same shall be borne by the Petitioner. We also fine no reason to allow the same in exercise of the powers under Regulations 76 or 77 to consider the claim of the Petitioner. Hence, the claim of the Petitioner is **not allowed**.	0.00
8	APH GEAR BOX	42.48	25 (2) (a)	The Petitioner has submitted that, the claims towards the works are the Critical Spares, which is required for ensuring reduction in downtime and improved operational reliability.	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, which are applicable for replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage.	0.00
	SUB-TOTAL:	**461.97**				**0.00**
	TG & AUXILIARIES SECTION					
9	CPU Butter Fly Valve	103.00	25 (2) (a)	The Petitioner has	The Petitioner has claimed subject items	0.00

Sl. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2020-21					
10	Emergency oil, Aux oil, Main oil pump assembly of Boiler Feed Pump Turbine	50.00	25 (2) (a)	submitted that, the claims towards the works are the Critical Spares, which is required for ensuring reduction in downtime and improved operational reliability.	under Regulation 25(2)(a) applicable for the replacement of assets which have fully depreciated. As the subject items are still not fully depreciated, the same can't be considered under Regulations 25(2)(a) of 2019, Tariff Regulations. In addition, the claimed items are spares in nature, which can be considered for capitalization only after the same are put to use only. Accordingly, the claim items are not allowed at this juncture / stage.	0.00
11	Journal bearings assembly, Thrust bearings assembly with pads of Booster Pump for Boiler Feed Pump	68.00	25 (2) (a)			0.00
12	BUTTERFLY VALVES FOR PHE	140.00	25 (2) (a)			0.00
13	TRIM ASSEMBLY FOR HP BYPASS VALVES	134.50	25 (2) (a)			0.00
14	TRIM ASSEMBLY FOR LP BYPASS VALVE	395.00	25 (2) (a)			0.00
15	Hydraulic Jack and Pump set	23.60	76 & 77		Reducing downtime would benefit the Petitioner by way of increase in availability of the project. However, the same may be met from the incentive so earned. We find no merit in exercising the powers under Regulation 76 or 77 of the 2019 Tariff Regulations, to allow the claim of the Petitioner and load the expenditure on consumers.	0.00
16	Induction heater	8.25	76 & 77			0.00
17	Stator Water Pump Assembly	30.10	25 (2) (a)		The Petitioner has claimed the assets/items under	0.00

Sl. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2020-21					
18	Complete assembly of Vacuum Breaker valve	35.30	25 (2) (a)		Regulation 25(2)(a) of the 2019 Tariff Regulations, which are applicable for replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage.	0.00
19	Condenser Vacuum Pump assembly	200.00	25 (2) (a)			0.00
	SUB-TOTAL:	**1187.75**				**0.00**
	C&I SECTION					
20	Upgradation of Yokogawa Centum DCS	625.00	25 (2) (c)	The Petitioner has claimed the works due to Technology Obsolesce.	The Petitioner has claimed the asserts/ items under Regulation 25(2)(c) of the 2019 Tariff Regulations, which are applicable for the replacement of assets on the ground of obsolescence. However, it is not clear as to how obsolescence has occurred so early in plant life (COD 31.3.2016) . The claim of the Petitioner is therefore **not allowed**. The Petitioner is at liberty to claim the expenditure, if incurred, at the time of truing-up tariff, along with proper OEM certificates including the justification as to how the obsolete technology	0.00
21	Upgradation of Emerson DEH system	110.00				0.00
22	Upgradation / Modification of Rockwell Turbine protection system (Software & IT product)	10.00				0.00
23	Upgradation of LVS Controller (Software & IT product)	15.00				0.00
	Upgradation of GEIP PLC HMI system for MRS	22.00				0.00
25	Upgradation of Rockwell PLC system	35.00				0.00

Sl. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2020-21					
					was adopted in new station	
26	Electronic modules for DCS/DDCMIS	40.00	25 (2) (a)	The Petitioner has submitted that, the claims towards the works are the Critical Spares, which is required for ensuring reduction in downtime and improved operational reliability	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, which are applicable for replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage.	0.00
27	Electronic modules for PLC	10.00				0.00
	SUB-TOTAL	**867.00**				**0.00**
	COAL HANDLING PLANT					
	Pump Complete, Type- SP 71; SR-V-EP-R90-2437761 for Haglund's drives	14.55	25 (2) (a)	The Petitioner submitted that the works are claimed due to unavailability of Spares, where the existing spares are expected to be consumed by the time. Thus, the same is required for ensuring reduction in downtime	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, which are applicable for replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after	0.00
29	Complete Pump, SP 250 SR-V-EP-2430562 for Haglund's drives	29.59	25 (2) (a)			0.00

Sl. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2020-21					
				and improved operational reliability	the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage.	
	SUB-TOTAL	**44.14**				0.00
	ELECTRICAL SECTION					
	Numerical Relays	90.00	25 (2) (a)	The Petitioner submitted that the available stocks of spares are expected to be exhausted. Hence, the same is required for ensuring reduction in downtime and improved operational reliability	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, which are applicable for replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage.	0.00
31	Complete Circuit Breaker, Isolator and CT for 33 kV switchyard	25.00	25 (2) (a)			0.00
32	Replacement of HPSVs/Fluorescents with LED light	15.00	25 (2) (a)	For low power consumption and better life	Considering the fact that the item is in the nature of O&M and since the Petitioner has been benefitted in terms of the reduced auxiliary energy consumption, the expenditure claimed is **not allowed.**	0.00
	SUB-TOTAL	**130.00**				**0.00**

Sl. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2020-21					
	WATER SYSTEM					
33	Water System - Intake well electro-mechanical works	645.00	25 (1) (e)	The work is within the original scope (under Sl. No. 3(iii) of the Sanction Order of RTPS dt. 18.10.2017). Electro-mechanical work will be commenced after completion of construction work of intake well. Construction work of intake well could not be completed within original contractual period due to high water level in Panchet Reservoir (which was under control of CWC) and due to local unrest.	Considering the said works, the expenditure claimed is **allowed** under Regulation 25(1)(e) of the 2019 Tariff Regulations, However, the Petitioner is directed to furnish the details / documents at the time of truing up of tariff, with regard to the Force Majeure events claimed in support of the same, including the steps taken to mitigate the same. The Petitioner shall also submit the breakup of the actual additional capital expenditure, including the price variation, IDC and interest if any, paid for the delay in payment, at the time of truing up of tariff.	645.00
	SUB-TOTAL	**645.00**				**645.00**
	TOWNSHIP AND MISCELLANEOUS CIVIL WORK					
34	Balance construction work of 5,00,000 ltr capacity overhead water tank, DVC, RTPS	79.27	25 (1) (e)	The work is within the original scope (under Sl. No. 5(4) of the Sanction Order of RTPS dt. 18.10.2017). Work could not be completed within scheduled	Considering the said works, the expenditure claimed is **allowed** under Regulation 25(1)(e) of the 2019 Tariff Regulations, However, the Petitioner is directed to furnish the details / documents at the time of truing up of tariff, with regard to the Force Majeure events claimed in support of the same,	79.27

Sl. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2020-21					
				time due to local unrest.	including the steps taken to mitigate the same. The Petitioner shall also submit the breakup of the actual additional capital expenditure, including the price variation, IDC and interest if any, paid for the delay in payment, at the time of truing up of tariff.	
35	Construction of Mini Market Complex at DVC, RTPS	134.20	76 & 77	For requirement of occupants of OD, SD	The Petitioner has not provided any substantial justification for the same. in view of this, we are not inclined to allow the claim of the Petitioner in exercise of the powers under Regulations 76 or 77 of the 2019 Tariff Regulations. Accordingly, the claim of the Petitioner is **not allowed**	0.00
36	Strengthening of Outside periphery road	25.00	76 & 77	Due to incomplete rail link, frequent dumper movement needs strengthening the periphery road	The Petitioner has not indicated the circumstances/ reasons on account of which the rail link could not be completed. In the absence of the information, we are not inclined to allow the claim in exercise of the powers under Regulations 76 or 77. Accordingly, the claim of the Petitioner is **not allowed**.	0.00
37	Strengthening of Inside periphery road	15.00	76 & 77			0.00
	SUB-TOTAL:	**253.47**				**79.27**
	CONSTRUCTION OF ROAD					
	Strengthening and widening of existing coal transportation WBM road	220.00	76 & 77	Due to incomplete rail link, frequent dumper movement needs strengthening	The Petitioner has not indicated the circumstances / reasons on account of which the rail link could not be completed. In the absence of the information, we are not	0.00

Sl. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2020-21					
				and widening the existing coal transportation WBM road from new Weigh Bridge to Track Hopper	inclined to allow the claim in exercise of the powers under Regulations 76 or 77. Accordingly, the claim of the Petitioner is **not allowed**.	
	SUB-TOTAL	**220.00**				**0.00**
	RAILWAY					
39	Railway Infrastructure	9148.00	25 (1) (e)	This is balance work under the original scope (under Sl. No. 5(1) of the Sanction Order of RTPS dt. 18.10.2017). The work for railway infrastructure could not be capitalized within the cut-off date due to local unrest as well as non-availability of required land from govt of WB.	Considering the said works, the expenditure claimed is **allowed** under Regulation 25(1)(e) of the 2019 Tariff Regulations, However, the Petitioner is directed to furnish the details / documents at the time of truing up of tariff, with regard to the Force Majeure events claimed in support of the same, including the steps taken to mitigate the same. The Petitioner shall also submit the breakup of the actual additional capital expenditure, including the price variation, IDC and interest if any, paid for the delay in payment, at the time of truing up of tariff.	9148.00
	SUB-TOTAL	**9148.00**				**9148.00**
	ROADS					
40	Road Over Bridge (ROB) over State Highway-5	1863.00	25 (1) (e)	The work is within the original scope (under Sl. No. 5(10) of the Sanction Order of RTPS dt. 18.10.2017). The work	The claim of the Petitioner is not covered by Regulation 25(1)(e) of the 2019 Tariff Regulations However, there is delay in capitalization of asset due to delay in land acquisition which is an uncontrollable	1863.00

Sl. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reasons for admissibility	Amount allowed
	2020-21					
				could not be capitalized within the cut-off date due to non-availability of required land from govt of WB and finalization of the scheme by PWD.	factor, provided that the delay in any way is not attributable to the project developer. Keeping in view the submissions of the Petitioner, we **allow** the expenditure claimed under Regulation 25 (1) (e) read with Regulation 76 of the 2019 Tariff Regulations. The Petitioner is directed to furnish the details / documents at the time of truing up of tariff, with regard to the Force Majeure events claimed in support of the same, including the steps taken to mitigate the same.	
	SUB-TOTAL	**1863.00**				**1863.00**
	Total amount claimed	**14820.33**				
	Total amount allowed					**11735.27**

(Rs. in lakh)

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reason for admissibility	Amount allowed
	2021-22					
	BOILER AND COAL MILL MAINTENANCE SECTION					
1	HYDRAULIC ACTUATION DEVICE FOR ID FAN	56.29	25 (2) (a)	The Petitioner submitted that the works are claimed due to unavailabilit y of Spares, where the existing spares are expected to	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, which are applicable for replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff	0.00
2	HFO PUMP	41.30	25 (2) (a)			0.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reason for admissibility	Amount allowed
	2021-22					
3	LDO PUMP	16.52	25 (2) (a)	be consumed by the time. Thus, the same is required for ensuring reduction in downtime and improved operational reliability	Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage.	0.00
	SUB-TOTAL	**114.11**				**0.00**
	C&I SECTION					
4	Upgradation of Yokogawa Centum DCS	625.00	25 (2) (c)	The Petitioner has claimed the works due to Technology Obsolesce.	The Petitioner has claimed the asserts/ items under Regulation 25(2)(c) of the 2019 Tariff Regulations, which are applicable for the replacement of assets on the ground of obsolescence. However, it is not clear as to how obsolescence has occurred so early in plant life (COD 31.3.2016). The claim of the Petitioner is therefore **not allowed**. The Petitioner is at liberty to claim the expenditure, if incurred, at the time of truing-up tariff, along with proper OEM certificates including the justification as to how the obsolete technology was adopted in new station	0.00
5	Upgradation of Emerson DEH system	110.00	25 (2) (c)			0.00
6	Upgradation / Modification of Rockwell Turbine protection system (Software & IT product)	10.00	25 (2) (c)			0.00
7	Upgradation of LVS Controller (Software & IT product)	15.00	25 (2) (c)			0.00
8	Upgradation of Rockwell PLC system	25.00				0.00
9	Upgradation of Schneider PLC system	25.00				0.00
10	Upgradation of Siemens PLC system	25.00				0.00
11	Electronic modules for DCS/DDCMIS	25.00	25 (2) (a)	The Petitioner has submitted that, the claims towards the works are	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, which are applicable for replacement of assets which have fully depreciated. As the items	0.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reason for admissibility	Amount allowed
	2021-22					
12	Electronic modules for PLC	20.00		the Critical Spares, which is required for ensuring reduction in downtime and improved operational reliability.	are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage.	0.00
	SUB-TOTAL	**880.00**				**0.00**
	COAL HANDLING PLANT					
13	Cooling Water Pump, Model: 125/150 GSN	5.00	25 (2) (a)	The Petitioner submitted that the works are claimed due to unavailability of Spares, where the existing spares are expected to be consumed by the time. Thus, the same is required for ensuring reduction in downtime and improved operational reliability	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, which are applicable for replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage.	0.00
14	Fluid Coupling, Model: PST 530	15.00				0.00
15	Fluid Coupling, Model: PST 660	20.00				0.00
16	Gear Box, Model: CKB 355	20.00				0.00
17	Gear Box, Model: CKB 315	20.00	25 (2) (a)			0.00
18	Gear Box, Model: CKB 250	15.00				0.00
	SUB-TOTAL	**95.00**				**0.00**
	ELECTRICAL SECTION					
	ESP retrofitting (HV controller)	55.00	25 (2) (a)	128 nos. of electronic controllers installed in Units-1,2. As these are Chinese	The items claimed are in the nature of O&M spares, and cannot be considered for capitalization. Accordingly, the claim of the Petitioner is **not allowed.**	0.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reason for admissibility	Amount allowed
	2021-22					
				item and there lead time is high so required quantity is for day to day maintenance and for insurance spare .		
20	SAS upgradation	85.00	25 (2) (c)	Some of the hardware items have become defective, software communication failed and most of the items have become obsolete	The Petitioner has claimed the asset/item under Regulation 25(2)(c) of the 2019 Tariff Regulations, which are applicable for the replacement of assets on obsolescence. However, the scope of upgradation is not clear. Also, no OEM recommendations for the obsolete items has been placed for consideration. In view of this, the claim of the Petitioner is **not allowed**. The Petitioner is at the asset at the time of truing up along with proper justification/explanation as why the same are not covered under O&M expenses.	0.00
21	Kits for measuring DCRM of 400 KV Circuit breaker, for Contact resistance measurement of 400 KV isolators, for measurement of third harmonic leakage current of LA	50.00	76 & 77	The Petitioner submitted that the available stocks of spares are expected to be exhausted. Hence, the same is required for ensuring reduction in downtime and improved	The Petitioner has not provided any proper justification for the said claim. Hence, the same is **not allowed**. Also, there is no merit to allow the claim in exercise of the powers under Regulation 76 or 77 of the 2019 Tariff Regulations.	0.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reason for admissibility	Amount allowed
	2021-22					
				operational reliability		
22	Energy Meter set	4.00	25 (2) (a)	The Petitioner submitted that, these kits are required to do tests as recommended in technical audit	As capitalization of spares after cut-off date is not permissible, the claim of the Petitioner, for building inventory, is **not allowed**.	0.00
23	LT Motors	20.00	25 (2) (a)	Towards the replacement of Chinese make motor by Indigenous by phase wise	The Petitioner has not submitted proper justification as to why the motors need replacement so early in the plant life The Petitioner has claimed spares under Regulation 25(2)(a) of the 2019 Tariff Regulations, which is applicable if the asset being replaced is fully depreciated. As the asset/ item is not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of the 2019 Tariff Regulations. Hence, the claim of the Petitioner is **not allowed**. The Petitioner may claim the same at the time of truing up of tariff, with proper justification, if asset is actually replaced.	0.00
24	Auxiliary Relays for Switchyard	10.00	25 (2) (a)	The Petitioner submitted that the	As capitalization of spares after cut-off date is not permissible, the claim of the Petitioner, for building	0.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reason for admissibility	Amount allowed
	2021-22					
				available stocks of spares are expected to be exhausted. Hence, the same is required for ensuring reduction in downtime and improved operational reliability	inventory, is **not allowed**	
25	Retrofitting of Actuator	50.00	25 (2) (a)	Towards the replacement of Chinese make actuators by Indigenous for easy spares availability.	The Petitioner has not submitted proper justification as to why the motors need replacement so early in the plant life The Petitioner has claimed spares under Regulation 25(2)(a) of the 2019 Tariff Regulations, which is applicable if the asset being replaced is fully depreciated. As the asset/ item is not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of the 2019 Tariff Regulations. Hence, the claim of the Petitioner is **not allowed**. The Petitioner may claim the same at the time of truing up of tariff, with proper justification, if asset is actually replaced.	0.00
26	400 KV Isolator Complete Assembly	60.00	25 (2) (a)	The Petitioner submitted that the available	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, which are applicable for	0.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reason for admissibility	Amount allowed
	2021-22					
27	DC Batteries for 220 V Battery bank	10.00	25 (2) (a)	stocks of spares are expected to be exhausted. Hence, the same is required for ensuring reduction in downtime and improved operational reliability	replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage.	0.00
28	Replacement of HPSVs/Fluorescents with LED light	20.00	25 (2) (c), 76 & 77	The assets required for the efficient operation of the generating station	Considering the fact that the item is the nature of O&M and since the Petitioner has been benefitted in terms of the reduced auxiliary energy consumption, the expenditure claimed is **not allowed.**	0.00
	SUB-TOTAL	**364.00**				**0.00**
	TOWNSHIP AND MISCELLANEOUS CIVIL WORK					
29	Strengthening of Outside periphery road	2.50	76 & 77	The Petitioner submitted that; the outside periphery road may damage due to movement of coal dumper.	The Petitioner has not provided any proper justification for the said claims. Also, there is no merit to allow the claims in exercise of the powers under Regulations 76 or 77 of the 2019 Tariff Regulations. Accordingly, claims of the Petitioner are **not allowed**.	0.00
30	Strengthening of Inside periphery road	2.50	76 & 77			0.00
	SUB-TOTAL	**5.00**				**0.00**
	ROADS					
31	Road Over Bridge (ROB) over State Highway-5	246.00	25 (1) (e)	The Petitioner Submitted that the work is within the original	It is observed that there is delay in capitalization of asset due to delay in land acquisition which is an uncontrollable factor as per Regulations, provided that the delay is not	246.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reason for admissibility	Amount allowed
	2021-22					
				scope (under Sl. No. 5(10) of the Sanction Order of RTPS dt. 18.10.2017) . The work could not be capitalized within the cut-off date due to non-availability of required land from govt of WB and finalization of the scheme by PWD.	attributable to the project developer. However, keeping in view the submissions of the Petitioner, we **allow** the expenditure claimed under Regulation 25 (1) (e) read with Regulation 76 of the 2019 Tariff Regulations. The Petitioner is directed to furnish the details / documents at the time of truing up of tariff, with regard to the Force Majeure events claimed in support of the same, including the steps taken to mitigate the same. The Petitioner shall also submit the breakup of actual additional capital expenditure including price variation, IDC and interest paid if any for delay in payment, for further consideration.	
	SUB-TOTAL	**246.00**				**246.00**
	Total amount claimed	**1704.11**				
	Total amount allowed					**246.00**

(Rs. In lakh)

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reason for admissibility	Amount allowed
	2022-23					
	BOILER AND COAL MILL MAINTENANCE SECTION					
1	OIL COOLER COMPLETE ASSEMBLY FOR ID FAN	5.90	25 (2) (a)	The Petitioner submitted that the works are claimed due to unavailability of Spares, where the existing spares are expected to be consumed by the time.	The Petitioner has claimed spares under Regulation 25(2)(a) of the 2019 Tariff Regulations, which is applicable if the asset being replaced is fully depreciated. As such, the expenditure on spare assets for building inventory **is not allowed.** The	0.00
2	OIL COOLER COMPLETE ASSEMBLY FOR FD FAN	2.36				0.00
3	OIL COOLER COMPLETE ASSEMBLY FOR PA FAN	5.19				0.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reason for admissibility	Amount allowed
	2022-23					
4	OIL COOLER COMPLETE ASSEMBLY FOR COAL MILL	3.13		Thus, the same is required for ensuring reduction in downtime and improved operational reliability.	Petitioner may claim the same at the time of truing up with proper justification, if put to use.	0.00
	SUB-TOTAL	**16.58**				**0.00**
	C&I SECTION					
5	Upgradation of Rockwell PLC system	25.00	25 (2) (c)	The Petitioner has claimed the works due to Technology Obsolescence	The Petitioner has claimed assets/items under Regulation 25(2)(c) of the 2019 Tariff Regulations, which is applicable for the replacement of assets on grounds of obsolescence. However, it is not clear as to how obsolescence has occurred so early in plant life (COD 31.3.2016). The claim of the Petitioner is therefore **not allowed**. The Petitioner is at liberty to claim the expenditure, if incurred, at the time of truing-up tariff, along with proper OEM certificates and justification as to how the obsolete technology was adopted in new station.	0.00
6	Upgradation of Schneider PLC system	25.00				0.00
7	Upgradation of Siemens PLC system	25.00				0.00
8	Upgradation of VMS system (Software)	50.00				0.00
9	Electronic modules for DCS/DDCMIS	25.00	25 (2) (a)	The Petitioner has submitted that, the claims towards the works are the Critical Spares, which is required for	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, which are applicable for replacement of assets which have fully	0.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reason for admissibility	Amount allowed
	2022-23					
10	Electronic modules for PLC	20.00	25 (2) (a)	ensuring reduction in downtime and improved operational reliability.	depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage.	0.00
	SUB-TOTAL	**170.00**				**0.00**
	COAL HANDLING PLANT					
11	Gear Box for Apron Feeder, Model: CKD 630	70.00	25 (2) (a)	The Petitioner submitted that the works are claimed due to unavailability of Spares, where the existing spares are expected to be consumed by the time. Thus, the same is required for ensuring reduction in downtime and improved operational reliability.	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, which are applicable for replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage.	0.00
	SUB-TOTAL	**70.00**				**0.00**
	ELECTRICAL SECTION					

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reason for admissibility	Amount allowed
	2022-23					
12	Complete 400 KV Circuit Breaker Pole	50.00	25 (2) (a)	The Petitioner submitted that the available stocks of spares are expected to be exhausted. Hence, the same is required for ensuring reduction in downtime and improved operational reliability.	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, which are applicable for replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage.	0.00
	SUB-TOTAL	**50.00**				**0.00**
	TOWNSHIP AND MISCELLANEOUS CIVIL WORK					
13	Strengthening of Outside periphery road	2.50	76 & 77	The Petitioner submitted that; the outside periphery road may damage due to movement of coal dumper.	The Petitioner has not provided any proper justification for the said claims. Also, there is no merit to allow the claims in exercise of the powers under Regulations 76 or 77 of the 2019 Tariff Regulations. Accordingly, claims of the Petitioner are **not allowed**.	0.00
14	Strengthening of Inside periphery road	2.50	76 & 77			0.00
	SUB-TOTAL	**5.00**				**0.00**
	Total amount claimed	**311.58**				
	Total amount allowed					**0.00**

(Rs. In lakh)

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reason for admissibility	Amount allowed
2023-24						
BOILER AND COAL MILL MAINTENANCE SECTION						
1	Complete BCP Motor	461.73	25 (2) (a)	The Petitioner submitted that the works are claimed due to unavailability of Spares, where the existing spares are expected to be consumed by the time. Thus, the same is required for ensuring reduction in downtime and improved operational reliability.	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, which are applicable for replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage	0.00
	SUB-TOTAL	**461.73**				**0.00**
C&I SECTION						
2	Upgradation of VMS system (Software)	50.00	25 (2) (c)	The Petitioner has claimed the works due to Technology Obsolesce.	The Petitioner has claimed assets /items under Regulation 25(2)(c) of the 2019 Tariff Regulations, which is applicable for the replacement of assets on grounds of obsolescence. However, it is not clear as to how obsolescence has occurred so early in plant life (COD 31.3.2016). The claim of the	0.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reason for admissibility	Amount allowed
2023-24						
					Petitioner is therefore **not allowed**. The Petitioner is at liberty to claim the expenditure, if incurred, at the time of truing-up tariff, along with proper OEM certificates and justification as to how the obsolete technology was adopted in new station.	
3	Electronic modules for DCS/DDCMIS	25.00	25 (2) (a)	The Petitioner has submitted that, the claims towards the works are the Critical Spares, which is required for ensuring reduction in downtime and improved operational reliability.	The Petitioner has claimed the assets/items under Regulation 25(2)(a) of the 2019 Tariff Regulations, which are applicable for replacement of assets which have fully depreciated. As the items are still not fully depreciated, the same cannot be considered under Regulations 25(2)(a) of 2019 Tariff Regulations. In addition, the items claimed are in the nature of spares, which can be considered for capitalization only after the same are put to use. Accordingly, the claim of the Petitioner is **not allowed** at this stage	0.00
4	Electronic modules for PLC	20.00				0.00
	SUB-TOTAL	**20.00**				**0.00**
COAL HANDLING PLANT						

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reason for admissibility	Amount allowed
2023-24						
5	Fluid Coupling, Model: PST 1000	30.00	25 (2) (a)	The Petitioner submitted that the works are claimed due to unavailability of Spares, where the existing spares are expected to be consumed by the time. Thus, the same is required for ensuring reduction in downtime and improved operational reliability.	The Petitioner has claimed subject items under Regulation 25(2)(a) applicable for the replacement of assets which have fully depreciated. As the subject items are still not fully depreciated, the same can't be considered under Regulations 25(2)(a) of 2019, Tariff Regulations. In addition, the claimed items are spares in nature, which can be considered for capitalization only after the same are put to use only. Accordingly, the claim items are not allowed at this juncture / stage.	0.00
6	Gear Box, Model: CSB 450	30.00	25 (2) (a)			0.00
7	Gear Box, Model: CSB 400	30.00	25 (2) (a)			0.00
	SUB-TOTAL	**90.00**				**0.00**
ELECTRICAL SECTION						
8	SEL Goose communication upgradation	20.00	25 (2) (c)	Some of the hardware items have become defective, software communication failed and most of the items have become obsolete	The Petitioner has claimed assets /items under Regulation 25(2)(c) of the 2019 Tariff Regulations, which is applicable for the replacement of assets on grounds of obsolescence. However, it is not clear as to how obsolescence has occurred so early in plant life (COD 31.3.2016). The claim of the Petitioner is therefore **not allowed**. The Petitioner is at liberty to claim the	0.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reason for admissibility	Amount allowed
2023-24						
					expenditure, if incurred, at the time of truing-up tariff, along with proper OEM certificates and justification as to how the obsolete technology was adopted in new station.	
9	Retrofitting of Actuator	30.00	25 (2) (a)	The Petitioner has claimed the works towards the replacement of Chinese make actuators by Indigenous for easy spares availability with phase wise.	The Petitioner has not submitted justification as to why the actuators need replacement so early in plant life. Regulation 25(2)(a) of the 2019 Tariff Regulations is applicable if the asset being replaced is fully depreciated. As the asset/ item is still not fully depreciated, the same cannot be considered under Regulation 25(2)(a) of the 2019 Tariff Regulations. The Petitioner may claim the same at the time of truing-up of tariff with proper justification, if actually replaced.	0.00
10	Transformer Bushings of transformers for 400 KV Switchyard and Transformer yard	90.00	25 (2) (a)	The Petitioner submitted that, the available stocks are expected to be exhausted and the same is required for ensuring reduction in downtime and improved operational reliability.	Since capitalization of spares after the cut-off date is not permissible, the claim of the Petitioner is **not allowed.** The Petitioner may claim the same at the time of truing up of tariff, in terms of the relevant provisions of the Regulations, if the same is actually put into service.	0.00
11	DC Batteries for 220 V Battery bank and 48 V	5.00				0.00

Sr. No.	Head of Work / Equipment	Claimed	Regulations	Justification by the Petitioner	Reason for admissibility	Amount allowed
2023-24						
	Battery Bank swyd					
	SUB-TOTAL	**145.00**				**0.00**
TOWNSHIP AND MISCELLANEOUS CIVIL WORKS						
12	Strengthening of Outside periphery road	2.50	76 & 77	The Petitioner submitted that; the outside periphery road may damage due to movement of coal dumper.	The Petitioner has not provided any proper justification for the said claims. Also, there is no merit to allow the claims in exercise of the powers under Regulations 76 or 77 of the 2019 Tariff Regulations. Accordingly, claims of the Petitioner are **not allowed**.	0.00
13	Strengthening of Inside periphery road	2.50	76 & 77			0.00
	SUB-TOTAL	**5.00**				**0.00**
	Total amount clamed	**721.73**				**0.00**
	Total amount allowed					**0.00**

Discharge of Liabilities

159. The Petitioner has submitted that the entire additional capital expenditure projections submitted under Form-9 are on accrual basis, and un-discharged liabilities, if any, will be submitted on actual basis at the time of truing-up of tariff. Accordingly, the Commission has also not allowed any discharge of liabilities for the period 2019-24 period. The Petitioner is directed to submit the item-wise and year-wise reconciliation statement, showing the details of such liabilities as per the balance sheet for the period 2019-24, duly certified by the auditor and furnish the break-up of discharges included in the liabilities discharged within the original scope of work or beyond original scope, at the time of truing-up exercise.

160. Based on the above, the additional capital expenditure allowed for the period 2019-24 is summarized as under:

Additional Capital Expenditure eligible for Normal ROE

(Rs. In lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Admitted additions in projected additional capital expenditure (A)	81485.03	11735.27	246.00	0.00	0.00
Less: De-capitalization considered for assets (B)	0.00	0.00	0.00	0.00	0.00
Less: Un-discharged Liabilities (C)	0.00	0.00	0.00	0.00	0.00
Add: Discharges of liabilities (against allowed assets / works) (D)	0.00	0.00	0.00	0.00	0.00
Net projected additional capital expenditure allowed (on cash basis) (E) = (A-B-C+D)	81485.03	11735.27	246.00	0.00	0.00

Additional Capital Expenditure eligible for ROE (WAROI)

(Rs. In lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Admitted additions in projected additional capital expenditure (A)	28.65	0.00	0.00	0.00	0.00
Less: De-capitalization considered for assets (B)	0.00	0.00	0.00	0.00	0.00
Less: Un-discharged Liabilities (C)	0.00	0.00	0.00	0.00	0.00
Add: Discharges of liabilities (against allowed assets / works) (D)	0.00	0.00	0.00	0.00	0.00
Net projected additional capital expenditure allowed (on cash basis) (E) = (A-B-C+D)	28.65	0.00	0.00	0.00	0.00

Capital cost allowed for the period 2019-24

161. Accordingly, the capital cost approved for the period 2019-24 is as under:

(Rs. In lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost (A)	541740.79	623254.47	634989.74	635235.74	635235.74
Add: Addition during the year / period (Net of exclusion not allowed) (B)	81513.68	11735.27	246.00	0.00	0.00
Less: Decapitalization during the year /period (C)	0.00	0.00	0.00	0.00	0.00
Less: Undischarged liabilities (D)	0.00	0.00	0.00	0.00	0.00
Add: Discharges during the year /period (E)	0.00	0.00	0.00	0.00	0.00
Net Additional Capitalization (F) = (B-C-D+E)	81513.68	11735.27	246.00	0.00	0.00
Closing Gross Block (G) = (A+F)	**623254.47**	**634989.74**	**635235.74**	**635235.74**	**635235.74**
Average Gross Block (H) = (A+G)/2	582497.63	629122.10	635112.74	635235.74	635235.74

Debt Equity Ratio

162. Regulations 18 and 72 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.*

(3) 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.”

xxx

72. Special Provisions relating to Damodar Valley Corporation: *(1) Subject to clause (2), this Regulation shall apply to determination of tariff of the projects owned by*

Damodar Valley Corporation (DVC).

(2) The following special provisions shall apply for determination of tariff of the projects owned by DVC:

xxx

> ***(ii) Debt Equity Ratio:*** *The debt equity ratio of all projects of DVC commissioned prior to 01.01.1992 shall be 50:50 and that of the projects commissioned thereafter shall be 70:30."*

163. The gross loan and equity amounting to Rs.379265.59 lakh and Rs.162542.40 lakh respectively as on 31.3.2019, as determined in this order, for the period 2014-19 as above, has been considered as gross loan and equity, as on 1.4.2019, in accordance with the Regulation 18 of the 2019 Tariff Regulations. The debt-equity ratio of 70:30 has been applied on year-wise admitted additional capital expenditure for arriving at the additions to loan and equity during each year of the period 2019-24. Accordingly, the details of the debt and equity in respect of the generating station is as follows:

	Capital Cost as on 1.4.2019 (Rs. in lakh)	%	Additional Capital Expenditure for period 2019-24 *(Rs. in lakh)*	%	Capital Cost as on 31.4.2024 *(Rs. in lakh)*	%
Debt	379218.55	70%	65446.47	70%	444665.02	70%
Equity	162522.24	30%	28048.49	30%	190570.72	30%
Total	**541740.79**	**100%**	**93494.95**	**100%**	**635235.74**	**100%**

Return on Equity

164. Regulations 30 of the 2019 Tariff Regulations provide as follows:

"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 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."

165. Regulation 31 of the 2019 Tariff Regulations provide as under:

"*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 FY 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."

166. The Respondent PSPCL has submitted that as per Regulation 31(1) of the 2019 Tariff Regulations, the effective tax rate is to be computed based on the actual tax paid in a financial year. It has pointed out that the Commission in its order dated 28.9.2017 in Petition No. 224/ GT/2015 had considered the base rate of 15.50% and an effective tax rate of 0.00% for period 2014-19 since no tax has been paid by the Petitioner. Accordingly, the Respondent has submitted that the Petitioner's claim for an effective tax rate of 21.5488% during the period 2019-24 is completely premature without the actual tax paid during the said year. Hence, it has prayed that the Commission may only allow ROE at the base rate of 15.50% and effective tax rate at 0.00% till the time the Petitioner submits the data of actual tax paid at the time of truing-up.

167. The Respondent KSEBL has submitted that the 2019 Tariff Regulations stipulates that the rate of ROE shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station has not implemented Restricted Governor Mode Operations (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. The Petitioner has not furnished the details of such mandatory requirements in this instant petition. Hence, the rate of ROE may be fixed only based on the achievement of the operation of RGPM/FGMO, data telemetry and communication system.

168. The Objector DVPCA has submitted that the Petitioner has considered effective

tax rate of 21.5488% for the computation of ROE for the period 2019-24, and the same is premature and needs to be claimed based on the actual tax paid in terms of Regulation 31 of the 2019 Tariff Regulations. As regards the Petitioner's claim for ROE at weighted average rate of interest on actual loan portfolio, DVPCA has submitted that the Petitioner has neither submitted any details of assets nor any justification for claiming the additional capitalisation after cut-off date and beyond the original scope of work.

169. In response, the Petitioner has submitted that ROE may be computed, without considering the income tax rates for the period 2019-24. However, the Petitioner has craved leave of the Commission to claim the income tax liability, if any, for any year of the period 2019-24 as and when arising in the future. The Petitioner has also submitted that details of assets along with justification has been furnished in Form-9 of the petition.

170. The matter has been considered. The Petitioner has not been paying any income tax in any of the financial year of the period 2014-19. Also, considering the submissions of the Petitioner above, the effective tax rate has been considered as 'Nil' for the purpose of grossing up of ROE and the rate of ROE has been considered as 15.50% for the period 2019-24. Accordingly, ROE is worked out and allowed as follows:

(a) Return on Equity at Normal Rate

(Rs. In lakh)

		2019-20	2020-21	2021-22	2022-23	2023-24
Normative Equity - Opening	A	162522.24	186967.75	190488.33	190562.13	190562.13
Addition to Equity due to additional capital expenditure	B	24445.51	3520.58	73.80	0.00	0.00
Normative Equity - Closing	C = (A+B)	186967.75	190488.33	190562.13	190562.13	190562.13

		2019-20	2020-21	2021-22	2022-23	2023-24
Average Normative Equity	D=Avg. (A,C)	174744.99	188728.04	190525.23	190562.13	190562.13
Return on Equity (Base Rate) (%)	E	15.500%	15.500%	15.500%	15.500%	15.500%
Tax Rate for the year (%)	F	0.000%	0.000%	0.000%	0.000%	0.000%
Rate of Return on Equity (Pre-Tax) (%)	G = E/(1-F)	15.500%	15.500%	15.500%	15.500%	15.500%
Return on Equity (Pre-Tax) annualized	**H = (DxG)**	**27085.47**	**29252.85**	**29531.41**	**29537.13**	**29537.13**

(b) Return on Equity at WAROI

(Rs. In lakh)

		2019-20	2020-21	2021-22	2022-23	2023-24
Normative Equity - Opening	A	0.00	8.60	8.60	8.60	8.60
Addition to Equity due to additional capital expenditure	B	8.60	0.00	0.00	0.00	0.00
Normative Equity - Closing	C = (A+B)	8.60	8.60	8.60	8.60	8.60
Average Normative Equity	D=Avg. (A, C)	4.30	8.60	8.60	8.60	8.60
Return on Equity (Base Rate) (%)	E	10.082%	10.080%	10.077%	10.073%	10.068%
Tax Rate for the year (%)	F	0.000%	0.000%	0.000%	0.000%	0.000%
Rate of Return on Equity (Pre-Tax) (%)	G = E/(1-F)	10.082%	10.080%	10.077%	10.073%	10.068%
Return on Equity (Pre-Tax) annualized	**H = (DxG)**	**0.43**	**0.87**	**0.87**	**0.87**	**0.87**

Total Return on Equity allowed

(Rs. In lakh)

		2019-20	2020-21	2021-22	2022-23	2023-24
Return on Equity at Normal Rate	A	27085.47	29252.85	29531.41	29537.13	29537.13
Return on Equity at WAROI	B	0.43	0.87	0.87	0.87	0.87
Total Return on Equity allowed	**C=(A+B)**	**27085.91**	**29253.71**	**29532.28**	**29538.00**	**29538.00**

171. The Petitioner is directed to furnish the report of RLDC with regard to the commissioning of any Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre, along with relevant information regarding the achievement of ‘Ramp

Rate' in compliance to proviso (i) and (iii) of Regulation 30(2) of the 2019 Tariff Regulations, at the time of truing-up of tariff.

Interest on Loan

172. Regulation 32 and 61 of the 2019 Tariff Regulations provides as follows:

> ***"****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 de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation 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."*
>
> *"****61. Sharing of saving in interest due to re-financing or restructuring of loan:*** *(1) If re-financing or restructuring of loan by the generating company or the transmission licensee, as the case may be, results in net savings on interest after accounting for cost associated with such refinancing or restructuring, the same shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 50:50.*
>
> *(2) 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 for settlement of the dispute:*
>
> *Provided that the beneficiaries or the long term customers 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."*

173. The Respondent KSEBL and the Objector DVPCA have submitted that since the additional capital expenditure claimed by the Petitioner for period 2019-24, is not in order, the interest on loan for the period may be allowed, only after deducting the additional capital expenditure which were disallowed in this order. In response, the Petitioner has submitted that the contentions of the Respondent and Objector are misconstrued in the matter of interest of loan for the period 2019-24 and may be rejected.

174. Accordingly, Interest on loan has been worked out as under:

a. Gross normative loan amounting to Rs. 379218.55 lakh on 31.3.2019 as considered and allowed in this order, for the period 2014-19, has been considered as on 1.4.2019.
b. Cumulative repayment of Rs. 120648.36 lakh as on 31.3.2019, as considered in in in this order for the period 2014-19, has been considered as on 1.4.2019.
c. Accordingly, the net normative opening loan as on 1.4.2019 works out to Rs. 258570.20 lakh.
d. Weighted average rate of interest on loan, as claimed by the Petitioner has been considered.
e. The repayments for the respective years of the period 2019-24, has been considered equal to the depreciation allowed for that year.
f. Interest on loan has been calculated on the normative average loan of the year by applying the weighted average rate of interest.

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

(Rs. In lakh)

		2019-20	2020-21	2021-22	2022-23	2023-24
Gross opening loan	A	379218.55	436278.13	444492.82	444665.02	444665.02
Cumulative repayment of loan upto previous year	B	120648.36	164748.35	212378.21	260461.62	308554.33
Net Loan Opening	C=(A-B)	258570.20	271529.78	232114.60	184203.40	136110.69
Addition due to additional capital expenditure	D	57059.58	8214.69	172.20	0.00	0.00
Repayment of loan during the year	E	44099.99	47629.86	48083.40	48092.72	48092.72
Repayment adjustment on account of decapitalization	F	0.00	0.00	0.00	0.00	0.00

		2019-20	2020-21	2021-22	2022-23	2023-24
Ney repayment of the loan during the year	G=(E-F)	44099.99	47629.86	48083.40	48092.72	48092.72
Net Loan Closing	H=(C+D -G)	271529.78	232114.60	184203.40	136110.69	88017.97
Average Loan	I=Avg. (C,H)	265049.99	251822.19	208159.00	160157.04	112064.33
Weighted Average Rate of Interest of loan	J	10.0821%	10.0797%	10.0765%	10.0726%	10.0678%
Interest on Loan	**K=(IxJ)**	**26722.70**	**25383.03**	**20975.24**	**16132.03**	**11282.40**

176. Further, the Petitioner has claimed share of savings due to restructuring of loan from PFC for the period 2019-24, on projection basis, as per Regulation 61(1) of the 2019 Tariff Regulations. In this regard, it is clarified that the sharing of saving in interest due to re-financing or restructuring of loan, if any, must be undertaken between the parties, on actual basis, in accordance with Regulation 61(1) of the 2019 Tariff Regulations.

Depreciation

177. Regulations 33 and 72 (2) (iii) of the 2019 Tariff Regulations provides as follows:

*"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 upto 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.
xxx

72. Special Provisions relating to Damodar Valley Corporation: *(1) Subject to clause (2), this Regulation shall apply to determination of tariff of the projects owned by Damodar Valley Corporation (DVC).*

(2) The following special provisions shall apply for determination of tariff of the projects owned by DVC:

xxx

(iii) Depreciation: *The depreciation rate stipulated by the Comptroller and Auditor General of India in terms of section 40 of the Damodar Valley Corporation Act, 1948 shall be applied for computation of depreciation of projects of DVC."*

178. The Respondent KSEBL and Objector DVPCA have submitted that since the additional capital expenditure claimed by the Petitioner for period 2019-24 is not in order, the depreciation for the said period may be allowed only after deducting the additional capital expenditure disallowed by the Commission. The Petitioner in its

rejoinder has submitted that the aforesaid contentions are misconstrued in the matter of depreciation for the period 2019-24 and may be rejected.

179. Accordingly, depreciation has been worked out considering the admitted capital cost of Rs.541740.79 lakh, as on 1.4.2019, and the cumulative depreciation of Rs.120648.36 lakh, as on 31.3.2019, as determined in this order for the period 2014-19. Thus, in terms of Regulation 33 and Regulation 72 (2) (iii) of the 2019 Tariff Regulations, depreciation has been worked out and allowed as under:

(Rs. In lakh)

		2019-20	2020-21	2021-22	2022-23	2023-24
Average Capital Cost	A	582497.63	629122.10	635112.74	635235.74	635235.74
Value of freehold land	B	14491.32	14491.32	14491.32	14491.32	14491.32
Aggregated Depreciable Value	C= [(A-B)x90%]	511205.68	553167.70	558559.27	558669.97	558669.97
Remaining Aggregate Depreciable value at the beginning of the year	D=[(C)-(Cumulative Depreciation of Previous year)]	390557.32	388419.35	346181.06	298208.36	250115.64
Balance useful life at the beginning of the year	E	22.00	21.00	20.00	19.00	18.00
Weighted Average Rate of Depreciation (WAROD)	F	7.57%	7.57%	7.57%	7.57%	7.57%
Depreciation (annualized)	**G = [Min (A* F,D)]**	**44099.99**	**47629.86**	**48083.40**	**48092.72**	**48092.72**
Cumulative depreciation (at the end of the year)	H= [(Cumulative Depreciation of Previous year) +(F)]	164748.35	212378.21	260461.62	308554.33	356647.05
Less: Depreciation adjustment on account of de-capitalization	I	0.00	0.00	0.00	0.00	0.00
Cumulative depreciation at the end of the year	J=(H - I)	164748.35	212378.21	260461.62	308554.33	356647.05

Operation & Maintenance Expenses

180. Regulation 35(1)(1) of the 2019 Tariff Regulations provides for the following O&M expenses for 600 MW series generating station:

(Rs in lakh/MW)

2019-20	2020-21	2021-22	2022-23	2023-24
20.26	20.97	21.71	22.47	23.26

181. The normative O&M expenses claimed by the Petitioner are as follows:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
24312.00	25164.00	26052.00	26964.00	27912.00

182. As the Petitioner has claimed the normative O&M expenses in accordance with Regulation 35(1)(1) of the 2019 Tariff Regulations, the same is allowed.

Water Charges, Security Charges and Capital Spares

183. Regulation 35(1)(6) of the 2019 Tariff Regulations provides as follows:

"35. Operation and Maintenance Expenses:

(1) Thermal Generating Station: Normative Operation and Maintenance expenses of thermal generating stations shall be as follows:
xxx
(6) The Water Charges, Security Expenses and Capital Spares for thermal generating stations shall be allowed separately after prudence check:

Provided that water charges shall be allowed based on water consumption depending upon type of plant and type of cooling water system, subject to prudence check. The details regarding the same shall be furnished along with the petition;

Provided further that the generating station shall submit the assessment of the security requirement and estimated expenses;

Provided also that the generating station shall submit the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance as per Regulation 17 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 or Special Allowance or claimed as a part of additional capitalisation or consumption of stores and spares and renovation and modernization."

Water Charges

184. In terms of the first proviso to Regulation 35(1)(6) of the 2019 Tariff Regulations, the Petitioner has considered normative water consumption of 3.5 m^3/MWh, generation as per NAPAF and has claimed water charges as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
3336.58	3660.22	4026.24	4428.86	4885.09

185. The Respondent PSPCL has submitted that the water charges are to be allowed separately, based on the details furnished by the Petitioner on the type of the

generating station and the actual water consumption, subject to prudence check. It has stated that from the details submitted by the Petitioner for the period 2014-19, it is observed that the Petitioner has projected the water charges for period 2019-24, based on the multiplication of generation in MWh projected in 2019-24, where the normative water consumption of 3.5 m^3/MWh based on MoEFCC Notification No. 3305 dated 7.12.2015 and water charge rate of Rs. 10.64/KL. The Respondent has also submitted that the Petitioner has considered the rate of Rs. 5.7/KL for the industrial use and Rs. 1.15/KL for domestic use, for each year of the control period 2016-19 and as against this, the Petitioner has considered a water charge rate of Rs. 10.64/KL for 2019-20, and thereafter, at a yearly escalation rate of 10% for the period 2020-24, wherein, the Petitioner has mentioned that such an increased rate is pursuant to the DVC Office Memorandum dated 23.7.2019. However, the Petitioner has not furnished a copy of the said OM, on the basis of which the water charges are being claimed during the period 2019-24. It has added that such an increase sought by the Petitioner is more than 85%, which is unreasonable and arbitrary and hence, the claim of the Petitioner is liable for scrutiny and prudence check.

186. The Objector DVPCA has submitted that the actual water charge rate was Rs. 5.7/KL and Rs. 1.15/KL for industrial use and domestic use respectively for each year of the period 2014-19 and accordingly, the weighted average water charge rate works out to Rs. 5.68/KL. DVPCA has stated that, as against this, the Petitioner has considered the water charge rate of Rs. 10.64/KL for the year 2019-20 and thereafter a yearly escalation rate of 10% for the remaining years of the period 2019-24, but has not furnished the relevant OM dated 23.7.2019. DVPCA has also submitted that the increase sought is more than 85% which is arbitrary and therefore the Commission may conduct strict prudence check on arriving at the allowable water charge rate,

such that, it is comparable with the rates prevailing in other States, derived at arms' length and there should be no cross-subsidisation of other activities of the Petitioner. DVPCA has added that the arbitrary escalation of 10% ought to be rejected as there is neither any basis for the same nor provided in the 2019 Tariff Regulations.

187. The Petitioner in its rejoinder has clarified that the water charges of the generating stations, w.e.f. 1.4.2019 and escalation thereof, are governed by the water tariff as notified by DVC vide OM dated 23.7.2019.

188. The matter has been considered. It is observed that the Petitioner has submitted OM dated 23.7.2019, as part of the additional information and accordingly, the same has been considered. In view of the above, and considering the MOEF&CC norms, generation as per NAPAF and water charges rate of Rs 10.64/KL and annual escalation of 10% thereof, as per OM dated 23.7.2019, the water charges for the period 2019-24 is allowed as under:

	Units	2019-20	2020-21	2021-22	2022-23	2023-24
Projected Gross Generation @ 85% load factor	MU	8959.68	8935.20	8935.20	8935.20	8959.68
Normative Specific Water Consumption as per MoEFCC stipulations	Cubic Meter/ MWh	3.50	3.50	3.50	3.50	3.50
Normative Water Consumption as per MoEFCC's Norms	Cubic Meter	31358880	31273200	31273200	31273200	31358880
Rate of Water Charges	Rs. / Cubic Meter	10.64	11.70	12.87	14.16	15.58
Total Normative Water Charges	**(in Rs. lakh)**	**3336.58**	**3660.22**	**4026.24**	**4428.86**	**4885.09**

189. The Petitioner is however, directed to submit the detailed justification for the high rate of the water charges along with comparison in rate from alternative sources at the time of truing-up of tariff.

Security Expenses

190. The Petitioner has claimed the following security expenses, on projection basis, for the period 2019-24 in terms of the second proviso to Regulation 35(6) of the 2019 Tariff Regulations.

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
2356.69	2470.33	2589.45	2714.32	2845.20

191. It is observed that the Petitioner has escalated the actual Security expenses of Rs. 2248.27 lakh for the year 2018-19 at the CAGR rate of 4.82% per annum, to claim the projected Security expenses for the period 2019-24. The Petitioner has also submitted that the escalation of Security expenses has been proposed to accommodate the year-on-year growth of salary expenditure and associated CISF activities, that are primarily governed by the CISF Rules.

192. The Objector DVPCA has submitted that the actual O&M expenses including, P&G expenses, Pay Revision expenses, CISF security expenses, Ash evacuation expenses, expenditure for Subsidiary activities, Mega Insurance expenses, GST on O&M, etc. are lower than the normative O&M expenses for the period 2014-19. Thus, DVPCA has submitted that there is no requirement for separate allowance of CISF security expenses, as they are covered under normative O&M expenses, and separate allowance of the same would lead to unjust enrichment of the Petitioner. It has also stated that the past analysis of all stations of the Petitioner would reveal that the CISF Man/MW ratio varies between the stations, ranges from 0.19 to 3.96 person/MW and the cost of CISF personnel/MW, also varies from station to station and ranges from Rs. 24084/- per annum, in case of Maithon HS (hydel) to a high of Rs. 237083/- per annum in case of RTPS (this generating station). DVPCA has also pointed out that the OM issued by CISF/MHA pertain to previous control periods and no other document is provided for during the period 2019-24. In response, the

Petitioner has submitted that the actual Security expenses for 2018-19 has been escalated at 4.82% (which is the CAGR of normative O&M expenses of RTPS Phase-I from 2018-19 to 2023-24) per annum to obtain the projected figures for the period 2019-24. The Petitioner has also submitted that the escalation of Security expenses has been proposed to accommodate the year-on-year growth of salary expenditure and associated CISF activities that are primarily governed by the CISF Rules.

193*. The matter has been considered. It is observed that the Security expenses for 2018-19 is Rs. 2248.27 lakh and the same is considered along with an annual escalation rate of 4.82%, as proposed by the Petitioner for the period 2019-24. Accordingly, the Security expenses claimed by the Petitioner as above, is allowed.* The Petitioner shall, at the time of truing up of tariff, furnish the actual security expenses incurred along with the justification and the same shall be assessed in terms of Regulation 35(1)(6) of the 2019 Tariff Regulations.

Capital spares

194. The Petitioner has not projected any capital spares for the period 2019-24 and submitted that it will claim the same during the truing-up of tariff, on actual basis. The last proviso to Regulation 35(1)(6) of the 2019 Tariff Regulations provides for considering capital spares after prudence check, on consumption basis, at the time of truing-up of tariff. In line with this, the Petitioner is at liberty to claim the actual spares at the time of truing up of tariff. The Petitioner is therefore directed to confirm / substantiate that the capital spares have not been funded through compensatory allowance or Special Allowance or claimed as a part of additional capitalisation or consumption of stores and spares and renovation and modernization during the true-up.

195. Based on the above discussion, the O&M expenses allowed under Regulation

35(1)(1) of the 2019 Tariff Regulations and water charges, security expenses and capital spares allowed under Regulation 35(1)(6) of the 2019 Tariff Regulations, are summarised below:

(Rs. in lakh)

		2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Installed Capacity (MW)		1200.00	1200.00	1200.00	1200.00	1200.00
O&M Expenses under Regulation 35(1) in Rs lakh / MW		20.26	20.97	21.71	22.47	23.26
Total O&M Expenses (A)	Claimed	24312.00	25164.00	26052.00	26964.00	27912.00
	Allowed	**24312.00**	**25164.00**	**26052.00**	**26964.00**	**27912.00**
Water Charges (B)	Claimed	3336.58	3660.22	4026.24	4428.86	4885.09
	Allowed	**3336.58**	**3660.22**	**4026.24**	**4428.86**	**4885.09**
Security Expenses (C)	Claimed	2356.69	2470.33	2589.45	2714.32	2845.20
	Allowed	**2356.69**	**2470.33**	**2589.45**	**2714.32**	**2845.20**
Capital Spares (D)	Claimed	0.00	0.00	0.00	0.00	0.00
	Allowed	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Total O&M Expenses as allowed (including Water Charges and Security Expenses) (D=A+B+C)	Claimed	**30005.27**	**31294.54**	**32667.69**	**34107.18**	**35642.30**
	Allowed	**30005.27**	**31294.54**	**32667.69**	**34107.18**	**35642.30**

Operational Norms

196. The provisions of Regulation 49 of the 2019 Tariff Regulations providing for operational norms for the generating station are as follows:

"Norms of operation for thermal generating station

49. The norms of operation as given hereunder shall apply to thermal generating stations:
(A) Normative Annual Plant Availability Factor (NAPAF)

(a) For all thermal generating stations, except those covered under clauses (b), (c), (d), & (e) - 85% ;
xxx
(C) Gross Station Heat Rate:

xx
(b) Thermal Generating Stations achieving COD on or after 1.4.2009:

(i) For Coal-based and lignite-fired Thermal Generating Stations:

1.05 X Design Heat Rate (kCal/kWh)

Where the Design Heat Rate of a generating unit means the unit heat rate guaranteed *by the supplier at conditions of 100% MCR, zero percent make up, design coal and design cooling water temperature/back pressure.*

Provided that the design heat rate shall not exceed the following maximum design unit heat rates depending upon the pressure and temperature ratings of the units:

Pressure Rating (Kg/cm2)	*150*	*170*	*170*
SHT/RHT (0C)	*535/535*	*537/537*	*537/565*
Type of BFP	*Electrical Driven*	*Turbine Driven*	*Turbine Driven*
Max Turbine Heat Rate (kCal/kWh)	*1955*	*1950*	*1935*
Min. Boiler Efficiency			
Sub-Bituminous Indian Coal	*0.86*	*0.86*	*0.86*
Bituminous Imported Coal	*0.89*	*0.89*	*0.89*
Max. Design Heat Rate (kCal/kWh)			
Sub-Bituminous Indian Coal	*2273*	*2267*	*2250*
Bituminous Imported Coal	*2197*	*2191*	*2174*

Pressure Rating (Kg/cm2)	*247*	*247*	*270*	*270*
SHT/RHT (0C)	*537/565*	*565/593*	*593/593*	*600/ 600*
Type of BFP	*Turbine Driven*	*Turbine Driven*	*Turbine Driven*	*Turbine Driven*
Max Turbine Heat Rate (kCal/kWh)	*1900*	*1850*	*1810*	*1800*
Min. Boiler Efficiency				
Sub-Bituminous Indian Coal	*0.86*	*0.86*	*0.865*	*0.865*
Bituminous Imported Coal	*0.89*	*0.89*	*0.895*	*0.895*
Max. Design Heat Rate (kCal/kWh)				
Sub-Bituminous Indian Coal	*2222*	*2151*	*2105*	*2081*
Bituminous Imported Coal	*2135*	*2078*	*2034*	*2022*

Provided further that in case pressure and temperature parameters of a unit are different from above ratings, the maximum design heat rate of the unit of the nearest class shall be taken:

Provided also that where heat rate of the unit has not been guaranteed but turbine cycle heat rate and boiler efficiency are guaranteed separately by the same supplier or different suppliers, the design heat rate of the unit shall be arrived at by using guaranteed turbine cycle heat rate and boiler efficiency:

Provided also that where the boiler efficiency is lower than 86% for Sub-bituminous Indian coal and 89% for bituminous imported coal, the same shall be considered as 86% and 89% for Sub-bituminous Indian coal and bituminous imported coal respectively, for computation of station heat rate:

xx

(D) Secondary Fuel Oil Consumption:

(a) For Coal-based generating stations other than at (c) below: 0.50 ml/kWh

xx

(E) Auxiliary Energy Consumption:

(a) For Coal-based generating stations except at (b) below:

S. No.	Generating Station	With Natural Draft cooling tower or without cooling tower
(i)	*200 MW series*	*8.50%*
(ii)	*300 MW series and above*	
	Steam driven boiler feed pumps	*5.75%*
	Electrically driven boiler feed pumps	*8.00%*

Provided that for thermal generating stations with induced draft cooling towers and where tube type coal mill is used, the norms shall be further increased by 0.5% and 0.8% respectively:

Provided further that Additional Auxiliary Energy Consumption as follows shall be allowed for plants with Dry Cooling Systems:

Type of Dry Cooling System	(% of gross generation)
Direct cooling air cooled condensers with mechanical draft fans	*1.0%*
Indirect cooling system employing jet condensers with pressure recovery turbine and natural draft tower	*0.5%*

197. The Operational norms claimed by the Petitioner are as follows:

Parameter	
Normative Annual Plant Availability Factor (NAPAF) (%)	85.00
Gross Station Heat Rate (kcal/kwh)	2350.98
Auxiliary Power Consumption (%)	5.75
Specific Oil Consumption (ml/kwh)	0.50

198. The Petitioner has sought liberty to claim relaxation of NAPAF as per Regulations 76 and 77 of the 2019 Tariff Regulations, for unforeseen event or uncontrollable factors.

199. The matter has been considered. We find no merit in the claim of the Petitioner to seek relaxation in NAPAF and hence the same is not allowed. It is observed that the Petitioner has submitted that the generating station is of 600 MW units with natural draft cooling. The operational norms are in line with the Regulations 49(A), 49(C), 49(D) and 49(E) of the 2019 Tariff Regulations and hence allowed along with the GCV and cost of primary and secondary fuel as under:

Parameter	
Normative Annual Plant Availability Factor (NAPAF) (%)	85.00
Gross Station Heat Rate (kcal/kwh)	2350.98
Auxiliary Power Consumption (%)	5.75
Specific Oil Consumption (ml/kwh)	0.50

Interest on Working Capital

200. The Petitioner has claimed weighted average GCV and Cost of coal as 3937.42 kCal/kg and Rs. 3514.89/MT, respectively, and those of Secondary fuel oil as 10189.55 kCal/L and Rs. 46823.52/KL. Accordingly, Interest on Working Capital as claimed by the Petitioner is as under:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Cost of Coal/Lignite for Stock and Generation (A)	26059.58	25988.38	25988.38	25988.38	26059.58
Cost of oil for 2 months (B)	349.60	348.65	348.65	348.65	349.60
O&M expenses - 1 month (C)	2500.44	2607.88	2722.31	2842.26	2970.19
Maintenance Spares - 20% of O&M (D)	6001.05	6258.91	6533.54	6821.44	7128.46
Receivables – 45 days (E)	43207.25	43991.65	43735.21	43297.67	42942.85
Total Working Capital (F) = (A+B+C+D+E)	**78117.93**	**79195.46**	**79328.08**	**79298.39**	**79450.68**
Rate of Interest (G)	12.05%	12.05%	12.05%	12.05%	12.05%
Total Interest on Working capital (H) = (F)x(G)	**9413.21**	**9543.05**	**9559.03**	**9555.46**	**9573.81**

201. Regulation 34(1)(a) of the 2019 Tariff Regulations provides as under:

"34. Interest on Working Capital: (1) The working capital shall cover:

(a) For Coal-based/lignite-fired thermal generating stations:
(i) Cost of coal or lignite and limestone towards stock, if applicable, for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower; (ii) Advance payment for 30 days towards cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;
(iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;
(iv) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;
(v) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on the normative annual plant availability factor; and
(vi) Operation and maintenance expenses, including water charges and security expenses, for one month."

202. Regulations 34(3) and 34(4) of the 2019 Tariff Regulations provide as under:

"(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 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.

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

a) Fuel Cost and Cost of Liquid Stock for Working Capital

203. The Petitioner has claimed the following fuel components as part of working capital, based on the price and GCV of coal as received and secondary fuel oil for the preceding three months from October 2018 to December 2018:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Cost of coal for 50 days	26059.58	25988.38	25988.38	25988.38	26059.58
Cost of Secondary fuel oil 2 months	349.60	348.65	348.65	348.65	349.60

204. Regulation 34(2) of the 2019 Tariff Regulations provides that the computation of cost of fuel as part of Interest on Working (IWC) is to be based on the landed price and GCV of fuel as per actuals, for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined.

205. Regulation 43(2) of the 2019 Tariff Regulations provides as under:

"(2) Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formulae:

(a) *For coal based and lignite fired stations:*
ECR = {(SHR – SFC x CVSF) x LPPF / CVPF+SFC x LPSFi + LC x LPL} x 100 / (100 – AUX)
(b) For gas and liquid fuel based stations:
ECR = SHR x LPPF x 100 / {(CVPF) x (100 – AUX)}
Where,
AUX = Normative auxiliary energy consumption in percentage.
CVPF = (a) Weighted Average Gross calorific value of coal as received, in kCal per kg for coal-based stations less 85 Kcal/Kg on account of variation during storage at generating station;
(b) Weighted Average Gross calorific value of primary fuel as received, in kCal per kg, per litre or per standard cubic meter, as applicable for lignite, gas and liquid fuel based stations;
(c) In case of blending of fuel from different sources, the weighted average Gross calorific value of primary fuel shall be arrived in proportion to blending ratio:
CVSF = Calorific value of secondary fuel, in kCal per ml;

ECR = Energy charge rate, in Rupees per kWh sent out;
SHR = Gross station heat rate, in kCal per kWh;
LC = Normative limestone consumption in kg per kWh;
LPL = Weighted average landed cost of limestone in Rupees per kg;
LPPF = Weighted average landed fuel cost of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month. (In case of blending of fuel from different sources, the weighted average landed fuel cost of primary fuel shall be arrived in proportion to blending ratio);
SFC= Normative specific fuel oil consumption, in ml per kWh;
LPSFi= Weighted Average Landed Fuel Cost of Secondary Fuel in Rs./ ml during the month:
Provided that energy charge rate for a gas or liquid fuel based station shall be adjusted for open cycle operation based on certification of Member Secretary of respective Regional Power Committee during the month."

206. In line with the above Regulations, a margin of 85 kCal/kg in weighted average Gross Calorific value (GCV) of coal on 'as received' for coal based generating stations on account of variation during storage at the generating station has been considered for computation of IWC. Accordingly, the GCV and price of fuel as claimed by the Petitioner and as allowed by the Commission are provided as under:

	Claimed	**Allowed**
Weighted average price of coal (Rs./MT)	3514.89	3514.89
Weighted average GCV of coal (kCal/kg)	3937.42	3852.42*
Weighted average price of oil (Rs./kl)	46823.52	46823.52
Weighted average GCV of oil (kCal/l)	10189.55	10189.55

**After adjustment of 85kcal/kg as per Regulation 43(2)(b)*

207. In this background, based on the operational norms, GCV and price of Coal and Oil allowed as above, the fuel components of working capital have been worked out and allowed as under:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Cost of coal for 20 days	10479.17	10479.17	10479.17	10479.17	10479.17
Cost of coal for generation for 30 days	15718.75	15718.75	15718.75	15718.75	15718.75
Cost of Secondary fuel oil 2 months	349.60	348.65	348.65	348.65	349.60

208. In the present petition, the computation of working capital is based on the GCV, and fuel cost furnished for third quarter of the year 2018-19. However, Regulation 34 (C) (2) of the 2019 Tariff Regulations, provides that the cost of fuel shall be based on

the landed fuel cost (taking into account normative transit and handling losses, in terms of Regulation 39 of these Regulations) by the generating station and gross calorific value of the fuel, as per actual weighted average for the third quarter of preceding financial year, in case of each financial year for which tariff is to be determined. In terms of above, the fuel cost computed as above is, based on the actual data to be furnished by Petitioner, for each year, at the time of truing-up of tariff.

b) Energy Charges for 45 days for Working Capital

209. The Petitioner has claimed Energy Charge Rate (ECR) of 224.68 Paise/kWh based on the weighted average price and GCV of coal as received, during the preceding three months i.e., October 2018, November 2018 and December 2018 as under:

	Unit	**Claimed**
Energy Charge Rate Secondary fuel	Rs./kWh	0.0234
Energy Charge Rate Primary fuel	Rs./kWh	2.094
Total Energy Charge Rate –ex-bus	Rs./kWh	2.247

210. Based on the operational norms and the price and GCV of the oil and price and GCV of coal [after adjusting margin of 85kCal/kg allowable as per Regulation 43(2)(b) of the 2019 Tariff Regulations], received at the generating station, during the period of three months i.e., October 2018, November 2018 and December 2018, the ECR, for the purpose of working capital, has been worked out and allowed as under:

Gross Station Heat Rate (kcal/kwh)	2350.98
Auxiliary Power Consumption (%)	5.75
Specific Oil Consumption (ml/kwh)	0.50
Weighted average price of coal (Rs./MT)	3514.89
Weighted average GCV of coal (kCal/kg)	3852.42*
Weighted average price of oil (Rs./kl)	46823.52
Weighted average GCV of oil (kCal/l)	10189.55
Energy Charge Rate ex-bus (Rs./kWh)	2.296

**After adjustment of 85kcal/kg as per Regulation 43(2)(b)*

211. Energy charges for 45 days, on the basis of weighted average GCV and

weighted average cost, for the purpose of interest on working capital, is worked out as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
23838.40	23838.40	23838.40	23838.40	23838.40

c) Working Capital for Maintenance Spares

212. The Petitioner has claimed the maintenance spares in the working capital as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
6001.05	6258.91	6533.54	6821.44	7128.46

213. Maintenance spares for the purpose of interest on working capital in accordance with the regulation, has been worked out as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
6001.05	6258.91	6533.54	6821.44	7128.46

d) Working Capital for Receivables

214. Receivables equivalent to 45 days of capacity charge and energy charges for the purpose of working capital has been worked out and allowed as follows:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Variable Charges (45 days)	23838.40	23838.40	23838.40	23838.40	23838.40
Fixed Charges (45 days)	16849.20	17531.42	17176.99	16759.08	16305.54
Total	**40687.60**	**41369.82**	**41015.39**	**40597.48**	**40143.94**

e) Working Capital for O&M Expenses

215. The O&M expenses for 1 (one) month claimed by the Petitioner for the purpose of working capital is allowed as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
2500.44	2607.88	2722.31	2842.26	2970.19

g) Rate of Interest for Working Capital

216. Regulation 34(3) of the 2019 Tariff Regulations provides for the rate of interest on working capital considered on projection basis, for the period 2019-24 as 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 the period 2019-24, is being determined during the year 2023-24, the SBI MCLR as on 1.4.2020 (7.75%), as on 1.4.2021 (7.00%) and as on 1.4.2022 (7.00%) is also available. 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 1.4.2020,1.4.2021 and 1.4.2022, for the subsequent financial years. Accordingly, the rate of interest for the year 2019-20 is 12.05%, 2020-21 is 11.25%, 2021-22 ,2022-23 is 10.50% and for the subsequent years the rate of interest of 10.50% has been considered (i.e., 1year SBI MCLR of 8.55% as on 1.4.2019 + 350 basis points, 1-year SBI MCLR of 7.75% as on 1.4.2020 + 350 basis points; 1-year SBI MCLR of 7.00% as on 1.4.2021 + 350 basis points; and 1year SBI MCLR of 7.00% as on 1.4.2022 + 350 basis points). Accordingly, Interest on working capital is allowed as follows:

(Rs. in lakh)

		2019-20	2020-21	2021-22	2022-23	2023-24
	Working Capital for non-pit-head Thermal Generating Station					
A	Working Capital for Cost of Coal towards Stock – 20 days	10479.17	10479.17	10479.17	10479.17	10479.17
B	Working Capital for Cost of Coal towards Generation – 20 days	15718.75	15718.75	15718.75	15718.75	15718.75
C	Working Capital for Cost of Secondary fuel oil – 2 months	349.60	348.65	348.65	348.65	349.60
D	Working Capital for Maintenance Spares @ 20% of O&M expenses	6001.05	6258.91	6533.54	6821.44	7128.46
E	Working Capital for Receivables - 45 days	40687.60	41369.82	41015.39	40597.48	40143.94
F	Working Capital for O&M expenses - 1 month	2500.44	2607.88	2722.31	2842.26	2970.19
G	**Total Working Capital (A+B+C+D+E+F)**	**75736.62**	**76783.18**	**76817.81**	**76807.75**	**76790.12**
H	Rate of Interest	12.05%	11.25%	10.50%	10.50%	10.50%

		2019-20	2020-21	2021-22	2022-23	2023-24
I	**Interest on Working capital (G x H)**	**9126.26**	**8638.11**	**8065.87**	**8064.81**	**8062.96**

Additional Claims

217. In addition to the Depreciation, Interest on Loan, Return on Equity, O&M Expenses, Water Charges, Security Expenses, Interest on Working Capital, share of savings in interest cost due to loan restructuring and Special Allowance in accordance with the 2019 Tariff Regulations, the Petitioner has also claimed expenditure towards Interest & Contribution on Sinking Fund (As per section 40, Part IV of DVC Act), Share of P&G contribution, Share of Common Office expenditure, Ash Evacuation expenses, Mega Insurance Expenses and Expenditure for Subsidiary activity as under:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Interest & Contribution on Sinking Fund (As per section 40, Part IV of DVC Act)	946.95	1013.23	1084.16	1160.05	1241.25
Share of P&G	4471.73	4681.93	4902.01	5132.44	5373.70
Share of Common Office Expenditure	235.98	253.26	256.45	220.55	201.03
Expenses due to Mega insurance & expenditure for Subsidiary activity	602.82	631.89	662.36	694.30	727.78
Total	**6257.48**	**6580.31**	**6904.98**	**7207.34**	**7543.77**

Interest & Contribution on Sinking Fund (As per Section 40, Part IV of DVC Act)

218. The Petitioner has claimed expenditure towards Interest & Contribution on Sinking Fund as under:

(Rs. in lakh)

2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
946.95	1013.23	1084.16	1160.05	1241.25

219. The Petitioner has allocated sinking fund contribution and interest for DVC Bonds of Rs. 3100 crore amongst the generating stations of the Petitioner, as under:

(Rs. in crore)

Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Total Contribution and Interest for Debt Borrowing	**214.27**	**229.27**	**245.32**	**262.49**	**280.87**
MTPS5&6	17.14	18.34	19.63	21.00	22.47
CTPS 7&8	31.10	33.28	35.61	38.10	40.77

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
MTPS 7&8	29.45	31.51	33.71	36.07	38.60
DSTPS	60.83	65.08	69.64	74.51	79.73
KTPS	66.29	70.93	75.89	81.20	86.89
RTPS-I	9.47	10.13	10.84	11.60	12.41
BTPS-A	-	-	-	-	-
Total	**214.27**	**229.27**	**245.32**	**262.49**	**280.87**

220. The Respondent KSEBL has submitted that the Commission vide order dated 3.10.2016 in Petition No. 207/GT/2015 had disallowed the interest on sinking fund and only contribution to the funds was allowed. The Objector, DVPCA has submitted that the linkage of Bonds has to be established with each specific generating station. It has also stated that the allocation of Principal cannot be the norm, as different power plants of the Petitioner, supply power to different entities/ beneficiaries. DVCPA has further submitted that neither the provisions of Electricity Act, 2003 nor the 2019 Tariff Regulations, sanction the recovery of cost of generation assets twice over through a) allowance of Contribution to Sinking Fund; and b) Depreciation and allowance of Interest on Loan by treating the amount realised through bonds as normative debt. It has pointed out that in the past tariff orders relating to the old plants of the Petitioner, the Commission had treated the amount realised through bonds as normative debt, and accordingly proceeded to grant interest thereon over and above the allowance of contribution to Sinking Fund in terms of Regulation 72(2)(iv) of the 2019 Tariff Regulations. It has stated that Regulation 72(2)(iv) of the 2019 Tariff Regulations, will be applicable only in such cases, where normative debt is not allowed, for funding capital cost, and the Petitioner cannot be allowed both, contributions to Sinking Fund, as well as depreciation and interest on loan, by treating the funds realised through bond issue as normative loan. DVPCA has also submitted that Petitioner is allowed all expenses related to Energy Charges and Fixed Charges including capital cost, IDC, time over and cost overrun to the extent permissible under the 2019 Tariff

Regulations. It has added that the Commission also allows funding of the approved capital cost and interest/ returns on the debt/ equity components on actual / normative basis and also the loan repayment, which is taken care of through higher depreciation for initial 12 years. DVPCA has further submitted that the creation of funds without any specific purpose cannot be allowed to be recovered as expenditure in tariff, even if it is mentioned in the DVC Act and/ the 2019 Tariff Regulations. Accordingly, DVPCA has submitted that the Petitioner may be directed to submit details on the purpose of borrowing of such funds, when all expenses related to capital funding and working capital funding are allowed.

221. In response, the Petitioner has reiterated that the matter related to Sinking Fund has been settled by APTEL in the appeals relating to the period 2007 to 2019, in favour of the Petitioner, which was subsequently, upheld by the Hon'ble Supreme Court vide its judgement dated 23.7.2018 in BSAL. v. DVC & ors (2018) 8 SCC 281. The Petitioner has further submitted that though Review Petition No. 4 of 2019 has been filed by the DVPCA in the matter of Maithon Alloys Ltd. vs CERC & Ors., there is no stay of the above decision of APTEL and therefore for all purposes the same is binding on all the parties.

222. We have examined the matter. Section 40 of the DVC Act provides that the Petitioner shall make provision for depreciation and for reserve and other funds at such rates and on such terms as may be specified by the C&AG in consultation with the Central Government. It is observed that the sinking funds have been created only for redemption of bonds. Accordingly, the amount approved for this generating station is as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
946.95	1013.23	1084.16	1160.05	1241.25

Share of P&G Contribution

223. The Petitioner has claimed P&G contribution, over and above, the normative O&M expenses, on projection basis, as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
4471.73	4681.93	4902.01	5132.44	5373.70

224. DVPCA has reiterated its submissions made on this issue for the period 2014-19. It has also pointed out that the projected P&G contribution for the period 2019-24, has been claimed by considering a yearly escalation of 4.70% on the Actuarial value, as on 31.3.2019 i.e., Rs.619420.12 lakh and the same has been apportioned to various stations, based on apportionment on Plant capacity basis. The Objector has also stated that the P&G contribution claimed in 2019-20 is higher by 108% than the P&G contribution claimed in 2018-19. It has further stated that the Petitioner has not furnished any justification for claiming such higher amount in 2019-20. DVPCA has further pointed out that during the process of framing the 2019 Tariff Regulations, all the generating companies including the Petitioner, had submitted the operational data for the past years, including O&M expenses, which also included the contribution towards P&G. It has added that the normative O&M expenses specified under Regulation 35 of the 2019 Tariff Regulations was only after giving due consideration to the requirement of the various generating companies including P&G contribution. In response, the Petitioner has reiterated its submissions in the matter of P&G fund in terms of its response to theobjections raised in the period 2014-19.

225. The matter has been considered. It is observed that the normative O&M expenses includes a portion of contribution towards gratuity and pension, which is not separately quantifiable for the Petitioner. It is also noted that under the heading P&G contribution for the period 2014-19, the actual O&M expenses including P&G during

the period 2014-19 are lower than the O&M expense norms allowable under the 2014-19 Tariff Regulations. Further, the normative O&M expenses determined by the Commission, while framing the 2019 Tariff Regulations, are based on the information furnished by various generating stations. In view of this, we are not inclined to allow P&G contribution for the period 2019-24.

Mega Insurance Expenses and Share of Subsidiary activity

226. The Petitioner has claimed projected expenditure towards Mega Insurance and Share of Subsidiary activities, as additional O&M expenses as under:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Mega Insurance Expenses	114.65	120.17	125.97	132.04	138.41
Share of Subsidiary activities	488.18	511.72	536.39	562.26	589.37
Total	**602.82**	**631.89**	**662.36**	**694.30**	**727.78**

227. The Respondent KSEBL has submitted that the claim for expenses towards ash evacuation, mega insurance and subsidiary activities ought to be rejected, as such expenses are already built in the normative O&M expenses, which are in the nature of a price-cap. It has therefore submitted that these expenses ought to be met from the normative O&M expenses allowed to the Petitioner and cannot be allowed separately.

Mega Insurance Expenses

228. The Petitioner has claimed total Rs. 631.24 lakh in the period 2019-24 towards Mega Insurance expenses under Regulations 76 and 77 of the 2019 Tariff Regulations. The Objector, DVPCA has submitted that the Petitioner has not referred to any extraordinary factors that have necessitated additional insurance cover for its units. It has also submitted that any comprehensive insurance is always cost effective in comparison to individual insurance policies and hence, it is not clear as to how mega insurance could lead to additional O&M expenses. The Petitioner in its rejoinder

has reiterated its submissions made in its petition for the period 2014-19, on this issue.

229. The matter has been considered. It is observed that, the Commission while specifying the O&M norms for the period 2019-24 had considered and factored the 'insurance expenses' as part of its calculations for O&M expense norms. Since the said regulations have been notified after extensive stakeholder consultations, we find no reason to exercise the power under Regulation 76 or Regulation 77 of the 2019 Tariff Regulations and grant relief to the Petitioner. In view of this, claim of the Petitioner under this head is not allowed.

Share of Subsidiary Activities

230. The Petitioner has claimed total amount of Rs. 2687.91 lakh during the period 2019-24 towards Share of Subsidiary activities under Regulations 76 and 77 of the 2019 Tariff Regulations. The Objector, DVPCA has submitted that the Petitioner has also claimed contribution to subsidiary funds and has claimed the Return on Equity, Interest on Loan and Depreciation on the common assets namely Direction Office, Subsidiary Activities, Other Offices, R&D, IT Centre and Central Office for the period 2019-24 under the nomenclature "share of common office expenditures". As such, the contribution to subsidiary fund is not allowable as the Return on Equity, Interest on Loan and Depreciation on the common assets have already been claimed separately. The Objector has further submitted that the Commission, in its order dated 28.9.2017 in Petition No. 224/GT/2015, had disallowed the expenditure on subsidiary activity and the same was to be recovered as part of the normative O&M expenses. The Objector, has also submitted that it has demonstrated that the actual O&M expenses, including the expenditure on subsidiary activity, for the period 2014-19, have been lower than the normative O&M expenses specified under the 2014 Tariff Regulations. Similarly.

the normative O&M expenses provided under the 2019 Tariff Regulations would be sufficient to cover such expenses for the period 2019-24. In response, the Petitioner has reiterated its submissions in the matter of expenses for subsidiary activities made in its replies relating to the period 2014-19.

231. The matter has been considered. It is noted from the judgments of APTEL dated 23.11.2007 and the judgment dated 23.7.2018 of the Hon'ble Supreme Court that the apportioned expenditure associated with subsidiary activities can be recovered through electricity tariff. Since the amount claimed is small, we are not allowing the share of subsidiary activities at this juncture, however, the Petitioner, may at the time of truing up of tariff for the period 2019-24, furnish the actual audited apportioned expenditure associated with subsidiary activities for consideration of the Commission.

Share of Common Office Expenditure

232. The Petitioner has submitted that the projected expenditure pertaining to common office expenditure such as Direction Office, Central Office, Other Offices, Subsidiary activities, IT centre and R&D caters services to all generating stations as well as composite transmission and distribution systems. The Petitioner has stated that it has allocated the cost of common offices amongst its generating stations, based on the installed capacity, and has claimed additional capital expenditure as under:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Direction Office	0.00	0.00	0.00	0.00	0.00
Subsidiary Activities	0.00	0.00	0.00	0.00	0.00
Other Offices	132.00	66.39	222.42	15.52	0.00
R&D	0.00	0.00	0.00	0.00	0.00
IT	960.00	1240.00	0.00	0.00	0.00
Central Office	0.00	0.00	0.00	0.00	0.00
Total	**1092.00**	**1306.39**	**222.42**	**15.52**	**0.00**

233. The head-wise, additional capital expenditure claimed by the Petitioner towards various offices is as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Sub Station equipment	132.00	66.39	222.42	15.52	0.00
Network Access Controller and Data Centre	960.00	1240.00	0.00	0.00	0.00
Total	**1092.00**	**1306.39**	**222.42**	**15.52**	**0.00**

234. The Petitioner has computed the Return on Equity, Interest on Loan and Depreciation on the Common Assets for the period 2019-24, based on the opening capital cost as on 1.4.2019, for different offices, and has apportioned them to each generating stations and T&D system, in proportion to the capital cost, claimed as on 31.3.2019. Further, the Petitioner has allocated the cost of common offices, amongst its generating stations, on the basis of installed capacity. Accordingly, the annual fixed charges claimed for assets of common offices are as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Direction Office	60.21	60.21	60.21	60.21	60.21
Subsidiary Activities	114.93	114.93	114.93	114.93	114.93
Other Offices	219.28	231.91	250.29	265.43	151.45
R&D	183.01	175.44	167.87	165.66	165.66
IT	149.74	319.41	407.60	394.52	381.44
Central Office	809.38	747.16	668.93	435.29	435.29
Total	**1536.55**	**1649.04**	**1669.83**	**1436.05**	**1308.98**

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Common Office expenditure apportioned to all DVC generating stations	1423.20	1527.40	1546.65	1330.11	1212.42
Common Office expenditure apportioned to T&D	113.35	121.65	123.18	105.93	96.56
Total	**1536.55**	**1649.04**	**1669.83**	**1436.05**	**1308.98**

235. In line with the above, the Petitioner has claimed apportioned common office expenses, for this generating station as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
235.98	253.26	256.45	220.55	201.03

236. The matter has been considered. It is observed that the common office expenditures are associated with the various offices of the Petitioner, but not to subsidiary activities. In order to work out the common office expenses to be allowed as a part of determination of tariff for the period 2019-24, we have examined the additional capital expenditure claimed by the Petitioner. The Petitioner has claimed projected additional capital expenditure during the period 2019-24 as under:

(Rs. in lakh)

		2019-20	2020-21	2021-22	2022-23	2023-24
1	Fully automated microprocessor-based portableCT&PT Analyzer (CRITL)	35.00	0.00	0.00	0.00	0.00
2	10 kV Digital Insulation Tester (CRITM)	17.00	0.00	0.00	0.00	0.00
3	Relay Test Kit (CRITL)	80.00	0.00	0.00	0.00	0.00
4	Dielectric Frequency Response Analysis(DFRA) Test Kit (CRITL)	0.00	36.17	0.00	0.00	0.00
5	Flash Point of Transformer Oil Measurement Kit(CRITL)	0.00	4.70	0.00	0.00	0.00
6	3-Phase Portable Power Source (CRITM)	0.00	21.00	21.00	0.00	0.00
7	Laptop (CRITM)	0.00	4.52	4.52	0.00	0.00
8	Fully Automatic Three Phase Transformer TestKit (CRITM)	0.00	0.00	75.58	0.00	0.00
9	Swift Frequency Response Analysis (SFRA)Test Kit (CRITL)	0.00	0.00	21.72	0.00	0.00
10	Furan Test Kit (CRITL)	0.00	0.00	60.00	0.00	0.00
11	3-Phase Portable Reference Standard Meter(0.02 Class) (CRITM)	0.00	0.00	39.60	0.00	0.00
12	Line Impedance Measurement Kit	0.00	0.00	0.00	15.52	0.00
13	Network Access Controller, Next Generation Firewall (NGFW) and Networking Switches	160.00	40.00	0.00	0.00	0.00
14	Data Centre (Hardware & Licenses)	800.00	1200.00	0.00	0.00	0.00
	Total	**1092.00**	**1306.39**	**222.42**	**15.52**	**0.00**

237. As regards additional capital expenditure claimed for fully automated microprocessor-based portable CT&PT Analyser and 10 kV Digital Insulation Tester, the Petitioner has submitted that CT&PT analyser is required for replacement of the existing 220 KV & 132 KV CTs in DVC grid with 0.2 Accuracy Class CTs, as per CEA guidelines. As regards Relay Test Kit (CRITL); Dielectric Frequency Response

Analysis (DFRA) Test Kit (CRITL); Flash Point of Transformer Oil Measurement Kit(CRITL); 3-Phase Portable Power Source (CRITM); Laptop (CRITM); Fully Automatic Three Phase Transformer Test Kit (CRITM); Swift Frequency Response Analysis (SFRA) Test Kit (CRITL); Furan Test Kit (CRITL); 3-Phase Portable Reference Standard Meter (0.02 Class) (CRITM); and Line Impedance Measurement Kit, the Petitioner has submitted that these items are required to facilitate testing, condition monitoring of various power equipment's and smart meters. As regards additional capital expenditure claimed for Network Access Controller, next generation Firewall (NGFW) and networking Switches, the Petitioner has submitted that in order to complywith cyber security guidelines, of MOP, GOI, NCIIPC network security layer are proposed to be established, so that access to the system is provided to authenticated users only. As regard claim for Data centre, the Petitioner has submitted that the procurement of hardware and licenses for Oracle to host EBA and other DVC applications, website, Firewall, Managed Back-up services, Load Balancer, IPS and Log Servers, IT infrastructure servers like DHCP, Ex-Bus, DNS, Virtualization, Security Appliances and storage in a DRC at different seismic zone, has been planned to be completed during the years 2019-20 and 2020-21.

238. The matter has been considered. It is observed that the items mentioned under the head 'Substation Equipment's' are required for the efficient functioning of the substations (including generating stations' switchyards) and therefore, the claim is allowed. As regards Network Access Controller, next Generation Firewall (NGFW), Networking switches and Data Centre, it is observed that the proposed additional expenditure is for measures taken to strengthen cyber security, in terms of the MOP, GOI guidelines dated 12.4.2010 and therefore the claim is allowed. Further, considering the nature of works, additional capitalization claimed against the head 'IT

Equipment' are allowed. The Petitioner is however, directed to furnish additional information regarding the total expenditure incurred on this count, the segregated claims during the periods 2014-19 and 2019-24, the expenditure envisaged in future etc., along with supporting documents, at the time of truing-up of tariff.

239. Based on the above, the total additional capital expenditure allowed under Common Office expenses for the period 2019-24, is summarised below:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Sub Station Equipment	132.00	66.39	222.42	15.52	0.00
Network Access Controller and Data Centre	960.00	1240.00	0.00	0.00	0.00
Total	**1092.00**	**1306.39**	**222.42**	**15.52**	**0.00**

240. It is observed that that the Petitioner has worked out Common Office expenses for various offices, including Subsidiary activities. However, expenses of subsidiary activities will be dealt at the time of truing-up of tariff for the period 2019-24.

241. Accordingly, the annual fixed charges for Common offices have been worked out by considering the opening capital cost as on 1.4.2014. The annual fixed charges for Common Offices, as worked out has been apportioned to the generating stations / T&D systems of the Petitioner, based on approved capital cost as on 31.3.2014 and the same is subject to truing-up for the period 2019-24. Accordingly, the share of common office expenses, worked out and allocated to the generating station are as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	458.06	357.82	300.14	310.67	232.58
Interest on Loan	91.10	136.51	163.38	148.52	135.87
Return on Equity	517.46	553.96	577.23	580.86	581.10
Total	**1066.62**	**1048.29**	**1040.75**	**1040.05**	**949.55**

(Rs. in lakh)

	Capital Cost as on 1.4.2014	2019-20	2020-21	2021-22	2022-23	2023-24
All DVC Generating stations	2036943.91	981.93	965.06	958.12	957.47	874.16
T&D	175678.95	84.69	83.23	82.63	82.58	75.39
Total	**2212622.86**	**1066.62**	**1048.29**	**1040.75**	**1040.05**	**949.55**

242. As regards the common office expenditure for the generating station, it is observed that the Commission vide its order dated 3.10.2016 in Petition No. 207/GT/ 2015 had observed the following:

> *"61. The petitioner has claimed the projected expenditure of Rs. 208.76 lakh during 2014-15, Rs. 194.64 lakh during 2015-16, Rs. 248.00 lakh during 2016-17, Rs. 363.90 lakh during 2017-18 and Rs. 412.33 lakh during 2018-19 and apportioned to Mejia 7&8 towards Common Office Expenditure which includes expenditure on Direction Office, Central Office, Other Offices, subsidiary activities, IT and R&D. The apportioned amount of share of Common Office expenditure includes return on equity, depreciation and interest on loan on the Common assets. The generating station is a new 1000 MW station for which normative O&M as specified under the 2014 Tariff Regulation, includes Corporate Office expenses also and under Corporate Office expenses, depreciation and interest on loan has also been included. Accordingly, the normative O&M expense for 500 MW unit size as allowed to the generating station includes the expenditure for Common Offices in respect of depreciation and interest on loan. As per special provisions relating to DVC generating stations specified under the Regulation 53 of 2014 Tariff Regulations and also as per the order of Tribunal dated 27.11.2007 in Appeal no 273/2006, the Common Office expenditure are to be allowed for the purpose of determination of tariff. The petitioner has furnished the details of total "Office Expenditure" in respect of the generating stations and T&D systems are as under:*
>
> *……*
>
> *The Commission has considered the O&M norms for this generating station as specified for 500 MW units including the expenditure for Common Offices in respect of depreciation and interest on loan. Therefore, only return on equity has been allowed as computed in the above table. Accordingly, return on equity of Rs. 87.01 lakh in 2014-15, Rs. 93.07 lakh in 2015-16, Rs. 115.68 lakh in 2016-17, Rs. 154.82 lakh in 2017-18 and Rs. 175.65 lakh in 2018-19 is allowed as part of share of Common office expenditure and annual fixed charges for the generating station."*

243. Since, the Commission has considered the O&M norms for this generating station as specified for 500 MW units including the expenditure for Common Offices in respect of depreciation and interest on loan, only ROE has been allowed as computed in the above table. Accordingly, the share of Common office expense computed for

this generating station, is as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Total Common Office Expenditure for generating stations (A)	981.93	965.06	958.12	957.47	874.16
Total Common Office Expenditure for T&D (B)	84.69	83.23	82.63	82.58	75.39
Total Common Office Expenditure for generating stations and T&D C=(A+B)	1066.62	1048.29	1040.75	1040.05	949.55
Total Depreciation for generating stations and T&D (D)	458.06	357.82	300.14	310.67	232.58
Total Interest on loan for generating stations and T&D (E)	91.10	136.51	163.38	148.52	135.87
Total Return on equity on for generating stations and T&D (F)	517.46	553.96	577.23	580.86	581.10
Total of Depreciation, Interest on Loan and ROE of Generating Station and T&D (G)	1066.62	1048.29	1040.75	1040.05	949.55
Return on equity corresponding to the generating stations only (A/C) *F (H)	476.38	509.98	531.40	534.74	534.96
Apportionment of the common office expenditure as claimed to RTPS including depreciation, interest on loan and ROE. (I)	162.81	160.02	158.87	158.76	144.94
Apportioned amount of only "Return on Equity" corresponding to the generating station (I/A)x H (J)	78.99	84.56	88.11	88.67	88.70

(Rs. in lakh)

Common Office Expenses	2019-20	2020-21	2021-22	2022-23	2023-24
RTPS (this generating station)	78.99	84.56	88.11	88.67	88.70

<u>Annual Fixed Charges allowed</u>

244. Based on the above discussion, the annual fixed charges allowed for the generating station is summarized as follows:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	44099.99	47629.86	48083.40	48092.72	48092.72
Interest on loan	26722.70	25383.03	20975.24	16132.03	11282.40
Return on Equity	27085.91	29253.71	29532.28	29538.00	29537.99
Interest on Working Capital	9126.26	8638.11	8065.87	8064.81	8062.96
O&M Expenses	24312.00	25164.00	26052.00	26964.00	27912.00
Water Charges	3336.58	3660.22	4026.24	4428.86	4885.09
Security Expenses	2356.69	2470.33	2589.45	2714.32	2845.20
Special Allowance	0.00	0.00	0.00	0.00	0.00
Sub-Total (A)	**137040.13**	**142199.26**	**139324.48**	**135934.73**	**132618.37**
Interest & Contribution on Sinking Fund	946.95	1013.23	1084.16	1160.05	1241.25

	2019-20	2020-21	2021-22	2022-23	2023-24
Share of P&G	0.00	0.00	0.00	0.00	0.00
Share of Common Office Expenditure	78.99	84.56	88.11	88.67	88.70
Mega Insurance Expenses	0.00	0.00	0.00	0.00	0.00
Share of subsidiary activities	0.00	0.00	0.00	0.00	0.00
Sub-Total (B)	**1025.93**	**1097.79**	**1,172.27**	**1,248.72**	**1,329.96**
Total Annual Fixed Charges (C=A+B)	**138066.07**	**143297.05**	**140496.75**	**137183.45**	**133948.32**

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.

245. The annual fixed charges approved as above are subject to truing up in terms of Regulation 13 of the 2019 Tariff Regulations.

Application Fee and Publication expenses

246. The Petitioner has sought the reimbursement of filing fee paid by it for filing the tariff petition for the period 2019-24 and for publication expenses. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

247. 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, 2019, shall be recovered from the beneficiaries. In addition, the Petitioner is entitled for recovery of statutory taxes, levies, duties, cess etc. levied by the statutory authorities in accordance with the 2019 Tariff Regulations.

248. Petition No. 575/GT/2020 is disposed of in terms of the above.

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