CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 567/GT/2020

Coram:

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

Date of Order: **19th May, 2023**

In the matter of

Petition for truing up of annual fixed charges for the period 2014-19 and for determination of tariff for the period 2019-24 in respect of Durgapur Thermal Power Station, Unit- III (140 MW) and Unit-IV (210 MW).

And

In the matter of

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

Vs

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

2. Jharkhand Bijli Vitran Nigam Limited
   Engineering Building, HEC, Dhurwa,
   Ranchi- 834004 **...Respondents**

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

Parties Present:

Shri M. G. Ramachandran, Senior Advocate, DVC
Ms. Anushree Bardhan, Advocate, DVC
Shri Srikanta Pandit, DVC
Shri Subrata Ghosal, DVC
Shri Samit Mandal, DVC
Shri Rajiv Yadav, Advocate, DVPCA

ORDER

This Petition has been filed by the Petitioner, Damodar Valley Corporation for truing-up of tariff of Durgapur Thermal Power Station (DTPS), Unit-III (140 MW) and Unit IV (210 MW) (in short “the generating station”) for the period 2014-19, in terms of Regulation 8(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (in short, “the 2014 Tariff Regulations”) and for determination of tariff of the generating station for the period 2019-24, in accordance with the provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (in short, ‘the 2019 Tariff Regulations’).

2. The Petitioner is a statutory body established by the Central Government under the Damodar Valley Corporation Act, 1948 (in short, 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 capacity of 350 MW, comprising of Unit III & Unit IV having capacity of 140 MW & 210 MW, respectively. The dates of commercial operation of the different Units of the generating station are as under:

	Actual COD
Unit – III	1.12.1966
Unit – IV	1.9.1982

Background

3. Petition No. 66/2005 was filed by the Petitioner for approval of the revenue requirements and for determining the tariff for electricity related activities, that is, the generation, transmission and distribution of electricity, undertaken by it for the period from 1.4.2004 to 31.3.2009. The Commission by its order dated 3.10.2006 determined tariff in respect of the generating stations and inter-state transmission systems of the

Petitioner, after allowing a special dispensation to the Petitioner to continue with the prevailing tariff till 31.3.2006. Against the Commission's order dated 3.10.2006, the Petitioner filed Appeal No. 273/2006 before the Appellate Tribunal for Electricity (in short, 'APTEL') on various issues. Similarly, appeals were also filed before APTEL by some of the objectors/ consumers, namely, Maithon Alloys Ltd. and others (Appeal No. 271/2006), Bhaskhar Shrachi Alloys Ltd. and others (Appeal No. 272/2006), State of Jharkhand (Appeal No. 275/2006) and the West Bengal State Electricity Regulatory Commission (Appeal No. 8/2007) challenging the order of the Commission dated 3.10.2006 on various grounds. APTEL by its judgment dated 23.11.2007 disposed of the said appeals ('Appeal Nos. 273/2006 & batch') as under:

> *"113. In view of the above, the subject Appeal No. 273 of 2006 against the impugned order of Central Commission passed on October 3, 2006 is allowed to the extent described in this judgment and we remand the matter to Central Commission for denovo consideration of the tariff order dated October 3, 2006 in terms of our findings and observations made hereinabove and according to the law. Appeal No. 271, 272 and 275 of 2006 and No. 08 of 2007 are also disposed of, accordingly."*

4. Against the above judgment dated 23.11.2007, some of the parties namely, the Central Commission (Civil Appeal No.4289/2008), the West Bengal State Electricity Regulatory Commission (Civil Appeal No.804/2008), M/s Bhaskar Shrachi Alloys Ltd & Ors (Civil Appeal No 971-973/2008), the State of Jharkhand (Civil Appeal No.4504-4508/2008) and the State of West Bengal (Civil Appeal No.1914/2008) filed Civil Appeals before the Hon'ble Supreme Court. Thereafter, in terms of the directions contained in the judgment of APTEL dated 23.11.2007 in Appeal No. 273/2006 and other connected appeals, for a denovo consideration of the order dated 3.10.2006, the Petition No. 66/2005 (with I.A. Nos.19/2009 and 23/2009) was heard by the Commission and tariff of the generation and inter-state transmission systems of the Petitioner for the 2006-09 tariff period was re-determined by order dated 6.8.2009, subject to the final outcome of the said Civil Appeals pending before the Hon'ble Supreme Court. Against

the Commission's order dated 6.8.2009, the Petitioner filed appeal (Appeal No.146/2009) before APTEL on various issues. However, APTEL by its judgment dated 10.5.2010, rejected the prayers of the Petitioner and upheld the order of the Commission dated 6.8.2009. Against the judgment of APTEL dated 10.5.2010, the Petitioner filed appeal (Civil Appeal No.4881/2010) before the Hon'ble Supreme Court and the Hon'ble Court by interim order dated 9.7.2010 stayed the directions of APTEL for refund of excess amount billed, until further orders. However, on 17.8.2010 the Hon'ble Court had passed interim order in the said appeal. During the pendency of these appeals, the Commission, in terms of the judgment of APTEL, while notifying the 2014 Tariff Regulations, applicable for the period 2014-19, incorporated Regulation 53, containing special provisions related to the generating stations of the Petitioner. Accordingly, the tariff of the generating stations of the Petitioner for the period 2014-19, was determined by this Commission, subject to the final decision of the Hon'ble Supreme Court, in the said civil appeals. Similar provisions were made by the Commission under Regulation 72, while notifying the 2019 Tariff Regulations, applicable for the period 2019-24.

5. Meanwhile, the Hon'ble Supreme Court vide its common judgment dated 23.7.2018 in Civil Appeal No(s) 971-973/2008 (along with C.A Nos. 1914/2008, C.A No. 4504-4508/2008 and C.A No. 4289/2008) dismissed all the Civil Appeals thereby affirming the judgment of APTEL dated 23.11.2007 in Appeal Nos. 273/2006 & batch. Further, vide judgment dated 3.12.2018, the Hon'ble Supreme Court dismissed the Civil Appeal No. 4881/2010 filed by the Petitioner, against the judgment of APTEL dated 10.5.2010. In this background and in terms of the special provisions under the 2014 and 2019 Tariff Regulations, the tariff of the generating station of the Petitioner, is being

trued-up for the period 2014-19 and is also determined for the period 2019-24, as stated in the subsequent paragraphs.

6. The Commission vide its order dated 20.7.2017 in Petition No. 348/GT/2014 had approved the capital cost and the annual fixed charges for the period 2014-19 as under:

Capital Cost allowed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost (A)	25700.10	29516.71	31255.40	32238.42	32827.13
Add: Additional Capital Expenditure allowed (B)	3816.60	1738.69	983.02	588.71	288.14
Closing Capital Cost (C) = (A) + (B)	**29516.71**	**31255.40**	**32238.42**	**32827.13**	**33115.26**
Average Capital Cost (D) = (A+B) / 2	27608.41	30386.05	31746.91	32532.77	32971.20

Annual Fixed Charges allowed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1837.87	2199.89	1772.98	825.98	503.74
Interest on loan	43.81	49.20	4.94	0.00	0.00
Return on Equity	1863.02	1992.18	2055.46	2092.00	2112.39
Interest on Working Capital	3120.97	3175.17	3204.02	3227.32	3267.58
O&M Expenses	10042.20	10673.60	11345.60	12059.60	12819.10
Sub-Total (A)	**16907.88**	**18090.04**	**18383.00**	**18204.91**	**18702.81**
Additional Claims Allowed					
Share of Common Office Expenses	55.36	50.98	47.62	47.57	47.02
Additional O&M on account of Ash Evacuation, Mega Insurance, CISF Security and Share of subsidiary activities	0.00	0.00	0.00	0.00	0.00
Share of Pension & Gratuity contribution	0.00	0.00	0.00	0.00	0.00
Sub-Total (B)	**55.36**	**50.98**	**47.62**	**47.57**	**47.02**
Total Annual Fixed Charges (C = A+B)	**16963.23**	**18141.02**	**18430.62**	**18252.48**	**18749.82**

Truing-up of tariff for the period 2014-19

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

"8. Truing up

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

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

8. In terms of the above Regulation, the Petitioner has filed the present petition for truing-up of tariff for the period 2014-19 and has claimed the capital cost (in Form 1(I) of the petition) and the annual fixed charges as stated below:

Capital Cost claimed

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Opening Capital Cost (A)	25700.10	30379.89	19914.17	20272.67	20418.03
Add: Addition during the year / period (B)	5261.97	1292.17	210.00	96.72	91.97
Less: De-capitalization during the year / period (C)	212.40	11727.67	18.75	17.01	10.42
Less: Reversal during the year / period (D)	-	-	-	-	-
Less: Undischarged liabilities (E)	369.77	30.21	7.18	1.10	1.31
Add: Discharges during the year / period (F)	-	-	174.43	66.74	-
Closing Capital Cost (G)=(A+B-C-D-E+F)	**30379.89**	**19914.17**	**20272.67**	**20418.03**	**20498.26**
Average Capital Cost (H)=(A+G)/2	28040.00	25147.03	20093.42	20345.35	20458.14

Annual Fixed Charges claimed

(Rs in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Depreciation	2103.34	-	723.78	243.61	116.82
Interest on loan	5.93	6.02	0.49	0.93	0.72
Return on Equity	2382.47	2222.99	1924.24	1939.13	1950.94
Interest on Working Capital	3505.67	3940.58	2140.82	2150.16	2138.17
O&M Expenses	10042.20	10381.02	5670.00	6027.00	6407.10
Water Charges	-	8391.53	132.50	153.66	161.31
Special Allowance	2625.00	2730.50	1781.38	1894.49	2014.79
Sub-Total (A)	**20664.61**	**27672.64**	**12373.20**	**12408.99**	**12789.85**
Additional Claims					
Capital Spares	532.78	305.60	146.00	67.00	116.07
Impact of Pay Revision due to recommendation of 7th Pay Commission	-	-	255.07	321.04	226.13
Impact of GST as "Change in Law"	-	-	-	61.28	143.10
Interest & Contribution on Sinking Fund (As per section 40, Part IV of DVC Act)	973.27	1021.86	719.68	-	-
Share of P&G	519.28	1304.25	879.27	1990.61	376.12
Unrecovered depreciation up to 31.03.2014 on account of lower availability of the generating station	849.01	-	-	-	-
Share of Common Office Expenditure	68.18	62.40	32.54	35.23	37.70
Expenses due to Ash evacuation, Mega insurance, CISF expenditure & Expenditure for Subsidiary activity	2622.07	2514.62	3373.70	2667.58	2670.63
Sub-Total (B)	**5564.59**	**5208.73**	**5406.26**	**5142.75**	**3569.75**
Total annual fixed charges claimed (C = A+B)	**26229.20**	**32881.36**	**17779.46**	**17551.74**	**16359.60**

9. The Petitioner vide affidavits dated 20.9.2021, 19.10.2021 and 11.11.2021 had submitted certain additional information, after serving copies on the Respondents/ Objector, DVPCA. The Objector, DVPCA has filed its objections vide affidavit dated 19.4.2021 and the Petitioner has filed its response to the same, vide affidavit dated 1.9.2021. The Petition was heard on 30.11.2021, through video conferencing and the Commission, directed the Petitioner to submit certain additional information and reserved its order in the petition. In response, the Petitioner vide affidavit dated 20.12.2021 has filed the additional information and has served copies on the Respondents/Objector. However, as the order in the petition, could not be issued prior to the then Chairperson Shri P. K. Pujari demitting office, the Petition was re-listed and heard through virtual hearing on 10.8.2022 and the Commission, after hearing the parties, further directed the Petitioner to submit additional information and reserved its order in the petition. In response, the Petitioner vide affidavit dated 9.9.2022, has filed additional information after serving copy on the Respondents/Objector. Taking into consideration the submissions of the parties and the documents available on record, we proceed to examine the claims of the Petitioner in this petition, on prudence check, as stated in the subsequent paragraphs.

<u>Capital Cost</u>

10. 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…"*

11. The Commission vide its order dated 20.7.2017 in Petition No. 348/GT/2014 had

allowed the closing capital cost of Rs. 25700.10 lakh as on 31.3.2014. The same has been considered as the opening capital cost as on 1.4.2014, in accordance with Regulation 9(3) of the 2014 Tariff Regulations.

Additional Capital Expenditure

12. 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 no/t 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."

13. The details of the additional capital expenditure allowed in order dated 20.07.2017 in Petition No. 348/GT/2014 is summarized below:

(Rs. in lakh)

Unit	Head of Works/ Equipment	Additional Capital Expenditure allowed	De-capitalization allowed	Depreciation Recovered on de-capitalised Assets	Net Additional Capital Expenditure allowed
2014-15					
Unit III	**Electrical package**				
	Upgradation of Switchyard package	40.00	5.63	5.05	34.38
	Upgradation of Electrical Protection system	50.00	1.58	1.42	48.42
Unit III	**Boiler and auxiliary package**				
	Replacement of water wall panel (front and rear) of Unit-III	757.59	23.78	21.40	733.81
Unit III & IV	**Common Services**	**3000.00**	**0.00**	**0.00**	**3000.00**
	Sub-Total	**3847.59**	**30.99**	**27.87**	**3816.60**
2015-16					
Unit III	**Turbine and Auxiliaries package**				
	Refurbishment of Boiler Feed Pumps-job includes: - a) Procurement of BFP Complete Rotor assembly to replace existing age old one for reliable performance b) Procurement of Gear Box to replace the age-old Gear box having high back lash, resulting enormous noise & vibration c) Lube Oil Cooler of Boiler Feed Pump to replace age old coolers (more than 15-20% plugging) d) Procurement of lube oil Pumps to replace age old pumps of inadequate discharge & for reliable performance.	662.25	106.00	95.00	556.25
Unit IV	**Turbine and Auxiliaries package**				
	Replacement of 27th and 31st stage diaphragms by new one based on RLA Study Report carried out by BHEL in 2007-08 and also through re-inspection of the diaphragms during AOH of the Unit in 2012.	452.60	13.18	11.86	439.42
	Replacement of HPT 1st stage Blades by new one based on RLA Study Report carried out by BHEL in 2007-08.	99.20	2.86	2.58	96.34
	Replacement of Peak Seals for HPT & IPT Diaphragms by new one based on RLA Study Report carried out by BHEL in 2007-08.	14.40	0.39	0.35	14.01
Unit III	**Electrical Package**				
	Upgrading of switchyard	20.00	0.79	0.71	19.21

Unit	Head of Works/ Equipment	Additional Capital Expenditure allowed	De-capitalization allowed	Depreciation Recovered on de-capitalised Assets	Net Additional Capital Expenditure allowed
	package				
	Upgradation & Augmentation of Electrical Auxiliary System of Unit- 3	40.00	4.75	4.27	35.25
	Upgradation of Electrical Protection system	190.00	6.39	5.74	183.61
Unit IV	**Electrical Package**				
	Upgradation of Switchyard package				
	Replacement of 132 kV & 220 kV CT's of DTPS Switchyard	50.00	15.71	14.14	34.29
	Replacement of 198 kV LA's for 220 kV Switch yard and 120 kV LA for 132 kV System.	3.00	1.00	0.90	2.00
	Replacement of existing age old 12 Nos. 220 kV & 3 Nos. 132 kV MOCB with SF6 Breakers	190.0	42.00	37.80	148.00
Unit III	**Boiler and auxiliary package**				
	Water wall intermediate header inside goose neck chamber) of Boiler, U-3	38.00	1.19	1.07	36.81
Unit IV	**Boiler and auxiliary package**				
	Replacement of Platen water wall coil during COH of Boiler U-4	86.38	2.71	2.44	83.67
	Hangers & Supports for critical piping of Boiler U-4, DTPS.	63.00	1.98	1.78	61.02
	ID fan Shaft impeller with conical cover plate type: NDZV-31B one set for Boiler U -4.	148.00	119.18	41.71	28.82
	Sub-Total	**2056.83**	**318.14**	**220.36**	**1738.69**
2016-17					
Unit III	**Electrical Package**				
	Upgrading of switchyard package	980.00	103.27	92.86	876.73
Unit IV	**Electrical Package**				
	Upgradation of Switchyard package	70.00	15.91	14.32	54.09
	Upgradation of Auxiliary Switchgear package	65.00	12.80	11.52	52.20
	Sub-Total	**1115.00**	**131.98**	**118.70**	**983.02**
2017-18					
Unit IV	**Electrical Package**				
	Upgradation of Switchyard package:				
	Replacement of 132 kV & 220 CT's of DTPS Switchyard	20.00	6.29	5.66	13.71
	Replacement of 220 kV & 132 Isolators in phase wise manner	40.00	9.09	8.18	30.91
	Replacement of Old ATRs	600.00	93.91	84.52	506.09
	Upgradation of auxiliary switchgear package	50.00	12.00	10.80	38.00
	Sub-total	**710.00**	**121.29**	**109.16**	**588.71**

Unit	Head of Works/ Equipment	Additional Capital Expenditure allowed	De-capitalization allowed	Depreciation Recovered on de-capitalised Assets	Net Additional Capital Expenditure allowed
2018-19					
Unit III	**Electrical Package**				
	Upgradation of Switchyard package	300.00	11.87	10.60	288.14
	Sub- total	**300.00**	**11.87**	**10.60**	**288.14**
	Total Approval	**8029.42**	**614.26**	**486.68**	**7415.16**

14. The Petitioner, in Form-9A of the petition, has claimed the actual additional capital expenditure incurred for the period 2014-19 as under:

(Rs. in lakh)

	Regulation	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Buildings							
Balance Payment for of the Concreting/ Gravelling work	14 (3) (vii), 54 & 55	1.20	-	-	-	-	**1.20**
Power House Building (Main Plant & Building in Equipment Tree		-	-	-	-	19.83	**19.83**
Sub-Total		**1.20**	**-**	**-**	**-**	**19.83**	**21.03**
Power House Plant & Machinery							
Boiler & Accessories Equipment DTPS							
Installation of Deflector Plate & Vane wheel assembly for XRP - 763 Bowl Mill	14 (3) (vii), 54 & 55	42.98	-	-	-	-	**42.98**
Different works performed as part of capital overhauling of the boiler and auxiliaries		263.72	-	-	-	-	**263.72**
Replacement of riser panel (both front and rear sides) of DTPS Unit-3 Boiler		376.46	-	-	-	-	**376.46**
Replacement of existing boiler drum level indication system of DTPS Unit-4		-	20.15	-	-	-	**20.15**
Procurement of spare Reheater bends (outlet and Inlet)		-	0.84	-	-	-	**0.84**
Replacement of old Lub Oil Pump with motor for DTPS Unit-4		-	-	-	2.44	-	**2.44**
Turbo Generator & Accessories							
Capital overhauling of the turbine and auxiliaries	14 (3) (vii), 54 & 55	217.05	25.14	-	-	-	**242.19**
Replacement of the existing Turning Gear Oil Pump (TGOP) of DTPS Unit #3		79.93	-	-	-	-	**79.93**
Complete set of hydraulic jack and Heavy Duty Square Drive double hex Industrial Socket		1.37	-	-	-	-	**1.37**
Replacement of old cartridge (rotor assembly) of the BFP of DTPS Unit #3		583.79	-	-	-	-	**583.79**

	Regulation	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Replacement of the old Oil Catcher assembly for High Speed Shaft for Gear Box of Boiler Feed Pump of DTPS Unit-3		2.88	-	-	-	-	**2.88**
Replacement of the existing steam jet air ejector of DTPS Unit #3		20.54	-	-	-	-	**20.54**
Hydrogen Cooling System of DTPS Unit-4		-	0.66	44.43	-	-	**45.09**
Accessory Elec. Equip. DTPS							
Erection & commissioning of 415V Unit Auxiliary Board	14 (3) (vii), 54 & 55	26.70	-	-	-	-	**26.70**
Installation of 415 V MCC D(1) for Turbine Auxiliaries of Unit#3		1.54	-	-	-	-	**1.54**
Replacement of the existing trouble prone isolators of 132KV Switch Yard of DTPS Unit #3		15.40	5.00	-	-	-	**20.40**
Replacement of old and trouble-prone LT Motors of DTPS Unit-4		3.78	11.34	-	3.78	-	**18.90**
Replacement of the existing PRECICON-R Controller for ESP Rectifier of DTPS Unit-4		2.33	-	-	-	-	**2.33**
Replacement of the existing old and trouble-prone Main Seal Oil Pump Motor of DTPS Unit#3		19.18	-	-	-	-	**19.18**
Replacement of existing old and trouble-prone LT Motors of DTPS Unit-3		8.28	-	-	-	-	**8.28**
Dismantling of the existing old Disconnections of DTPS Unit-4 and retro fitment of new Disconnections along with arrangements for local and remote operation, indication and interlocks.		5.56	5.64	-	-	-	**11.20**
Replacement of the non-smart type level transmitters for DTPS Unit-4 HP Heater		0.30	-	-	-	-	**0.30**
Replacement of the damaged control cable of heat zone area of DTPS Unit#3		14.44	-	-	-	-	**14.44**
Replacement of the age old Lightning Arrestor of 33KV switch yard of DTPS Unit-3		0.14	-	-	-	-	**0.14**
Procurement of Diagnostic Insulation Tester for facilitation of condition monitoring activities		12.97	-	-	-	-	**12.97**
Replacement of the age old Lightning Arrestor of 33KV switch yard (30 KV Heavy Duty Station Class Zinc Oxide Gapless Lighting Arresters) of DTPS Unit-4		-	0.14	-	-	-	**0.14**
Replacement of the age-old trouble prone motor of PA Fan Lub Oil Pump of DTPS Unit-4 Boiler		-	0.28	-	-	-	**0.28**
Replacement of the age-old trouble prone voltage transducers		-	0.19	-	-	-	**0.19**

	Regulation	2014-15	2015-16	2016-17	2017-18	2018-19	Total
and frequency transducers of DTPS Unit-4							
Expenditure is for replacement of age-old Surge arrestors of deteriorated electrical properties		-	0.96	7.34	0.72	-	**9.02**
Procurement of special type of IP Converters for DTPS Unit-4		-	-	1.42	-	-	**1.42**
Installation of 25 KV Vacuum Circuit Breaker for the new Railway Transformer bay.		-	-	4.16	-	-	**4.16**
Procurement of Single Phase Variac / Dimmer stat to ensure facilitation of testing of different switchgear items which includes motors, transformers, excitation system etc.		-	-	0.37	-	-	**0.37**
Procurement of Digital Multimeter for measurement of voltage, current, resistance for 24X7 maintenance of C&I system.		-	-	0.06	-	-	**0.06**
Replacement of age old MOCB breakers with SF6 breaker		-	-	-	69.30	27.72	**97.02**
Procurement of different testing instruments required for facilitation of testing of different switchgear items which includes motors, transformers, excitation system etc.		-	-	-	0.96	-	**0.96**
Replacement of age-old 132 KV and 220 KV CT-s having deteriorating electrical properties		-	-	-	-	26.15	**26.15**
Procurement of aluminum pipe for maintenance works.		-	-	-	-	0.30	**0.30**
Transformer DTPS							
Deputation charge of Service Engineer for supervision of commissioning of the new Railway Transformer (RT#3)	14 (3) (vii), 54 & 55	0.98	-	-	-	-	**0.98**
Replacement of the existing two numbers of age-old 150 MVA ATRs with new ones (160 MVA)		589.51	7.39	16.87	5.94	-	**619.70**
Replacement of existing old and trouble-prone cooling fans of power transformer of DTPS Unit-4		3.28	-	-	-	-	**3.28**
Installation of Nitrogen Injection-based Fire Prevention System with all accessories for the newly installed 160 MVA Auto Transformers		-	945.99	-	-	-	**945.99**
Replacement of the damaged distribution transformer with new one		-	-	12.15	-	-	**12.15**
Procurement of Hydraulic Jack (100 Ton) with accessories for maintenance purpose		-	-	-	1.61	-	**1.61**
Ash Handling Equip. DTPS							

	Regulation	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Replacement of the bare pump assembly of the Ash Slurry Pump of DTPS Unit-4	14 (3) (vii), 54 & 55	24.88	-	-	-	-	**24.88**
Misc. Power Plant Equip.(Prodi-DTPS)							
Replacement of the old and obsolete annunciation system	14 (3) (vii), 54 & 55	2.65	-	-	-	-	**2.65**
Replacement of existing old chartless recorders for DTPS Unit-3	14 (3) (vii), 54 & 55	4.76	-	-	-	-	**4.76**
Replacement of (a) old analogy type controllers, and (b) pH transmitter used in DM plant and CW plant of DTPS Unit-4		2.42	-	-	0.64	1.11	**4.17**
Replacement of the existing boiler Main Steam Stop Valve/ (MSSV) of DTPS Unit-3		21.44	-	-	-	-	**21.44**
Replacement of the existing oil cooler of the fluid couplings of the ID fans of DTPS Unit-4		8.69	-	-	-	-	**8.69**
Replacement of the old and leakage-prone make up pieces and two-way splitters in the Pulverized Coal pipes of DTPS Unit-3		9.15	-	-	-	-	**9.15**
Replacement of old Second Stage Super Heater Attemperator for DTPS Unit#3 boiler		54.08	-	-	-	-	**54.08**
Procurement of spare bowl assembly for CW Pumps in order to be prepared for any eventuality of CW Pump		42.56	-	-	-	-	**42.56**
Installation of one number of Back Wash Pump		3.32	-	-	-	-	**3.32**
Installation of one number of Sulphuric Acid Transfer Pump		0.79	-	-	-	-	**0.79**
Installation of Chlorine Leak Absorption and detection system		1.97	-	-	-	-	**1.97**
Procurement of spares for ID Fan of DTPS Unit-4 and UPS for chartless recorder installed at 33 KV Control Panel		-	1.03	-	-	-	**1.03**
Installation of Online Continuous Effluent Quality Monitoring System to monitor parameters like pH, TSS, Temperature etc.	14 (3) (ii)	-	-	9.56	-	-	**9.56**
Installation of Online Continuous Stack Emission Monitoring System to monitor parameters like SOx, NOx, CO.		-	-	56.65	1.06	-	**57.71**
New Ultrasonic-type Non-contact Level Transmitters that are installed in Ash Slurry sump, oil tank and BCW sump for better measurement, monitoring and control	14 (3) (vii), 54 & 55	-	-	1.59	0.40	-	**1.99**

	Regulation	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Replacement of old and damaged Sump pump used for dewatering in CHP during rainy season		-	-	1.88	1.88	-	**3.76**
Replacement of the conventional tube light by energy efficient LED tube light.		-	-	-	1.04	-	**1.04**
Replacement of gear box of CT Fan of DTPS Unit-4		-	-	8.31	-	-	**8.31**
Procurement of temperature gauge		-	-	0.003	-	-	**-**
Installation of Standby back up link (including Outdoor Wireless Bridge - 3 Nos.; Lightning Arrester for Wireless Devices - 3 Nos.; STP Cable - 305 Mtrs.; Installation and Commissioning Charges for Outdoor Wireless Bridge; Lightning Arrester for Wireless Devices; and STP Cable)		-	-	-	1.01	0.73	**1.74**
Installation of various monitoring and surveillance devices for monitoring of activities at the Main Gate of DTPS by the CISF	14 (3) (iii)	-	-	-	1.66	-	**1.66**
Procurement of miscellaneous tools	14 (3) (vii), 54 & 55	-	-	-	0.20	-	**0.20**
Replacement of age-old calibrating instrument with new hydraulic dead weight tester to facilitate instrument calibrations.		-	-	-	-	0.31	**0.31**
Replacement of existing Raymond Mill / Raymond type pulverizer with feeder, used for coal analysis		-	-	-	-	1.07	**1.07**
Dry Fly Ash Collecting System	14 (3) (ii)	2729.95	261.00	27.94	-	-	**3018.88**
Sub-Total		**5199.81**	**1285.76**	**192.73**	**92.63**	**57.40**	**6828.33**
Computer / IT Assets							
Procurement of Desktop Computers with pre-loaded operating systems and associated accessories	14 (3) (iii)	2.66	2.66	0.44	3.53	13.83	**23.13**
Sub-Total		**2.66**	**2.66**	**0.44**	**3.53**	**13.83**	**23.13**
Other Assets (excluding Computer / IT Assets)							
Procurement of Thermo Vision Camera with software and all accessories	14 (3) (vii), 54 & 55	4.79	-	-	-	-	**4.79**
Procurement of various office furniture & accessories at offices in plant premises	54 & 55	1.78	1.25	0.12	-	0.65	**3.80**
Installation of Dry Fly Ash Collection System is in line with the Pollution Control Norms	14 (3) (vii), 54 & 55	51.73	-	-	-	-	**51.73**
Procurement of various items / equipment's for DTPS Hospital	54 & 55	-	2.50	0.86	0.55	-	**3.91**
Replacement of five numbers of existing and old pumps (with motors) at Sewerage Treatment Plant with new ones	14 (3) (ii)	-	-	6.05	-	-	**6.05**

	Regulation	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Different asset procured towards employee welfare measure	54 & 55	-	-	3.83	-	-	**3.83**
Procurement for Information and Directors' Bungalow at DTPS colony		-	-	3.44	-	-	**3.44**
Procurement and installation of Water Purifier for safe drinking water for the employees & CISF personal		-	-	-	-	0.27	**0.27**
Sub-Total		**58.31**	**3.74**	**14.29**	**0.55**	**0.92**	**77.81**
Coal Handling Plant DTPS							
Replacement of the damaged gear-box for Tipper Car of Conveyor #30B with new Alroid Worm Reduction Gear-box	14 (3) (vii), 54 & 55	-	-	1.04	-	-	**1.04**
Replacement of the old damaged submersible pump of CHP with new one		-	-	1.51	-	-	**1.51**
Sub-Total		**-**	**-**	**2.54**	**-**	**-**	**2.54**
Grand Total		**5261.97**	**1292.17**	**210.00**	**96.72**	**91.97**	**6952.83**

15. DVPCA has submitted that the Petitioner has not provided appropriate justification and/or documentary evidence as per the Regulation 14(3) of the 2014 Tariff Regulations. It has further submitted that the Petitioner's claim for certain additional capital expenditures under Regulation 54 and Regulation 55 of the 2014 Tariff Regulations, can be considered by the Commission only in rare cases, and the Petitioner has not presented any extraordinary circumstance for the same. DVPCA has furnished a comparative statement of the additional capital expenditure claimed by the Petitioner and has submitted that the following may only be allowable:

(Rs. in lakh)

	2014-15		**2015-16**		**2016-17**		**2017-18**		**2018-19**	
	Claimed	**As per DVPCA**	**Claimed**	**As per DVPCA**	**Claimed**	**As per DVPCA**	**Claimed**	**As per DVPCA**	**Claimed**	**As per DVPCA**
Buildings	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electrical Package	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boiler & Auxiliary Package	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Turbine & Auxiliary Packages	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power House Plant & Machinery	5199.81	0.00	1285.76	945.99	195.27	66.21	92.63	1.06	57.40	0.00
Computer & IT Assets	2.66	2.66	2.66	2.66	0.44	0.44	3.53	3.53	13.83	13.83
Other Assets	58.31	0.00	3.74	0.00	14.29	0.00	0.55	0.00	0.92	0.00

	2014-15		2015-16		2016-17		2017-18		2018-19	
	Claimed	As per DVPCA	Claimed	As per DVPCA	Claimed	As per DVPCA	Claimed	As per DVPCA	Claimed	As per DVPCA
Total Additional Capitalization	**5261.97**	**2.66**	**1292.17**	**948.65**	**210.00**	**66.65**	**96.72**	**4.59**	**91.97**	**13.83**

16. The Petitioner, in its response, has submitted that it has given detailed justification against each of the claimed additional capital expenditure item along with documentary evidence. The Petitioner has further stated that most of the additional capital expenditures claimed by the generating station for the period 2014-19 have been on the grounds of replacement of age-old equipment or modification of existing equipment in order to ensure reliable and efficient operation–some of these replacements have been based on recommendations from the OEM or technical audit; ensuring plant security and safety – some of the additional capital expenditure are based on recommendations of CISF/ local police authorities; compliance with directives of Ministry of Power and procurement of tools and equipment to facilitate monitoring, testing and maintenance works with the aim to ensure reliable operation. The Petitioner has also submitted that it has claimed additional capital expenditure under Regulation 14(2) and Regulation 14(3) of the 2014 Tariff Regulations, as the same is nearest to the provisions for such kind of claim and therefore, to remove the difficulty, the Petitioner has claimed additional capital expenditure under Regulation 14(2) and Regulation 14(3) of the 2014 Tariff Regulations read with Regulation 54 (Power to Relax) and Regulation 55 (Power to Remove Difficulty). The Petitioner has stated that all the additional capital expenditure proposed for the generating station are critical to ensure reliable, safe and efficient operation of the generating station and is therefore unavoidable.

17. The matter has been examined. Before the claim of the Petitioner is put to prudence check in terms of 2014 Tariff Regulations, it is observed that the units of the station are operating since 1966 (Unit-3) and 1982 (unit-4) and as such the generating

station as a whole has completed its useful life way back in 2007. The 2009 as well as 2014 Tariff Regulations provided for two alternatives for such stations after useful life of the station i.e. to go for comprehensive R&M in consultation with the beneficiaries or to avail special allowance which is available to thermal units not operating under relaxed norms. As far as Special allowance is concerned, the generating station is operating with relaxed norms (GSHR-2820kcal/kWh, NAPAF-74%, SFC-2.40 ml/kWh AEC- 10.50 %) and as such, the same has been denied to the generating station in paragraph 57 of this order. Further, the generating station has also not opted for comprehensive R&M for the station. Instead the station has been claiming capital expenditure for selective replacement of the non-repairable equipment/components. Accordingly, Commission considering the vintage of the units and units operating with relaxed norms, had been allowing capital expenditure claimed by the Petitioner for replacement of age old equipment/components to keep the units operational. As such, the beneficiaries have been reaping the benefit of low AFC of the generating station by servicing the minor additional capital expenditure, allowed by the Commission for keeping the units operational, which is quite reasonable in comparison to special allowance or expenditure which would have been incurred had the generating station gone for R&M. In this background, we consider the claim of the Petitioner for additional capital expenditure.

18. Accordingly, based on the submissions and documents on record and the peculiar facts of this generating station, the claim of the Petitioner for additional capital expenditure claimed for the period 2014-19, is examined and on prudence check, allowed as under:

(Rs. in lakh)

Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Remarks for admissibility	Amount Allowed
Buildings					
Balance Payment for of the Concreting/ Gravelling work	1.20	14 (3) (vii), 54 & 55	This expenditure is the balance payment corresponding to the spilled-over portion (220 kV side of switchyard) of the Concreting/Gravelling work at 132kV/ 220KV/ 33KV/ 25 KV Switch Yard and around Transformer area at DTPS DVC.	The Petitioner has not linked the item with any approved works from the previous period which has been spilled over to the period 2014-19. Further, the Petitioner has neither furnished any document in support of its claim, nor has justified the need for invoking Regulations 54 & 55 of the 2014 Tariff Regulations . In view of this, the claim of the Petitioner, is **not allowed.**	0.00
Power House Building (Main Plant & Building in Equipment Tree)	19.83		This expenditure is towards **concreting/ gravelling** work at 132 KV/220 KV Switchyard and around Transformer Area (Phase-II). Concreting work was executed for safe and secure operation and maintenance in Switchyard and to prevent growth of vegetation/weeds requiring regular de-weeding activities.	The Petitioner has not indicated the provisions of the regulation under which the claim is made. It is however noticed that the expenditure claimed is in the nature of O&M expenses and hence, **not allowed.**	0.00
Total	**21.03**				**0.00**
Power House Plant & Machinery					
Boiler & Accs. Equip DTPS					
Installation of Deflector Plate & Vane wheel assembly for XRP - 763 Bowl Mill	42.98	14 (3) (vii), 54 & 55	This expenditure is towards installation of Deflector Plate & Vane wheel assembly for XRP - 763 Bowl Mill of DTPS Unit-4 with an aim to achieve uniform erosion of wear parts and improved coal fineness and consequently reduction in combustibles.	Since the generating station is a coal based thermal generating station, Regulation 14(3)(vii) of the 2014 Tariff Regulations is not applicable. However, the actual expenditure incurred by the Petitioner **is allowed** for keeping the units operational, by invoking power to relax under Regulation 54 for relaxing the provisions of Regulation 14(3)(vii) of 2014 Tariff Regulations.	42.98
Different works performed as part of capital overhauling of the boiler and auxiliaries	263.72	14 (3) (vii), 54 & 55	This expenditure is towards the different works performed as part of capital overhauling of the boiler and auxiliaries of DTPS Unit-3 in order to ensure efficient	The expenditure claimed is in the nature of O&M expenses and hence, **not allowed.**	0.00

Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Remarks for admissibility	Amount Allowed
			operation of the unit.		
Replacement of riser panel (both front and rear sides) of DTPS Unit-3 Boiler	376.46	14 (3) (vii), 54 & 55	This expenditure is towards replacement of riser panel (both front and rear sides) of DTPS Unit-3 Boiler in order to address the frequent leakages. The Hon'ble Commission in the Tariff Order of 2014-19 for DTPS dt. 20.07.2017 allowed the additional capital expenditure against this work (Para- 61, 65 of the Tariff Order)	This item was allowed subject to the Petitioner furnishing the OEM / technical committee report for replacement of these assets due to obsolescence at the time of truing up of tariff and the same has not been furnished by the Petitioner. However, the actual expenditure incurred by the Petitioner **is allowed** for keeping the units operational, by invoking power to relax under Regulation 54 for relaxing the provisions of Regulation 14(3)(vii) of 2014 Tariff Regulations.	376.46
Replacement of existing boiler drum level indication system of DTPS Unit-4	20.15	14 (3) (vii), 54 & 55	This expense is towards the replacement of existing boiler drum level indication system of DTPS Unit-4 with complete Hydrastep electronic gauging system along with latest sensors and indicators for better measurement and monitoring of drum level, thereby aiming at operational reliability.		0.00
Procurement of spare Reheater bends (outlet and Inlet)	0.84	14 (3) (vii), 54 & 55	This expense is for procurement of spare Reheater bends (outlet and Inlet) for preparation against any eventuality of Reheater leakage of DTPS Unit-3 boiler. Availability of spare bends will enable quick replacement with minimum downtime and minimum generation loss.	The expenditure claimed are in the nature of O&M expenses, hence, **not allowed.**	0.00
Replacement of old Lub Oil Pump with motor for DTPS Unit-4	2.44	14 (3) (vii), 54 & 55	This expenditure is for replacement of old Lub Oil Pump with motor for DTPS Unit-4 Boiler FD Fans with new ones to ensure reliable and efficient operation.		0.00
Turbo Generator & Accessories.					
Capital overhauling of the turbine and auxiliaries	242.19	14 (3) (vii), 54 & 55	This expenditure is towards the various activities performed as part of capital overhauling of the turbine and auxiliaries of DTPS Unit #3 (activities include	The expenditure claimed is in the nature of O&M expenses hence, **not allowed.**	0.00

Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Remarks for admissibility	Amount Allowed
			alumina blasting of turbine internals, replacement of spill strips & packing rings N1 to N5, weld repair of diaphragms & steam flow path audit) for ensuring efficient operation of the unit.		
Replacement of the existing Turning Gear Oil Pump (TGOP) of DTPS Unit #3	79.93	14 (3) (vii), 54 & 55	This expenditure is for replacement of the existing Turning Gear Oil Pump (TGOP) of DTPS Unit #3 with a new one. The existing TGOP was not available due to shearing of its shaft. The replacement was made to ensure enhanced reliability of the lube oil system, thereby ensuring reliability of the unit.	The actual expenditure incurred by the Petitioner **is allowed** for keeping the units operational, under Regulation 14(3)(vii) of the 2014 Tariff Regulations, in exercise of the power under Regulation 54 (power to relax) of the 2014 Tariff Regulations. .	79.93
Complete set of hydraulic Jack and Heavy Duty Square Drive double hex Industrial Socket	1.37	14 (3) (vii), 54 & 55	This expenditure is for procurement of complete set of hydraulic Jack and Heavy Duty Square Drive double hex Industrial Socket required for carrying out capital overhauling of HP Turbine of Unit#3.	The assets claimed are in the nature of tools & tackles. In view of this, the claim of the Petitioner is **not allowed.**	0.00
Replacement of old cartridge (rotor assembly) of the BFP of DTPS Unit #3	583.79	14 (3) (vii), 54 & 55	This expenditure is towards replacement of old cartridge (rotor assembly) of the BFP of DTPS Unit #3 with new one to ensure efficient and reliable operation of the units. This item has already been allowed by this Hon'ble Commission in the Tariff Order for 2009 -14 for DTPS dt. 07.08.13 (Para 45, 46 of the Tariff Order).	This item was allowed in the earlier order, subject to the Petitioner furnishing the OEM/technical committee report for replacement of these assets due to obsolescence at the time of truing up, which has not been furnished by the Petitioner. However, the actual expenditure incurred by the Petitioner **is allowed** for keeping the units operational, under Regulation 14(3)(vii) of the 2014 Tariff Regulations, in exercise of the power under Regulation 54 (power to relax) of the 2014 Tariff Regulations.	583.79
Replacement of the old Oil Catcher assembly for High Speed Shaft for Gear Box of Boiler	2.88	14 (3) (vii), 54 & 55	This expenditure is towards replacement of the old Oil Catcher assembly for High Speed Shaft for Gear Box of Boiler Feed Pump of DTPS Unit-3, by new one.	The expenditure claimed is in the nature of O&M expenses and hence, **not allowed.**	0.00

Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Remarks for admissibility	Amount Allowed
Feed Pump of DTPS Unit-3					
Replacement of the existing steam jet air ejector of DTPS Unit #3	20.54	14 (3) (vii), 54 & 55	This expenditure is for replacement of the existing steam jet air ejector of DTPS Unit #3 with a new one. The exiting ejector already completed its useful life; therefore the replacement was necessary to ensure reliable and efficient operation of the unit.	The actual expenditure incurred by the Petitioner **is allowed** for keeping the units operational, under Regulation 14(3)(vii) of the 2014 Tariff Regulations, in exercise of the power under Regulation 54 (power to relax) of the 2014 Tariff Regulations.	20.54
Hydrogen Cooling System of DTPS Unit-4	45.09	14 (3) (vii), 54 & 55	This expenditure is towards replacement of the age-old Hydrogen cooler of the DTPS Unit-4 Generator and associated cost (freight bill). Three out of the four coolers were already replaced; the remaining cooler has been replaced in this year. This replacement is necessary to ensure improved Hydrogen cooling of the generator and enhanced Hydrogen purity, thereby ensuring efficient and reliable operation.		45.09
Accessory Elec. Equip. DTPS					
Erection & commissioning of 415V Unit Auxiliary Board	26.70	14 (3) (vii), 54 & 55	This expenditure is towards erection & commissioning of 415V Unit Auxiliary Board U-4A3,U-4B3,U-42B & Earthing Material Including Supply of Materials like Riser, G.I. Flant etc.as per requirement and other Civil Works/ Erection & Commissioning of 6.6. KV Switchboards.	The actual expenditure incurred by the Petitioner **is allowed** for keeping the units operational, under Regulation 14(3)(vii) of the 2014 Tariff Regulations, in exercise of the power under Regulation 54 (power to relax) of the 2014 Tariff Regulations.	26.70
Installation of 415 V MCC D(1) for Turbine Auxiliaries of Unit#3	1.54	14 (3) (vii), 54 & 55	This expenditure is for installation of 415 V MCC D(1) for Turbine Auxiliaries of Unit#3, DTPS.	The expenditure claimed is in the nature of O&M expenses, hence **not allowed.**	0.00
Replacement of the existing trouble prone isolators of 132KV Switch Yard of DTPS Unit-3	20.40	14 (3) (vii), 54 & 55	This expenditure is for replacement of the existing trouble prone isolators of 132 KV Switch Yard of DTPS Unit -3 with new ones. The existing isolators have already out lived their useful life. Therefore, this replacement was necessary to ensure reliable operation. The Commission in the Order of 2014-19 for DTPS		0.00

Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Remarks for admissibility	Amount Allowed
			dt. 20.07.2017 allowed the additional capital expenditure against this work (Para- 59 of the tariff order).		
Replacement of old and trouble-prone LT Motors of DTPS Unit-4	18.90	14 (3) (vii), 54 & 55	This expense is towards replacement of age-old and trouble prone LT Motor used at DTPS Unit-4 with latest one. Replacement was necessary to ensure efficient and reliable operation.	The expenditure claimed is in the nature of O&M expenses hence, **not allowed.**	0.00
Replacement of the existing PRECICON-R Controller for ESP Rectifier of DTPS Unit-4	2.33	14 (3) (vii), 54 & 55	This expenditure is toward replacement of the existing Precicon-R Controller for ESP Rectifier of DTPS Unit-4 with new one. The existing Controller was in service since inception and was obsolete. The replacement was necessary for ensuring better quality of measurement, control and operational reliability.	The expenditure claimed is in the nature of O&M expenses hence, **not allowed.**	0.00
Replacement of the existing old and trouble-prone Main Seal Oil Pump Motor of DTPS Unit#3	19.18	14 (3) (vii), 54 & 55	This expense is for replacement of the existing old and trouble-prone Main Seal Oil Pump Motor of DTPS Unit#3 with new one to ensure operational reliability.	The actual expenditure incurred by the Petitioner **is allowed** for keeping the units operational, under Regulation 14(3)(vii) of the 2014 Tariff Regulations, in exercise of the power under Regulation 54 (power to relax) of the 2014 Tariff Regulations.	19.18
Replacement of existing old and trouble-prone LT Motors of DTPS Unit-3	8.28	14 (3) (vii), 54 & 55	This expenditure is for replacement of existing old and trouble-prone various LT Motors (**22 Nos.)** of DTPS Unit-3 with new ones to ensure operational reliability.	The expenditure claimed are in the nature of O&M expenses hence, **not allowed.**	0.00
Dismantling of the existing old Disconnections of DTPS Unit-4 and retrofitment of new Disconnections along with arrangements for local and remote operation, indication and interlocks.	11.20	14 (3) (vii), 54 & 55	This expense is for dismantling of the existing old Disconnections of DTPS Unit-4 and retro fitment of new Disconnections along with arrangements for local and remote operation, indication and interlocks. There was frequent trouble in old disconnectors. Motorised operation was also not in service. The procurement was necessary for ensuring operational reliability.		000

Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Remarks for admissibility	Amount Allowed
Replacement of the non-smart type level transmitters for DTPS Unit-4 HP Heater	0.30	14 (3) (vii), 54 & 55	This expenditure is for replacement of the non-smart type level transmitters for DTPS Unit-4 HP Heater, which was in use since inception, with latest smart type (2-wire) level transmitter for better quality of measurement, control and overall reliability in the operation of the HP heaters.		0.00
Replacement of the damaged control cable of heat zone area of DTPS Unit#3	14.44	14 (3) (vii), 54 & 55	This expense is for replacement of the damaged control cable of heat zone area of DTPS Unit#3.		0.00
Replacement of the age old Lightning Arrestor of 33KV switch yard of DTPS Unit-3	0.14	14 (3) (vii), 54 & 55	This expense is for replacement of the age-old Lightning Arrestor of 33KV switch yard of DTPS Unit-3 with new ones to ensure operational reliability.		0.00
Procurement of Diagnostic Insulation Tester for facilitation of condition monitoring activities	12.97	14 (3) (vii), 54 & 55	The expense is for procurement of Diagnostic Insulation Tester for facilitation of condition monitoring activities with the aim to ensure operational reliability.	Asset claimed is in the nature of tools & tackles. In view of this, the claim of the Petitioner is **not allowed.**	0.00
Replacement of the age-old Lightning Arrestor of 33KV switch yard (30 KV Heavy Duty Station Class Zinc Oxide Gapless Lighting Arresters) of DTPS Unit-4	0.14	14 (3) (vii), 54 & 55	This expense is for replacement of the age-old Lightning Arrestor of 33KV switch yard (30 KV Heavy Duty Station Class Zinc Oxide Gapless Lighting Arresters) of DTPS Unit-4 with new ones to ensure operational reliability.		0.00
Replacement of the age-old trouble prone motor of PA Fan Lub Oil Pump of DTPS Unit-4 Boiler	0.28	14 (3) (vii), 54 & 55	This expenditure is for replacement of the age-old trouble prone motor of PA Fan Lub Oil Pump of DTPS Unit-4 Boiler. The replacement was necessary for ensuring operational reliability.	The expenditure claimed is in the nature of O&M expenses hence, **not allowed.**	0.00
Replacement of the age-old trouble prone voltage transducers and frequency transducers of DTPS Unit-4	0.19	14 (3) (vii), 54 & 55	This expenditure is for replacement of the age-old trouble prone voltage transducers and frequency transducers of DTPS Unit-4 with new ones with the aim to ensure reliable operations.		0.00
Expenditure is	9.02	14 (3) (vii),	This expenditure is for	The item was allowed in	9.02

Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Remarks for admissibility	Amount Allowed
for replacement of age-old Surge arrestors of deteriorated electrical properties		54 & 55	replacement of age-old Surge arrestors of deteriorated electrical properties (198 KV 10 KA Station Class Metal Oxide Surge Arrestors and 120 KV Heavy Duty Station Class Zinc Oxide Gapless Lightning Arrestors for 132 KV and 220 KV switchyard) with new Surge arrestors to ensure reliable operation. The Hon'ble Commission in the Tariff Order of 2014-19 for DTPS dt. 20.07.2017 allowed the additional capital expenditure against this work (Para- 59 of the Tariff Order).	order dated 20.7.2017 in Petition No. 348/GT/ 2014, subject to the Petitioner furnishing the OEM/ technical committee report for replacement of these assets due to obsolescence at the time of truing up, which has not been furnished by the Petitioner. However, the actual expenditure incurred by the Petitioner **is allowed** for keeping the units operational, under Regulation 14(3)(vii) of the 2014 Tariff Regulations, in exercise of the power under Regulation 54 (power to relax) of the 2014 Tariff Regulations.	
Procurement of special type of IP Converters for DTPS Unit-4	1.42	14 (3) (vii), 54 & 55	This expense is towards procurement of special type of IP Converters for DTPS Unit-4 whose command remains intact compared to other normal IP Converters enabling the pneumatic actuators like Super Heater temperature control, feed flow control, BFP scoop control etc. to remain in same position for better control of the parameters and operation of the Plant.	Since the generating station is coal based thermal generating station, Regulation 14(3)(vii) of the 2014 Tariff Regulations is not applicable. Also, the claim of the Petitioner is in the nature of O&M expenses. In view of this, the claim of the Petitioner is **not allowed.**	0.00
Installation of 25 KV Vacuum Circuit Breaker for the new Railway Transformer Bay.	4.16	14 (3) (vii), 54 & 55	This expense is towards installation of 25 KV Vacuum Circuit Breaker for the new Railway Transformer Bay. The Hon'ble Commission in the Tariff Order of 2014-19 for DTPS dt. 20.07.2017 allowed the additional capital expenditure against this work (Para- 59 of the Tariff Order).	**The item was allowed** in order dated 20.7.2017 in Petition No. 348/GT/ 2014. Accordingly, the actual expenditure incurred by the Petitioner **is allowed** for keeping the units operational, under Regulation 14(3)(vii) of the 2014 Tariff Regulations, in exercise of the power under Regulation 54 (power to relax) of the 2014 Tariff Regulations.	4.16
Procurement of Single Phase Variac / Dimmerstat to ensure facilitation of	0.37	14 (3) (vii), 54 & 55	This expenditure is for procurement of Single Phase Variac / Dimmerstat to ensure facilitation of testing of different switchgear items which		0.00

Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Remarks for admissibility	Amount Allowed
testing of different switchgear items which includes motors, transformers, excitation system etc			includes motors, transformers, excitation system etc. which improves better quality of measurement, control and overall reliability in the operation of the plant.	Assets claimed are in the nature of tools & tackles. In view of this, the claim of the Petitioner is **not allowed**	
Procurement of Digital Multimeter for measurement of voltage, current, resistance for 24X7 maintenance of C&I system.	0.06	14 (3) (vii), 54 & 55	This expenditure is for procurement of Digital Multimeter for measurement of voltage, current, resistance for 24X7 maintenance of C&I system.		0.00
Replacement of age old MOCB breakers with SF6 breaker	97.02	14 (3) (vii), 54 & 55	This expense is towards replacement of age old MOCB breakers with SF6 breaker has facilitated improved system reliability and overall reliability in the operation of the plant. The Hon'ble Commission in the Tariff Order of 2014-19 for DTPS dt. 20.07.2017 allowed the additional capital expenditure against this work (Para-59 of the Tariff Order).	The item was allowed in order dated 20.7.2017 in Petition No. 348/GT/ 2014, subject to the Petitioner furnishing the OEM/technical committee report for replacement of these assets due to obsolescence at the time of truing up, which has not been furnished by the Petitioner. However, the actual expenditure incurred by the Petitioner **is allowed** for keeping the units operational, under Regulation 14(3)(vii) of the 2014 Tariff Regulations, in exercise of the power under Regulation 54 (power to relax) of the 2014 Tariff Regulations.	97.02
Procurement of different testing instruments required for facilitation of testing of different switchgear items which includes motors, transformers, excitation system etc	0.96	14 (3) (vii), 54 & 55	This expenditure is for procurement of different testing instruments required for facilitation of testing of different switchgear items which includes motors, transformers, excitation system etc. which improves better quality of measurement, control and overall reliability in the operation of the plant.	The assets claimed are in the nature of tools & tackles. In view of this, the claim of the Petitioner is **not allowed.**	0.00
Replacement of age-old 132 KV and 220 KV CT-s having deteriorating	26.15	14 (3) (vii), 54 & 55	This expense is for replacement of age-old 132 KV and 220 KV CT-s having deteriorating electrical properties with new ones,	The item was allowed in order dated 20.7.2017 in Petition No. 348/GT/2014, subject to the Petitioner furnishing the	26.15

Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Remarks for admissibility	Amount Allowed
electrical properties			for ensuring reliable and efficient control and operation. The Hon'ble Commission in the Tariff Order of 2014-19 for DTPS dt. 20.07.2017 allowed the additional capital expenditure against this work (Para-59 of the Tariff Order).	OEM/technical committee report for replacement of these assets due to obsolescence at the time of truing up, which has not been furnished by the Petitioner. However, the actual expenditure incurred by the Petitioner **is allowed** for keeping the units operational, under Regulation 14(3)(vii) of the 2014 Tariff Regulations, in exercise of the power under Regulation 54 (power to relax) of the 2014 Tariff Regulations.	
Procurement of aluminium pipe for maintenance works.	0.30	14 (3) (vii), 54 & 55	Procurement of aluminium pipe for maintenance works.	The assets claimed are in the nature of O&M expenses. In view of this, the claim of the Petitioner is **not allowed.**	0.00
Transformer DTPS					
Deputation charge of Service Engineer for supervision of commissioning of the new Railway Transformer (RT#3)	0.98	14 (3) (vii), 54 & 55	This expenditure is toward the deputation charge of Service Engineer for supervision of commissioning of the new Railway Transformer (RT#3) at Eastern Section of 132KV Main Bus to avoid interruption of Railways Supply in the event of Half Bus Shut Down.	The assets claimed are in the nature of O&M expenses. In view of this, the claim of the Petitioner is **not allowed.**	0.00
Replacement of the existing two numbers of age-old 150 MVA ATRs with new ones (160 MVA)	619.70	14 (3) (vii), 54 & 55	This expenditure is for replacement of the existing two numbers of age-old 150 MVA ATRs with new ones (160 MVA) for ensuring reliable operation. The Hon'ble Commission in the Tariff Order of 2014-19 for DTPS dt. 20.07.2017 allowed the additional capital expenditure against this work (Para- 37-39 and Para 55-59 of the Tariff Order).	The item was allowed in order dated 20.7.2017 in Petition No. 348/GT/2014, subject to the Petitioner furnishing the OEM/technical committee report for replacement of these assets due to obsolescence at the time of truing up, which has not been furnished by the Petitioner. However, in view of the fact that the station is not eligible for compensation and special allowance and is also not going in for comprehensive R&M, the actual expenditure incurred by the Petitioner **is allowed** for keeping the units operational, under Regulation 14(3)(vii) of the	619.70

Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Remarks for admissibility	Amount Allowed
				2014 Tariff Regulations, in exercise of the power under Regulation 54 (power to relax) of the 2014 Tariff Regulations..	
Replacement of existing old and trouble-prone cooling fans of power transformer of DTPS Unit-4	3.28	14 (3) (vii), 54 & 55	This expense is for replacement of existing old and trouble-prone cooling fans of power transformer of DTPS Unit-4 with new ones. The replacement was necessary to ensure reliability of the power transformer as well as system operation.	Since the generating station is coal based thermal generating station, Regulation 14(3)(vii) of the 2014 Tariff Regulations is not applicable. Also, it is noticed that the assets claimed are in the nature of O&M expenses. In view of this, the claim of the Petitioner is **not allowed.**	0.00
Installation of Nitrogen Injection-based Fire Prevention System with all accessories for the newly installed 160 MVA Auto Transformers	945.99	14 (3) (ii), (iii)	This expenditure is for installation of Nitrogen Injection-based Fire Prevention System with all accessories for the newly installed 160 MVA Auto Transformers, for ensuring safety from fire hazards. The Firefighting system is mandatory from safety point of view as well as to comply with the Fire Safety Code of Practice IS:3034 of 1993 and clause 8B of CEA (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations 2010.	As the original item, i.e. 160 MVA Auto Transformer has been allowed, the installation of Nitrogen Injection-based Fire Prevention System is also **allowed** under Regulation 14(3)(vii) of the 2014 Tariff Regulations, in exercise of the power under Regulation 54 (power to relax) of the 2014 Tariff Regulations.	945.99
Replacement of the damaged distribution transformer with new one	12.15	14 (3) (vii), 54 & 55	This expenditure is for replacement of the damaged distribution transformer with new one for ensuring efficient and reliable operations.	Since the generating station is coal based thermal generating station, Regulation 14(3)(vii) of the 2014 Tariff Regulations is not applicable. Further, It is noticed that the assets claimed are in the nature of O&M expenses. In view of this, the claim of the Petitioner is **not allowed.**	0.00
Procurement of Hydraulic Jack (100 Ton) with accessories for maintenance purpose	1.61	14 (3) (vii), 54 & 55	This expenditure is for procurement of Hydraulic Jack (100 Ton) with accessories for maintenance purpose.		0.00
Ash Handling Equip. DTPS					
Replacement of the bare pump assembly of the Ash Slurry Pump of DTPS Unit-4	24.88	14 (3) (vii), 54 & 55	This expenditure is for replacement of the bare pump assembly of the Ash Slurry Pump of DTPS Unit-4 with new one to ensure reliable and effective evacuation of ash slurry of bottom ash and fly ash of Unit-4 boiler.	The actual expenditure incurred by the Petitioner **is allowed** for keeping the units operational, under Regulation 14(3)(vii) of the 2014 Tariff Regulations, in exercise of the power under Regulation 54 (power to relax) of the	24.88

Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Remarks for admissibility	Amount Allowed
				2014 Tariff Regulations..	
Misc. Power Plant Equipment (Prodi-DTPS)					
Replacement of the old and obsolete annunciation system	2.65	14 (3) (vii), 54 & 55	This expense is for replacement of the old and obsolete annunciation system, which was in use since inception, with latest microprocessor-based annunciation system along with power supply unit and central processing unit for ensuring reliable functioning of the system.	Since, the generating Since the generating station is coal based thermal generating station, Regulation 14(3)(vii) of the 2014 Tariff Regulations is not applicable. Further, it is noticed that the assets claimed are in the nature of O&M expenses. In view of this, the claim of the Petitioner is **not allowed.**	0.00
Replacement of existing old chartless recorders for DTPS Unit-3	4.76	14 (3) (vii), 54 & 55	This expense is towards replacement of existing old chartless recorders for DTPS Unit-3 with new ones for ensuring better display quality, trending, data storage, retrieving facility & reliability of measurement.		0.00
Replacement of (a) old analogy type controllers, and (b) pH transmitter used in DM plant and CW plant of DTPS Unit-4	4.17	14 (3) (vii), 54 & 55	This item is toward replacement of (a) old analogy type controllers, and (b) pH transmitter used in DM plant and CW plant of DTPS Unit-4 with latest / new ones for better quality of measurement, control and overall reliability in the operation of the plant.		0.00
Replacement of the existing boiler Main Steam Stop Valve (MSSV) of DTPS Unit-3	21.44	14 (3) (vii), 54 & 55	This expense is for replacement of the existing boiler Main Steam Stop Valve (MSSV) of DTPS Unit-3, that was leakage-prone, with new one along with actuator to ensure operational safety and reliability.	The actual expenditure incurred by the Petitioner **is allowed** for keeping the units operational, under Regulation 14(3)(vii) of the 2014 Tariff Regulations, in exercise of the power under Regulation 54 (power to relax) of the 2014 Tariff Regulations.	21.44
Replacement of the existing oil cooler of the fluid couplings of the ID fans of DTPS Unit-4	8.69	14 (3) (vii), 54 & 55	This expense is toward replacement of the existing oil cooler of the fluid couplings of the ID fans of DTPS Unit-4 boilers with new ones with the aim to ensure better cooling of the bearing lube oil and enhancement of the lives of different bearings in ID fans.		8.69
Replacement of the old and leakage-prone make up pieces and two-way splitters in the Pulverized Coal	9.15	14 (3) (vii), 54 & 55	This expenditure is for replacement of the old and leakage-prone make up pieces and two-way splitters in the Pulverized Coal pipes of DTPS Unit-3 boiler with the aim to reduce reduction	The expenditure claimed is in the nature of O&M expenses and hence, **not allowed.**	0.00

Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Remarks for admissibility	Amount Allowed
pipes of DTPS Unit-3			in coal dust leakage near burner mouth.		
Replacement of old Second Stage Super Heater Attemperator for DTPS Unit#3 boiler	54.08	14 (3) (vii), 54 & 55	This expenditure if toward replacement of old Second Stage Super Heater Attemperator for DTPS Unit#3 boiler with new one (complete assembly, attemperator shell, venturi, spray nozzle & attemperator sleeve), which resulted in better control in final super heater temperature thereby ensuring operational efficiency.	The actual expenditure incurred by the Petitioner **is allowed** for keeping the units operational, under Regulation 14(3)(vii) of the 2014 Tariff Regulations, in exercise of the power under Regulation 54 (power to relax) of the 2014 Tariff Regulations.	54.08
Procurement of spare bowl assembly for CW Pumps in order to be prepared for any eventuality of CW Pump	42.56	14 (3) (vii), 54 & 55	This expense is toward procurement of spare bowl assembly for CW Pumps in order to be prepared for any eventuality of CW Pump outage due to mechanical damage as a result of ingress of foreign material. Availability of spare bowl assembly will enable the plant personnel to quickly replace the damaged part with reduced down time, thereby minimizing the generation loss.	Since capitalization of spares/spare assets is not permissible after the cut-off date, the expenditure claimed is **not allowed**. The same may be claimed under "capital spares consumed" as and when actually put into service.	0.00
Installation of one number of Back Wash Pump	3.32	14 (3) (vii), 54 & 55	This expense is for installation of one number of Back Wash Pump to ensure improved discharge pressure and improved back washing of filter beds and consequent improvement in filter water quality generated.	Since the generating station is coal based thermal generating station, Regulation 14(3)(vii) of the 2014 Tariff Regulations is not applicable. Further, it is noticed that the assets claimed are in the nature of O&M expenses. In view of this, the claims of the Petitioner are **not allowed.**	0.00
Installation of one number of Sulphuric Acid Transfer Pump	0.79	14 (3) (vii), 54 & 55	This expense is for installation of one number of Sulphuric Acid Transfer Pump. Earlier, acid was fed manually in the system from the Sulphuric Acid storage tank. For safe operation, the pump was installed.		0.00
Installation of Chlorine Leak Absorption and detection system	1.97	14 (3) (iii)	This expense is for installation of Chlorine Leak Absorption and detection system in order to ensure safety in the eventuality of Chlorine leakage.		0.00
Procurement of spares for ID Fan of DTPS	1.03	14 (3) (vii), 54 & 55	This includes expenditure towards freight bill for procurement of spares for		0.00

Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Remarks for admissibility	Amount Allowed
Unit-4 and UPS for chartless recorder installed at 33 KV Control Panel			ID Fan of DTPS Unit-4 and UPS for chartless recorder installed at 33 KV Control Panel.		
Installation of Online Continuous Effluent Quality Monitoring System to monitor parameters like pH, TSS, Temperature etc.	9.56	14 (3) (ii)	This expense is for installation of Online Continuous Effluent Quality Monitoring System to monitor parameters like pH, TSS, Temperature etc. The installation is to comply with CPCB and WBPCB directives.	As the additional capital expenditure claimed is for compliance to the statutory norms of the Pollution Control Board, the same is **allowed** under Regulation 14(3)(ii) of the 2014 Tariff Regulations.	9.56
Installation of Online Continuous Stack Emission Monitoring System to monitor parameters like SOx, NOx, CO.	57.71	14 (3) (ii)	This expense is for installation of Online Continuous Stack Emission Monitoring System to monitor parameters like SOx, NOx, CO. Expense is against installation of Single Micro Board for RCU-1 Unit, Display Interface Board-1 Unit, Plug In Interface PCB with Transceiver and Solenoid - 1 Unit. The installation is to comply with CPCB and WBPCB directives.		57.71
New Ultrasonic-type Non-contact Level Transmitters that are installed in Ash Slurry sump, oil tank and BCW sump for better measurement, monitoring, and control	1.99	14 (3) (vii), 54 & 55	This expense is for new Ultrasonic-type Non-contact Level Transmitters that are installed in Ash Slurry sump, oil tank and BCW sump for better measurement, monitoring, and control.	Since the generating station is coal based thermal generating station, Regulation 14(3)(vii) of the 2014 Tariff Regulations is not applicable. Further, the expenditure claimed is in the nature of O&M expenses hence, **not allowed.**	0.00
Replacement of old and damaged Sump pump used for dewatering in CHP during rainy season	3.76	14 (3) (vii), 54 & 55	This expense is for replacement of old and damaged Sump pump used for dewatering in CHP during rainy season.		0.00
Replacement of the conventional tube light by energy efficient LED tube light.	1.04	14 (3) (vii), 54 & 55	This expense is for replacement of the conventional tube light by energy efficient LED tube light.		0.00

Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Remarks for admissibility	Amount Allowed
Replacement of gear box of CT Fan of DTPS Unit-4	8.31	14 (3) (vii), 54 & 55	This expenditure is for replacement of gear box of CT Fan of DTPS Unit-4, in order to ensure reliable and efficient operation.	The expenditure claimed is in the nature of O&M expenses hence, **not allowed.**	0.00
Procurement of temperature gauge	0.003	14 (3) (vii), 54 & 55	Procurement of temperature gauge	The expenditure claimed is in the nature of O&M expenses hence, **not allowed.**	0.00
Installation of Standby back up link	1.74	14 (3) (vii), 54 & 55	This expense is for installation of Standby back up link (including Outdoor Wireless Bridge - 3 Nos.; Lightning Arrester for Wireless Devices - 3 Nos.; STP Cable - 305 Mtrs.; Installation and Commissioning Charges for Outdoor Wireless Bridge; Lightning Arrester for Wireless Devices; and STP Cable) from back bone OPGW terminal to server room of DTPS.		0.00
Installation of various monitoring and surveillance devices for monitoring of activities at the Main Gate of DTPS by the CISF	1.66	14 (3) (iii)	This expense is for installation of various monitoring and surveillance devices for monitoring of activities at the Main Gate of DTPS by the CISF, in order to ensure security and safety of the Plant.		0.00
Procurement of miscellaneous tools	0.20	14 (3) (vii), 54 & 55	This expenditure is for procurement of miscellaneous tools for carrying out maintenance works at multiple areas for completing the jobs in time.		0.00
Replacement of age-old calibrating instrument with new hydraulic dead weight tester to facilitate instrument calibrations.	0.31	14 (3) (vii), 54 & 55	This expenditure is for replacement of age-old calibrating instrument with new hydraulic dead weight tester to facilitate instrument calibrations.		0.00
Replacement of existing Raymond Mill / Raymond type pulveriser with feeder, used for coal analysis	1.07	14 (3) (vii), 54 & 55	This expenditure is towards replacement of existing Raymond Mill / Raymond type pulveriser with feeder, used for coal analysis, with new one. The existing one was in use for long and was unserviceable.		0.00

Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Remarks for admissibility	Amount Allowed
Dry Fly Ash Collecting System	3018.88	14 (3) (ii)	This expenditure is towards installation of dry fly ash collecting system. The Hon'ble Commission in the Tariff Order of 2014-19 for DTPS dt. 20.07.2017 allowed the additional capital expenditure against this work (Para- 73 of the Tariff Order).	It is observed that the Commission in its order dated 20.7.2017 in Petition No. 348/GT/ 2014 had allowed Rs. 3000.00 lakh towards 'dry fly ash collection system' under the head 'Common Services'. As the additional capital expenditure claimed is for compliance to the statutory norms of the Pollution Control Board and has been consistently allowed to all coal-based generating stations to maximise the fly ash utilization, the same is **allowed** under Regulation 14(3)(ii) of the 2014 Tariff Regulations.	3018.88
Total	**6828.33**				**6091.97**
Computer / IT Assets					
Procurement of Desktop Computers with pre-loaded operating systems and associated accessories	23.13	14 (3) (iii)	This expenditure is towards procurement of Desktop Computers with pre-loaded operating systems and associated accessories, to be used for efficient working in the integrated system (EBA system). Computers with updated operating systems are essential to ensure protection against cyber threat. This purchase is in compliance with the directives of the Ministry of Power, GOI dt. 12.04.2010 and dt. 02.08.2017 regarding steps to be taken to prevent cyber-attacks. The said directives of the Ministry of Power, GOI are furnished by the Petitioner.	Capitalization of minor items like Computers, etc. is not allowed after cut-off date. Therefore, the claim is **not allowed.**	0.00
Total	**23.13**				**0.00**
Other Assets (excluding Computer / IT Assets)					
Procurement of Thermo Vision Camera with software and all accessories	4.79	14 (3) (vii), 54 & 55	This expenditure is toward procurement of Thermo Vision Camera with software and all accessories for facilitation of condition monitoring activities towards reliable system performance.	Since the generating station is coal based thermal generating station, Regulation 14(3)(vii) of the 2014 Tariff Regulations is not applicable. Further, it is noticed that the assets claimed are in the nature of O&M expenses. In view	0.00

Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Remarks for admissibility	Amount Allowed
				of this, the claim of the Petitioner is **not allowed.**	
Procurement of various office furniture & accessories at offices in plant premises	3.80	54 & 55	This expense is for procurement of various office furniture's to facilitate day to day office use for office buildings at the plant premises.	Capitalization of minor items like office furniture, etc. is not allowed after cut-off date. Therefore, the claim is **not allowed.**	0.00
Installation of Dry Fly Ash Collection System is in line with the Pollution Control Norms	51.73	14 (3) (vii), 54 & 55	The installation of Dry Fly Ash Collection System is in line with the Pollution Control Norms. The Weigh Bridge has been installed for smooth disposal of dry fly ash from the system.	As the additional capital expenditure claimed is for compliance to the statutory norms of the Pollution Control Board, and has been consistently allowed to all coal-based generating stations to maximise the fly ash utilization, the same is **allowed** under Regulation 14(3)(ii) of the 2014 Tariff Regulations.	51.73
Procurement of various items / equipment's for DTPS Hospital	3.91	54 & 55	This expenditure is towards procurement of various items / equipment's for DTPS Hospital (including Suction Machine and AMBU Bag, Folding Stretcher Dressing Drum, Wheel-Chair and Stretcher on Trolley, Refrigerator, etc.) for ensuring improved medical facilities to the DVC Employees along with residents of the adjoining areas.	The Petitioner has not provided any document or justification for exercise of the power under Regulations 54 of the 2014 Tariff Regulations. Further, the expenditure claimed for the asset, is in the nature of O&M expenses and therefore **not allowed.**	0.00
Replacement of five numbers of existing and old pumps (with motors) at Sewerage Treatment Plant with new ones	6.05	14 (3) (ii)	This expenditure is towards replacement of five numbers of existing and old pumps (with motors) at Sewerage Treatment Plant with new ones. The existing pumps were running since 1974 and needed replacement to ensure discharge quality of the treated effluents and to comply with the pollution control norms.	The replacement of pumps is not covered under Regulation 14(3)(ii) of the 2014 Tariff Regulations. Accordingly, this claim is **not allowed.**	0.00
Different asset procured towards employee welfare measure.	3.83	54 & 55	Different asset procured towards employee welfare measure.	The Petitioner has not provided any document or justification for invocation of Regulations 54 of the 2014 Tariff Regulations. Further, the expenditure claimed for the asset, is in the nature of O&M expenses and therefore	0.00
Procurement for Information and Directors'	3.44	54 & 55	Procurement of Refrigerator, LED TV and 3 numbers of Air Conditioning		0.00

Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Remarks for admissibility	Amount Allowed
Bungalow at DTPS colony.			Machines procured for Information and Directors' Bungalow at DTPS colony.	**not allowed.**	
Procurement and installation of Water Purifier for safe drinking water for the employees & CISF personal	0.27	54 & 55	Procurement and installation of Water Purifier for safe drinking water for the employees		0.00
Total	**77.81**				**51.73**
Coal Handling Plant DTPS					
Replacement of the damaged gearbox for Tipper Car of Conveyor #30B with new Alroid Worm Reduction Gear-box	1.04	14 (3) (vii), 54 & 55	This expenditure is for replacement of the damaged gearbox for Tipper Car of Conveyor #30B with new Alroid Worm Reduction Gearbox for ensuring operational reliability and efficiency.	The assets claimed are in the nature of O&M expenses. In view of this, the claim of the Petitioner is **not allowed.**	0.00
Replacement of the old damaged submersible pump of CHP with new one	1.51	14 (3) (vii), 54 & 55	This expenditure is for replacement of the old damaged submersible pump of CHP with new one. The pump is essential during emergency when sump pump fails in deep monsoon.		0.00
Total	**2.54**				**0.00**
Grand Total	**6952.83**				**6143.70**

19. Accordingly, the summary of additional capital expenditure allowed for the period 2014-19 is as follows:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Buildings	0.00	0.00	0.00	0.00	0.00	**0.00**
Boiler & Accessory Equipment	419.44	0.00	0.00	0.00	0.00	**419.44**
Turbo Generator & Accessory	684.27	0.66	44.43	0.00	0.00	**729.36**
Accessory Electrical Equipment	45.88	0.96	11.50	70.02	53.87	**182.24**
Transformer	589.51	953.37	16.87	5.94	0.00	**1565.69**
Ash Handling Equipment	24.88	0.00	0.00	0.00	0.00	**24.88**
Coal Handling Plant	0.00	0.00	0.00	0.00	0.00	**0.00**
Misc. Power Plant Equipment	84.21	0.00	66.21	1.06	0.00	**151.48**
Dry Fly Ash collection system	2729.95	261.00	27.94	0.00	0.00	**3018.88**
Computer / IT Assets	0.00	0.00	0.00	0.00	0.00	**0.00**
Other Assets (excluding Computer / IT Assets)	51.73	0.00	0.00	0.00	0.00	**51.73**
Total	**4629.87**	**1215.99**	**166.95**	**77.02**	**53.87**	**6143.70**

20. Accordingly, the additional capital expenditure allowed/disallowed for the period 2014-19 is summarised below:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Claimed	5261.97	1292.17	210.00	96.72	91.97	**6952.83**
Allowed	4629.87	1215.99	166.95	77.02	53.87	**6143.70**
Disallowed	632.10	76.17	43.06	19.70	38.10	**809.13**

<u>De-capitalization</u>

21. The Petitioner has submitted the asset wise details of de-capitalization of Rs.11986.26 lakh (Rs.212.40 lakh in 2014-15, Rs.11727.67 lakh in 2015-16, Rs.18.75 lakh in 2016-17; Rs.17.01 in 2017-18; and Rs. 10.42 lakh in 2018-19) in 2014-19.

22. The decapitalization claimed by the Petitioner against the replacement of additional capital expenditure items which have been allowed have been considered. However, the decapitalization of items claimed by the Petitioner wherein, additional capital expenditure was not allowed, have been excluded. It is also observed that the Petitioner has submitted that Unit-III of the generating station was decommissioned on 10.3.2016. Accordingly, the Petitioner has decapitalised the capital base by Rs.11717.15 lakh in 2015-16, corresponding to the decommissioned Unit-III, which is allowed. Accordingly, the decapitalisation allowed for the period 2014-19 is as follows:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
De-capitalization against Additional Capital Expenditure	203.84	2.13	12.76	14.77	10.01
Decommissioning of Unit-III	0.00	11717.15	0.00	0.00	0.00
Total De-capitalization	**203.84**	**11719.27**	**12.76**	**14.77**	**10.01**

<u>Un-Discharged Liabilities</u>

23. The Petitioner has submitted that the total undischarged liabilities created during the period 2014-19 is Rs. 409.58 lakh (Rs. 369.77 lakh in 2014-15, Rs. 30.21 lakh in 2015-16, Rs. 7.18 lakh in 2016-17; Rs. 1.10 lakh in 2017-18; and Rs. 1.31 lakh in 2018-

19). The Petitioner has submitted that IDC and undischarged liabilities were maintained consolidated on year-to-year basis but not item wise thus the additional capital expenditure claimed for each item is on accrual basis. It observed that the Commission vide order dated 20.7.2017 in Petition No. 348/GT/2014 had directed the Petitioner to maintain the item-wise and year-wise discharge of liabilities from 1st April 2014. In the absence of item-wise availability of undischarged liability, the same is determined on pro-rata basis considering the allowed additional capital expenditure against the claimed additional capital expenditure during each year for the period 2014-19. Accordingly, as against an un-discharged liability amounting to Rs. 409.58 lakh claimed by the Petitioner, a corresponding amount of Rs. 361.14 lakh has been allowed.

Discharge of Liabilities

24. The Petitioner has submitted year-wise total liability discharged for Rs. 241.17 lakh (Rs. 174.43 lakh for the year 2016-17 and Rs. 66.74 lakh for the year 2017-18) during the period 2014-19, instead of item wise liability discharges. It is observed that the Commission vide order dated 20.7.2017 in Petition No. 348/GT/2014, had directed the Petitioner to maintain the item-wise and year-wise discharge of liabilities from 1st April 2014. In the absence of item-wise availability of liability discharged, the same is determined on *pro-rata* basis, considering the admitted additional capital expenditure, as against the claimed additional capital expenditure, during each year of the period 2014-19. Further, the opening balance of liability discharged as on 1.4.2014 has been allowed to be discharged in full. Accordingly, the discharge of liabilities, allowed as part of the additional capital expenditure, corresponding to the allowed assets, are as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Un-discharged liabilities as on 1.4.2014 (A)	83.08	408.43	436.86	303.91	251.63
Additions during the period 2014-19 (corresponding to allowed additional capital expenditure) (B)	325.36	28.43	5.71	0.87	0.77

	2014-15	2015-16	2016-17	2017-18	2018-19
Discharges during the period 2014-19 (corresponding to allowed additional capital expenditure) (C)	0.00	0.00	138.67	53.15	0.00
Reversal of Liabilities out of liabilities added during the period 2014-19 (corresponding to allowed additional capital expenditure) (D)	0.00	0.00	0.00	0.00	0.00
Closing Un-discharged liabilities (E) = (A+B-C-D)	408.43	436.86	303.91	251.63	252.40

Capital Cost allowed for the period 2014-19

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

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost (A)	25700.10	29800.78	19269.07	19556.20	19670.73
Add: Addition during the year / period (B)	4629.87	1215.99	166.95	77.02	53.87
Less: De-Capitalization/De-Commissioning during the year /period (C)	203.84	11719.27	12.76	14.77	10.01
Less: Undischarged liabilities (D)	325.36	28.43	5.71	0.87	0.77
Add: Discharges during the year /period (E)	0.00	0.00	138.67	53.15	0.00
Closing Gross Block (F) = (A+B-C-D+E)	**29800.78**	**19269.07**	**19556.20**	**19670.73**	**19713.82**
Average Gross Block (F) = (A+F)/2	27750.44	24534.92	19412.64	19613.47	19692.27

Debt-Equity Ratio

26. 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."

27. The gross normative loan and equity amounting to Rs.14253.10 lakh and Rs. 11446.99 lakh, as considered in the Commission's order dated 20.7.2017 in Petition No. 348/GT/2014, has been retained for the purpose of tariff. Further, the additional capital expenditure admitted as above has been allocated in the debt-equity ratio of 70:30, whereas the de-capitalisation, being related to assets put in use prior to 1992 has been allocated in the debt-equity ratio of 50:50. Also, the impact of de-commissioned Unit-III has been allocated in the debt-equity ratio as on the opening date of the year of decommissioning, i.e. 1.4.2015, i.e. 57.60%: 42.40%. Accordingly, the details of the debt-equity ratio in respect of the generating station, as on 1.4.2014 and 31.3.2019 allowed is as follows:

(Rs. in lakh)

	Capital Cost as on 1.4.2014	**%**	**Net Additional Capital Expenditure for 2014-19 tariff period**	**%**	**De-capitalisation for 2014-19 tariff period**	**%**	**De-commissioning of Unit-III for 2014-19 tariff period**	**%**	**Capital Cost as on 31.3.2019**	**%**
Debt	14253.10	55.46%	4182.06	70.00%	121.75	50.00%	6748.72	57.60%	11564.69	58.66%
Equity	11446.99	44.54%	1792.31	30.00%	121.75	50.00%	4968.42	42.40%	8149.13	41.34%
Total	**25700.10**	**100.00%**	**5974.38**	**100.00%**	**243.51**	**100.00%**	**11717.15**	**100.00%**	**19713.82**	**100.00%**

Return on Equity

28. 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:

Provided that:

(i) *in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in Appendix-I:*
(ii) *the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:*
(iii) *additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:*
(iv) *the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode*
(v) *Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:*
(vi) *as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:*
(vii) *additional RoE shall not be admissible for transmission line having length of less than 50 kilometer."*

29. 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."

30. The base rate of Return on Equity (ROE) allowed under Regulation 24 of the 2014 Tariff Regulations, is required to be grossed up with the effective tax rate of the respective financial years. Also, in term 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 the actual tax paid, together with any additional tax demand, including interest thereon, duly adjusted for any refund of tax, including interest received from the income tax authorities, pertaining to the period 2014-19 on actual gross income of any financial year.

31. DVPCA has submitted that though the Petitioner has considered effective tax rate of 20.9605%, 21.3416%, 21.3416%, 21.3416% and 21.548% for the computation of ROE for the period 2014-19, the Audited accounts reveals that the Petitioner has not paid any actual tax during the period from 2014-18. It has stated that for 2018-19, 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, DVPCA has stated that the

claim is in contravention to the 2014 Tariff Regulations and the 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 till date there is no income tax liability on the Petitioner for the period 2014-19. However, it has sought leave of the Commission, to claim the income tax liability, if any, to arise in the future.

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

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Normative Equity-Opening (A)	11446.99	12636.43	8023.21	8106.80	8138.20
Net Addition of Equity due to additional capital expenditure (B)	1189.44	(-)4613.22	83.59	31.40	10.93
Normative Equity-Closing (C) = (A) + (B)	12636.43	8023.21	8106.80	8138.20	8149.13
Average Normative Equity (D) = (A+C)/2	12041.71	10329.82	8065.01	8122.50	8143.67
Return on Equity (Base Rate) (E)	15.50%	15.50%	15.50%	15.50%	15.50%
Effective Tax Rate (F)	0.00%	0.00%	0.00%	0.00%	0.00%
Rate of Return on Equity (Pre-Tax) (G) = (E)/(1-F)	15.50%	15.50%	15.50%	15.50%	15.50%
Return on Equity (Pre-Tax) annualized (H) = (D)*(G)	**1866.47**	**1601.12**	**1250.08**	**1258.99**	**1262.27**

Interest on Loan

33. 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."

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

a. The Gross normative loan amounting to Rs.14253.10 lakh has been considered as on 1.4.2014, as per order dated 20.7.2017 in Petition No. 348/GT/2014.

b. Cumulative repayment amounting to Rs.14253.10 lakh, has been considered as on 1.4.2014, as considered in order dated 20.7.2017 in Petition No. 348/GT/2014.

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 2014-19. A Proportionate adjustment has been made to the repayments on account of de-capitalizations considered in the additional capital expenditure approved above.

e. In line with the provisions of the Regulations, the weighted average rate of interest (WAROI) has been calculated by applying the actual loan portfolio existing as on 1.4.2014, along with subsequent additions during the period 2014-19, if any, for the generating station. In the case of loans carrying a floating rate of interest the rate of interest as provided by the Petitioner has been considered for the purpose of tariff.

35. The Petitioner was directed to justify the inclusion of Loan-5 DVC Bonds (for T&D)-fully repaid on 26.2.2017 and Loan-6 REC Loan (For T&D) for computation of weighted average rate of interest (WAROI) for generating station. In response, the Petitioner, vide affidavit dated 9.9.2022, has stated that the loan portfolio as approved by the Commission vide order dated 20.7.2017 in Petition No 348/GT/2014 has been considered and the revised Form-13 has been submitted by the Petitioner.

36. The revised Form-13, submitted by the Petitioner, as above, has been considered for the purpose of computation of WAROI and accordingly WAROI has been used in computation of Interest on loan as under:

(Rs in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Gross opening loan (A)	14253.10	17164.35	11245.85	11449.40	11532.52
Cumulative repayment of loan up to previous year (B)	14253.10	16116.89	9367.10	10789.70	11532.52
Net Loan Opening (C) = (A) - (B)	0.00	1047.46	1878.75	659.71	0.00
Addition due to additional capital expenditure (D)	2911.24	(-)5918.49	203.55	83.12	32.17
Repayment of loan during the year (E)	1965.70	0.00	1428.98	750.21	37.17
Less: Repayment adjustment on account of de-capitalization (F)	101.92	6749.79	6.38	7.39	5.00
Net Repayment (G) = (E) - (F)	1863.78	-6749.79	1422.60	742.82	32.17
Net Loan Closing (H) =(C) +(D) -(G)	1047.46	1878.75	659.71	0.00	0.00
Average Loan (I) = (C+H)/2	523.73	1463.11	1269.23	329.85	0.00
Weighted Average Rate of Interest of loan (J)	8.9403%	8.9424%	8.9448%	6.9122%	6.9122%
Interest on Loan (K) = (I)*(J)	**46.82**	**130.84**	**113.53**	**22.80**	**0.00**

Depreciation

37. 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."

xxx

38. 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)….
(ii)….
(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."

39. Cumulative depreciation amounting to Rs. 22939.04 lakh, as on 1.4.2014, is in line with the cumulative depreciation, as on 31.3.2014, as per order dated 20.7.2017 in Petition No. 348/GT/2014. The weighted average rate of depreciation calculated in terms of the Regulation 53(2)(iii) read with Regulation 27 and Regulation 38 of the 2014 Tariff Regulations, has been considered for calculation of depreciation. The cumulative depreciation has been adjusted on account of de-capitalization, considered during the period 2014-19, for the purpose of tariff. Further, in case of de-commissioned Unit-III having COD 1.12.1966, adjustment of cumulative depreciation equivalent to 90% has been considered during the year of de-commissioning, i.e. 2015-16. Accordingly, depreciation is worked out and allowed as under:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Average Capital Cost (A)	27750.44	24534.92	19412.64	19613.47	19692.27
Value of freehold land included in average capital cost (B)	78.51	78.51	78.51	78.51	78.51
Value of software and IT equipment included in average capital cost (C)	0.00	0.00	0.00	0.00	0.00
Aggregated Depreciable Value (D)= (A-B-C)*90%+ (C)	24904.74	22010.78	17400.72	17581.46	17652.39
Remaining aggregate depreciable value at the beginning of the year (E) = (D) - ('L' of previous year)	1965.70	0.00	3226.78	1990.03	629.96
No. of completed years at the beginning of the year (F)	-	-	-	-	-
Balance useful life at the beginning of the year (G) = 25 - (F)	-	-	-	-	-
Weighted Average Rate of Depreciation (WAROD) (H)	7.5012%	7.5142%	7.3611%	7.3638%	7.3607%
Depreciation during the year/ period (I) = Min[(A*H),E]	**1965.70**	**0.00**	**1428.98**	**1444.29**	**629.96**
Cumulative depreciation at the end of the year (before adjustment for de-capitalization) (J) = (I) + ('L' of previous year)	24904.74	24721.29	15602.92	17035.73	17652.39

	2014-15	2015-16	2016-17	2017-18	2018-19
Less: Depreciation adjustment on account of de-capitalisation (K)	183.45	10547.35	11.49	13.29	9.01
Cumulative depreciation at the end of the year (L) = (J) - (K)	24721.29	14173.94	15591.43	17022.43	17643.38

**Cumulative depreciation at the end of 2013-14 is Rs 22939.04 lakh.*

Operation & Maintenance Expenses

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

(Rs. in lakh/MW)

	2014-15	2015-16	2016-17	2017-18	2018-19
For Unit-III(140 MW)	35.88	38.14	40.54	43.09	45.80
For Unit-IV (210 MW)	23.90	25.40	27.00	28.70	30.51

41. The O&M expenses claimed by the Petitioner is as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
10042.20	10381.02	5670.00	6027.00	6407.10

42. Considering the fact that the Unit-III of the generating station was decommissioned on 10.3.2016, the O&M expenses allowed to the generating station are as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
For Unit-III(140 MW) (A)	5023.20	5018.64*	0.00	0.00	0.00
For Unit-IV (210 MW) (B)	5019.00	5334.00	5670.00	6027.00	6407.10
Total for the generating station (C) = (A)+(B)	**10042.20**	**10352.64**	**5670.00**	**6027.00**	**6407.10**

**For 344 days out of 366 days*

Water Charges

43. 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:"*

44. The Petitioner has claimed water charges as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
0.00	8391.53	132.50	153.66	161.31

45. The Petitioner has submitted that the actual water consumption of DTPS Units 3 and 4 was higher than the normative consumption corresponding to the same gross electricity generation, whereas during 2017-18 and 2018-19, the actual water consumption was lower than the normative. It has also submitted that the higher water consumption is due to the fact that Unit-III of the generating station, had once-through cooling water system and after Unit-III was decommissioned, the specific water consumption improved gradually. The Petitioner, in its additional submission vide affidavit dated 20.9.2021, has submitted the year-wise audited computation of actual water charges claimed for the period 2014-19, including the actual quantity of water consumed; rate (Rs. /M^3) charged by the State authorities and Auditor certificate to the effect that such other charges above were booked under the head 'water charges' during the period 2014-19. The detail of water charges as submitted by the Petitioner is as follows:

Year	Water Use	Quantity of Water Consumed (m3)	Rate of Water Charges (Rs./m3)	Water Charges as per Rate (Rs. lakh)	Water Charges as per Annual Accounts (Rs. lakh)
2014-15	Industrial Usage	85729529	6.15	5272.37	0.00
	Domestic Usage	876000	1.15	10.07	
	Total	**86605529**		**5282.44**	
2015-16	Industrial Usage	50390072	6.15	3098.99	8391.53
	Domestic Usage	878400	1.15	10.10	
	Total	**51268472**		**3109.09**	
2016-17	Industrial Usage	1990607	6.15	122.42	132.50
	Domestic Usage	876000	1.15	10.07	
	Total	**2866607**		**132.50**	
2017-18	Industrial Usage	2408515	6.15	148.12	153.66
	Domestic Usage	481800	1.15	5.54	
	Total	**2890315**		**153.66**	
2018-19	Industrial Usage	2532810	6.15	155.77	161.31

Year	Water Use	Quantity of Water Consumed (m3)	Rate of Water Charges (Rs./m3)	Water Charges as per Rate (Rs. lakh)	Water Charges as per Annual Accounts (Rs. lakh)
	Domestic Usage	481800	1.15	5.54	
	Total	**3014610**		**161.31**	
Total		**146645533**		**8839.00**	**8839.00**

46. It is observed that the water charges determined, based on consumption and rate, thereof, are in slight variance with the apportioned audited water charges. Accordingly, the audited water charges have been considered. It is also noticed, that the Petitioner has claimed domestic water charges, 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, the water charges allowed are as follows:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Claimed	0.00	8391.53	132.50	153.66	161.31
Allowed	**0.00**	**8371.36**	**122.42**	**148.12**	**155.77**

Capital Spares

47. 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:

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."

48. The Petitioner has claimed total actual expenditure of Rs.1167.44 lakh (Rs. 532.78 lakh in 2014-15, Rs.305.60 lakh in 2015-16, Rs.146.00 lakh in 2016-17, Rs.67.00 lakh in 2017-18 and Rs.116.07 lakh in 2018-19) towards capital spares during 2014-19 under Regulation 29(2) of the 2014 Tariff Regulations. The Petitioner has prayed that capital spares replaced/consumed by the generating station during the

period 2014-19 may be allowed.

49. The matter has been examined. It is observed that the 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, the tariff has been recovering 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, 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.

50. We have examined the list of the capital spares consumed by the Petitioner. Keeping in view the principle of materiality and to ensure standardized practices in respect of earmarking and treatment of capital spares, the value of capital spares exceeding Rs.1 (one) lakh, on prudence check of the details furnished by the Petitioner in Form-17 of the petition, has been considered for the purpose of tariff. In view of the above discussion, only those capital spares, which do not form part of the capital cost of the project, have been considered and allowed as under:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Capital Spares (not part of capital cost) claimed (A)	532.78	305.60	146.00	67.00	116.07
Value of Capital Spares (of Rs. 1 lakh and below) disallowed on individual basis (B)	0.00	0.00	0.00	0.00	0.00
Value of capital spares disallowed on individual basis (C)	0.00	0.00	0.00	0.00	0.00
Net total value of capital spares considered (D) = (A) - (B) - (C)	**532.78**	**305.60**	**146.00**	**67.00**	**116.07**

51. We are also of the view that spares do have a salvage value. Accordingly, in line with the practice of considering the salvage value, presumed to be recovered by the Petitioner on sale of capital assets, on becoming unserviceable, the salvage value of 10% has been deducted from the cost of capital spares considered above, for the period 2014-19. Therefore, on prudence check of the information furnished by the Petitioner in Form-17 and on applying the said ceiling limit along with deduction of the salvage value @ 10%, the net capital spares allowed in terms of Regulation 29(2) of 2014 Tariff Regulations is as under:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Net total value of capital spares considered (A)	532.78	305.60	146.00	67.00	116.07
Salvage value @ 10% (B)	53.28	30.56	14.60	6.70	11.61
Net Claim allowed (C) = (A)*(B)	**479.50**	**275.04**	**131.40**	**60.30**	**104.46**

52. Accordingly, the O&M expenses allowed for the period 2014-19 are as follows:

(Rs. in lakh)

		2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Total O&M Expenses (in Rs. lakh) (A)	Claimed	10042.20	10381.02	5670.00	6027.00	6407.10
	Allowed	**10042.20**	**10352.64**	**5670.00**	**6027.00**	**6407.10**
Water Charges (in Rs. lakh) (B)	Claimed	0.00	8391.53	132.50	153.66	161.31
	Allowed	0.00	8371.36	122.42	148.12	155.77
Capital Spares Consumed (in Rs. lakh) (C)	Claimed	532.78	305.60	146.00	67.00	116.07
	Allowed	**479.50**	**275.04**	**131.40**	**60.30**	**104.46**
Total O&M Expenses as allowed (including Water Charges and Capital Spares Consumed) (D) = (A+B+C)	Claimed	10574.98	19078.15	5948.50	6247.67	6684.48
	Allowed	**10521.70**	**18999.03**	**5923.82**	**6235.43**	**6667.33**

Special Allowance

53. Regulation 16 of the 2014 Tariff Regulations provides as follows:

"16. <u>Special Allowance for Coal-based/Lignite fired Thermal Generating station:</u>

(1) In case of coal-based/lignite fired thermal generating station, the generating company, instead of availing R&M may opt to avail a „special allowance" in accordance with the norms specified in this regulation, as compensation for meeting the requirement of expenses including renovation and modernisation beyond the useful life of the generating station or a unit thereof, and in such an event, revision of the capital cost shall not be allowed and the applicable operational norms shall not be relaxed but the

special allowance shall be included in the annual fixed cost:

Provided that such option shall not be available for a generating station or unit for which renovation and modernization has been undertaken and the expenditure has been admitted by the Commission before commencement of these regulations, or for a generating station or unit which is in a depleted condition or operating under relaxed operational and performance norms.

(2) The Special Allowance shall be @ Rs. 7.5 lakh/MW/year for the year 2014-15 and thereafter escalated @ 6.35% every year during the tariff period 2014-15 to 2018-19, unit wise from the next financial year from the respective date of the completion of useful life with reference to the date of commercial operation of the respective unit of generating station:

Provided that in respect of a unit in commercial operation for more than 25 years as on 1.4.2014, this allowance shall be admissible from the year 2014-15:
Provided further that the special allowance for the generating stations, which, in its discretion, has already availed of a 'special allowance" in accordance with the norms specified in clause (4) of regulations 10 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff Determination) Regulations, 2009, shall be allowed Special Allowance by escalating the special allowance allowed for the year 2013-14 @ 6.35% every year during the tariff period 2014-15 to 2018-19.

(3) In the event of granting special allowance by the Commission, the expenditure incurred or utilized from special allowance shall be maintained separately by the generating station and details of same shall be made available to the Commission as and when directed to furnish details of such expenditure."

54. The Petitioner has claimed the following Special Allowance under provisions of Regulation 16 of the 2014 Tariff Regulations:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
2625.00	2730.50	1781.38	1894.49	2014.79

55. DVPCA has submitted that as per Regulation 16 (1) of the 2014 Tariff Regulations, the generating stations instead of availing R&M may opt to avail Special Allowance in order to meet the requirement of expenses including R&M beyond the useful life of the generating stations. DVPCA has stated that the Petitioner needed to submit the comprehensive scheme of expenditure of R&M incurred for extension of life of the generating station. However, the Petitioner has not submitted any details regarding requirement of expenses including R&M incurred for extension of life of the generating station. Since the Petition is for true-up, complete audited details justifying

what kind of expenditure are incurred through Special Allowance needs to be provided and the same cannot be claimed on normative basis. DVPCA has further submitted that prior approval of the Commission is required for incurring expenditure through Special Allowance. DVPCA has also stated that the Petitioner should have satisfied the condition as laid down in Regulation 16(1) of the 2014 Tariff Regulations; mainly on how much useful life of asset will increase beyond 25 years. DVPCA has stated that the Petitioner is claiming the expenditure without furnishing any approval and proper justifications. Therefore, the claim made by the Petitioner towards Special Allowance ought to be disallowed on the above grounds. The Petitioner in its rejoinder has submitted that the Special Allowance is allowed by the Commission on normative basis in lieu of expenditure for Renovation and Modernization. Further, the Petitioner ha stated that the norms have been set by the Commission with a view that the same is sufficient to meet the generating station's requirement for R&M works. Therefore, the Petitioner has submitted that the generator's claim of Special Allowance will be irrespective of submission of R&M details and DVPCA's contentions lack any merit and may be rejected.

56. The matter has been considered. It is observed that the provision for Special Allowance was introduced by the Commission under the 2009 Tariff Regulations, i.e. for the period 2009-14, wherein a thermal generating station, may avail of a special allowance, as compensation for meeting the requirement of expenses including renovation and modernisation beyond the useful life of the generating station or a unit thereof, and in such an event revision of the capital cost shall not be considered and the applicable operational norms shall not be relaxed but the special allowance shall be included in the annual fixed cost. Further, the proviso to this Regulation explicitly states that such option shall not be available for a generating station or unit for which

renovation and modernization has been undertaken and the expenditure has been admitted by the Commission before commencement of these regulations, or for a generating station or unit which is in a depleted condition or operating under relaxed operational and performance norms. Therefore, the option of Special Allowance was introduced essentially with the following conditions:

a) Revision of the capital cost shall not be considered;

b) Applicable operational norms shall not be relaxed;

c) Further the Statement of Reason also mentioned that the option once exercised will be final and shall not be allowed to be changed.

d) The allowance shall not be available to stations which have availed R&M expenditure or for a generating station or unit which is in a depleted condition or operating under relaxed operational and performance norms.

57. It is further observed that in none of its earlier tariff petitions, namely- Petition Nos.276/GT/2012, 471/GT/2014 and 348/GT/2014, the Petitioner had not claimed any Special Allowance and accordingly, the same was not allowed, in orders dated 7.8.2013, 29.7.2016 and 20.7.2017, respectively. It is also observed that the Petitioner, instead of opting for the Special Allowance had chosen to claim substantial amount of additional capital expenditure during the periods 2004-09, 2009-14 and 2014-19, which, after prudence check, had been allowed by the Commission. Further, the Commission in its Tariff Regulations for the periods 2009-14, 2014-19 and 2019-24 has provided relaxed operating norms for the generating station. After availing the benefits of substantial additional capital expenditure and continued relaxed operational norms in the last two tariff periods, the Petitioner cannot be permitted to seek the benefit of Special Allowance also. Considering these aspects, it is evident that the generating station of the Petitioner does not meet the criteria for the grant of Special Allowance in terms of the first proviso to Regulation 16(1) of the 2014 of Tariff Regulations.

Accordingly, the claim of the Petitioner is not allowed.

<u>Operational Norms</u>

58. The operational norms in respect of the generating station claimed by the Petitioner are as under:

	2014-15	2015-16	2016-17	2017-18	2018-19
Normative Annual Plant Availability Factor (NAPAF) (%)	74%	74%	74%	74%	74%
Gross Station Heat Rate (kCal/kWh)	2820	2820	2820	2820	2820
Auxiliary Power Consumption (%)	10.50%	10.50%	10.50%	10.50%	10.50%
Specific Oil Consumption (ml/kWh)	2.40	2.40	2.40	2.40	2.40

Normative Annual Plant Availability Factor

59. Regulation 36(A)(c) of the 2014 Tariff Regulations provides as under:

"(c) Following Thermal Generating Stations of DVC:

Bokaro TPS	*75%*
Chandrapura TPS	*75%*
Durgapur TPS	*74%*

60. The Target Availability of 74% during the period 2014-19, as claimed by the Petitioner, is in accordance with the above said Regulation and hence, the same is allowed.

Gross Station Heat Rate

61. As the Gross Station Heat Rate of 2820 kCal/kWh, claimed by Petitioner is in accordance with the provisions of Regulation 36(C)(a)(iii) of the 2014 Tariff Regulations and the same was approved vide order dated 20.7.2017 in Petition No. 348/GT/2014 for the period 2014-19, hence the same is allowed.

Auxiliary Energy Consumption

62. The Petitioner has claimed Auxiliary Energy Consumption (AEC) of 10.50%. Regulation 36(E)(b) of the 2014 Tariff Regulations provides for the AEC of 10.50% for this generating station. Accordingly, AEC claimed by the Petitioner is in line with the

Regulations and as approved in order dated 20.7.2017 in Petition No. 348/GT/2014 and therefore the same is allowed.

Secondary Fuel Oil Consumption

63. Regulation 36(D)(c) of the 2014 Tariff Regulations provides secondary fuel oil consumption of 2.40 ml/kWh for this generating station. Accordingly, secondary fuel oil consumption claimed by the Petitioner is in line with the Regulations and as approved in order dated 20.7.2017 in Petition No. 348/GT/2014 and hence, the same is allowed.

64. Accordingly, based on the above the following operational norms are allowed:

	2014-15	2015-16	2016-17	2017-18	2018-19
Normative Annual Plant Availability Factor (NAPAF) (%)	74%	74%	74%	74%	74%
Gross Station Heat Rate (GSHR) (kCal/kWh)	2820	2820	2820	2820	2820
Auxiliary Power Consumption (%)	10.50%	10.50%	10.50%	10.50%	10.50%
Specific Oil Consumption (ml/kWh)	2.40	2.40	2.40	2.40	2.40

Interest on Working Capital

65. 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."

66. Interest on working capital as claimed by the Petitioner is as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of Coal/Lignite for Stock and Generation (A)	8851.31	8681.03	5310.79	5310.79	5310.79
Cost of oil for 2 months (B)	524.22	514.14	314.53	314.53	314.53
O&M expenses - 1 month (C)	836.85	1564.38	483.54	515.06	547.37
Maintenance Spares - 20% of O&M (D)	2008.44	3754.51	1160.50	1236.13	1313.68
Receivables - 2 months (E)	13747.07	14675.39	8588.56	8550.61	8351.92
Total Working Capital (F) = (A+B+C+D+E)	**25967.89**	**29189.45**	**15857.93**	**15927.12**	**15838.29**
Rate of Interest (G)	13.50%	13.50%	13.50%	13.50%	13.50%
Total Interest on Working capital (H) = (F)x(G)	**3505.67**	**3940.58**	**2140.82**	**2150.16**	**2138.17**

Fuel Cost for Working Capital

67. Sub-clauses (i), (ii) and (iii) of Regulation 28(1) of the 2014 Tariff Regulations provide for 30 days of stock, cost of coal for 30 days of 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. 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.

68. 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 Regulation, for determination of the 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 3585.28 Kcal/kg on "as received" basis for the period from January 2014 to March 2014. The Petitioner has also submitted that it has filed separate petition (Petition No. 133/MP/2018) before the Commission, wherein, it had taken samples manually from the wagon top and GCV of coal on considered 'as received basis', for computation of cost of coal and the same is pending. Accordingly, the Petitioner has submitted that the Commission may take on record the statements of measurement of GCV as submitted in Petition 133/MP/2018 along with this petition and determine the tariff for the generating station, based on GCV considered on 'as received' basis.

71. The matter has been considered. 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 2014 to March 2014, for the purpose of computation of working capital for the period 2014-19. It is observed that the Petitioner has claimed transit & handling loss of coal, GCV and price of primary and secondary fuel in line with the regulations. It is observed that the Petitioner in Form-15 (excel soft copy), has submitted the details of coal quantity in Million Metric Tonne up to 7-8 decimal places and the same has been considered. Accordingly, the weighted average cost and GCV of primary and secondary fuel and the cost of fuel components in working capital is allowed as follows:

	Allowed
Weighted average GCV of coal (kCal/kg)	3585.28
Weighted average price of coal (Rs./MT)	2998.00
Weighted average GCV of oil (kCal/litre)	8630.00
Weighted average price of oil (Rs./kl)	57763.31

72. Based on the above discussions, the cost of fuel components in working capital is worked out and allowed as follows:

					(Rs. in lakh)
	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Effective capacity (MW)	350.00	341.58	210.00	210.00	210.00
Cost of Coal towards stock (30 days)	4365.03	4260.08	2619.02	2619.02	2619.02
Cost of Coal towards Generation (30 days)	4365.03	4260.08	2619.02	2619.02	2619.02
Cost of Secondary fuel oil 2 months	524.22	513.02	314.53	314.53	314.53

Working capital for Maintenance Spares

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

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
2008.44	3754.51	1160.50	1236.13	1313.68

74. It is noticed that the Petitioner has claimed working capital for maintenance spares by excluding the capital spares. However, Regulation 28(1)(a)(iv) of the 2014 Tariff Regulations provide for maintenance spares @ 20% of the O&M expenses, 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)

2014-15	2015-16	2016-17	2017-18	2018-19
2104.34	3799.81	1184.76	1247.09	1333.47

Working Capital for O & M Expenses for one month

75. O&M expenses for 1 month claimed by the Petitioner, in Form-13B, for the purpose of working capital is as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
836.85	1564.38	483.54	515.06	547.37

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 cost of maintenance spares @ 20% of the operation & maintenance expenses including water charges and capital spares, allowed are as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
876.81	1583.25	493.65	519.62	555.61

Energy Charge Rate (ECR) for Working Capital for Receivables

77. The Petitioner has claimed Energy Charge Rate (ECR) ex-bus of 277.02 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 the 2014-19 period for the generating station. Accordingly, the allowable ECR, based on the operational norms as specified under the 2014 Regulations and on approved weighted average GCV of coal and oil is worked out as 277.00 Paise / kWh (or Rs. 2.770 / kWh).

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

a) ECR of Rs. 2.770/kWh as calculated above (rounded off to three places as per Regulation 30(6) of 2014 Regulations).

b) Ex-bus energy (two months), corresponding to the effective installed capacity in MW, normative availability of 74% and Auxiliary Energy Consumption of 10.50%.

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

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
9374.66	9174.32	5624.79	5624.79	5624.79

Working Capital for Receivables

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

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Variable Charges - for two months (A)	9374.66	9174.32	5624.79	5624.79	5624.79
Fixed Charges – for two months (B)	2952.78	4077.70	1782.09	1825.91	1760.19
Total (C) = (A+B)	**12327.44**	**13252.02**	**7406.88**	**7450.70**	**7384.99**

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)

	2014-15	2015-16	2016-17	2017-18	2018-19
Working capital for Cost of Coal for Stock (30 days) (A)	4365.03	4260.08	2619.02	2619.02	2619.02
Working capital for Cost of Coal for Generation (30 days) (B)	4365.03	4260.08	2619.02	2619.02	2619.02
Working capital for Cost of oil for 2 months (C)	524.22	513.02	314.53	314.53	314.53
Working capital for O & M expenses - 1 month (D)	876.81	1583.25	493.65	519.62	555.61
Working capital for Maintenance Spares - 20% of O&M (E)	2104.34	3799.81	1184.76	1247.09	1333.47
Working capital for Receivables - 2 months (F)	12327.44	13252.02	7406.88	7450.70	7384.99
Total Working Capital (G) = (A+B+C+D+E+F)	**24562.87**	**27668.26**	**14637.87**	**14769.98**	**14826.63**
Rate of Interest (H)	13.50%	13.50%	13.50%	13.50%	13.50%
Total Interest on Working capital (I) = (G)*(H)	**3315.99**	**3735.22**	**1976.11**	**1993.95**	**2001.60**

Additional O&M Expenses

82. The Petitioner has also claimed additional O&M expenses over and above the normative O&M expenses, which are 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, Ash Evacuation Expenses, Impact of GST, Impact of Pay Revision, Share of Pension & Gratuity (P&G) and Share of Subsidiary Activity. In order 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 Operation & Maintenance 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) Ash Disposal Expenses

83. The Petitioner has claimed Rs. 1288.75 lakh (i.e., Rs. 303.99 lakh in 2015-16, Rs. 1016.24 lakh in 2016-17 and (-) Rs. 31.48 lakh in 2017-18) towards Ash Disposal expenses, as additional O&M expenses for the generating station under Regulation 8(3)(ii) of the 2014 Tariff Regulations. In justification of the same, the Petitioner has submitted that due to the statutory directives by the MoEF&CC, GoI vide Notification dated 14.9.1999 (and its amendments dated 27.8.2003, 3.11.2009 and 25.1.2016), the fly ash generated during the course of operation of the coal power plants, is required to be utilized, under various designated modes, out of which, mine stowing is the most feasible option for the generating station, as the Eastern Coalfields Limited (ECL) has allowed the Petitioner to utilize its abandoned mines for the purpose of mine stowing. Accordingly, the Petitioner has engaged various transporters for excavation and transportation of ash from ash ponds of the generating station to the abandoned open cast mines of ECL. The Petitioner has further submitted that the expenses for such ash evacuation and transportation activities for DTPS Units III & IV have been booked in the annual accounts in a consolidated manner and subsequently have been apportioned among the various units of DTPS based on the actual gross generation of the units for respective years during the period 2014-19. The Petitioner has prayed to approve the

Ash Disposal expenses for the period 2014-19, and allow the same to be recovered in full from the beneficiaries, considering the statutory requirement as per MoEF&CC Notifications as “Change in Law” under the of the 2014 Tariff Regulations.

84. DVPCA has submitted that the Commission had disallowed the claim of expenses towards Ash evacuation in a number of orders, stating that the Petitioner was fully aware of the MoEF&CC Notification, 2009 which mandates 100% ash utilization to be ensured by the generator, within a specific period by installation of dry ash and wet ash disposal system. It has stated that the Petitioner must have taken necessary steps for installation of the evacuation system at the inception stage. The Objector has further submitted that as the actual O&M expenses including Ash Evacuation expenses are lower than the normative O&M expenses and thus, there is no requirement of allowing Ash evacuation expenses additionally. It has also pointed out that the Commission in its order dated 20.7.2017 in Petition No. 348/GT/2014 had also not allowed Ash evacuation expenses.

85. The Petitioner, in its rejoinder, has clarified that the Commission in its order dated 5.11.2018 in Petition No. 172/MP/2016 (NTPC vs. UPPCL & ors) had admitted the expenses related to transportation of ash under ‘change in law’ as additional O&M expenses and NTPC was granted liberty to claim the same at the time of truing-up of tariff for the period 2014-19. It has also pointed out that the Commission in its order dated 29.7.2020 in Petition No.101/MP/2019, had granted liberty to the Petitioner to claim expenses for ash transportation at the time of truing-up for the period 2014-19. Accordingly, the Petitioner has submitted that it has claimed expenses incurred for ash transportation from its thermal generating stations for the period 2014-19, for the approval under Regulation 8(3)(ii) of the 2014 Tariff Regulations. The Petitioner has

stated that the issue of 'actual vs norms' is no longer res-integra and stands decided by the Hon'ble Supreme Court in UPPCL v NTPC & ors (2011) 122 SCC 400, wherein, it has upheld the concept of 'normative basis' and rejected the contention, that tariff should be determined on the basis of 'normative' or 'actuals', whichever is less. The Petitioner has added that even the National Tariff Policy, 2016 prescribes that the operating parameters in tariffs should be at "normative levels" only and not at "lower of normative and actuals" and this is essential to encourage better operating performance. The Petitioner has also stated that the Commission in its order dated 29.7.2020 in Petition No. 101/MP/2019 had directed the Petitioner to furnish some additional information in support to the Petitioner's claim on ash evacuation expenses as under:

> *"31. Accordingly, we in exercise of the regulatory power hold that the actual additional expenditure incurred by the Petitioner towards transportation of ash in terms of the MOEFCC No as additional O&M expenses. However, the admissibility of the claims is subject to prudence check of the following conditions/ details on case to case basis for each station:*
> *(a) Award of fly ash transportation contract has been affected through a transparent competitive bidding procedure. Alternatively, the schedule rates of the respective State Governments, as applicable for transportation of fly ash.*
> *(b) Details of the actual additional expenditure incurred on Ash transportation after 25.1.2016, duly Certified Auditor.*
> *(c) Details of the Revenue generated from sale of fly ash/fly ash products and the expenditure incurred towards Ash utilisation up to 25.1.2016 and from 25.1.2016 to till date, separately.*
> *(d) Revenue generated from fly Ash sales maintained in a separate account as per the MoEF notification."*

86. The Petitioner has stated that in compliance to the above, the transportation of fly ash was awarded through competitive bidding and the transportation charges are within the schedule rates of the respective State Governments. In addition, the Petitioner has submitted that the revenue generated from Fly ash sales is maintained in a separate account, as per the MOEF&CC notifications, and an auditor certificate on the information associated with ash evacuation/ transportation expenses in respect of various stations are as under:

(Rs. in lakh)

	DSTPS	DTPS	KTPS	CTPS	MTPS	BTPS	Total
Ash transportation Charges 1.4.2014 to 25.1.2016	454.11	880.91	749.75	3202.23	15797.33	761.93	**21846.26**
Ash transportation Charges 26.1.2016 to 31.3.2019	411.69	1016.24	2533.62	7147.80	24768.26	3457.03	**39334.64**
Income from sale of Ash / Cenosphere from 1.4.2014 to 25.1.2016	0.00	0.00	0.00	28.97	0.00	11.96	**40.93**
Income from sale of Ash from 26.1.2016 to 31.3.2019	1964.87	17.04	812.47	10.05	297.11	7.62	**3109.16**

87. The matter has been examined. The relevant portion of the MoEF&CC Notifications dated 3.11.2009 and 25.1.2016 are extracted as under:

> *"**Notification dated 3.11.2009:***
> *"6. The amount collected from sale of fly ash and fly ash-based products by coal and / or lignite based thermal power stations or their subsidiary or sister concern unit, as applicable should be kept in separate account head and shall be utilized only for development of infrastructure facilities, promotion of and facilitation activities for use of fly ash until 100 percent fly ash utilization level is achieved; thereafter as long as 100 % fly ash utilization levels are maintained, the thermal power station would be free to utilize the amount collected for other development programmes also and in case, there is a reduction in fly ash utilization levels in the subsequent year(s), the use of financial return from fly ash shall get restricted to development of infrastructure or facilities and promotion or facilitation activities for fly ash utilization until 100 percent fly ash utilization level is again achieved and maintained."*
>
> ***Notification dated 25.1.2016:***
> *"10. The cost of transportation of ash for road construction projects or for manufacturing of ash based products or use as soil conditioner in agriculture activity within a radius of hundred kilometres from a coal or lignite based thermal power plant shall be borne by such coal or lignite based thermal power plant and the cost of transportation beyond the radius of hundred kilometres and up to three hundred kilometres shall be shared equally between the user and the coal or lignite based thermal power plant."*

88. It is observed that the Petitioner had filed Petition No.101/MP/2019 before this Commission seeking recovery of ash transportation charges through monthly bills of beneficiaries, in terms of the MoEF&CC notification dated 25.1.2016, as 'change in law' event and the Commission vide its order dated 29.7.2020, disposed of the same, after observing that the said MOEF&CC notification is a change in law event. Accordingly,

the Petitioner was granted liberty to approach the Commission at the time of truing up of tariff, along with the audited details, including the award of transportation through competitive bidding, alternatively scheduled rate of State Government, expenditure incurred and revenue generated (up to 25.1.2016/ after 25.1.2016) and to maintain the revenue generated from fly ash in a separate account. In compliance to the above, the Petitioner has furnished the year-wise audited ash transportation details and the income received from sale of ash for its various generating stations i.e., MTPS, CTPS, DTPS, BTPS, DSTPS, KTPS etc., during the period 2014-19 and these charges were apportioned to the various stages, on the basis of their actual generation, in the respective years. Further, in compliance to direction given in order dated 29.7.2020 in Petition No.101/MP/2019, the Petitioner has furnished additional information such as the end user type, category of ash utilization, the award of transportation carried out through competitive bidding/ rate of transportation is lower than Schedule of Rates (SoR), the actual quantum of ash supplied, transported, distance, awarded rate of transportation in Rs./ton per kilometre, income from sale of ash etc, from 25.1.2016 to 31.3.2019 for DTPS (1 x 210 MW), MTPS (4 x 210 MW + 2 x 250 MW + 2 x 500 MW), KSTPS (2 x 500 MW), DSTPS (2 x 500 MW), CTPS (1 x 130 MW + 2 x 250 MW) and BTPS (1 x 210 MW + 1 x 500 MW). It is noticed that the Petitioner has also claimed Ash transportation charges, pertaining to mine filling (abandoned coal mines of ECL) and low-lying area (DVC & its premises) and the revenue generated through sale of ash to cement / non-cement plants. However, the information regarding the revenue generated from sale of ash as on 25.1.2016 has not been furnished. The Petitioner has also transported ash from its generating stations through road (trucks), the distance varied from 2 kms to 76 kms and has therefore declared that it has not received any money from escrow account / coal mine companies for mine stowing. Considering, the claim of the Petitioner towards ash transportation charges in its various tariff petitions filed in respect of its thermal generating stations, it is noticed that total ash transportation expenses incurred by the Petitioner is Rs.611.75 crore (approx.), which also matches with the audited figures and the annual report (after rounding off), on yearly basis, as detailed below:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018 -19**	**Total**
DSTPS	115.00	339.11	46.64	244.45	120.6	865.80
DTPS	**608.40**	**303.99**	**1016.24**	**(-) 31.24**	**0.00**	**1897.39**
KTPS	0.00	819.49	513.59	897.39	1050.56	3281.03
CTPS	1618.10	1891.14	2518.01	2840.98	1478.59	10346.82
MTPS	10292.17	8215.14	10601.33	6535.3	4921.30	40565.24
BTPS	578.44	534.11	1598.27	1068.46	439.68	4218.96
Total	**13212.11**	**12102.98**	**16294.08**	**11555.34**	**8010.73**	**61175.24**

89. In consideration of the submissions of the Petitioner and since the MoEF&CC notification dated 25.1.2016 is a change in law event, the ash transportation charges from 26.1.2016 to 31.3.2019 are determined as follows:

(Rs. in lakh)

	2014-15	**2015-16 (w.e.f. 26.1.2016)**	**2016-17**	**2017- 18**	**2018-19**	**Total**
DSTPS	0.00	0.00	46.64	244.45	120.6	411.69
DTPS	**0.00**	**31.24**	**1016.24**	**(-) 31.24**	**0.00**	**1016.24**
KTPS	0.00	72.08	513.59	897.39	1050.56	2533.62
CTPS	0.00	310.22	2518.01	2840.98	1478.59	7147.80
MTPS	0.00	2710.33	10601.33	6535.3	4921.30	24768.26
BTPS	0.00	350.62	1598.27	1068.46	439.68	3457.03
Total	**0.00**	**3474.49**	**16294.08**	**11555.34**	**8010.73**	**39334.64**

90. The Petitioner has also generated revenue through the sale of ash and the details of plant wise along with the year-wise income received from sale of fly ash from 26.10.2016 to 31.3.2019 is as under:

(Rs. in lakh)

	DSTPS	DTPS	KTPS	CTPS	MTPS	BTPS
26.1.2016 to 31.3.2016	0.00	0.00	0.00	0.00	0.00	0.00
2016 - 17	272.40	0.00	0.00	0.00	0.00	0.00
2017- 18	664.47	3.26	373.70	10.05	44.67	7.62
2018 - 19	1027.99	13.78	438.77	0.00	252.44	0.00
Total	**1964.87**	**17.04**	**812.47**	**10.05**	**297.11**	**7.62**

91. In terms of the MoEF&CC notification dated 25.1.2016, the plant-wise revenue generated, shall be first adjusted towards the ash transportation charges of the plant and the balance shall be recovered from the beneficiaries. In this regard, it is noticed that during the period between 26.1.2016 to 31.3.2019, except for DSTPS, the ash transportation charges of all other plants, are higher than the income received from the sale of fly ash as worked out below:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
DSTPS	0.00	0.00	0.00	0.00	0.00	0.00
DTPS	**0.00**	**0.00**	**999.20**	**0.00**	**0.00**	**999.20**
KTPS	0.00	72.08	513.59	523.69	611.79	1721.15
CTPS	0.00	310.22	2518.01	2830.93	1478.59	7137.75
MTPS	0.00	2710.33	10601.33	6490.63	4668.86	24471.15
BTPS	0.00	350.62	1598.27	1060.84	439.68	3449.41
Total	**0.00**	**3443.25**	**16230.40**	**10906.08**	**7198.92**	**37778.66**

92. Accordingly, the ash disposal expenses amounting Rs. 999.20 lakh is only allowed in 2016-17.

93. Admittedly, the 2014 Tariff Regulations, do not contain any provision for allowing the ash transportation charges. Accordingly, we, in exercise of the regulatory powers, allow the total expenditure of Rs 999.20 lakh, towards fly ash transportation for the generating station of the Petitioner, for the period 2014-19, after adjusting the revenue received from the sale of ash of such plants, in six equal instalments, starting from March, 2023, keeping in view the interest of the beneficiaries. Considering the fact that

the reimbursement of the ash transportation expenses is being allowed based on the MOEF&CC notification, these expenses are not made part of the O&M expenses and the consequent annual fixed charges being determined in this order under the 2014 Tariff Regulations.

(B) Mega Insurance Expenses

94. The Petitioner has claimed Rs. 218.88 lakh (i.e., Rs. 46.40 lakh in 2014-15, Rs. 6.09 lakh in 2015-16, Rs. 41.58 lakh in 2016-17, Rs. 94.23 lakh in 2017-18 and Rs. 30.58 lakh in 2018-19) on account of 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 located 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.

95. DVPCA has submitted that the Commission in its earlier orders has disallowed the expenditure on mega insurance and the same was to be recovered as part of normative O&M expenses. It has also submitted that the actual O&M expenses, including the mega insurance expenses for the period 2014-19 have been lower than the normative O&M expenses prescribed by the 2014 Tariff Regulations, and thus the normative O&M expenses are sufficient to cover such expenses. Accordingly, the Objector has submitted that the claim of the Petitioner may not be considered separately. In response, the Petitioner in its rejoinder has clarified that the 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 and various other strategic safeguard measures. It has also submitted that these factors are applicable to the assets of the Petitioner, due to an enhanced risk profile, because of its area of operation, considering the potential threat, justifying the insurance expense

as an additional pass-through, over and above, the norms. The Petitioner has further submitted that the Commission in its various orders (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.

96. The matter has been considered. It is observed that the Commission while specifying the O&M norms for the period 2014-19 had considered the 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 O&M norms as claimed by the Petitioner. Accordingly, the expenses claimed towards Mega Insurance is not allowed.

(C) CISF Security Expenses

97. The Petitioner has claimed Rs.10985.20 lakh (i.e. Rs. 1771.19 lakh in 2014-15, Rs. 1970.06 lakh in 2015-16, Rs. 2195.96 lakh in 2016-17, Rs. 2489.44 lakh in 2017-18 and Rs. 2558.55 lakh in 2018-19) towards CISF Security expenses as additional O&M expenses during the period 2014-19 for the generating station. In justification of the same, the Petitioner has submitted the following:

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

b) The Ministry of Home Affairs, GoI has granted sanction for creation of posts for security personnel to be stationed at the generating station and accordingly, DVC has deployed CISF personnel in its generating stations to ensure adequate security at the generating stations as well as to comply with the directives on security measures. Accordingly, DVC has been incurring expense towards CISF Security for deployment of the CISF personnel and associated CISF activities.

c) The Commission had allowed the CISF expenses 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 Thermal Power Station 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. Accordingly, the Petitioner has prayed to allow the CISF expenses as incurred by and apportioned to the generating station during the period 2014-19 to be recovered in full, under the provision of 'Power to Relax' of the 2014 Tariff Regulations, similar to the Commission's treatment in the afore-said orders.

98. DVPCA has submitted that the actual O&M expenses, including the security expenses, for the period 2014-19, has been lower than the normative O&M expenses specified under the 2014 Tariff Regulations, and therefore the normative O&M expenses are sufficient to cover such expenses. Accordingly, the Objector has prayed that the claim may not be allowed separately.

99. The matter has been considered. As regards the submission of the Petitioner that the Commission had allowed CISF security expenses 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 Chandrapura Thermal Power Station (Units-1 to 3) projects of the Petitioner during the period 2009-14 in exercise of the power to relax, but was not allowed for other projects of the Petitioner. It is however, observed that the Commission while specifying the O&M expense norms for the period 2014-19, had considered security expenses for the generating station, 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 additional O&M expenses towards CISF security.

(D) Share of Subsidiary Activities

100. The Petitioner has claimed Rs. 747.40 lakh (i.e., Rs. 196.09 lakh in 2014-15, Rs. 234.49 lakh in 2015-16, Rs.119.92 lakh in 2016-17, Rs.115.39 lakh in 2017-18 and Rs.81.50 lakh in 2018-19) towards share of subsidiary activities as additional O&M expenses during the period 2014-19. In justification of the same, the Petitioner has submitted that the Petitioner has been undertaking various subsidiary activities in terms of Section 12 of the DVC Act, 1948. In terms of the judgment dated 23.11.2007 in Appeal No. 273 of 2006 and batch, the Tribunal has decided that the Petitioner has to be allowed the expenses in regard to the subsidiary activities as a passthrough element in the tariff. The above judgment of the Tribunal 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 in the matter of Bhaskar Shrachi Alloys Ltd. Vs. DVC (2018) 8 SCC 281. The Petitioner has further submitted that the Commission had allowed the expense toward Share of subsidiary activities in case of MTPS Unit-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 Thermal Power Station 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 2009 Tariff Regulations. Accordingly, the Petitioner has prayed to allow the expenses toward share of subsidiary activities as incurred by and apportioned to the generating station during the period 2014-19 to be recovered in full, under the provision of 'Power to Relax' of the 2014 Tariff Regulations.

101. 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 the common assets are already claimed separately. DVPCA 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 20.7.2017 in Petition No. 348/GT/2014. It has stated that the actual O&M expenses including Share of subsidiary expenses are lower than the normative O&M expenses and thus, there is no requirement of allowing share of subsidiary expenses additionally. In response, the Petitioner has clarified as under:

a) The Petitioner has been undertaking multifarious functions in the Damodar Valley area interms 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 the Petitioner are not restricted to generation and sale/supply of electricity. The functions of the Petitioner include promotion and operation of schemesfor 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, the Petitioner is engaged in number of activities which are not commercial in nature and where no significant revenue accrues to the Petitioner .

b) The Petitioner 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 healthand general well-being in the Damodar Valley. The main revenue earning activity performed by the Petitioner is generation and sale of power. The Petitioner 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 the Petitioner has been established. Inthe facts and circumstances mentioned herein above, the Petitioner occupies a special position.

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

d) Section 32 of the DVC Act 1948 allows the Petitioner 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 recoveryof 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 the Petitioner are statutory in nature and provided for recovery of related expenses.

102. The submissions have been considered. The expenses of subsidiary activities include multipurpose dams and other heads. In this regard, the 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 basisof 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.
xxxx

(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."

103. It is noticed that the Commission in its various tariff orders of the Petitioner for the period 2014-19 has observed that as per Statement of Objects and Reasons (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."*

104. 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.

105. Accordingly, the expenses of 'Share of Subsidiary activities' is allowed as claimed by the Petitioner during the period 2014-19 i.e., Rs. 196.09 lakh in 2014-15, Rs. 234.49 lakh in 2015-16, Rs.119.92 lakh in 2016-17, Rs.115.39 lakh in 2017-18 and Rs.81.50 lakh in 2018-19.

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

106. The Petitioner has claimed additional O&M expenses on account of GST amounting to Rs. 204.39 lakh (Rs. 61.28 lakh in 2017-18 and Rs. 143.10 lakh in 2018-19) (GST) during the period 2014-19. DVPCA has submitted that the Petitioner's claim is extraneous to the provisions of the 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. 1/SM/2018 has considered the implementation of GST as 'change in law'.

107. 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 para 49.6 of the SOR to the 2014 Tariff Regulations, which is extracted as follows:

> *"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..."*

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

(F) Impact of Pay Revision and P&G Contribution

109. 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.

110. It is noticed that the Petitioner, in its 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 forms part of the O&M expense norms specified under the 2009 Tariff Regulations. Aggrieved by this decision, the Petitioner has filed Appeal No.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 period 2014-19) 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 the period 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:

> *"25**……**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.

111. Based on the above, the Petitioner, in respect of its petitions for truing-up of generation tariff for the period 2014-19, has submitted its claim for P&G contribution and for impact of pay revision, as additional O&M expenses, which are examined below:

(i) Impact of Pay Revision

112. The Petitioner has claimed total amount of Rs. 802.25 lakh (Rs. 255.07 lakh in 2016-17, Rs. 321.04 lakh in 2017-18 and Rs. 226.13 lakh in 2018-19) towards impact on account of Pay revision during period 2014-19, due to recommendations of 7th Pay Commission. Further, the Petitioner has 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.

113. The Petitioner vide affidavit dated 19.10.2021, has submitted that the additional O&M expenses including P&G liability claimed as elements of Part B of the total annual 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, as per

Annexure-A, for the period 2014-19 is as follows:

(Rs. in lakh)

2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
9872.33	11315.38	13178.98	15044.52	12421.31

114. 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 Petitioner's 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.

115. DVPCA has submitted that the impact of pay revision claimed by the Petitioner shall not be allowed, as the same is to be considered 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. The Petitioner, in its rejoinder, has reiterated the submissions and 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

116. The Petitioner has claimed P&G contribution for the period 2014-19 as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
519.28	1304.25	879.27	1990.61	376.12

117. The Petitioner, in terms of the directions 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.*

118. The Petitioner has further submitted that as per recommendation of the 7th Pay Commission, the Cabinet on 12.9.2017 cleared the Payment of Gratuity (Amendment Bill 2017), where it has been stipulated to increase the upper ceiling of gratuity from the present value of Rs.10.00 lakh to Rs.20.00 lakh effective from 1.1.2016. Since the impact of enhancement of the 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 Petitioner has requested the Commission to consider the impact while considering the P&G contribution for the period 2014-19.

119. 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.

120. In response, the Petitioner in its rejoinder 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) 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.

121. 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 andGratuity 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 contributionsare 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 tothe 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 whichit 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 Pensionand 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 theTariff 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 21and 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 contributionalong with relevant details at the time of truing up.

(g) The principle for apportionment of the contribution towards Pension & Gratuity fundto 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 directedfor 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.

122. In consideration of the above submissions, the Petitioner has submitted that the objector's contentions may be rejected and the amount claimed towards contribution to Pension & Gratuity for the period 2014-19 may be allowed to be recovered in full, on sharing basis.

Analysis and Decision

123. The submissions have been considered. It is noticed that the Petitioner has prayed and claimed the impact of pay revision, as additional O&M expenses, on account of 7th Pay Commission. However, in respect of Pension & Gratuity contribution, it is noted that the Petitioner has primarily pleaded for not only the impact of pay revision on Pension & Gratuity but has claimed the actual Pension & Gratuity. It is observed that

the normative O&M expenses includes 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.

124. 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.

125. 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.

126. 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 and General Administration Charges-Power Segment	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**

127. 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**

128. 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 2014 -19 period 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, and in this petition an amount of Rs.1050.70 lakh has been allowed. Further amounts towards capital spares will be allowed on prudence check, in the remaining tariff petitions of the

Petitioner. 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.

Other Additional Claims

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

129. The Petitioner has claimed expenditure towards Interest & Contribution on Sinking Fund as follows:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
973.27	1021.86	719.68	0.00	0.00

130. The Petitioner has allocated sinking fund contribution and interest for 13th Series (10.2.2010) 8.95 % DVC Bonds for Rs. 640 Crore amongst the generating stations of DVC as follows:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Total share of Interest & Contribution on Sinking Fund for DVC Generating Stations	6554.84	7013.43	7504.45	0.00	0.00
BTPS	1751.89	1880.57	2159.04	0.00	0.00
CTPS	1084.50	1164.16	1242.56	0.00	0.00
DTPS	**973.27**	**1021.86**	**719.68**	**0.00**	**0.00**
MTPS (1-3)	1751.89	1880.57	2159.04	0.00	0.00
MTPS#4	583.96	626.86	719.68	0.00	0.00
MHS	175.74	188.65	216.59	0.00	0.00
PHS	222.46	238.80	274.16	0.00	0.00
THS	11.12	11.94	13.71	0.00	0.00

131. In justification for the same, 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.

132. DVPCA has 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 has 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, DVPCA 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.

133. 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,*

134. 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.*

135. DVPCA has objected to the claim of the Petitioner and has submitted that neither the provisions of 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 realised through bonds, as normative debt. Per contra, the Petitioner has, however pointed out that in Appeal No.17/2014 & batch (MAL v CERC & ors) 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 in 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 fund in 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"

136. Though DVPCA has filed review against the said judgment before APTEL, no stay of operation of the said judgment has been ordered. Regulation 53 (2) (iv) of the 2014 Tariff Regulations categorically provides that the funds created under Section 40 of the Damodar Valley Corporation 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 approved as under:

(Rs. in lakh)

2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
973.27	1021.86	719.68	0.00	0.00

(B) Share of Common Office Expenditure

137. 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 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**

138. 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
Road Culverts & Rly. Sidings	0.00	0.00	38.84	0.00	5.42
Power House Plant & Machinery	0.00	8.01	1.15	431.94	52.08
Machinery & Equipment-Workshop	77.91	128.60	124.77	198.34	29.09
Sub Station Equipment	0.00	0.00	0.00	0.00	97.85
Tower Poles & Fixtures	37.69	0.00	0.00	0.00	0.00
Cyber Security Assets	0.00	(-)0.88	(-)0.88	(-)0.01	0.00
EBA - Integrated Software	0.00	0.00	0.00	(-)0.28	0.00
Other Assets	0.00	0.00	0.00	0.00	0.76
Total	**119.82**	**174.04**	**163.88**	**1173.23**	**386.48**

139. 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 approved as 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

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

140. In line with the above, the Petitioner has claimed apportioned common office expenses to the generating station as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Common Office Expenditure apportioned to DTPS Unit III and IV	68.18	62.40	32.54	35.23	37.70

141. The matter has been considered. It is observed that the Petitioner's methodology for seeking the common office expenditure has been in line with the Commission's approved methodology in the previous orders. Accordingly, in order to work out the common office expenditure to be allowed as a part of truing-up of tariff, we have examined the additional capital expenditure claimed by the Petitioner, as under.

Land and Land Rights

142. The Petitioner has claimed an 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. Subsequently, in response to the ROP for the hearing dated 10.8.2022, 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

143. 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.

Power House Plant & Machinery

144. 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

145. 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

146. 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 and Fixtures

147. 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

148. 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 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

149. 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

150. The Petitioner has claimed following additional capital expenditure under the head ‘Other Assets’ 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**

151. 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 2014-19. 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

152. The Petitioner has claimed total 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, however, has not furnished any justification for the same. Accordingly, the additional capitalization and decapitalization under subject head is not allowed.

153. Accordingly, the item-wise additional capital expenditure allowed by the Commission towards various 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
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
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**

154. 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

	2014-15	2015-16	2016-17	2017-18	2018-19
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**

155. 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 2014 -19 tariff period, '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 return on equity is considered as 15.50% for the period 2014-19.

156. The annual fixed charges for Common offices have been worked out by considering the closing capital cost as on 31.3.2014 as 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
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

	Capital Cost as on 1.4.2014	2014-15	2015-16	2016-17	2017-18	2018-19
Total	**2212622.86**	**1160.85**	**1069.90**	**994.98**	**979.69**	**1010.37**

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
DTPS Unit III and IV	59.79	53.10	25.85	25.53	26.99

Unrecovered Depreciation up to 31.3.2014 on account of lower availability of the generating station

157. The Petitioner has claimed Rs. 849.01 lakh towards unrecovered depreciation up to 31.3.2014 on account of lower availability of the generating station. In justification of the same, the Petitioner has submitted that APTEL vide its judgment dated 13. 6.2007 on the issue of "admissibility of depreciation up to 90% of the value of assets" had allowed the unpaid portion of the depreciation (because of under recovery of fixed charges due to lower availability than NAPAF) after the plant has lived its designated useful life. It has submitted that the station COD of the generating station is September 1982 and therefore, the generating station, has completed its useful life by September 2007. As per the third proviso of Regulation 27(3) of the 2014 Tariff Regulations, the Petitioner has claimed the unrecovered depreciation up to 31.3.2014 on account of lower availability of DTPS Units 3 and 4. The Petitioner has submitted following computation for the unrecovered depreciation based on Actual PAF:

Year	NAPAF	Actual PAF	Admitted AFC	Depreciation included in admitted AFC	Unrecovered AFC due to lower PAF than NAPAF	Unrecovered Depreciation due to lower PAF than NAPAF
	(%)	(%)	(Rs. lakh)	(Rs. lakh)	(Rs. lakh)	(Rs. lakh)
2006-07	60.50	67.73	14727.68	288.95	0.00	0.00
2007-08	67.00	53.59	13274.92	0.00	2656.97	0.00
2008-09	74.00	62.70	17506.01	103.31	2673.22	15.78
2009-10	74.00	66.44	21029.32	1092.00	2148.40	111.56
2010-11	74.00	48.75	21402.07	1414.64	7302.73	482.70
2011-12	74.00	63.60	23031.93	1700.41	3236.92	238.98
2012-13	74.00	75.85	23641.62	1824.95	0.00	0.00
2013-14	74.00	87.41	22565.86	721.13	0.00	0.00

Year	NAPAF	Actual PAF	Admitted AFC	Depreciation included in admitted AFC	Unrecovered AFC due to lower PAF than NAPAF	Unrecovered Depreciation due to lower PAF than NAPAF
	(%)	(%)	(Rs. lakh)	(Rs. lakh)	(Rs. lakh)	(Rs. lakh)
GRAND TOTAL						849.01

158. The matter has been considered. It is observed that APTEL in its judgment dated 13.6.2007 in Appeal Nos. 139 of 2006 and batch (NTPC Ltd. Vs CERC and ors) has held as follows:

> *"In a regulatory cost-plus regime all costs have to be reimbursed. Depreciation amount up to 90% being a cost has to be allowed over the life of the plant. If due to underperformance in a particular year the appellant is not able to recover full depreciation allowed in that year and if this denial is forever, it will tantamount to a penalty. In a contract between the appellant and the beneficiaries, only levy of liquidated damages can be permitted. It will, therefore, be enough deterrent for the appellant if the depreciation is not allowed during the year of underperformance. However, the same cannot be denied forever and, therefore, it will be only fair to allow the unpaid portion of the depreciation after the plant has lived its designated useful life. In this view of the matter the CERC needs to examine this aspect as per the aforesaid observations."*

159. The APTEL judgment refers to consider allowing the recovery of unrecovered depreciation over the life of the plant, after the plant has lived its designated useful life. The matter has been examined. It is observed that the 2004 Tariff Regulations and the 2009 Tariff Regulations were silent about the recovery of unrecovered depreciation due to underperformance of the generating station in terms of plant availability factor (PAF) in comparison to NAPAF. As such, in absence of such explicit provision in the 2004 Tariff Regulations and the 2009 Tariff Regulations, APTEL in its above judgment observed that –

> "*It will, therefore, be enough deterrent for the appellant if the depreciation is not allowed during the year of underperformance. However, the same cannot be denied forever and, therefore, it will be only fair to allow the unpaid portion of the depreciation after the plant has lived its designated useful life"*

160. Considering the fact that the designated life of the generating station was over in 2007, and the period for which unrecovered depreciation has been claimed is prior to

31.3.2014 i.e. for the period during which the erstwhile Tariff Regulations were silent about such under recovery, the Commission, in consideration of APTEL judgment as quoted above, allows the recovery of unrecovered depreciation of Rs. 849.01 lakh. The Petitioner may recover the same from beneficiaries in six equal monthly instalments (without interest) after reconciliation of the PAF, billed amount and unrecovered depreciation during the period of claim as indicated by the Petitioner.

161. Accordingly, the annual fixed charges approved for the generating station for the period 2014-19 is summarized as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1965.70	0.00	1428.98	1444.29	629.96
Interest on Loan	46.82	130.84	113.53	22.80	0.00
Return on Equity	1866.47	1601.12	1250.08	1258.99	1262.27
Interest on Working Capital	3315.99	3735.22	1976.11	1993.95	2001.60
O&M Expenses	10042.20	10352.64	5670.00	6027.00	6407.10
Water Charges	0.00	8371.36	122.42	148.12	155.77
Special Allowance	0.00	0.00	0.00	0.00	0.00
Capital Spares	479.50	275.04	131.40	60.30	104.46
Total AFC (A)	**17716.67**	**24466.21**	**10692.52**	**10955.45**	**10561.15**
Additional O&M Expense					
Impact of Pay Revision	0.00	0.00	0.00	0.00	0.00
Impact of GST	0.00	0.00	0.00	0.00	0.00
Interest & Contribution on Sinking Fund (As per section 40, Part IV of DVC Act)	973.27	1021.86	719.68	0.00	0.00
Share of Pension & Gratuity Contribution	0.00	0.00	0.00	0.00	0.00
Share of Common Office Expenses	59.79	53.10	25.85	25.53	26.99
Additional O&M on account of Share of subsidiary activities	196.09	234.49	119.92	115.39	81.50
Sub-Total (B)	**1229.15**	**1309.45**	**865.45**	**140.92**	**108.49**
Total Annual Fixed Charges (C) = (A) + (B)	**18945.83**	**25775.66**	**11557.97**	**11096.37**	**10669.64**
Annual fixed charges allowed vide order dated 20.7.2017 in Petition No. 348/GT/2014	16963.23	18141.02	18430.62	18252.48	18749.82

Note: (1) All figures are on an 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.

162. The Ash disposal expenses to be reimbursed in six equal monthly instalments (without interest), in terms of paragraph 93 above is Rs. 999.20 lakh. Further,

unrecovered depreciation of Rs. 849.01 lakh shall also be recoverable from beneficiaries in six equal monthly instalments (without interest) subject to reconciliation as mentioned at para 159 above.

163. 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

164. The Petitioner, in this petition, has also sought 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)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Opening Capital Cost (A)	20498.26	21381.24	21383.74	21402.34	21419.81
Add: Additional Capital Expenditure (B)	1011.35	2.50	20.00	20.00	6.00
Less: De-Capitalisation during the year / period (C)	128.37	0.00	1.40	2.53	0.73
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)	**21381.24**	**21383.74**	**21402.34**	**21419.81**	**21425.07**
Average Capital Cost (H) = (A+G)/2	**20939.75**	**21382.49**	**21393.04**	**21411.07**	**21422.44**

Annual Fixed Charges claimed

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Depreciation	442.83	514.00	9.49	17.49	12.51
Interest on loan	12.81	12.53	0.22	0.28	0.09
Return on Equity	1979.48	2005.70	2006.15	2007.06	2007.67
Interest on Working Capital	1922.39	1942.25	1957.28	1981.51	2010.30
O&M Expenses	6921.60	7165.20	7415.10	7677.60	7946.40

	2019-20	2020-21	2021-22	2022-23	2023-24
Water Charges	583.90	640.54	704.59	775.05	854.89
Security Expenses	2740.28	2860.86	2986.75	3118.18	3255.39
Special Allowance	1995.00	1995.00	1995.00	1995.00	1995.00
Sub-Total (A)	**16598.29**	**17136.08**	**17074.57**	**17572.17**	**18082.25**
DVC's share of savings in interest cost due to loan restructuring	0.59	0.58	0.01	0.01	0.00
Share of P&G	782.55	819.34	857.85	898.18	940.40
Share of Common Office Expenditure	41.30	44.32	44.88	38.60	35.18
Expenses for Ash Evacuation, Mega Insurance and Subsidiary Activities	620.43	643.30	666.85	691.55	716.96
Sub-Total (B)	**1444.87**	**1507.53**	**1569.59**	**1628.34**	**1692.54**
Total Annual Fixed Charges (A+B)	**18043.16**	**18643.62**	**18644.16**	**19200.51**	**19774.79**

Capital Cost

165. 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.*
> *….*
> *(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.*
> *….*
> *(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.

."

166. The opening capital cost claimed by the Petitioner, as on 1.4.2019 is Rs. 20498.26 lakh. However, the closing capital cost of Rs.19713.82 lakh as on 31.3.2019, as approved in this order, for the period 2014-19, has been 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 above Regulations.

Additional Capital Expenditure

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

168. The year-wise projected additional capital expenditure claimed by the Petitioner in respect of the generating station for the period 2019-24 are as follows:

(Rs. in lakh)

Head of Work / Equipment	Regulations	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Electrical Package	25 (2) (a) (c) (d), 76 & 77	35.00	0.00	10.00	0.00	0.00	**45.00**
Control & Instrumentation Package	25 (2) (a), 76 & 77	10.00	2.50	5.00	20.00	0.00	**37.50**
Turbine & Auxiliaries Package	25 (2) (a)	614.60	0.00	0.00	0.00	0.00	**614.60**
Boiler & Auxiliary Package		247.75	0.00	0.00	0.00	0.00	**247.75**
Coal Handling Plant:	25 (2) (a), 76 & 77	15.00	0.00	5.00	0.00	6.00	**26.00**
Security & Fire package (CISF)	25 (2) (a)	89.00	0.00	0.00	0.00	0.00	**89.00**

Head of Work / Equipment	Regulations	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Total Additional Capital Expenditure		**1011.35**	**2.50**	**20.00**	**20.00**	**6.00**	**1059.85**

169. DVPCA has submitted that the Petitioner has not provided any proper justification or documentary evidence for claiming the additional capital expenditure held after cut-off date as per the regulatory provisions of Regulation 25(1) & Regulation 25(2) of the 2019 Tariff Regulations. It has also been submitted that the Petitioner has not furnished detailed reasons for additional capitalization claimed under Regulations 76 & 77 of the 2019 Tariff Regulations and has put the onus on the Commission to decide and undertake analysis of claims. DVPCA has further submitted that It is well settled in law that the 'Power to Relax' and 'Power to Remove Difficulty' has to be exercised in rare cases and not ordinarily and since the Petitioner has not presented/ cited any extra-ordinary circumstances or events which has led to incurring such additional capitalisation and accordingly, the items claimed under additional capitalisation in terms of Regulations 76 and Regulation 77 of 2019 Tariff Regulations may be rejected. According to DVPCA, the Petitioner may be allowed an additional capital expenditure of only Rs. 15.00 lakh in 2019-20 and 'Nil' for the period 2020-24.

170. The Petitioner, in its rejoinder, has submitted that all the additional capital expenditures proposed for the generating station are critical to ensure reliable, safe and efficient operation of the station and are therefore unavoidable. The Petitioner has submitted that most of the additional capital expenditures claimed for Unit-IV of the generating station for the period 2019-24 is based on the following grounds:

(a) Replacement of age old or obsolete equipment or modification of existing equipment in order to ensure reliable and efficient operation – some of these replacements have been projected based on recommendations from the OEM or technical audit;

(b) Procurement of tools and equipment to facilitate monitoring, testing and maintenance works with the aim to ensure reliable operation;

(c) Procurement of spares to ensure reliable and efficient operation.

171. Accordingly, the Petitioner has claimed the additional capital expenditure for the generating station under sub-clauses (a), (c), (d) and (e) of Regulation 25(2) of the 2019 Tariff Regulations, as per detailed justification and supporting documents furnished in terms of the said Regulations. The Petitioner has prayed to allow the additional capital expenditure under Regulations 76 and 77 of the 2019 Tariff Regulations, wherever the same is not covered under the sub-clauses of Regulation 25(2) of the 2019 Tariff Regulations.

172. The matter has been considered. Based on the submissions 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 follows:

(Rs. in lakh)

Asset/Work	Amount Claimed	Regulation	Petitioner Submission	Remarks for admissibility	Amount Allowed
Electrical Package					
Battery charger for battery bank no. 2	15.00	25 (2) (a), (d)	Existing equipment has outlived its service life after almost 43 years of operation. Spares and OEM are not available. Already 02 nos. Battery Banks with one Battery Charger replaced during 08-09 regime. One No. Battery Charger to be replaced during this Tariff regime. Complete replacement envisaged to ensure sustainability & reliability. This item has already been allowed by the commission during Tariff period 2014-19. Due to several factors job is still pending. Commission may please allow this item under Tariff regime 2019-24.	Since the item is in the nature of O&M expenses, the claim is **not allowed.**	0.00

Asset/Work	Amount Claimed	Regulation	Petitioner Submission	Remarks for admissibility	Amount Allowed
Replacement of one no. battery charger of unit#4, DTPS	15.00	25 (2) (a)	Batteries & their charger are the heart of any Electrical System. It's reliability, stability & healthiness ultimately ensure the overall safe operation of the electrical system. Performance of one of the chargers in service is very poor and giving frequent troubles. Replacement of the same is urgently required.		0.00
Upgradation to energy efficient illumination system	5.00	25 (2) (c)	It has been decided to replace 1300 nos. of FTL / HPSV / HPMV of different wattage ratings with LED Luminaires thereby reducing approximately 0.81% APC per year. The average life of LED luminaires is approx. 11 yrs.		0.00
Energy meter (Electronic)	10.00	76 & 77	New one is required for recording energy consumption of various drives for PAT cycle-II.	No document or justification has been furnished by the Petitioner, in support of the prayer to invoke the power under Regulations 76 of the 2019 Tariff Regulations. Also, the item is in the nature of O&M expenses. In view of this, the claim is **not allowed.**	0.00
Control & Instrumentation Package					
Transmitter/ indicator/ Recorder/ Controller / CV positioner/ actuators / Pneumatic converter/ annunciation system/PLC etc.	10.00	25 (2) (a)	There are around 80 nos. transmitters, 60 nos. controllers, 80 nos. indicators, 115 nos. of actuators, 25 nos. of CV positioners etc. which are in service since inception of the unit. It has outlived their usual life and stands obsolete. Around 60% of such instruments already replaced under 2014-19. Proposed in 2019-24 for replacement of balance 40%.	Since the item is in the nature of O&M expenses, the claim is **not allowed.**	0.00
Installation of Precision testing	2.50	76 & 77	There is no C&I lab for calibration of various instruments as on date which	No document or justification has been furnished	0.00

Asset/Work	Amount Claimed	Regulation	Petitioner Submission	Remarks for admissibility	Amount Allowed
Instruments & calibrators for C&I lab			is required to support plant operation and maintenance	by the Petitioner, in support of the prayer to invoke the power under Regulations 76 of the 2019 Tariff Regulations. Also, the item is in the nature of O&M expenses. In view of this, the claim is **not allowed.**	
Chartless recorders for critical parameters.	5.00	25 (2) (a)	In Unit #4, around 50% of the old & obsolete chart recorders have been replaced with the Chartless recorders in phase wise manner under Add-Cap 2014-19. Replacement of balance 50% old chart recorders with the latest chartless recorders with better display quality, trending, data storage, retrieving facility & reliability of measurement proposed in 2019-24.	Since the item is in the nature of O&M expenses, the claim is **not allowed.**	0.00
Modernization of Turbine, BFP, ID, FD & PA Fan Vibration Monitoring system & Installation of New Vibration Monitoring system in CT Fans.	20.00	25 (2) (a)	Measurement of vibration is vital for safe and reliable operation of any machinery. The vibration measurement system of ID, FD, PA Fan & BFP are in use since inception of the unit and outlived its usual life. Proposed for replacement of the same with latest online vibration measurement & machinery protection system which will enable the user to operate the equipments with safety & reliability. It will also enable predictive / condition-based maintenance of equipments. Regarding CT fans, it is recommended by the enquiry committee report constituted to investigate failure of one CT Fan, to install online vibration monitoring system.	Considering the fact that the unit is kept operational after completion of useful life, the claim of the Petitioner is **allowed** under Regulation 25(2)(d) of the 2019 Tariff Regulations, along with decapitalization of old asset at gross value.	20.00

Asset/Work	Amount Claimed	Regulation	Petitioner Submission	Remarks for admissibility	Amount Allowed
Installation of Precision testing Instruments & calibrators for C&I lab	2.50	76 & 77	There is no C&I lab for calibration of various instruments as on date which is required to support plant operation and maintenance	No document or justification has been furnished by the Petitioner, in support of the prayer to invoke the power under Regulations 76 of the 2019 Tariff Regulations. Also, the item is in the nature of O&M expenses. In view of this, the claim is **not allowed.**	0.00
Turbine & Auxiliaries Package					
Replacement of 27th and 31st stage diaphragms	459.00	25 (2) (a)	The items were included in the tariff proposal 2009-14 based on RLA Study Report of BHEL carried out in 2007-08. The items were reinspected during AOH of the unit 2012. An MOM was made between DVC and BHEL detailing the deteriorating status of the diaphragms and the decision in procuring the diaphragms with the fitment programmed in next COH of the unit, scheduled in Oct-Nov 2015. Accordingly, procurement action was taken in 2013 and order was placed on BHEL for Rs. 4.00 crore exclusive of taxes and duties. Materials have been delivered and 100% payment has already been made in 2016-17. The materials use in the system during Capital Overhauling'2019.	Considering the fact that the unit is kept operational after completion of useful life, the claim of the Petitioner is **allowed** under Regulation 25(2)(d) of the 2019 Tariff Regulations, along with decapitalization of old asset at gross value.	459.00
Peak Seals (Packing Strip/Sealing Strip for HPT & IPT)	14.22	25 (2) (a)	The item was included in the tariff proposal 2009-14 based on RLA Study Report of BHEL (reference page of RLA Study Report is enclosed) carried out in 2007-08. Accordingly, procurement action was taken in 2011 and order was placed on BHEL in 2012 for Rs.12.4	These items were procured prior to 2019-20 and have been consumed during the capital overhauling in 2019. Therefore,	0.00

Asset/Work	Amount Claimed	Regulation	Petitioner Submission	Remarks for admissibility	Amount Allowed
			lacs exclusive of taxes and duties. Materials have been delivered and 100% payment has already been made in 2013-14. The materials use in the system during Capital Overhauling'2019.	the same may be claimed under additional O&M expenditure as "capital spare consumed". At the time of truing-up of tariff. In view of this, the claim is **not allowed**.	
Radial Thrust Bearing	51.38	25 (2) (a)	TG bearing no.2 is a radial thrust cum journal bearing & very critical one for LMZ machine. It is being observed that its babbit metal temp is maintaining slightly on the higher side, especially at part load/CVSM throttle condition BHEL has also recommended to replace bearing no.2 assembly along with liner & correction of catenary of the rotor system during overhauling to resolve the issue (E-mail attached). We replaced TG Brg#2 during last COH in the year 2010 & problem was resolved, but again it has resurfaced. Accordingly, procurement action was taken in 2016 and order was placed on BHEL for Rs. 4353900.00 exclusive of taxes and duties. Materials have been delivered and 100% payment has already been made in 2017-18. The materials put to use in the system during Capital Overhauling'2019.		0.00
HP Turbine 1st stage blade packets	90.00	25 (2) (a)	The item was included in the tariff proposal 2009-14 based on RLA Study Report of BHEL (reference page of RLA Study Report is enclosed) carried out in 2007-08. Accordingly, procurement action was taken in 2012 and order was placed on BHEL for Rs.79.99 lacs exclusive of taxes and duties. Materials have been delivered and 100% payment has already been made. The materials use in the system during Capital		0.00

Asset/Work	Amount Claimed	Regulation	Petitioner Submission	Remarks for admissibility	Amount Allowed
			Overhauling'2019.		
Boiler & Auxiliary Package					
ID Fan Shaft	236.48	25 (2) (a)	ID Fan 4A was in very miserable condition. Its impeller was badly damaged and frequent problem of unbalancing occurred. As per recommendation of OEM it was decided to replace earlier procured ID Fan with Shaft during COH in May-June'19. Commission may please allow this item under Tariff regime 2019-24.	Considering the fact that the unit is kept operational after completion of useful life, the claim of the Petitioner is **allowed** under Regulation 25(2)(d) of the 2019 Tariff Regulations, along with decapitalization of old asset at gross value.	236.48
Deflector Plate and Vane Wheel Assembly for Bowl Mill	11.27	25 (2) (a)	One set of Deflector Plate and Vane Wheel Assembly is required per Coal Mill, i.e., total requirement is six sets for Coal Mills. In Coal Mill-4B, this item was in service since 20.10.2014 and got damaged. Mill was in service underperformance and poor reliability on account of this spare. Therefore, one set of this item has been replaced during Capital Overhauling of U-4 in June-2019. Commission may please allow this item under Tariff regime 2019-24.	Since the item is in the nature of O&M expenses, the claim is **not allowed.**	0.00
Coal Handling Plant:					
Vibrating Screen	15.00	25 (2) (a)	Previously there were two nos. of Electro Magnetic Vibrating Feeder (R/H#3&4) in which coal flow as well as coal crushing was very poor. At present, two nos. of Mechanical Vibrating Feeder are fitted to R/H#3&4 at Conveyor belt #22, CHP by replacing the old Electro Magnetic Vibrating feeder at the time of Capital Overhauling (April-May-2019) of the U#4, CHP, DTPS. Due	Since the item is in the nature of O&M expenses, the claim is **not allowed.**	0.00

Asset/Work	Amount Claimed	Regulation	Petitioner Submission	Remarks for admissibility	Amount Allowed
			to installation of two nos. of new Mechanical Vibrating Feeder, coal flow increased satisfactorily. Commission may please allow this item under tariff period 2019-24.		
Sump Pump without motor pump	11.00	76 & 77	There is total eleven nos. of such pumps which are installed in different tunnel [viz. Conv.#21(1);22(2);24(2);28(1) & Reject Conv. (1) of U#4 and Conv.#10/11(2); 74(1), WT-3 pit (1)] of CHP for dewatering purposes. Now, most of these pumps are more than three years old and cannot perform their duties properly during heavy monsoon. So, to avoid monsoon difficulties, replacement of these pumps is essential one by one by new one.	No document or justification has been furnished by the Petitioner, in support of the prayer to invoke the power under Regulations 76 of the 2019 Tariff Regulations. In view of this, the claim is **not allowed.**	0.00
Security & Fire package (CISF)					
Procurement of Fire Tender	80.00	25 (2) (a)	The existing fire tenders (4 nos.) have become age old. As advised by DTPS, CISF (Fire Wing) replacement of 1 no. out of 4 nos. existing fire tenders is essential for providing better fire protection services at DTPS.	Considering the fact that the unit is kept operational after completion of useful life, the claim of the Petitioner is **allowed** under Regulation 25(2)(d) of the 2019 Tariff Regulations, along with decapitalization of old asset at gross value.	80.00
Procurement of different type and capacity portable fire extinguishers	9.00	25 (2) (a)	Due to ageing many fire extinguishers have become unserviceable. Phase wise replacement is essential.	Since the item is in the nature of O&M expenses, the claim is **not allowed.**	0.00
Grand Total	**1059.85**				**795,48**

173. Accordingly, the additional capital expenditure approved for the period 2019-24

is as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24	2019-24
Electrical Package	0.00	0.00	0.00	0.00	0.00	0.00
Control & Instrumentation Package	0.00	0.00	0.00	20.00	0.00	20.00
Turbine & Auxiliaries Package	459.00	0.00	0.00	0.00	0.00	459.00
Boiler & Auxiliary Package	236.48	0.00	0.00	0.00	0.00	236.48
Coal Handling Plant	0.00	0.00	0.00	0.00	0.00	0.00
Security & Fire package (CISF)	80.00	0.00	0.00	0.00	0.00	80.00
Total Additional Capital expenditure allowed	**775.48**	**0.00**	**0.00**	**20.00**	**0.00**	**795.48**

De-capitalization

174. The Petitioner has submitted the asset wise details of de-capitalization of Rs. 133.04 lakh (Rs. 128.37 lakh in 2019-20, Rs. 1.40 lakh in 2021-22; Rs. 2.53 in 2022-23; and Rs. 0.73 lakh in 2023-24) as under:

(Rs. in lakh)

Sr. No.	Name of the Asset	Original value of the Asset capitalized
	2019-20	
1	Battery charger for battery bank no. 2	2.71
2	Replacement of one no. battery charger of unit#4, DTPS	2.71
3	Replacement of old luminaires by installing new energy efficient luminaires such as LEDs, T5, CFLs, solar power operated luminaries, Timers, Occupancy Switches.	1.17
4	Transmitter/indicator/Recorder/Controller /CV positioner/ actuators / Pneumatic converter/ annunciation system/PLC etc.	1.60
5	Replacement of 27th and 31st stage diaphragms by new one based on RLA Study Report carried out by BHEL in 2007-08 and thorough re-inspection of the diaphragms during AOH of the Unit in 2012	55.14
6	PEAK SEALS (PACKING STRIP/SEALING STRIP FOR HPT & IPT) FOR DTPS UNIT NO. 4 (210 MW, BHEL MAKELMW SET), DVC	1.71
7	RADIAL THRUST BEARING NO.2 COMPLETE ASSEMBLY ALONG WITH LINER [DIA 330 MM] OF UNIT NO.4 [210 MW LMZ BHEL MAKE], DTPS, DVC	6.17
8	HP Turbine 1st stage blade packets complete set for Unit No.4, DTPS, DVC	10.81
9	ID Fan Shaft	28.41
10	Deflector Plate and Vane Wheel Assembly for Bowl Mill	1.59
11	Vibrating Screen	2.12
12	Procurement of Fire Tender - 1 No.	12.79

Sr. No.	Name of the Asset	Original value of the Asset capitalized
13	Procurement of different type and capacity portable fire extinguishers	1.44
Total - 2019-20		**128.37**
	2020-21	
Total - 2020-21		**0.00**
	2021-22	
1	Chartless recorders for critical parameters.	0.75
2	Sump Pump without motor pump	0.66
Total - 2021-22		**1.40**
	2022-23	
1	Modernization of Turbine, BFP, ID, FD & PA Fan Vibration Monitoring system & Installation of New Vibration Monitoring system in CT Fans.	2.53
Total - 2022-23		**2.53**
2023-24		
1	Sump Pump without motor pump	0.73
Total - 2023-24		**0.73**

175. We have considered the decapitalization of assets claimed by the Petitioner. The assets against which the additional capital expenditure has not been allowed or which have been allowed to be claimed during truing up as additional O&M expenses, under ‘capital spares consumed’ have been excluded from decapitalization. Accordingly, the decapitalization allowed is as under:

(Rs. in lakh)

Sr. No.	Name of the Asset	Gross value of asset de capitalized
2019-20		
1	Replacement of 27th and 31st stage diaphragms by new one based on RLA Study Report carried out by BHEL in 2007-08 and thorough re-inspection of the diaphragms during AOH of the Unit in 2012	55.14
2	ID Fan Shaft	28.41
3	Procurement of Fire Tender - 1 No.	12.79
Total - 2019-20		**96.35**
2022-23		
1	Modernization of Turbine, BFP, ID, FD & PA Fan Vibration Monitoring system & Installation of New Vibration Monitoring system in CT Fans.	2.53
	Total - 2022-23	**2.53**

Discharge of Liabilities

176. The Petitioner has submitted that the projected additional capital expenditure

submitted in 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, no discharge of liabilities has been considered for the period 2019-24. However, the Petitioner is directed to submit the item-wise and year wise reconciliation statement, showing details of such liabilities as per balance sheet for the period 2019-24, duly certified by auditor and also furnish the break-up of discharges included in the liabilities discharged within the original scope of work or other than within the original scope of work of the project, at the time of truing-up of tariff.

Exclusions

177. The Petitioner has not claimed exclusions for the period 2019-24.

Capital cost allowed for the period 2019-24

178. The Petitioner has submitted that the information related to 'Discharge of Liabilities' shall be submitted on actual basis, at the time of truing-up. Accordingly, ignoring discharge/undischarged liabilities the capital cost approved for the period 2019-24 is shown as under:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Opening Capital Cost (A)	19713.82	20392.96	20392.96	20392.96	20410.42
Add: Addition during the year / period (Net of Exclusion not allowed) (B)	775.48	0.00	0.00	20.00	0.00
Less: De-Capitalisation during the year /period (C)	96.35	0.00	0.00	2.53	0.00
Closing Gross Block (D) = (A+B-C)	20392.96	20392.96	20392.96	20410.42	20410.42
Average Gross Block (E) = (A+D)/2	**20053.39**	**20392.96**	**20392.96**	**20401.69**	**20410.42**

179. The capital cost approved as above, is subject to truing-up, based on the information to be furnished by the Petitioner with regard to the actual additional capital incurred, the undischarged and discharged liabilities, during the period 2019-24. Accordingly, the Petitioner is directed to provide relevant information with regard to

actual additional capital incurred, undischarged and discharged liabilities during 2019-24 at the time of truing-up of tariff.

Debt Equity Ratio

180. Regulations 18 and 72 of the 2019 Tariff Regulations provides as follows:

> ***"****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."

….

***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:

…..

***(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."*

181. The gross loan and equity amounting to Rs.11564.69 lakh and Rs.8149.13 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 terms of Regulation 18 and Regulation 72 of the 2019 Tariff Regulations, the debt-equity ratio of 70:30, has been applied on year-wise admitted additional capital expenditure and the decapitalisation in the ratio of 50:50, for arriving at the additions to loan and equity during each year of the period 2019-24. Accordingly, the debt: equity is worked out as under:

(Rs. in lakh)

	Capital Cost as on 1.4.2019	**%**	**Additional Capital Expenditure for period 2019-24**	**%**	**De-capitalization for period 2019-24**	**%**	**Capital Cost as on 31.3.2024**	**%**
Debt	11564.69	58.66%	556.84	70.00%	49.44	50.00%	12072.09	59.15%
Equity	8149.13	41.34%	238.64	30.00%	49.44	50.00%	8338.33	40.85%
Total	**19713.82**	**100.00%**	**795.48**	**100.00%**	**98.88**	**100.00%**	**20410.42**	**100.00%**

Return on Equity

182. Regulations 30 & Regulation 31 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.

*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."

183. DVPCA has submitted that though the Petitioner has considered the effective tax rate of 21.5488% for the computation of ROE for the period 2019-24, the same is premature and consequently, the ROE shall be allowed at a rate of 15.50% only subject to true-up, based on actual tax paid. Regarding the Petitioner's claim with regard to the ROE at weighted average rate of interest on actual loan portfolio, as per Form-1(I) of the petition, DVPCA has submitted that the Petitioner has neither submitted any detail of the assets nor any justification for claiming the additional capitalisation, after the cut-of date and beyond the original scope of work. The Petitioner, in its rejoinder, has prayed to compute the ROE, 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, during any year of the period 2019-24, future. The Petitioner has submitted that the details of assets and detailed justification have been furnished in Form-9, for the period 2019-24.

184. The matter been considered. The Petitioner has not been paying any income tax till 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:

Return on Equity at Normal Rate

(Rs. in lakh)

		2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Equity - Opening	A	8149.13	8333.60	8333.60	8333.60	8338.33
Less: Adjustment to equity in terms of first proviso to Regulation 18(3) of 2019 Tariff Regulations	B	0.00	0.00	0.00	0.00	0.00
Normative Equity - Opening	C=(A-B)	8149.13	8333.60	8333.60	8333.60	8338.33
Addition to Equity due to additional capital expenditure	D	232.64	0.00	0.00	6.00	0.00
Deletion of Equity on account of De-Capitalization of Assets	E	48.17	0.00	0.00	1.27	0.00
Normative Equity - Closing	F=(C+D-E)	8333.60	8333.60	8333.60	8338.33	8338.33
Average Normative Equity	G=Average (C, F)	8241.36	8333.60	8333.60	8335.97	8338.33
Return on Equity (Base Rate) (%)	H	15.500%	15.500%	15.500%	15.500%	15.500%
Tax Rate for the year (%)	I	0.000%	0.000%	0.000%	0.000%	0.000%
Rate of Return on Equity (Pre-Tax) (%)	J=H/(1-I)	15.500%	15.500%	15.500%	15.500%	15.500%
Return on Equity (Pre-Tax) annualized	K=(GxJ)	**1277.41**	**1291.71**	**1291.71**	**1292.07**	**1292.44**

Total Return on Equity allowed

	2019-20	2020-21	2021-22	2022-23	2023-24
Return on Equity at Normal Rate (A)	1277.41	1291.71	1291.71	1292.07	1292.44
Return on Equity at WAROI (B)	0.00	0.00	0.00	0.00	0.00
Total Return on Equity allowed (A+B)	**1277.41**	**1291.71**	**1291.71**	**1292.07**	**1292.44**

Interest on Loan

185. Regulation 32 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."

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

a. Gross normative loan amounting to Rs.11564.69 lakh on 31.3.2019 as considered in this order, for the period 2014-19, has been considered as on 1.4.2019;

b. Cumulative repayment of Rs.11564.69 lakh as on 31.3.2019 as considered 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. 0.00 lakh;

d. Weighted average rate of interest on loan, as allowed in the year 2018-19 has been considered;

e. The repayments for the respective years of the period 2019-24, has been considered based on 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.

187. 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	11564.69	12059.35	12059.35	12059.35	12072.09
Cumulative repayment of loan upto previous year	B	11564.69	11850.53	12059.35	12059.35	12065.95

		2019-20	2020-21	2021-22	2022-23	2023-24
Net Loan Opening	C=(A-B)	0.00	208.82	0.00	0.00	6.14
Addition due to additional capital expenditure	D	542.84	0.00	0.00	14.00	0.00
Less: De-Cap	E	48.17	0.00	0.00	1.27	0.00
Repayment of loan during the year	F	334.01	208.82	0.00	7.86	6.14
Repayment adjustment on account of decapitalisation	G	48.17	0.00	0.00	1.27	0.00
Net repayment of the loan during the year	H=(F-G)	285.84	208.82	0.00	6.59	6.14
Net Loan Closing	I=(C+D-E-H)	208.82	0.00	0.00	6.14	0.00
Average Loan	J=Average (C, I)	104.41	104.41	0.00	3.07	3.07
Weighted Average Rate of Interest of loan	K	6.912%	6.912%	6.912%	6.912%	6.912%
Interest on Loan	**L=(JxK)**	**7.22**	**7.22**	**0.00**	**0.21**	**0.21**

188. Further, the Petitioner has claimed share of savings due to restructuring of loan from REC for the period 2019-24, on projection basis, as per Regulation 61(1) of the 2019 Tariff Regulations. In this regard, it is observed that as per the Petitioner's submission vide affidavit dated 13.7.2022, REC loan has not been considered as actual loan portfolio, for the purpose of computation of WAROI, as the loan pertains to T&D system. Therefore, the Petitioner's claim of its share of savings due to loan restructuring does not deserve any merit for consideration. Further, in this regard, it is clarified that the sharing of saving in interest due to re-financing or restructuring of loan, if any, has to be undertaken between the parties, on actual basis, in accordance with Regulation 61(1) of the 2019 Tariff Regulations. However, in case of disputes, any of the parties may approach the Commission, in terms of Regulation 61(2) of the 2019 Tariff Regulations.

Depreciation

189. 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:

xxxx

(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."

190. Depreciation has been worked out considering the cumulative depreciation of Rs.17643.38 lakh as on 31.3.2019, as considered for the period 2014-19, in this order. Accordingly, in terms of Regulation 33 and Regulation 72(2)(iii) of the 2019 Tariff Regulations, depreciation has been worked out and allowed as follows:

(Rs. in lakh)

		2019-20	2020-21	2021-22	2022-23	2023-24
Average Capital Cost	A	20053.39	20392.96	20392.96	20401.69	20410.42
Value of freehold land	B	78.51	78.51	78.51	78.51	78.51
Aggregated Depreciable Value	C= [(A-B) x90%]	17977.39	18283.01	18283.01	18290.87	18298.73
Remaining Aggregate Depreciable value at the beginning of the year	D=[(C)-(Cumulative Depreciation of Previous year)]	334.01	392.32	0.00	7.86	10.14
Balance useful life at the beginning of the year	E	0.00	0.00	0.00	0.00	0.00
Weighted Average Rate of Depreciation (WAROD)	F	7.3607%	7.3607%	7.3607%	7.3607%	7.3607%
Depreciation (annualized)	**G = Min(A*F,D)**	**334.01**	**392.32**	**0.00**	**7.86**	**10.14**
Cumulative depreciation (at the end of the year)	H= [(Cumulative Depreciation of Previous year) +(G)]	17977.39	18283.01	18283.01	18290.87	18298.73
Less: Depreciation adjustment on account of de-capitalisation	I	86.71	0.00	0.00	2.28	0.00

		2019-20	2020-21	2021-22	2022-23	2023-24
Cumulative depreciation at the end of the year	J=(H-I)	17890.68	18283.01	18283.01	18288.59	18298.73

Operation & Maintenance Expenses

191. Regulation 35(1)(1) of the 2019 Tariff Regulations provides for the following norms for the O&M expenses in respect of generating station:

(Rs in lakh/MW)

	2019-20	2020-21	2021-22	2022-23	2023-24
210 MW	32.96	34.12	35.31	36.56	37.84

192. The normative O&M expenses claimed by the Petitioner in terms of the above regulation, is as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
6921.60	7165.20	7415.10	7677.60	7946.40

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

Water Charges, Security Charges and Capital Spares

194. The 2019 Tariff Regulations provide as under with respect to water charges, security expenses and capital spares:

> ***"35.*** *Operation and Maintenance Expenses:*
>
> *(1) Thermal Generating Station**:** Normative Operation and Maintenance expenses of thermal generating stations shall be as follows:*
> *…..*
> *(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

195. 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 water charges at Rs. 10.64 per KL and claimed as follows:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
583.90	640.54	704.59	775.05	854.89

196. Objector DVPCA has submitted that the actual water charge rate was Rs. 6.15/KL and Rs. 1.15/KL for industrial use and domestic use respectively for each year of the control period 2014-19. Accordingly, the Objector has worked out the weighted average water charge rate Rs. 6.03/KL. As against this, the Petitioner has considered a 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. However, the Petitioner has not furnished the relevant Office Memorandum (OM) dated 23.7.2019. The Objector has also submitted that the increase sought is more than 57% which is certainly unreasonable and arbitrary and requested the Commission to conduct a 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. It has further stated 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. In response, the Petitioner in its rejoinder has submitted 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 the Petitioner, vide OM dated 23.7.2019.

197. 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 @ 74% load factor	MU	1365.03	1361.30	1361.30	1361.30	1365.03
Normative Specific Water Consumption as per MoEF&CC stipulations	Cubic Meter/MWh	3.50	3.50	3.50	3.50	3.50
Normative Water Consumption as per MoEF&CC Norms	Cubic Meter	4777618	4764564	4764564	4764564	4777618
Rate of Water Charges based on 2018-19 approved rates	Rs. / Cubic Meter	10.64	11.70	12.87	14.16	15.58
Total Normative Water Charges	(in Rs. lakh)	508.34	557.45	613.20	674.66	744.35

198. The Petitioner is however, directed to submit actual water consumption and 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

199. The Petitioner has claimed the following security expenses, on projection basis, 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
2740.28	2860.86	2986.75	3118.18	3255.39

200. It is observed that the Petitioner has escalated the actual security expenses (including impact of GST) for 2018-19 at the rate of 4.40% per annum to project the security expenses 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 expenditures and associated CISF activities that are primarily governed by the CISF Rules. It is observed that the actual security expenses for 2018-19 is Rs.2624.78 lakh (including GST) and the same is considered along with an annual escalation rate of 4.40%, as proposed by the Petitioner. Accordingly, the projected security expenses allowed are as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
2740.28	2860.86	2986.75	3118.18	3255.39

201. 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

202. The Petitioner has not projected any capital spares for the period 2019-24 , but has submitted that it will claim the same at the time of truing up of tariff, on actual basis. The third proviso to Regulation 35(1) (6) of the 2019 Tariff Regulations provides for the consideration of capital spares, after prudence check, on consumption basis at the time of truing up of tariff. In line with the said proviso, the Petitioner is permitted to claim the same, with justification and also substantiate that the capital spares are not funded through compensatory allowance or Special allowance or claimed as a part of additional capitalisation or consumption of stores and spares and renovation and modernization at the time of truing-up of tariff.

203. Based on the above discussion, the O&M expenses allowed including water charges, security expenses and capital spares is summarised as follows:

(Rs. in lakh)

		2019-20	2020-21	2021-22	2022-23	2023-24
Installed Capacity (MW)		210.00	210.00	210.00	210.00	210.00

		2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses under Regulation 35(1) in Rs lakh / MW		32.96	34.12	35.31	36.56	37.84
Total O&M Expenses (A)	Claimed	6921.60	7165.20	7415.10	7677.60	7946.40
	Allowed	**6921.60**	**7165.20**	**7415.10**	**7677.60**	**7946.40**
Water Charges (B)	Claimed	583.90	640.54	704.59	775.05	854.89
	Allowed	**508.34**	**557.45**	**613.20**	**674.66**	**744.35**
Security Expenses (C)	Claimed	2740.28	2860.86	2986.75	3118.18	3255.39
	Allowed	**2740.28**	**2860.86**	**2986.75**	**3118.18**	**3255.39**
Total O&M Expenses as allowed (including Water Charges and Security Expenses) (D=A+B+C)	Claimed	10245.78	10666.60	11106.44	11570.83	12056.68
	Allowed	**10170.22**	**10583.52**	**11015.05**	**11470.44**	**11946.14**

Special Allowance

204. Regulation 28 of the 2019 Tariff Regulations provides for Special Allowance for Coal-based /Lignite fired Thermal Generating stations as follows:

*"**28. Special Allowance for Coal-based/Lignite fired Thermal Generating station***

(1) In case of coal-based/lignite fired thermal generating stations, the generating company, instead of availing renovation and modernization (R&M) may opt to avail a 'special allowance' in accordance with the norms specified in this Regulation, as compensation for meeting the requirement of expenses including renovation and modernisation beyond the useful life of the generating station or a unit thereof and in such an event, upward revision of the capital cost shall not be allowed and the applicable operational norms shall not be relaxed but the Special Allowance shall be included in the annual fixed cost:

Provided that such option shall not be available for a generating station or unit thereof for which renovation and modernization has been undertaken and the expenditure has been admitted by the Commission before commencement of these regulations, or for a generating station or unit which is in a depleted condition or operating under relaxed operational and performance norms;

Provided further that special allowance shall also be available for a generating station which has availed the Special Allowance during the tariff period 2009-14 or 2014-19 as applicable from the date of completion of the useful life.

(2) The Special Allowance admissible to a generating station shall be @ Rs 9.5 lakh per MW per year for the tariff period 2019-24.

(3) In the event of a generating station availing Special Allowance, the expenditure incurred upon or utilized from Special Allowance shall be maintained separately by the generating station and details of same shall be made available to the Commission as and when directed.

The Special Allowance allowed under this Regulation shall be transferred to a separate fund for utilization towards Renovation & Modernisation activities, for which detailed methodology shall be issued separately."

205. Special Allowance claimed by the Petitioner under Regulation 28 of the 2019 Tariff Regulations is as under:

(Rs. in lakh)

2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
1995.00	1995.00	1995.00	1995.00	1995.00

206. The matter has been considered. It is observed that the Petitioner has claimed substantial additional capital expenditure during the periods 2014-19 and 2019-24, and has also claiming relaxed operational norms in accordance with the 2019 Tariff Regulations, and the same has also been allowed by the Commission, after prudence check. As discussed in paragraphs 57, 58 and 59 above, of this order, the Special Allowance claimed by the Petitioner for the generating station claimed is not allowed.

Operational Norms

207. 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)
xxx

(c) For following Thermal Generating Stations of DVC:

Bokaro TPS	*75%*
Chandrapura TPS	*75%*
Durgapur TPS	*74%*

xxx
(C) Gross Station Heat Rate:
xxx
(a) *Existing Thermal Generating Stations:*
xxx
(iii) For Thermal Generating Stations of Damodar Valley Corporation (DVC):

Bokaro TPS	*2,700 kCal / kWh*
Chandrapura TPS	*3,000 kCal / kWh*
Durgapur TPS	*2,750 kCal / kWh*

xxx

(D) Secondary Fuel Oil Consumption:

xxx

(c) For Coal-based generating stations of DVC:

Bokaro TPS	*1.5 ml / kWh*
Chandrapura TPS	*1.5 ml / kWh*
Durgapur TPS	*2.4 ml / kWh*

xxx

(E) Auxiliary Energy Consumption:

(b) For other Coal-based generating stations:

(i)	*Talcher Thermal Power Station*	*10.50%*
(ii)	*Tanda Thermal Power Station*	*11.50%*
(iii)	*Bokaro Thermal Power Station*	*10.25%*
(iv)	*Chandrapura Thermal Power Station*	*9.50%*
(v)	*Durgapur Thermal Power Station*	*10.50%*

208. The operational norms claimed by the Petitioner is as under:

Parameter	**Value**
Normative Annual Plant Availability Factor (NAPAF) (%)	74.00
Gross Station Heat Rate (kcal/kwh)	2750.00
Auxiliary Power Consumption (%)	10.50
Specific Oil Consumption (ml/kwh)	2.40

209. The operational norms claimed by the Petitioner are in accordance with the provisions of the 2019 Tariff Regulation and hence allowed as stated below:

.	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Normative Annual Plant Availability Factor (NAPAF) (%)	74%	74%	74%	74%	74%
Gross Station Heat Rate (GSHR) (kCal/kWh)	2750.00	2750.00	2750.00	2750.00	2750.00
Auxiliary Power Consumption (%)	10.50%	10.50%	10.50%	10.50%	10.50%
Specific Oil Consumption (ml/kWh)	2.40	2.40	2.40	2.40	2.40

Interest on Working Capital

210. The Petitioner has claimed the weighted average GCV and Cost of coal as 3591.34 kCal/kg and Rs. 3774.31/kg, respectively, and those of Secondary oil as 10460.00 kCal/L and Rs. 50179.11/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)	5429.28	5414.44	5414.44	5414.44	5429.28
Cost of oil for 2 months (B)	273.98	273.24	273.24	273.24	273.98
O&M expenses - 1 month (C)	853.82	888.88	925.54	964.24	1004.72
Maintenance Spares - 20% of O&M (D)	2049.16	2133.32	2221.29	2314.17	2411.34
Receivables – 45 days (E)	7347.23	7408.38	7408.45	7477.99	7563.69
Total Working Capital (F) = (A+B+C+D+E)	**15953.47**	**16118.26**	**16242.95**	**16444.07**	**16683.01**
Rate of Interest (G)	12.05%	12.05%	12.05%	12.05%	12.05%
Total Interest on Working capital (H) = (F)x(G)	**1922.39**	**1942.25**	**1957.28**	**1981.51**	**2010.30**

211. Regulation 34(1)(a) of the 2019 Tariff Regulations provide 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."

212. 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."

213. Regulation 3(7) of the 2019 Tariff Regulations defines Bank Rate as under:

*"In these regulations, unless the context otherwise requires: -
Bank Rate" means the one-year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;"*

(a) <u>Fuel Cost and Cost of Liquid Stock for Working Capital</u>

214. 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 stipulated three months from October 2018 to December 2018, as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Cost of coal for 50 days	5429.28	5414.44	5414.44	5414.44	5429.28
Cost of Secondary fuel oil 2 months	273.98	273.24	273.24	273.24	273.98

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

216. In line with the above Regulations, a margin of 85kCal/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 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	2188.43	2188.43	2188.43	2188.43	2188.43
Cost of coal for generation for 30 days	3282.65	3282.65	3282.65	3282.65	3282.65
Cost of Secondary fuel oil 2 months	273.98	273.24	273.24	273.24	273.98

217. It is pertinent to mention that the above 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) 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 above, based on the actual data to be furnished by Petitioner, for each year, at the time of truing-up of tariff.

Energy Charges for 45 days for Working Capital

218. The Petitioner has claimed Energy Charge Rate (ECR) of Paise 333.425/kWh based on the weighted average price and GCV of coal as received and secondary oil, during the preceding three months i.e., October 2018, November 2018 and December 2018 as follows:

	Unit	Claimed
Energy Charge Rate Secondary fuel ex-bus	paise/kWh	13.456
Energy Charge Rate Primary fuel ex-bus	paise/kWh	319.969
Total Energy Charge Rate ex-bus	paise/kWh	333.425

219. 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 stipulated 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 for the period 2019-24 as under:

	Claimed	Allowed
Weighted average price of coal (Rs./MT)	3774.31	3774.31
Weighted average GCV of coal (kCal/kg)	3591.34	3505.48*
Weighted average price of oil (Rs./kl)	50179.11	50179.11
Weighted average GCV of oil (kCal/l)	10460.00	10460.00
Energy Charge Rate Secondary fuel (Ex-bus) (Rs./kWh)	0.135	0.135
Energy Charge Rate Primary fuel (Ex-bus) (Rs./kWh)	3.200	3.278
Total Energy Charge Rate ex-bus (Ex-bus) (Rs./kWh)	3.334	3.413

**after adjusting margin of 85 kcal/kg from 'as received GCV' of 3590.48 kcal/kg*

220. Energy charges for 45 days, on the basis of operational norms as per the 2019 Tariff Regulations and weighted average GCV and weighted average cost of fuel as above, for the purpose of interest on working capital, has been worked out as follows:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
5126.66	5126.66	5126.66	5126.66	5126.66

Working Capital for Maintenance Spares

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

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
2049.16	2133.32	2221.29	2314.17	2411.34

222. Maintenance spares for the purpose of interest on working capital in accordance with Regulation 34(1)(b)(iii) of the 2019 Tariff Regulations, is worked out as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
2034.04	2116.70	2203.01	2294.09	2389.23

Working Capital for Receivables

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

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Variable Charges (45 days)	5126.66	5126.66	5126.66	5126.66	5126.66
Fixed Charges (45 days)	1678.07	1729.69	1720.67	1780.30	1836.73
Total	**6804.73**	**6856.34**	**6847.33**	**6906.96**	**6963.38**

Working Capital for O&M Expenses

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

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
853.82	888.88	925.54	964.24	1004.72

225. Considered the O&M expenses allowed, the O&M expenses for 1 (one) month allowed for the purpose of working capital is as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
847.52	881.96	917.92	955.87	995.51

Rate of Interest for Working Capital

226. 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). 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%) 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 and 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	Cost of Coal towards Stock-20 days Corresponding to NAPAF	2188.43	2188.43	2188.43	2188.43	2188.43
B	Cost of Coal towards Generation – 30 days Corresponding to NAPAF	3282.65	3282.65	3282.65	3282.65	3282.65
C	Cost of Secondary fuel oil – 2 months Corresponding to NAPAF	273.98	273.24	273.24	273.24	273.98
D	Maintenance Spares @ 20% of O&M Expenses	2034.04	2116.70	2203.01	2294.09	2389.23
E	Receivables - 45 days	6804.73	6856.34	6847.33	6906.96	6963.38
F	O&M expenses - 1 month	847.52	881.96	917.92	955.87	995.51
G	**Total Working Capital (A+B+C+D+E+F)**	**15431.36**	**15599.32**	**15712.58**	**15901.23**	**16093.19**
H	Rate of Interest	12.05%	11.25%	10.50%	10.50%	10.50%
I	**Interest on Working capital (G x H)**	**1859.48**	**1754.92**	**1649.82**	**1669.63**	**1689.78**

Other Elements of Tariff

227. In addition to the Depreciation, Interest on Loan, Return on Equity, O&M Expenses, Water Charges, Security Expenses, Interest on Working Capital and Special

Allowance in accordance with the 2019 Tariff Regulations, the Petitioner has also claimed expenditure towards share of savings in interest cost due to loan restructuring, Share of P&G, Share of Common Office Expenditure, Ash Evacuation Expenses, Mega Insurance Expenses and Expenditure for Subsidiary activity as given below:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Share of P&G	782.55	819.34	857.85	898.18	940.40
Share of Common Office Expenditure	41.30	44.32	44.88	38.60	35.18
Expenses due to Ash evacuation, Mega insurance & expenditure for Subsidiary activity	620.43	643.30	666.85	691.55	716.96
Total	**1444.28**	**1506.95**	**1569.58**	**1628.32**	**1692.54**

Share of P&G Contribution

228. 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
782.55	819.34	857.85	898.18	940.40

229. DVPCA has 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, on Plant capacity basis. It 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. It has also 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 made in the petition.

230. 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.

Ash Evacuation Expenses, Mega Insurance Expenses and Expenditure for Subsidiary activity

231. The Petitioner has claimed projected expenditure towards Ash Evacuation, 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**
Ash Evacuation Expenses	503.42	521.13	539.31	558.40	577.95
Mega Insurance Expenses	31.93	33.33	34.80	36.33	37.93
Share of Subsidiary Activities	85.09	88.83	92.74	96.82	101.08
Total	**620.43**	**643.30**	**666.85**	**691.55**	**716.96**

<u>Ash Evacuation Expenses</u>

232. The Petitioner has claimed total amount of Rs. 3308.67 lakh (Rs. 503.42 lakh in 2019-20, Rs. 521.13 lakh in 2020-21, Rs. 539.31 lakh in 2021-22, Rs. 558.40 lakh in 2022-23 and Rs. 577.95 lakh in 2023-24) towards Ash evacuation expenses. The Petitioner has submitted that due to statutory directives by the Ministry of Environment, Forest and Climate Change, Govt. of India notification dated 14.9.1999, the fly ash

generated during the course of operation of the coal power plant is required to be utilized and accordingly it has claimed Ash evacuation expenses under Regulation 76 and Regulation 77 of the 2019 Tariff Regulations.

233. DVPCA has submitted that the Commission had disallowed the claim of the Petitioner for ash evacuation expenses during the period 2009-14 on the ground that the same form part of the normative O&M expenses. Accordingly, DVPCA has stated that there is no rationale to allow such expenses over and above the normative O&M expenses for the period 2019-24.

234. The matter has been examined. MoEF&CC notification dated 31.12.2021 provides for the following:

(i) Thermal power plants w.e.f. 1.4.2022, preferably utilise 100 % ash generated during that year and in no case, utilisation shall fall below 80 % in any year subjected to 100 % utilization in a three years cycle. In addition, the unutilised accumulated ash i.e. legacy ash, which is stored before the publication of this notification, shall be utilised progressively and completed fully within ten years, by 31.12.2031.

(ii) All agencies (Government, Semi-government and Private) engaged in construction activities such as road laying, road and flyover embankments, shoreline protection structures in coastal districts and dams within 300 kms from the thermal power plants shall mandatorily utilise ash in these activities in accordance with specifications and guidelines laid down by the Bureau of Indian Standards, Indian Road Congress, Central Building Research Institute, Roorkee, Central Road Research Institute, Delhi, Central Public Works Department, State Public Works Departments and other Central and State Government Agencies.

(iii) Provided that it is delivered at the project site free of cost and transportation cost is borne by such thermal power plants.

(iv) Provided further that thermal power plant may charge for ash cost and transportation as per mutually agreed terms, in case thermal power plant is able to dispose the ash through other means and those agencies makes a request for it and the provisions of ash free of cost and free transportation shall be applicable, if thermal power plant serves a notice on the construction agency for the same.

(v) Non-compliance of these provisions by Thermal Power plants attracts an environmental compensation of annual Rs. 1000 / ton of unutilised ash and that of users is Rs. 1500 per ton of ash for the quantity they fall short off.

235. The Petitioner has proposed ash transportation charges for the period 2019-24, based on the ash transportation charges, associated with the generating station for 2014-15, with an annual escalation rate of 6.64% thereof. The Petitioner has submitted that the Ash evacuation expense of the generating station for 2018-19, was 'zero' because no ash evacuation activity took place during that year and therefore, the Ash evacuation expenses for 2017-18 was negative because of reversal of excess provision taken in previous year. It has stated that Unit-III of the generating station, was decommissioned in 2015-16 (on 10.3.2016) and therefore, Ash evacuation expense for 2014-15 (instead of 2018-19) has been taken as base for the purpose of projections, since 2014-15 was the latest year, in which both the units of generating station were operational for the entire year. However, the actual expenses will depend on actual generation, quality of coal, quantity of ash utilized locally, quantity of ash transported, type of end user, distance of end user, etc and may be in variance with projected claim of the Petitioner. Also, the Petitioner may generate some revenue by sale of ash. It is observed that while in 2014-15 both Units with a total installed capacity of 350 MW were operational, during the period 2019-24, only one Unit with an installed capacity of 210 MW is operational. In this background, we are inclined to allow only 90% of the projected ash transportation charges corresponding to the installed capacity of 210 MW only, as additional O&M expenses, for the period 2019-24. The Petitioner is permitted to recover the said expenses from 1.4.2019 upto the date of this order, in 6 equal instalments commencing from May, 2023, in accordance with the Regulation 10 of the 2019 Tariff Regulations and thereafter, the recovery of the same, shall be effected through monthly bills. The Petitioner is however, directed to submit all relevant documents in terms of

the MoEF&CC notification and the provisions of the 2019 Tariff Regulations, including the year-wise audited statements, detailed justification, the ash available, plant wise income from sale of ash, quantity of ash produced, quantity of ash transported within 100 kms and beyond, revenue received, interest accrued, the statement of ash fund account as on 31.3.2014, 25.1.2016 and 31.3.2019, transportation cost borne by the end consumer, scheduled rate, etc., at the time of truing up of tariff. It is noticed that in the past, the Petitioner has used road transportation (trucks) for transportation of ash. In terms of this, the Petitioner is directed to explore other economic and environmentally friendly alternatives for ash disposal such as ash slurry pipeline, wagons instead of road transportation. Accordingly, the ash transportation charges allowed are as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
271.84	281.41	291.23	301.54	312.09

Mega Insurance Expenses

236. The Petitioner has claimed total expenditure of Rs. 174.31 lakh (Rs. 31.93 lakh in 2019-20, Rs. 33.33 lakh in 2020-21, Rs. 34.80 lakh in 2021-22, Rs. 36.33 lakh in 2022-23 and Rs. 37.93 lakh in 2023-24) towards Mega Insurance expenses under Regulations 76 and Regulation 77 of the 2019 Tariff Regulations.

237. 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 dated 16.7.2021 has reiterated its submissions made in its petition for the period 2014-19, on this issue.

238. 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.

<u>Share of Subsidiary Activities</u>

239. The Petitioner has claimed total expenditure of Rs. 464.56 lakh (Rs. 85.09 lakh in 2019-20, Rs. 88.83 lakh in 2020-21, Rs. 92.74 lakh in 2021-22, Rs. 96.82 lakh in 2022-23 and Rs. 101.08 lakh in 2023-24) towards Share of subsidiary activities under Regulations 76 and Regulation 77 of the 2019 Tariff Regulations.

240. DVPCA has submitted that the Petitioner has also claimed contribution to subsidiary funds. The Petitioner 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. DVPCA has further submitted that the Commission, in its order dated 20.7.2017 in Petition No. 348/GT/2014, had disallowed the expenditure on subsidiary activity and the same was to be recovered as part of normative O&M expenses. DVPCA 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 prescribed by the 2014 Tariff Regulations. Similarly, the normative O&M expenses provided under the 2019 Tariff Regulations would be sufficient to cover such

expenses in 2019-24 also. In response, the Petitioner has reiterated its submissions in the matter of expenses for subsidiary activities made w.r.t the replies for the period 2014-19.

241. The matter has been considered. It is noted that APTEL vide its judgement dated 23.11.2007 and Hon'ble Supreme Court vide judgement dated 23.7.2018 had observed 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.

<u>Share of Common Office Expenditure</u>

242. 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, on the basis of 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	-	-	-	-	-
Subsidiary Activities	-	-	-	-	-
Other Offices	132.00	66.39	222.42	15.52	-
R&D	-	-	-	-	-
IT	960.00	1240.00	-	-	-
Central Office	-	-	-	-	-
Total	**1092.00**	**1306.39**	**222.42**	**15.52**	**-**

243. The head-wise additional capital expenditure claimed by the Petitioner towards various offices is summarised as 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	-
Network Access Controller and Data Centre	960.00	1240.00	-	-	-
Total	**1092.00**	**1306.39**	**222.42**	**15.52**	**-**

244. 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**

245. In line with the above, the Petitioner claimed apportioned Common office expenses, for this generating station as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Common Office Expenditure apportioned to DTPS	41.30	44.32	44.88	38.60	35.18

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

247. 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 comply with 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 year 2019-20 and 2020-21.

248. The matter has been considered. It is observed that the items mentioned under the head 'Substation Equipments' 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. Further, the Petitioner is directed to furnish additional information regarding the total expenditure incurred on this count, segregated claims during the periods 2014-19 and 2019-24, expenditure envisaged in future etc., along with supporting documents.

249. Based on the above, the total additional capital expenditure allowed under Common Office Expenditure for the period 2019-24 is summarised as follows:

(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	960.00	1240.00	0.00	0.00	0.00
Total	**1092.00**	**1306.39**	**222.42**	**15.52**	**0.00**

250. 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.

251. 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 the 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**

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
DTPS Unit-IV	28.49	28.00	27.80	27.78	25.37

Annual Fixed Charges allowed for the period 2019-24

252. Based on the above discussion, the annual fixed charges allowed for the generating station for the period 2019-24 is summarized as follows:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	334.01	392.32	0.00	7.86	10.14
Interest on loan	7.22	7.22	0.00	0.21	0.21
Return on Equity	1277.41	1291.71	1291.71	1292.07	1292.44
Interest on Working Capital	1859.48	1754.92	1649.82	1669.63	1689.78
O&M Expenses	6921.60	7165.20	7415.10	7677.60	7946.40
Water Charges	508.34	557.45	613.20	674.66	744.35
Security Expenses	2740.28	2860.86	2986.75	3118.18	3255.39
Special Allowance	0.00	0.00	0.00	0.00	0.00
Sub-Total (A)	**13648.34**	**14029.69**	**13956.58**	**14440.22**	**14938.72**
Share of P&G	0.00	0.00	0.00	0.00	0.00
Share of Common Office Expenditure	28.49	28.00	27.80	27.78	25.37
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)	**28.49**	**28.00**	**27.80**	**27.78**	**25.37**
Total Annual Fixed Charges (C=A+B)	**13676.83**	**14057.69**	**13984.38**	**14468.00**	**14964.08**

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.

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Ash Evacuation Expenses	271.84	281.41	291.23	301.54	312.09

253. 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

254. 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.

255. 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.

256. Petition No. 567/GT/2020 is disposed of in terms of the above.

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