

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 568/GT/2020

Coram:

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

Date of Order: 27th April 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 Mejia Thermal Power Station, Units 7 & 8 (1000 MW)

And

In the matter of

Damodar Valley Corporation,
DVC Towers, VIP Road
Kolkata

...Petitioner

Vs

1. BSES-Rajdhani Power Limited,
PMG Office, 2nd Floor, B-Block,
BSES Bhawan, Nehru Place,
Delhi- 110 019
2. BSES-Yamuna Power Limited,
Shakti Kiran Building, Karkardooma,
Delhi- 110072
3. Tata Power Delhi Distribution Limited,
Grid Substation Building, Hudson Lines,
Kingsway Camp, New Delhi- 110 009
4. Haryana Power Generation Corporation Limited,
Shakti Bhawan, Sector – 6,
Panchkula – 134109
5. Kerala State Electricity Board Limited,
8th Floor, Vydyuthi Bhawan,
Trivananthapuram – 695004



6. Bangalore Electricity Supply Company,
K.R. Circle, Bangalore-506001
7. Hubli Electricity Supply Company,
Navanagar, PB Road, Hubli - 580025,
Karnataka
8. Gulbarga Electricity Supply Corporation,
Station Road, Gulbarga - 585102,
Karnataka
9. Mangalore Electricity Supply Company,
Paradigm Plaza, AB Shetty Circle, Mangalore-575001
10. Chamundeshwari Electricity Supply Corporation,
927, L J Avenue, GF, New Kantharaj Urs Road,
Saraswathipuram, Mysore-570009
11. Tata Steel Limited,
PGP Works, General Office (W-175)
Jamshedpur – 831001

...Respondents

12. 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
Ms. Srishti Khindaria, Advocate, DVC
Shri Manik Rakshi, DVC
Shri Sandip Pal, DVC
Shri Samit Mandal, DVC
Shri Arnab Kr. Sinha, DVC
Shri Buddy A. Ranganadhan, Advocate, BYPL
Shri Arunav Patnaik, Advocate, GESCOM, BESCOM, CESC, MESCOM & HESCOM
Ms. Bhabna Das, Advocate, GESCOM, BESCOM, CESC, MESCOM & HESCOM
Shri Rajiv Yadav, Advocate, DVPCA

ORDER

This petition has been filed by the Petitioner, Damodar Valley Corporation, for truing-up of tariff of Mejia Thermal Power Station, Units 7 to 8 (2 x 500 MW) (in short “the generating station”) for the period 2014-19, in term 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 1000 MW comprising of two units of 500 MW each. The dates of commercial operation of the different Units of the generating station are as under:

	Actual COD
Unit – VII	2.8.2011
Unit – VIII	16.8.2012

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 (hereinafter referred to as 'the APTEL') on various issues. Similarly, appeals were also filed before the 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. The 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 de novo 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 Bhaskhar 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 de novo 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 period 2006-09 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, were 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 trued-up for the period 2014-19 and also determined for the period 2019-24, as stated in the subsequent paragraphs.

6. The Commission vide its order dated 3.10.2016 in Petition No. 207/GT/2015 had approved the capital cost and the annual fixed charges of the generating station for the period 2014-19 as under:



Capital cost allowed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost (A)	493784.79	496084.85	496084.85	496084.85	496084.85
Add: Additional Capital Expenditure allowed (B)	2300.06	0.00	0.00	0.00	0.00
Closing Capital Cost (C) = (A) + (B)	496084.85	496084.85	496084.85	496084.85	496084.85
Average Capital Cost (D) = (A+C) / 2	494934.82	496084.85	496084.85	496084.85	496084.85

Annual fixed charges allowed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	34837.59	34918.54	34918.54	34918.54	34918.54
Interest on loan	28955.20	25128.79	21515.93	17954.03	14375.58
Return on Equity	19950.29	20003.77	20003.77	20003.77	20003.77
Interest on Working Capital	7946.71	7931.44	7907.83	8015.58	8008.42
O&M Expenses	17461.47	18471.47	19541.47	20681.47	21891.47
Sub-Total (A)	109151.26	106454.00	103887.53	101573.38	99197.76
Additional Claims Allowed					
Share of Common Office Expenses	68.84	73.59	91.43	122.4	138.91
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
Sinking fund contribution	1971.27	2109.26	2256.91	2414.89	2583.93
Sub-Total (B)	2040.11	2182.85	2348.34	2537.29	2722.84
Total Annual Fixed Charges (C = A+B)	111191.37	108636.85	106235.87	104110.68	101920.61

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 Regulations, 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 under:



Capital Cost claimed*(Rs. in lakh)*

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost (A)	493784.79	497242.09	498916.39	505426.20	509312.36
Add: Addition during the year / period (B)	3568.50	1500.68	1023.22	2498.02	5466.70
Less: De-capitalization during the year / period (C)	-	-	-	-	517.53
Less: Reversal during the year / period (D)	-	-	-	-	-
Less: Undischarged liabilities (E)	138.51	24.90	21.24	312.92	1.38
Add: Discharges during the year / period (F)	27.31	198.53	5507.83	1701.05	-
Closing Capital Cost (G)=(A+B-C-D-E+F)	497242.09	498916.39	505426.20	509312.36	514260.14
Average Capital Cost (H)=(A+G/2)	495513.44	498079.24	502171.30	507369.28	511786.25

Annual fixed charges claimed*(Rs in lakh)*

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	38094.33	38962.51	39289.94	39697.07	40036.27
Interest on loan	27983.33	24728.10	20656.08	15687.49	12771.27
Return on Equity	25274.95	25549.09	25791.00	26098.28	26429.02
Interest on Working Capital	10381.94	10652.92	10595.02	10623.10	10469.59
O&M Expenses	16000.00	17010.00	18080.00	19220.00	20430.00
Water Charges	-	3149.55	1562.79	1057.38	1074.95
Compensation Allowance	-	-	-	-	-
Sub-Total (A)	117734.55	120052.17	115974.83	112383.31	111211.09
Capital Spares	730.82	383.26	346.04	705.83	1413.20
Impact of Pay Revision due to recommendation of 7 th Pay Commission	-	-	1214.62	1528.78	1076.82
Impact of GST as 'change in Law'	-	-	-	67.10	229.40
Interest & Contribution on Sinking Fund (As per section 40, Part IV of DVC Act)	2099.40	2246.36	2403.61	2571.86	2751.89
Share of P&G	1462.04	3755.79	4135.52	9315.10	1783.72
Share of Common Office Expenditure	194.80	182.27	154.94	167.78	179.55
Expenses due to Ash evacuation, Mega insurance, CISF expenditure &	6856.27	6594.36	8125.92	5784.89	4969.34



	2014-15	2015-16	2016-17	2017-18	2018-19
Expenditure for Subsidiary activity					
Sub-Total (B)	11343.33	13162.04	16380.64	20141.34	12403.91
Total annual fixed charges claimed (C = A+B)	129077.87	133214.21	132355.47	132524.66	123615.01

9. The Petitioner has filed certain additional information vide affidavits dated 18.6.2020, 26.5.2021 and 16.11.2021, along with the revised tariff filing forms, for the period 2019-24, after correction of the certain inadvertent errors. The Respondent No.5, Kerala State Electricity Board Limited (KSEBL) has filed its reply vide affidavit dated 14.5.2021 and the Petitioner has filed its rejoinder to the same, vide affidavit dated 22.9.2021. The Respondent No.2 BSES Yamuna Power Limited (BYPL), has filed its reply vide affidavit dated 3.8.2021 and the Petitioner has filed its rejoinder to the same on 2.9.2021. The Objector, Damodar Valley Power Consumers Association (in short 'DVPCA') has filed its reply vide affidavit dated 27.4.2021 and the Petitioner has filed its rejoinder to the same vide affidavits dated 16.7.2021. This petition was heard on 25.5.2021 through video conferencing, wherein, the Petitioner, circulated the note of arguments. The Commission, after hearing the parties, reserved its order in the petition, after directing the Petitioner to submit certain additional information. In compliance to the said directions, the Petitioner has filed the additional submissions vide affidavit dated 2.7.2021. However, as the order in the petition could not be issued, prior to the Chairperson Shri P.K. Pujari demitting office, the Petition was re-listed and heard through virtual hearing on 25.2.2022 and the Commission, after directing the parties to file certain additional information reserved its order in the petition. In compliance thereto, the Petitioner has filed additional submissions vide affidavit dated 22.3.2022, after serving copy on the Respondents/Objector. The Respondent Karnataka Escoms (Respondent No. 6-10) have filed their written submissions on 5.4.2022. 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.

Capital Cost

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 14.9.2016 in Petition No. 206/GT/2015 had allowed the closing capital cost of Rs. 493784.79 lakh as on 31.3.2014. The Petitioner in its additional capital expenditure has submitted following rectification entries:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
008/01 BOILER & ACCS.EQUIP. 7&8 (Proj-MTPS) (0111084402)	-	(-) 51.03	-	-	-
008/02 BOILER FEED PUMP 7&8 (Proj-MTPS) (0111084408)	-	(-) 69.01	-	-	-
Machinery & Equip (Workshop) (0111110001)	-	(-) 28.12	-	-	-
Total	-	(-) 148.16	-	-	-

12. In justification of the above claims, the Petitioner has submitted that negative entries are on account of inadvertent error made in the ledger code. Since, during the tariff period, no corresponding positive entry was identified, against the above said negative entries, the amounts are adjusted to the approved capital cost, as on 31.3.2014. Accordingly, the net closing capital cost, as on 31.3.2014, is worked out as Rs.493636.63 lakh and the same has been considered as the opening capital cost, as on 1.4.2014, in accordance with Regulation 9(3)(a) of the 2014 Tariff Regulations.



Additional Capital Expenditure

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

“14. Additional Capitalization and De-capitalization:

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

- (i) Un-discharged liabilities recognized to be payable at a future date;*
- (ii) Works deferred for execution;*
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;*
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and*
- (v) Change in law or compliance of any existing law:*
Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.”

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

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

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

- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;*
- (ii) Change in law or compliance of any existing law;*
- (iii) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;*
- (iv) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such un-discharged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;*
- (vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;*



- (vii) Any additional capital expenditure which has become necessary for efficient operation of generating station other than coal / lignite-based stations or transmission system as the case may be. The claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;
- (viii) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;
- (ix) In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolescence 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.”

14. The details of the additional capital expenditure allowed in order dated 3.10.2016 in Petition No. 207/GT/2015, is summarized below:

Head of Work/Equipment	Regulation	Additional capital expenditure allowed				
		2014-15	2015-16	2016-17	2017-18	2018-19
(Rs. in lakh)						
Boiler & Auxiliary						
Quick erect scaffolding system		281.50	0.00	0.00	0.00	0.00
Hydraulic puller		2.87	0.00	0.00	0.00	0.00



Head of Work/Equipment	Regulation	Additional capital expenditure allowed				
		2014-15	2015-16	2016-17	2017-18	2018-19
Spares of ID fan bearing like liner assy, thrust plate, aux. seal kit, end cap kit etc.	14(1)(iii)	40.00	0.00	0.00	0.00	0.00
Mill body liner		10.00	0.00	0.00	0.00	0.00
Wear plate of ID fan impeller		50.00	0.00	0.00	0.00	0.00
TG & Auxiliary						
Spares for Condenser Vacuum pump	14(1)(iii)	162.91	0.00	0.00	0.00	0.00
Spares for Main MDBFP & TDBFP and their booster pump		36.09	0.00	0.00	0.00	0.00
Spares for HP Bypass System		78.83	0.00	0.00	0.00	0.00
Filter elements for primary water and generator seal oil system		7.41	0.00	0.00	0.00	0.00
Spares of LP bypass Valve		652.62	0.00	0.00	0.00	0.00
Cartridge assembly of boiler feed pump		240.00	0.00	0.00	0.00	0.00
Electrical system (Inside powerhouse)						
Spares for motorized actuator	14(1)(iii)	63.00	0.00	0.00	0.00	0.00
Numerical Relays for LT system		10.00	0.00	0.00	0.00	0.00
Spares for 220 V & 24 V chargers		15.00	0.00	0.00	0.00	0.00
Spare LT Motor		43.00	0.00	0.00	0.00	0.00
Spare LT Breaker		8.00	0.00	0.00	0.00	0.00
Spare Full Actuator		65.00	0.00	0.00	0.00	0.00
Electronic controller for ESP		4.85	0.00	0.00	0.00	0.00
ESP Mechanical spares		30.00	0.00	0.00	0.00	0.00
Induction Heater		3.50	0.00	0.00	0.00	0.00
Electrical System (400 KV Switch yard)						
400 VK Surge Arrestors	14(1)	4.52	0.00	0.00	0.00	0.00
SF6 Gas Handling and measuring devices	14(1)(iii)	42.28	0.00	0.00	0.00	0.00
Electrical System (Outside Powerhouse)						
Three Phase Sq. Cage Induction Motor (Boiler Fill Pump & Condensate Trf. Pump)	14(1)(iii)	1.80	0.00	0.00	0.00	0.00
AHP Section						



Head of Work/Equipment	Regulation	Additional capital expenditure allowed				
		2014-15	2015-16	2016-17	2017-18	2018-19
Spares of Ash handling system	14(1)(iii)	37.00	0.00	0.00	0.00	0.00
Spares of Transport air compressor of AHP		91.17	0.00	0.00	0.00	0.00
Mechanical Maintenance-Outside powerhouse (CW System, plant water package, etc.)						
Different spares of plant water system	14(1)(iii)	110.00	0.00	0.00	0.00	0.00
Spares of Fire System		20.00	0.00	0.00	0.00	0.00
Chemical Lab						
Dew point Meter	14(1)(iii)	3.00	0.00	0.00	0.00	0.00
Dissolved Oxygen Meter		9.00	0.00	0.00	0.00	0.00
Portable Tri gas analyser		8.00	0.00	0.00	0.00	0.00
Powerhouse Civil						
Construction of the CHP shed	14(1)(ii)	45.00	0.00	0.00	0.00	0.00
Construction of R.C.C. pavement at the adjacent place of the both sides of track hopper: 3 along with R.C.C. drain beside fuel oil pipe line		123.72	0.00	0.00	0.00	0.00
Total		2300.06	0.00	0.00	0.00	0.00

15. The Petitioner has submitted that the un-discharged liabilities included in the additional capitalization, cash expenditure, and IDC included in additional capital expenditure for individual items, could not be furnished, as the data, has not been recorded in that manner. The additional capital expenditure claimed by the Petitioner for the period 2014-19 is as under:

	<i>(Rs. in lakh)</i>					
	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Building						
Additional Capitalization Items	267.92	112.94	29.69	-	246.51	657.06
Initial Spares	-	-	1.32	-	-	1.32
Roads, Culverts & Railway Siding	256.49	4.08	-	-	-	260.57
Barrage, Gates & Others	10.16	(-)18.95	133.34	-	-	124.55
Powerhouse Plant and Machinery						
Additional Capitalization Items	2350.81	499.55	627.12	2496.69	5120.18	11094.34



	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Initial Spares embedded in different packages	215.93	153.28	0.96	-	-	370.17
Balance Initial Spares procured separately	133.70	740.61	45.86	-	-	920.17
Machinery & Equipment - Workshop	27.86	(-)28.12	-	-	-	(-)0.26
Sub Station Equipment - Initial Spares	12.92	-	-	-	-	12.92
Switchgear						
Additional Capitalization Items	21.79	-	8.50	-	10.90	41.19
Initial Spares	17.08	-	46.26	-	-	63.35
Computer / IT Assets	9.03	0.60	-	-	39.22	48.85
Other Assets						
Additional Capitalization Items	244.25	36.68	6.41	1.33	49.88	338.55
Initial Spares	0.56	-	123.77	-	-	124.34
Total	3568.50	1500.68	1023.22	2498.02	5466.70	14057.12

16. The Respondent BYPL has submitted that the Petitioner has sought the capitalization of balance initial spares for Rs. 1609.72 lakh (i.e., difference of the initial spares actually capitalised and allowed in order dated 3.10.2016 in Petition No. 207/ GT/ 2015) under Regulation 14(2)(iv) read with Regulation 54 (Power to Relax) and Regulation 55 (Power to Remove Difficulty) of the 2014 Tariff Regulations. Accordingly, the Respondent has submitted that the claim of the Petitioner for capitalization of initial spares amounting to Rs. 1609.72 lakh, is liable to be rejected. The Respondent KSEBL has submitted that though the Petitioner has claimed additional capital expenditure towards transfer of work to fixed assets from CWIP, under Regulation 14(2) (iv) of the 2014 Tariff Regulations, it has not furnished the details of the related work for which the undischarged liability has been claimed. The Respondent KSEBL has also pointed out that the power to relax and power to remove difficulty provisions, can be applied only in extra ordinary circumstances and for which the Petitioner has not furnished any justification. Accordingly, the Respondent has submitted that the claim for additional capital expenditure under this regulation may be disallowed.



17. The Objector, DVPCA has submitted that the Petitioner has not submitted any details of asset wise/work wise expenditure included in original scope of work along with the estimate of expenditure, liabilities recognised to be payable in future date and the work deferred for the execution along with the Petition. DVPCA has further stated that the Petitioner has not provided any proper justification or documentary evidence for claiming the additional capital expenditure as per Regulations 14(1) and Regulation 14(2) of the 2014 Regulations. It has also pointed out that the Petitioner has not detailed out reasons for additional capitalization claimed under Regulations 54 (Power to Relax) and 55 (Power to Remove Difficulty) and that these powers can be exercised only in rare cases and not ordinarily. DVPCA has stated that the Petitioner has not referred to 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 these provisions, may be rejected. It has further submitted that the claims of the Petitioner lack detailed justification and may therefore be disallowed. The Objector, has furnished a comparative statement of the additional capital expenditure claimed by the Petitioner and which, according to it, can be allowed as under:

(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
Building	268	268	113	0	31	0	0	0	247	0
Road & Rail Siding	256	256	4	0	0	0	0	0	0	0
Barrage Gate & Other	10	10	(19)	0	133	0	0	0	0	0
Powerhouse plant & Machinery	2700	2351	1393	0	674	0	2497	0	5120	0
Machinery & Equipment	28	28	(28)	0	0	0	0	0	0	0
Sub-station equipment	12	12	0	0	0	0	0	0	0	0
Switch Gear	39	22	0	0	55	0	0	0	11	0
Computer & IT Assets	9	9	1	0	0	0	0	0	39	0



	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
Other Assets	245	169	37	0	130	0	1	0	50	0
Grand Total	3568	2906	1501	0	1023	0	2498	0	5467	0

18. In response to the above, the Petitioner, in its rejoinder, has submitted that the items of additional capital expenditure claimed under Regulation 14(2) of the 2014 Tariff Regulations, were within the original scope of work and was completed within the cut-off date of the generating station. It has also submitted that most of the additional capital expenditure was transferred to fixed assets during the period 2009-14, as and when full and final settlement was done. The Petitioner has further stated that the capital expenditure was executed for ensuring plant safety based on the recommendations from technical audit report and for ensuring reliable and efficient operation of the generating station. Accordingly, the Petitioner has submitted that the additional capital expenditures for this generating station, has been claimed under the Regulation 14(1), Regulation 14(2) and Regulation 14(3) of the 2014 Tariff Regulations. It has also stated that all the additional capital expenditures incurred by the Petitioner for this generating station, are critical to ensure reliable, safe, and efficient operation of the generating station and are therefore unavoidable. The Petitioner has further stated that, wherever, the additional capital expenditure could not be claimed under these Regulations, the same has been claimed under Regulation 54 and Regulation 55 of the 2014 Tariff Regulations. Accordingly, the Petitioner has prayed that the Commission may allow the additional capital expenditure claimed for the period 2014-19.

19. 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 for the period 2014-19, is examined and allowed as under:



(Rs. in lakh)

Sl. No.	Asset/Work	Amount Claimed	Regulation	Petitioner Submission	Remarks for admissibility	Amount Allowed
2014-15						
A. Buildings						
1	Other Building	151.70	14 (1) (i) & (ii)	This expenditure is toward Construction of R.C.C. pavement at the adjacent places of both sides of the track hopper no. 3 along with R.C.C. drain besides fuel oil pipeline. This work is within the original scope and is capitalized within the cut-off date. Expenditure against this work has been approved by the Hon'ble CERC vide Order dt. 3.10.2016.	As the Commission has already allowed the additional capital expenditure on projected basis, and since the same has been incurred within cut-off date, the additional capital expenditure claimed are allowed under Regulation 14 (1) (ii) of the 2014 Tariff Regulations.	151.70
2	Other Building	8.76	14 (1) (i) & (ii)	This expenditure is toward Construction of maintenance shed cum site store for CHP of U#7&8. This work is within the original scope and is capitalized within the cut-off date. Expenditure against this work has been approved by the Hon'ble CERC vide Order dt. 3.10.2016.		8.76
3	PERMANENT STORE BUILDING 7&8 (Proj-MTPS)	30.35	14 (1) (i) & (ii)	This expenditure is toward construction of 3 No. cover store and 3 No. open store for U#7&8. Earlier only 2 stores go downs were there, which were insufficient to store all required spares. Therefore, the new store buildings	The Petitioner has not confirmed that the asset forms part of the original scope of work of the project. Therefore, the additional facility claimed, over and above the original scope of work, is not allowable. Accordingly, the	0.00



				were constructed to cater the requirement.	claim of the Petitioner is not allowed.	
4	RESIDENTIAL BUILDING 7&8 (Proj-MTPS)	23.07	14 (1) & (ii)	This expenditure is toward extension and renovation of CISF quarter guard building. Such extension and renovation work were necessary to accommodate additional CISF Jawans for guarding of quarter guard on round-the-clock basis and storing of more arms and ammunitions at the quarter guard after commissioning of MTPS U#7 & 8.	It is observed that the additional capital expenditure has been incurred to cater to the security of the generating station. Therefore, the expenditure claimed is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations.	23.07
5	POWERHOUSE BUILDING 7&8 (Proj-MTPS)	2.35	14 (1) (i) & (ii)	This expenditure is towards the work which is within the original scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.3.2015), as executed and capitalized within the cut-off date.	Considering the fact that the actual additional capital expenditure has been incurred within cut-off date, in respect of the assets which fall within the original scope of work, the claims of the Petitioner are allowed under Regulation 14(1)(ii) of the 2014 Tariff Regulations.	2.35
6	CPU REGENERATION BUILDING 7&8 (Proj-MTPS)	0.01	14 (1) (i) & (ii)			0.01
7	DG BUILDING-7&8 (Proj-MTPS)	0.01	14 (1) (i) & (ii)			0.01
8	CONDENSATE TRANSFER PUMP HOUSE-7&8 (Proj-MTPS)	0.01	14 (1) (i) & (ii)			0.01
9	ILLUMINATION 7&8 (Proj-MTPS)	22.42	14 (1) (i) & (ii)			22.42
10	Other Building	10.97	14 (1) (i) & (ii)			10.97
11	EARTHING & LIGHTNING PROTECTION SYS 7&8 (Proj-MTPS)	7.20	14 (1) (i) & (ii)			7.20
12	Other Building	7.65	14 (1) (i) & (ii)			7.65
13	RESIDENTIAL BUILDING 7&8 (Proj-MTPS)	3.23	14 (1) (i) & (ii)			3.23
14	TECHNICAL BUILDING-7&8 (Proj-MTPS)	0.06	14 (1) (i) & (ii)			0.06



15	ADMINISTRATIVE BUILDING 7&8 (Proj-MTPS)	0.03	14 (1) (i) & (ii)			0.03
16	PERMANENT STORE BUILDING 7&8 (Proj-MTPS)	0.03	14 (1) (i) & (ii)			0.03
17	PIPE & CABLE RACK FOR BAL.PLANT AREA-7&8 (Proj-MTPS)	0.02	14 (1) (i) & (ii)			0.02
18	FIRE STATION BUILDING 7&8 (Proj-MTPS)	0.02	14 (1) (i) & (ii)			0.02
19	CANTEEN BUILDING 7&8 (Proj-MTPS)	0.01	14 (1) (i) & (ii)			0.01
20	MAIN GATE & GATE HOUSE - 7&8 (Proj-MTPS)	0.00	14 (1) (i) & (ii)			0.00
	Total of (A)	267.92				237.56
B. Culverts & Railway Sidings:						
1	Access Road MTPS 7 & 8	256.49	14 (1) (i) & (ii)	This expenditure involves the cost of construction of RCC road used for transportation of coal and construction of periphery road within the original scope (under Sl. No. 9 (11) of Sanction Order of MTPS 7&8 dt. 31.03.2015), as executed and capitalized within the cut-off date.	Considering the fact that the actual expenditure has been incurred within cut-off date, in respect of the assets which fall within the original scope of work, the claim of the Petitioner, is allowed under Regulation 14(1)(ii) of the 2014 Tariff Regulations.	256.49
	Total of (B)	256.49				256.49
C. Barrage, Gates & Others						
1	RLY TRACK HOPPER-7&8 (Proj-MTPS)	9.50	14 (1) (i) & (ii)	This expenditure is towards the work which is within the original scope (under Sl. No. 3(ii) of Sanction Order of MTPS 7&8 dt. 31.03.2015), as capitalized within the cut-off date by transferring from	Considering the fact that the actual expenditure has been incurred within cut-off date, in respect of the assets which fall within the original scope of work, the claims of the Petitioner, are allowed under	9.50



				CWIP to Fixed Asset.	Regulation 14(1)(ii) of the 2014 Tariff Regulations.	
2	COOLING TOWER & CIRCULATING W SYS 7&8 (Proj-MTPS)	0.66	14 (1) (i) & (ii)	This expenditure is towards the work which is within the original scope (under Sl. No. 3(iii) of Sanction Order of MTPS 7&8 dt. 31.03.2015), as capitalized within the cut-off date by transferring from CWIP to Fixed Asset.		0.66
	Total of (C) Barrage, Gates & Others	10.16				10.16
D. Power House Plant & Machinery						
1	STEAM TURB, GEN, LP HEATER, COD, AUX MTPS 7 & 8	43.86	14 (1) (i) & (ii)	This expenditure is towards the work which is within the original scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.03.2015), as capitalized within the cut-off date by transferring from CWIP to Fixed Asset.	Considering the fact that the actual expenditure has been incurred within cut-off date, in respect of the assets which fall within the original scope of work, the claims of the Petitioner, are allowed under Regulation 14(1)(ii) of the 2014 Tariff Regulations.	43.86
2	SWITCH YARD (220 KV) 7&8 (Proj-MTPS)	82.96	14 (1) (i) & (ii)			82.96
3	BOILER & ACCS.EQUIP. 7&8 (Proj-MTPS)	2.36	14 (1) (i) & (ii)			2.36
4	ASH HANDLING PLANT 7&8 (Proj-MTPS)	12.51	14 (1) (i) & (ii)			12.51
5	STN C&I, CONTROLS FOR SG & TG, SEE, AVR 7&8 (Proj-MTPS)	6.76	14 (1) (i) & (ii)			6.76
6	GENERATOR TRANSFORMER 7&8 (Proj-MTPS)	5.85	14 (1) (i) & (ii)			5.85
7	FUEL OIL PUMP HOUSE 7&8 (Proj-MTPS)	3.54	14 (1) (i) & (ii)			3.54
8	THERMAL INSULATION 7&8 (Proj-MTPS)	1.66	14 (1) (i) & (ii)			1.66
9	CHIMNEY 7&8 (Proj-MTPS)	0.60	14 (1) (i) & (ii)			0.60
10	ESP RECTIFIERS 7&8 (Proj-MTPS)	0.06	14 (1) (i) & (ii)			0.06
11	TG PIPING, LP PIPING, INCL	0.01	14 (1) (i) & (ii)			0.01



	CW PIPING 7&8 (Proj-MTPS)					
12	PLATE HEAT EXCHANGER 7&8 (Proj-MTPS)	0.01	14 (1) (i) & (ii)			0.01
13	COAL HANDLING PLANT 7&8 (Proj-MTPS)	1948.23	14 (1) (i) & (ii)	This expenditure is towards the work which is within the original scope (under Sl. No. 3(ii) of Sanction Order of MTPS 7&8 dt. 31.03.2015), as capitalized within the cut-off date by transferring from CWIP to Fixed Asset.		1948.23
14	10. Water System	113.48	14 (1) (i) & (ii)	This expenditure is towards the work which is within the original scope (under Sl. No. 3(iii) of Sanction Order of MTPS 7&8 dt. 31.03.2015), as capitalized within the cut-off date by transferring from CWIP to Fixed Asset.		113.48
15	COLORINATION PLANT 7&8 (Proj-MTPS)	61.75	14 (1) (i) & (ii)			61.75
16	DM PLANT 7&8 (Proj-MTPS)	45.93	14 (1) (i) & (ii)			45.93
17	FIRE PROTECTION & DETECTION 7&8 (Proj-MTPS)	21.06	14 (1) (i) & (ii)			21.06
18	PRE-TREATMENT (PT) PLANT 7&8 (Proj-MTPS)	0.19	14 (1) (i) & (ii)			0.19
19	Initial Spares in Powerhouse Plant & Machinery embedded in different packages:	215.93	14 (1) (iii)	Within Original Scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.03.2015)	Considering the fact that the actual expenditure incurred on initial spares is within the cut-off date and is also within the permissible limit of initial spares, as per prevailing Regulations at the time of COD, the claim of the Petitioner is allowed under Regulation 14(1)(iii) of the 2014 Tariff Regulations.	215.93
20	Balance Initial Spares in Powerhouse Plant & Machinery procured separately:	133.70	14 (1) (iii)	Within Original Scope (under Sl. No. 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015).		133.70
	Total of (D)	2700.44				2700.44
E. Machinery & Equipment - Workshop						
1	Machinery & Equip (Workshop)	27.86	14 (1) (i) & (ii)	This expenditure is towards the work which is within the	Considering the fact that the actual expenditure has	27.86



				original scope (under Sl. No.9 of Sanction Order of MTPS 7&8 dt. 31.3.2015), as capitalized within the cut-off date by transferring from CWIP to Fixed Asset.	been incurred within cut-off date, in respect of the assets which fall within the original scope of work, the claim of the Petitioner, is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations.	
	Total of (E)	27.86				27.86
F. Sub Station Equipment						
1	Initial Spares	12.92	14 (1) (iii)	Within Original Scope (under Sl. No. 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015)	Considering the fact that the actual expenditure has been incurred within the cut-off date on the initial spares with in original scope of work and is within the permissible limit of initial spares as per prevailing Regulations at the time of COD, the claimed expenditure is allowed under Regulation 14(1)(iii) of the 2014 Tariff Regulations.	12.92
G. Switch Gear						
1	KV SWITCH GEAR 7&8 (Proj-MTPS)	7.80	14 (1) (i) & (ii)	This expenditure is towards the work which is within the original scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.03.2015), as capitalized within the cut-off date by transferring from CWIP to Fixed Asset.	Considering the fact that the actual additional capital expenditure has been incurred within cut-off date, in respect of the assets which fall within the original scope of work, the claim of the Petitioner is allowed under Regulation 14(1)(ii) of the 2014 Tariff Regulations.	7.80
2	I.V. SWITCH GEAR 7&8 (Proj-MTPS)	7.65	14 (1) (i) & (ii)			7.65
3	LT BUS DUCT 7&8 (Proj-MTPS)	5.36	14 (1) (i) & (ii)			5.36
4	ISOLATED PHASE (IP) BUS DUCT 7&8 (Proj-MTPS)	0.97	14 (1) (i) & (ii)			0.97
5	Initial Spares	17.08	14 (1) (iii)	Within Original Scope (under Sl. No. 3(i) & 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015)	Considering the fact that the actual expenditure incurred on initial spares is within the cut-off date and is also within permissible limit of	17.08



					initial spares, as per prevailing Regulations at the time of COD, the expenditure claimed is allowed under Regulation 14(1)(iii) of the 2014 Tariff Regulations.	
	Total of (G) Switch Gear	38.87				38.87
H.	Computer / IT Asset					
1	PERSONAL COMPUTER-MTPS 7 & 8	9.03	14 (1) (i) & (ii)	This expenditure is towards the work which is within the original scope (under Sl. No. 9 (16) of Sanction Order of MTPS 7&8 dt. 31.03.2015), as capitalized within the cut-off date by transferring from CWIP to Fixed Asset. Computers with updated operating systems are essential to ensure protection against cyber threat. This purchase is in compliance to 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.	Considering the fact that the actual additional capital expenditure has been incurred within cut-off date, in respect of the assets which fall within the original scope of work, the claim of the Petitioner is allowed under Regulation 14(1)(ii) of the 2014 Tariff Regulations.	9.03
	Total of (H)	9.03				9.03
I	Other Assets:					
1	CRANE & HOIST CHAIN PULLEY 7&8 (Proj-MTPS)	61.68	14 (1) (i) & (ii)	This expenditure is towards the work which is within the Original scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.03.2015), as capitalized within the cut-off date by transferring from	Considering the fact that the actual additional capital expenditure has been incurred within cut-off date, in respect of the assets which fall within the original scope of work, the claims of the Petitioner are	61.68
2	VENTILATION SYSTEM 7&8 (Proj-MTPS)	45.52	14 (1) (i) & (ii)			45.52
3	ELEVATOR 7&8 (Proj-MTPS)	0.03	14 (1) (i) & (ii)			0.03



				CWIP to Fixed Asset.	allowed under Regulation 14(1)(ii) of the 2014 Tariff Regulations.	
4	Motor Lorrys, Bus, Trucks (O/assets)	27.00	14 (1) (i) & (ii)	This expenditure is towards the work which is within the original scope (under Sl. No. 9 of Sanction Order of MTPS 7&8 dt. 31.03.2015), as capitalized within the cut-off date by transferring from CWIP to Fixed Asset.	The initial spares have been procured within the cut-off date and is within the ceiling limit, as per regulations. Hence, the claim for initial spares is allowed under Regulation 14 (1) (iii) of the 2014 Tariff Regulations	27.00
5	OFFICE FURNITURE- MTPS 7 & 8	95.87	14 (1) (i) & (ii)	This expenditure is towards the work which is within the original scope (under Sl. No. 9(15) of Sanction Order of MTPS 7&8 dt. 31.03.2015), as capitalized within the cut-off date by transferring from CWIP to Fixed Asset.		95.87
6	Hospital Equip (O/assets)	9.87	14 (1) (i) & (ii)			9.87
7	INTERNAL TELEPHONE SYSTEM 7&8 (Proj-MTPS)	0.49	14 (1) (i) & (ii)			0.49
8	SIMULATOR-7&8 (Proj-MTPS)	3.78	14 (1) (i) & (ii)	This expenditure is towards the work which is within the Original scope (under Sl. No. 9 (9) of Sanction Order of MTPS 7&8 dt. 31.03.2015), as capitalized within the cut-off date by transferring from CWIP to Fixed Asset.		3.78
9	Initial Spares:	0.56	14 (1) (iii)	Within Original Scope (under Sl. No. 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015)		0.56
	Total of (I)	244.81				244.81
	Grand Total	3568.50				3538.15



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
2015-16						
A.	Buildings					
1	POWERHOUSE BUILDING 7&8 (Proj-MTPS)	25.72	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by contractor, the claims of the Petitioner are allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.	25.72
2	CONDENSATE TRANSFER PUMP HOUSE-7&8 (Proj-MTPS)	0.12	14 (2) (iv), 54 & 55			0.12
3	COMPRESSOR BUILDING 7&8 (Proj-MTPS)	0.09	14 (2) (iv), 54 & 55			0.09
4	CPU REGENERATION BUILDING 7&8 (Proj-MTPS)	0.08	14 (2) (iv), 54 & 55			0.08
5	ACW/AIR WASHER BLDG-7&8 (Proj-MTPS)	0.06	14 (2) (iv), 54 & 55			0.06
6	DG BUILDING-7&8 (Proj-MTPS)	0.06	14 (2) (iv), 54 & 55			0.06
7	Other Building	21.03	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 9(11) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which		21.03
8	TECHNICAL BUILDING-7&8 (Proj-MTPS)	0.68	14 (2) (iv), 54 & 55			0.68
9	ADMINISTRATIVE BUILDING 7&8 (Proj-MTPS)	0.38	14 (2) (iv), 54 & 55			0.38
10	PERMANENT STORE BUILDING 7&8 (Proj-MTPS)	0.30	14 (2) (iv), 54 & 55			0.30
11	PIPE & CABLE RACK FOR BAL.PLANT AREA-7&8 (Proj-MTPS)	0.23	14 (2) (iv), 54 & 55			0.23



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
12	FIRE STATION BUILDING 7&8 (Proj-MTPS)	0.21	14 (2) (iv), 54 & 55	was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.		0.21
13	CANTEEN BUILDING 7&8 (Proj-MTPS)	0.06	14 (2) (iv), 54 & 55			0.06
14	MAIN GATE & GATE HOUSE - 7&8 (Proj-MTPS)	0.03	14 (2) (iv), 54 & 55			0.03
15	EARTHING & LIGHTNING PROTECTION SYS 7&8 (Proj-MTPS)	0.00	14 (2) (iv), 54 & 55			0.00
16	LT/HT CABLES & CABLING SYS 7&8 (Proj-MTPS)	0.00	14 (2) (iv), 54 & 55			0.00
17	School Building	63.88	14 (2) (iv), 54 & 55			This expenditure is towards the work which is within the original scope (under Sl. No. 9(19) (2) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.
Total of (A)		112.94				112.94
B.	Roads, Culverts & Railway Sidings:					



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
1	Access Road MTPS 7 & 8	4.08	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 9(11) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by contractor, the claims of the Petitioner are allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.	4.08
Total of (B)		4.08				4.08
C. Barrage, Gates & Other						
1	RLY TRACK HOPPER-7&8 (Proj-MTPS)	152.90	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 3(ii) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by contractor, the claims of the Petitioner are allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.	152.90



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
				CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.		
2	COOLING TOWER & CIRCULATING W SYS 7&8 (Proj-MTPS)	6.85	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 3(iii) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.		6.85
3	RIVER INTAKE PIPELINE 7&8 (Proj-MTPS)	(-) 178.69	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 9(13) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The amount includes (a) Rs. 50,52,060.00 towards the work of raw water piping		(-) 178.69



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
				and pump house (the work for which was already executed within the cut-off date and only the residual expenditure is now transferred from CWIP to Fixed Assets), and (b) Rs. - 2,29,21,262.00 towards recovery from the contractor and savings due to reduction in CST rate. The amount under 'a' above also includes an amount of Rs. 13,46,117.00, which was inadvertently booked under MTPS Unit 5 & 6 in FY 2014-15 and was rectified and booked under MTPS Unit 7 & 8 in FY 2015-16.		
Total of (C)		(-)18.95				(-)18.95
D. Power House Plant & Machinery						
1	STEAM TURB, GEN, LP HEATER, COD, AUX MTPS 7 & 8	482.22	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by contractor, the claims of the Petitioner are allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.	482.22
2	STN C&I, CONTROLS FOR SG & TG, SEE, AVR 7&8 (Proj-MTPS)	2.00	14 (2) (iv), 54 & 55			2.00
3	008/09/05 CHIMNEY 7&8 (Proj-MTPS)	6.54	14 (2) (iv), 54 & 55			6.54
4	008/06/04 TG PIPING, LP PIPING, INCL CW PIPING 7&8 (Proj-MTPS)	2.21	14 (2) (iv), 54 & 55			2.21
5	008/01/07 ESP RECTIFIERS 7&8 (Proj-MTPS)	0.68	14 (2) (iv), 54 & 55			0.68



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
6	008/12/02 FUEL OIL PUMP HOUSE 7&8 (Proj-MTPS)	0.13	14 (2) (iv), 54 & 55	CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.		0.13
7	008/09/01 GENERATOR TRANSFORMER 7&8 (Proj-MTPS)	0.00	14 (2) (iv), 54 & 55			0.00
8	008/07 CONTROL & RELAY PANEL 7&8 (Proj-MTPS)	0.00	14 (2) (iv), 54 & 55			0.00
9	008/07/03 DG SET (500KVA) 7&8 (Proj-MTPS)	0.00	14 (2) (iv), 54 & 55			0.00
10	008/07/07 PA SYSTEM 7&8 (Proj-MTPS)	0.00	14 (2) (iv), 54 & 55			0.00
11	DC SYSTEM WITH BATTERY & CHARGER 7&8 (Proj-MTPS)	0.00	14 (2) (iv), 54 & 55			0.00
12	CLORINATION PLANT 7&8 (Proj-MTPS)	0.12	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 3(iii) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.	0.12	
13	FIRE PROTECTION & DETECTION 7&8 (Proj-MTPS)	13.48	14 (2) (iv), 54 & 55		13.48	



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
14	COAL HANDLING PLANT 7&8 (Proj-MTPS)	112.20	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 3(ii) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.		112.20
15	BOILER & ACCS.EQUIP. 7&8 (Proj-MTPS)	(51.03)		Rectification entry	These negative entries, have been adjusted from the capital cost as on 1.4.2014 in the absence of linkage with positive entries in the previous year i.e., 2014-15	-
16	BOILER FEED PUMP 7&8 (Proj-MTPS)	(69.01)		Rectification entry		-
17 Initial Spares in Powerhouse Plant & Machinery embedded in different packages						
i	BOILER & ACCS.EQUIP. 7&8 (Proj-MTPS)	0.10	14 (2) (iv)	Within Original Scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.03.2015)	Considering the fact that the expenditure claimed towards initial spares is within the permissible ceiling limits, as per prevailing Regulations. at the time of COD, the	0.10
ii	BOILER FEED PUMP 7&8 (Proj-MTPS)	69.01	14 (2) (iv)			69.01
iii	STEAM TURB, GEN, LP	84.17	14 (2) (iv)			84.17



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
	HEATER, COD, AUX MTPS 7 &8				claims of the Petitioner are allowed under Regulation 14(1)(iii) read with Regulation 54 of the 2014 Tariff Regulations.	
	Sub-total:	153.28				153.28
18	Balance Initial Spares in Powerhouse Plant & Machinery procured separately					
i	85. Switchyard	8.17	14 (2) (iv)	Within Original Scope (under Sl. No. 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015)	Considering the fact that the expenditure claimed towards initial spares is within the permissible ceiling limits, as per prevailing Regulations. at the time of COD, the claims of the Petitioner are allowed under Regulation 14(1)(iii) read with Regulation 54 of the 2014 Tariff Regulations.	8.17
ii	BOILER & ACCS.EQUIP. 7&8 (Proj-MTPS)	236.64	14 (2) (iv)	Within Original Scope (under Sl. No. 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015). This includes expenditure of: a) Rs. 153 lakh for Quick erect scaffolding system; b) Rs. 49.02 lakh for Wear Plate of ID Fan Impeller (further expense of Rs. 4.68 lakh incurred and claimed in FY 2015-16); c) Rs. 28.30 lakh for Spares for Auma make Actuators (further expenses of Rs. 29.19 lakh and Rs. 20.82 lakh incurred and claimed in FY 2014-15 and FY 2016-17 respectively; and d) Rs. 6.32 lakh for Spares of ESP (further expenses of Rs. 20.15 lakh and Rs. 2.62 lakh incurred and		236.64



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
				claimed in FY 2014-15 and FY 2016-17 respectively).		
	TUBE MILLS 7&8 (Proj-MTPS)	5.46	14 (2) (iv)	Within Original Scope (under Sl. No. 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015). This expense is for Mill Body Liner.		5.46
iii	STEAM TURB, GEN,LP HEATER,COD,AUX MTPS 7 &8	471.23	14 (2) (iv)	Within Original Scope (under Sl. No. 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015) This includes expenditure of Rs. 469.25 lakh for Spares of LP Bypass system.		471.23
iv	STN C&I, CONTROLS FOR SG & TG,SEE,AVR 7&8 (Proj-MTPS)	8.39	14 (2) (iv)	Within Original Scope (under Sl. No. 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015)		8.39
v	DM PLANT 7&8 (Proj-MTPS)	10.72	14 (2) (iv)	Within Original Scope (under Sl. No. 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015). This includes expenditure of Rs. 2 lakh for Spares of LT Motor (further expenses of Rs. 3.17 lakh and Rs. 17 lakh claimed under Sl. No. 20.i and 20.ii respectively in FY 2014-15).		10.72
	Sub-total:	740.61				740.61
	Total of (D)	1393.44				1513.48
Machinery & Equipment - Workshop						



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
1	Machinery & Equip (Workshop)	(-)28.12	14 (2) (iv), 54 & 55	Booking inadvertently made in ledger code Machinery & Equip (Workshop) (0111110001) now rectified.	These negative entries, have been adjusted from the capital cost as on 1.4.2014 in the absence of linkage with positive entries in the previous year i.e., 2014-15	-
Total of (E)		(-) 28.12				-
F. Switch Gear						
1	6.6 KV SWITCH GEAR 7&8 (Proj-MTPS)	0.00	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by contractor, the claims of the Petitioner are allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.	0.00
2	ISOLATED PHASE (IP) BUS DUCT 7&8 (Proj-MTPS)	0.00	14 (2) (iv), 54 & 55			0.00
3	LT BUS DUCT 7&8 (Proj-MTPS)	0.00	14 (2) (iv), 54 & 55			0.00
Total of (F) Switch Gear		0.00				0.00
G. Computer / IT Assets						
1	PERSONAL COMPUTER-MTPS 7 & 8	0.60	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the Original scope (under Sl. No. 9(16) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by	0.60



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
				executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor. 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.	contractor, the claims of the Petitioner are allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.	
	Total of (G) Computer / IT Assets	0.60				0.60
H.	Other Assets					
1	WORK Shop Equipment-7&8 (Proj-MTPS)	30.54	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the Original scope (under Sl. No. 9 of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by contractor, the claims of the Petitioner are allowed under	30.54
2	Motor Lorry, Bus, Trucks (O/assets)	1.92	14 (2) (iv), 54 & 55			1.92



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
				transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.	Regulation 14(3)(v) of the 2014 Tariff Regulations.	
3	ELEVATOR 7&8 (Proj-MTPS)	2.11	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.		2.11
4	VENTILATION SYSTEM 7&8 (Proj-MTPS)	0.02	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the Original scope (under Sl. No. 9(9) of Sanction Order of MTPS 7&8 dt.		0.02
5	SIMULATOR-7&8 (Proj-MTPS)	1.66	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the Original scope (under Sl. No. 9(9) of Sanction Order of MTPS 7&8 dt.		1.66



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
				31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.		
6	Miscellaneous (O/assets)	0.43	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the Original scope (under Sl. No. 9(15) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.		0.43
7	INTERNAL TELEPHONE SYSTEM 7&8 (Proj-MTPS)	0.00	14 (2) (iv), 54 & 55	31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.		0.00
Total of (H)		36.68				36.68



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
	Grand Total	1500.68				1648.84

(Rs in lakh)

Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
2016-17						
A. Building						
1	LT/HT CABLES & CABLING SYS 7&8 (ProjMTPS)	25.58	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 9(11) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by contractor, the claims of the Petitioner are allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.	25.58
2	EARTHING & LIGHTNING PROTECTION SYS 7&8 (ProjMTPS)	4.10	14 (2) (iv), 54 & 55			4.10
	Sub-total:	29.68				29.68
3 Initial Spares:						
i	FIRE STATION BUILDING 7&8 (Proj MTPS)	1.32	14 (2) (iv)	Within Original Scope (under Sl. No. 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015)	Considering the fact that the actual expenditure incurred towards initial spares is within the original scope of work and is also within the permissible ceiling limit of initial spares as per prevailing Regulations at the time of COD, the claim of the Petitioner, is allowed under Regulation 14(1)(iii) and	1.32



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
					Regulation 54 and 55 of the 2014 Tariff Regulations.	
	Sub-total:	1.32				1.32
	Total of Building	31.00				31.00
B. Barrage & Barrage Gates & other civil works						
1	RLY TRACK HOPPER 7&8 (Proj MTPS)	133.34	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 3(ii) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by contractor, the claims of the Petitioner are allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.	133.34
	Total of (B)	133.34				133.34
C. Powerhouse Plant & Machinery						
1	BOILER & ACCS.EQUIP. 7&8 (Proj MTPS) (0111084402)	192.26	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by contractor, the	192.26
2	GENERATOR TRANSFORMER 7&8 (Proj MTPS)	187.36	14 (2) (iv), 54 & 55			187.36
3	STEAM GENERATOR 7&8 (Proj MTPS)	185.56	14 (2) (iv), 54 & 55			185.56



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
4	SWITCH YARD 7&8 (Proj MTPS)	24.83	14 (2) (iv), 54 & 55	was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.	claims of the Petitioner are allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.	24.83
5	CONTROL & RELAY PANEL 7&8 (ProjMTPS)	1.17	14 (2) (iv), 54 & 55			1.17
6	DG SET (500KVA) 7&8 (ProjMTPS)	0.29	14 (2) (iv), 54 & 55			0.29
7	PA SYSTEM 7&8 (Proj MTPS)	0.29	14 (2) (iv), 54 & 55			0.29
8	DC SYSTEM WITH BATTERY & CHARGER 7&8 (ProjMTPS)	0.59	14 (2) (iv), 54 & 55			0.59
9	COAL HANDLING PLANT 7&8 (ProjMTPS)	34.76	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 3(i.i) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.	34.76	
10	Initial Spares in Powerhouse Plant & Machinery embedded in different packages					
i	STEAM TURB, GEN, LP HEATER, COD, AUX MTPS 7 &8	0.96	14 (2) (iv)	Within Original Scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.03.2015)	Considering the fact that the actual expenditure incurred towards initial spares is within the original scope of work and is also is within the permissible ceiling limit of initial spares, as per prevailing Regulations at the time of COD, the claim of the Petitioner is allowed under Regulation	0.96



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
					14(1)(iii) read with Regulation 54 and 55 of the 2014 Tariff Regulations.	
	Sub-total:	0.96				0.96
11	Balance Initial Spares in Powerhouse Plant & Machinery procured separately					
i	CENTRAL LUBE OIL PURIFICATION	12.63	14 (2) (iv)	Within Original Scope (under Sl. No. 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015)	Considering the fact that the actual expenditure incurred towards initial spares is within the original scope of work and is also is within the permissible ceiling limit of initial spares, as per prevailing Regulations at the time of COD, the claim of the Petitioner is allowed under Regulation 14(1)(iii) read with Regulation 54 and 55 of the 2014 Tariff Regulations.	12.63
ii	UPS	5.22	14 (2) (iv)	-Do-		5.22
iii	BOILER & ACCS.EQUIP. 7&8 (ProjMTPS)	20.82	14 (2) (iv)	Within Original Scope (under Sl. No. 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015). This expenditure is for Spares for Auma make Actuators (further expenses of Rs. 29.19 lakh and Rs. 28.30 lakh incurred and claimed in FY 2014-15 and FY 2015-16 respectively).		20.82
iv	ESP RECTIFIERS 7&8 (ProjMTPS)	2.62	14 (2) (iv)	Within Original Scope (under Sl. No. 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015)		2.62
v	DM PLANT 7&8 (ProjMTPS)	0.40	14 (2) (iv)	Within Original Scope (under Sl. No. 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015)		0.40
vi	SWITCH YARD 7&8 (ProjMTPS)	4.17	14 (2) (iv)	Within Original Scope (under Sl. No. 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015). This expenditure is for 400KV Surge arrestors.		4.17
	Sub-total:	45.86				45.86
	Grand Total	673.93				673.93
D.	Switchgear					
1	ISOLATED PHASE (IP) BUS DUCT 7&8 (ProjMTPS)	3.23	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date.	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by	3.23
2	KV SWITCH GEAR 7&8 (ProjMTPS)	4.69	14 (2) (iv), 54 & 55			4.69



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
3	LT BUS DUCT 7&8 (ProjMTPS)	0.59	14 (2) (iv), 54 & 55	The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.	contractor, the claims of the Petitioner are allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.	0.59
	Sub-total	8.51				8.51
4	Initial Spares					
i	ISOLATED PHASE (IP) BUS DUCT 7&8 (ProjMTPS)	46.26	14 (2) (iv)	Within Original Scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.03.2015)		46.26
	Sub-total: Initial Spares	46.26				46.26
	Total of Switchgear	54.77				54.77
E.	Other Assets					
1	Miscellaneous (O/assets)	3.83	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 9(15) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date.	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by contractor, the claims of the Petitioner are allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.	3.83
2	INTERNAL TELEPHONE SYSTEM 7&8 (ProjMTPS)	0.29	14 (2) (iv), 54 & 55	The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.		0.29
3	SIMULATOR 7&8 (ProjMTPS)	2.29	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the Original scope (under Sl. No. 9(9) of Sanction Order		2.29



Sl. No.	Asset/Work	Amount Claimed	Regulation	Justification	Remark for admissibility	Amount allowed
				of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.		
	Sub-total	6.41				6.41
4	Initial Spares					
i	CHEMICAL LAB EQUIPMENT 7&8 (ProjMTPS)	9.14	14 (2) (iv)	Within Original Scope (under Sl. No. 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015). This expenditure is for Portable Dissolved Oxygen Analyser.	Considering the fact that actual expenditure incurred towards initial spares is within the original scope of work and is also within the permissible ceiling limit of initial spares as per prevailing Regulations at the time of COD, the claims of the Petitioner are allowed under Regulation 14(1)(iii) read with Regulation 54 and 55 of the 2014 Tariff Regulations.	9.14
ii	OFFICE FURNITURE MTPS 7 & 8	114.63	14 (2) (iv)	Within Original Scope (under Sl. No. 9(17) of Sanction Order of MTPS 7&8 dt. 31.03.2015)		114.63
	Sub-total:	123.77				123.77
	Total of Other Assets	130.18				130.18
	Grand Total	1023.22				1023.22

Sl. No.	Asset/Work	Amount claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount Allowed
2017-18						
A. Total of Power House Plant & Machinery						
1	TG PIPING, LP PIPING, INCL CW	438.62	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the Original	Since the expenditure claimed	438.62



	PIPING 7&8 (ProjMTPS)			scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.	by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by contractor, the claims of the Petitioner are allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.	
2	BOILER & ACCS.EQUIP. 7&8 (ProjMTPS)	72.81	14 (2) (iv), 54 & 55			72.81
3	STEAM TURB, GEN, LP HEATER, COD, AUX MTPS 7 &8	53.58	14 (2) (iv), 54 & 55			53.58
4	STEAM GENERATOR 7&8 (ProjMTPS)	43.75	14 (2) (iv), 54 & 55			43.75
5	GENERATOR TRANSFORMER 7&8 (ProjMTPS)	19.53	14 (2) (iv), 54 & 55			19.53
6	BOILER FEED PUMP 7&8 (ProjMTPS)	12.90	14 (2) (iv), 54 & 55			12.90
7	STN C&I, CONTROLS FOR SG & TG, SEE, AVR 7&8 (ProjMTPS)	12.71	14 (2) (iv), 54 & 55			12.71
8	TUBE MILLS 7&8 (ProjMTPS)	1.78	14 (2) (iv), 54 & 55			1.78
9	ID FAN MOTORS 7&8 (ProjMTPS)	0.83	14 (2) (iv), 54 & 55			0.83
10	ASH HANDLING PLANT 7&8 (ProjMTPS)	0.32	14 (2) (iv), 54 & 55			0.32
11	RE JOINTS, FLASH TANKS & MISC TANKS 7&8 (ProjMTPS)	0.41	14 (2) (iv), 54 & 55			0.41
12	COAL HANDLING PLANT 7&8 (ProjMTPS)	1604.85	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the Original scope (under Sl. No. 3(ii) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by contractor, the claims of the Petitioner are allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.	1604.85



13	CLORINATION PLANT 7&8 (ProjMTPS)	234.61	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the Original scope (under Sl. No. 3(iii) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.		234.61
	Total of Power House Plant & Machinery	2496.69				2496.69
B. Other Assets						
1	Hospital Equipment MTPS U 7&8	1.33	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the Original scope (under Sl. No. 9 (15) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by contractor, the claims of the Petitioner are allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.	1.33
	Total of Other Assets	1.33				1.33
	Grand Total	2498.02				2498.02



(Rs in lakh)

Sl. No.	Asset/Work	Amount claimed	Regulation	Petitioner Submission	Reason for admissibility	Amount Allowed
2018-19						
A. Building						
1	Residential Building 7&8 (Proj MTPS)	246.51	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the Original scope (under Sl. No. 9(11) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by contractor, the claims of the Petitioner are allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.	246.51
	Total of Building	246.51				246.51
B. Plant & Machinery						
1	STEAM GENERATOR 7&8 (ProjMTPS)	838.59	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the Original scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by contractor, the	838.59



Sl. No.	Asset/Work	Amount claimed	Regulation	Petitioner Submission	Reason for admissibility	Amount Allowed
2	BOILER & ACCS.EQUIP. 7&8 (ProjMTPS)	593.98	14 (2) (iv), 54 & 55	was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.	claims of the Petitioner are allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.	593.98
3	STEAM TURB, GEN, LP HEATER, COD, AUX MTPS 7 & 8	549.42	14 (2) (iv), 54 & 55			549.42
4	TG PIPING, LP PIPING, INCL CW PIPING 7&8 (ProjMTPS)	362.00	14 (2) (iv), 54 & 55			362.00
5	STN C&I, CONTROLS FOR SG & TG, SEE, AVR 7&8 (ProjMTPS)	197.71	14 (2) (iv), 54 & 55			197.71
6	BOILER FEED PUMP 7&8 (ProjMTPS)	193.43	14 (2) (iv), 54 & 55			193.43
7	GENERATOR TRANSFORMER 7&8 (ProjMTPS)	170.69	14 (2) (iv), 54 & 55			170.69
8	ASH HANDLING PLANT 7&8 (ProjMTPS)	153.08	14 (2) (iv), 54 & 55			153.08
9	SWITCH YARD (220 KV) 7&8 (ProjMTPS)	120.02	14 (2) (iv), 54 & 55			120.02
10	TUBE MILLS 7&8 (ProjMTPS)	113.62	14 (2) (iv), 54 & 55			113.62
11	CHIMNEY 7&8 (ProjMTPS)	108.99	14 (2) (iv), 54 & 55			108.99
12	P/CYC, HP BYPASS, QCNRV, PIPING VALVES ETC 7&8 (ProjMTPS)	49.21	14 (2) (iv), 54 & 55			49.21
13	ID FAN MOTORS 7&8 (ProjMTPS)	42.87	14 (2) (iv), 54 & 55			42.87
14	CONDENSATE POLISHING UNIT 7&8 (ProjMTPS)	30.47	14 (2) (iv), 54 & 55			30.47
15	CNTRL VALVES FLOW ELEMENTS ANNU BAR 7&8 (ProjMTPS)	20.48	14 (2) (iv), 54 & 55			20.48
16	DG SET (500KVA) 7&8 (ProjMTPS)	15.86	14 (2) (iv), 54 & 55			15.86
17	RE JOINTS, FLASH TANKS & MISC TANKS 7&8 (ProjMTPS)	15.16	14 (2) (iv), 54 & 55			15.16
18	FUEL OIL PUMP HOUSE 7&8 (ProjMTPS)	15.04	14 (2) (iv), 54 & 55			15.04



SI. No.	Asset/Work	Amount claimed	Regulation	Petitioner Submission	Reason for admissibility	Amount Allowed
19	BUTTERFLY VALVES 7&8 (ProjMTPS)	12.96	14 (2) (iv), 54 & 55			12.96
20	ESP RECTIFIERS 7&8 (ProjMTPS)	10.91	14 (2) (iv), 54 & 55			10.91
21	DC SYSTEM WITH BATTERY & CHARGER 7&8 (ProjMTPS)	6.73	14 (2) (iv), 54 & 55			6.73
22	PLATE HEAT EXCHANGER 7&8 (ProjMTPS)	5.87	14 (2) (iv), 54 & 55			5.87
23	AUXILIARY PRDS 7&8 (ProjMTPS)	5.52	14 (2) (iv), 54 & 55			5.52
24	HP/LP DOZING 7&8 (ProjMTPS)	5.05	14 (2) (iv), 54 & 55			5.05
25	THERMAL INSULATION 7&8 (ProjMTPS)	5.04	14 (2) (iv), 54 & 55			5.04
26	MISC PUMPS RE JOINTS HEAT EXCHANGERS 7&8 (ProjMTPS)	4.10	14 (2) (iv), 54 & 55			4.10
27	SELF CLEANING STRAINERS 7&8 (ProjMTPS)	2.68	14 (2) (iv), 54 & 55			2.68
28	P/CYCLE VALVES(CS/SS) GATE/GLOBE/NR V 7&8 (ProjMTPS)	1.74	14 (2) (iv), 54 & 55			1.74
29	PA SYSTEM 7&8 (ProjMTPS)	1.14	14 (2) (iv), 54 & 55			1.14
30	CONTROL & RELAY PANEL 7&8 (ProjMTPS)	1.00	14 (2) (iv), 54 & 55			1.00
31	LV POWER TRANSFORMER (OIL FEED) 7&8 (ProjMTPS)	0.88	14 (2) (iv), 54 & 55			0.88
32	CENTRAL LUBE OIL PURIFICATION	0.13	14 (2) (iv), 54 & 55			0.13
33	BALL VALVES 7&8 (ProjMTPS)	0.07	14 (2) (iv), 54 & 55			0.07
34	UPS	0.05	14 (2) (iv), 54 & 55			0.05
35	MISC POWER PLANT EQUIP (MTPS 7 & 8)	0.01	14 (2) (iv), 54 & 55			0.01



Sl. No.	Asset/Work	Amount claimed	Regulation	Petitioner Submission	Reason for admissibility	Amount Allowed
36	Switchyard	8.44	14 (2) (iv), 14 (3) (vii), 54 & 55	This expenditure is towards the work which is within the Original scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor. The expenditure also includes procurement of Oil Breakdown Voltage (BDV) Test Kit for testing of transformer Oil. Earlier the testing was done with the test kit available at the Testing lab, CRITIL at Maithon. To extend the In-house transformer oil testing facility & to minimize the lead time for measurement of such a vital parameter for transformer oil, the new Oil BDV Test kit was procured.		8.44
37	COAL HANDLING PLANT 7&8 (ProjMTPS)	503.94	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the Original scope (under Sl. No. 3(ii) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The		503.94
38	SUMP PUMPS 7&8 (ProjMTPS)	0.67	14 (2) (iv), 54 & 55			0.67



Sl. No.	Asset/Work	Amount claimed	Regulation	Petitioner Submission	Reason for admissibility	Amount Allowed
39	DM PLANT 7&8 (ProjMTPS)	154.76	14 (2) (iv), 54 & 55	work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between DVC and the contractor.		154.76
40	FIRE PROTECTION & DETECTION 7&8 (ProjMTPS)	36.55	14 (2) (iv), 54 & 55			36.55
41	CLORINATION PLANT 7&8 (ProjMTPS)	10.55	14 (2) (iv), 54 & 55			10.55
42	Water System	1.27	14 (2) (iv), 54 & 55			1.27
43	PRE TREATMENT (PT) PLANT 7&8 (ProjMTPS)	36.15	14 (2) (iv), 54 & 55			36.15
44	STEAM TURB, GEN, LP HEATER, COD, AUX MTPS 7&8	703.85	14 (3) (vii), 54 & 55	This expenditure is towards the repair works procurement of the damaged IP Turbine of MTPS Unit-8 along with replacement of blades of the IP rotor. On 03.07.2017, the MTPS Unit-8 encountered sudden high vibration at turbine bearing no 1 and 2. The incident of high vibration was referred to BHEL. The turbine was dismantled in September 2017 for detailed inspection. Upon inspection, the turbine IP rotor and blades were found damaged including missing lock blade of 7th stage, dent/hitting marks on other blades, damaged sealing strips of 7th stage, rubbed gland fins, deep line mark on the rotor shaft, etc. Re-blading was carried out by BHEL along with other necessary repair works.	The generating station being a coal-based station, Regulation 14(3)(vii) of the 2014 Tariff Regulation is not applicable. Moreover, no provision exists under the 2014 Tariff Regulations, to allow additional capital expenditure for replacement of equipment, early in the plant useful life, In view of this and after examining the submissions of the Petitioner, we find no reason to allow the claim of the Petitioner, by invocation of Regulation 54 and/or Regulation 55 of the 2014 Tariff Regulations. Accordingly, the claim of the Petitioner, is not allowed .	0.00



Sl. No.	Asset/Work	Amount claimed	Regulation	Petitioner Submission	Reason for admissibility	Amount Allowed
45	Boiler & ACCS.EQUIP. 7&8 (Proj MTPS)	5.96	14 (3) (vii), 54 & 55	This expenditure is toward procurement of two nos. of Electrostatic Liquid Cleaning (ELC) machines for the purpose of purification of lubricating oils of boiler and coal mill equipment's of MTPS U #7&8. As the boiler and coal mill area is dust prone, the oil used for lubrication gets contaminated very frequently. In order to prevent choking of various ports and malfunctioning of equipment's, it is very much essential to clean the lubricating oil on a regular basis. The existing two no's of ELC machines were insufficient to cater the requirement smoothly. Hence, two more ELC machines have been procured for equipment's in the boiler and coal mill area for smooth execution of the oil purification job keeping in consideration less transportation requirement for the ELC machines.	Regulation 14(3)(vii) of the 2014 Tariff Regulations is applicable to generating stations other than coal based generating stations. This generating station, being a coal-based station, Regulation 14(3)(vii) is therefore not applicable. Accordingly, the additional capital expenditure claimed by the Petitioner, towards creation of additional facilities is not allowed .	0.00
46	Boiler & ACCS.EQUIP. 7&8 (ProjMTPS)	3.52	14 (3) (vii), 54 & 55	This expenditure is toward procurement of Low Vacuum Dehydration machine for removal of moisture from lubricating oil of equipment's in boiler and coal mill area of MTPS 7&8. Presence of moisture in lubricating oil results in corrosion of machine parts, reduction of life of bearings and other	Regulation 14(3)(vii) of the 2014 Tariff Regulations is applicable to generating stations other than coal based generating stations. This generating station, being a coal-based station, Regulation 14(3)(vii) is therefore not applicable. Accordingly, the additional capital expenditure claimed by the Petitioner, towards creation of	0.00



Sl. No.	Asset/Work	Amount claimed	Regulation	Petitioner Submission	Reason for admissibility	Amount Allowed
				machine internals, depletion of anti-rust & anti-oxidant additives in oil along with other additives, reduces lubricity, increase in acidity value of oil and accelerated ageing of components. It is also to note here that permissible value of moisture in oil to be filtered through ELC machine is up to 500 PPM and reduction of moisture in oil also increases the filtration capability of ELC machines. Therefore, the Low Vacuum Dehydration machine has been purchased to facilitate oil filtration as well as to ensure healthiness of the equipment's in the boiler and coal mill area of MTPS #7 & 8.	additional facilities is not allowed .	
	Total	5120.18				4406.85
C. Switchgear (13)						
1	KV SWITCH GEAR 7&8 (ProjMTPS)	10.90	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the Original scope (under Sl. No. 3(i) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. The major expenditure was already transferred to Fixed Asset. Only the residual expenditure, which was kept in CWIP, is now being transferred from CWIP to fixed assets as and when full and final settlement for the respective part of the job has been achieved between	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by contractor, the claims of the Petitioner are allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.	10.90



Sl. No.	Asset/Work	Amount claimed	Regulation	Petitioner Submission	Reason for admissibility	Amount Allowed
				DVC and the contractor.		
	Total of Switchgear	10.90				10.90
D. Computer / IT Assets						
1	Personal Computer MTPS 7 & 8	39.22	14 (2) (iv), 54 & 55	This expenditure is towards the procurement within the Original scope (under Sl. No. 9(16) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The procurement was already made within the cut-off date. Only the residual expenditure is now being transferred from CWIP to fixed assets. 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 expenditure incurred on minor assets, after the cut-off date, is not allowed , in terms of the proviso to Regulation 14 of the 2014 Tariff Regulations.	0.00
	Total of (D)	39.22				0.00
E. Other Assets						
1	CHEMICAL LAB EQUIPMENT 7&8 (ProjMTPS)	23.30	14 (2) (iv), 54 & 55	This expenditure is towards procurement of instruments which is within the Original scope (under Sl. No. 9 (15) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The procurement was already made within the cut-off date. Only the residual expenditure is now being transferred from CWIP to fixed assets. The instruments include Spectrometer, Automatic Potentiometric	Since the expenditure claimed by the Petitioner pertains to the full and final settlement for the respective part of the work undertaken by contractor, the claims of the Petitioner are allowed under Regulation 14(3)(v) of the	23.30



Sl. No.	Asset/Work	Amount claimed	Regulation	Petitioner Submission	Reason for admissibility	Amount Allowed
				Tiatorator, refrigerator cum freezer, etc. for chemical lab.	2014 Tariff Regulations.	
2	AIR CONDITIONING SYSTEM 7&8 (ProjMTPS)	1.74	14 (2) (iv), 54 & 55	This expenditure is towards the procurement within the Original scope (under Sl. No. 9(15) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The procurement was already made within the cut-off date. Only the residual expenditure is now being transferred from CWIP to fixed assets.		1.74
3	CRANE & HOIST CHAIN PULLEY 7&8 (ProjMTPS)	5.47	14 (2) (iv), 54 & 55	This expenditure is towards the procurement of Hydraulic jack and vertical wedge within the original scope (under Sl. No. 9 of Sanction Order of MTPS 7&8 dt. 31.03.2015). The procurement was already made within the cut-off date. Only the residual expenditure is now being transferred from CWIP to fixed assets.		5.47
5	SIMULATOR7&8 (ProjMTPS)	19.37	14 (2) (iv), 54 & 55	This expenditure is towards the work which is within the original scope (under Sl. No. 9(9) of Sanction Order of MTPS 7&8 dt. 31.03.2015). The work was already executed within the cut-off date. Only the residual expenditure is now being transferred from CWIP to fixed assets.		19.37
	Total of (E)	49.88				49.88
	Grand Total	5466.70				4714.14

20. Accordingly, the additional capital expenditure, including initial spares allowed/



disallowed for the period 2014-19 is as under:

	<i>(Rs. in lakh)</i>				
Additional Capital Expenditure	2014-15	2015-16	2016-17	2017-18	2018-19
Claimed	3568.50	1500.68	1023.22	2498.02	5466.70
Allowed	3538.15	1648.84	1023.22	2498.02	4714.14
Disallowed	30.35	(-148.16)	0.00	0.00	752.55

Initial Spares

21. The Petitioner has claimed total initial spares for Rs.1492.26 lakh (Rs. 380.20 lakh in 2014-15, Rs.893.90 lakh in 2015-16 and Rs.218.17 lakh in 2016-17) under Regulation 14(1)(i) and Regulation 14(1)(iii) of the 2014 Tariff Regulations. In justification for the same, the Petitioner has submitted that the capital spares pertain to the original scope of work and have been procured within the cut-off date of the generating station. The Petitioner has claimed initial spares for Rs.893.90 lakh in 2015-16 and Rs. 218.17 lakh in 2016-17 i.e., after the cut-off date and has submitted that these spares are balance initial spares, within the original scope of work and are within the permissible ceiling limit of 4% as per the 2014 Tariff Regulations.

22. The matter has been considered. Considering the fact that the station COD was in the year 2012, the generating station is an existing station and as such, in terms of the 2009 Tariff Regulations, the ceiling limit of initial spares within the original scope shall be 2.5% of the capital cost as on the cut-off date. As per the order dated 3.10.2016 in Petition No.207/GT/2015, the value of initial spares transferred to fixed assets till the cut-off date is Rs.9120 lakh. Accordingly, based on the capital cost (excluding initial spares) i.e., Rs.487944.75 lakh (Rs.497064.75 lakh – Rs.9120.00 lakh) as on the cut-off date (31.3.2015), the ceiling limit of 2.5% as per Regulation 8(i) of 2009 Tariff Regulations, the initial spares works out as Rs.12511.40 lakh ($487944.75 \times 2.5 / 97.5$), as against the initial spares of Rs.9120 lakh capitalized till the cut-off date. Accordingly, the Petitioner's



claim towards initial spares for Rs.380.20 lakh (on cash basis), during the period 2014-15, is allowed. Further, considering the ceiling of 2.5%, the balance allowable initial spares, as on 31.3.2015, works out as Rs. 3391.40 lakh (Rs. 12511.40 lakh – Rs.9120 lakh). As such, considering the fact that the balance initial spares claimed during the years 2015-16 and 2016-17 i.e., Rs.893.90 lakh and Rs.218.7 lakh, amounts to Rs.1112.60 lakh only, as against the balance limit of Rs.3391.40 lakh, we, allow the initial spares claimed during the years 2016-17 and 2017-18 under Regulation 14(i)(iii) read with Regulation 54 (Power to relax) of the 2014 Tariff Regulations. Accordingly, the Initial Spares allowed in additional capital expenditure for the period 2014-19 is as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Claimed	380.20	893.90	218.17	0.00	0.00
Allowed	380.20	893.90	218.17	0.00	0.00

De-Capitalization

23. The Petitioner has submitted the asset-wise details of de-capitalization of Rs. 517.53 lakh for Steam Turbine, GEN, LP Heater, COD, AUX. MTPS 7 &8, Replacement of damaged blades of IP rotor of MTPS Unit-8 in 2018-19. As the expenditure has been disallowed, no decapitalisation has been considered in this order.

Un-discharged Liabilities

24. The Petitioner has submitted that the total undischarged liabilities created during the period 2014-19 is Rs.498.96 lakh (Rs.138.51 lakh in 2014-15, Rs. 24.90 lakh in 2015-16, Rs. 21.24 lakh in 2016-17, Rs.312.92 lakh in 2017-18 and Rs.1.38 lakh in 2018-19). It is observed that information submitted by the Petitioner is not line with the provisions of the 2014 Tariff Regulations i.e., no item-wise and year-wise position of undischarged/discharge of liabilities has been made available. In the absence of item-wise availability of undischarged liabilities, the same is determined on a *pro-rata* basis,



considering the admitted additional capital expenditure, as against the additional capital expenditure claimed, during each year of the period 2014-19. Accordingly, as against un-discharged liabilities for Rs. 498.96 lakh claimed, a corresponding amount of Rs. 497.59 lakh (Rs.137.34 lakh in 2014-15, Rs.24.90 lakh in 2015-16, Rs.21.24 lakh in 2016-17, Rs.312.92 lakh in 2017-18 and Rs.1.19 lakh in 2018-19) has been allowed.

Discharge of liabilities

25. The Petitioner has submitted the year-wise total liabilities discharged for Rs. 7434.73 lakh during the period 2014-19 (Rs.27.31 lakh in 2014-15, Rs.198.53 lakh in 2015-16, Rs.5507.83 lakh in 2016-17; and Rs.1701.05 lakh in 2017-18), instead of the item wise discharge of liabilities. In the absence of the item-wise liabilities discharged, the same is determined on a *pro-rata* basis, considering the admitted additional capital expenditure, as against the claimed expenditure, during each year of the period 2014-19. Further, the opening balance of liabilities 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 assets allowed, are as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Un-discharged liabilities (A)	7293.70	7403.72	7230.10	1744.40	356.50
Additions during the 2014-19 tariff period (corresponding to allowed additional capital expenditure) (B)	137.34	24.90	21.24	312.92	1.19
Discharges during the 2014-19 tariff period (corresponding to allowed additional capital expenditure) (C)	27.31	198.53	5506.94	1700.82	0.00
Reversal of Liabilities out of liabilities added during the 2014-19 tariff period (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)	7403.72	7230.10	1744.40	356.50	357.69

Capital cost allowed for the period 2014-19

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



(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost (A)	493636.63	497064.75	498887.22	505396.14	509282.05
Add: Addition during the year / period (B)	3538.15	1648.84	1023.22	2498.02	4714.14
Less: De-capitalization during the year /period (C)	0.00	0.00	0.00	0.00	0.00
Less: Undischarged liabilities (D)	137.34	24.90	21.24	312.92	1.19
Add: Discharges during the year /period (E)	27.31	198.53	5506.94	1700.82	0.00
Closing Gross Block (F) = (A+B-C-D+E)	497064.75	498887.22	505396.14	509282.05	513995.01
Average Gross Block (F) = (A+F)/2	495350.69	497975.98	502141.68	507339.09	511638.53

Debt-Equity Ratio

27. 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.”

28. The opening capital cost of Rs. 493636.63 lakh, as on 1.4.2014, has been apportioned between debt and equity, as Rs.365308.61 lakh and Rs.128328.02 lakh respectively, on the debt equity ratio of 74:26 as determined in order dated 14.9.2016 in Petition No. 206/GT/2015. Further, the additional capital expenditure admitted as above has been allocated in the debt-equity ratio of 70:30. Accordingly, the details of debt-equity ratio in respect of the generating station as on 1.4.2014 and as on 31.3.2019 are as follows:

	Capital Cost as on 1.4.2014 (Rs. in lakh)	%	Net Additional Capital Expenditure for 2014-19 tariff period (Rs. in lakh)	%	Capital Cost as on 31.4.2019 (Rs. in lakh)	%
Debt	365308.61	74.00%	14250.87	70%	379559.48	73.84%
Equity	128328.02	26.00%	6107.51	30%	134435.53	26.16%
Total	493636.63	100.00%	20358.38	100%	513995.01	100.00%

Return on Equity

29. 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 Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:
- (v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:
- (vii) additional RoE shall not be admissible for transmission line having length of less than 50 kilometer.”

30. 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.”

31. The base rate of Return on Equity (ROE) as 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 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 during 2014-15 to 2018-19 on actual gross income of any financial year.

32. DVPCA has submitted that though the Petitioner has considered the effective tax rate of 20.9605%, 21.3416%, 21.3416%, 21.3416% and 21.548% for computation of ROE for the period 2014-19, the Audited accounts reveals that the Petitioner has not paid any actual tax during the 2014-18. It has stated that for the year 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 ROE is to be allowed at a rate of 15.50% only, without considering any effective tax rate. In response, the Petitioner, has clarified that there is no income tax liability on the Petitioner for the period 2014-19. However, it has sought leave of the Commission, to claim income tax liability, if any, which may arise in future.

33. The matter has been considered. Since the Petitioner has not been paying 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 2014 Tariff Regulations. Accordingly, ROE has been worked out and allowed as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Normative Equity-Opening (A)	128328.02	129356.45	129903.19	131855.87	133021.64
Addition of Equity due to additional capital expenditure (B)	1028.44	546.74	1952.68	1165.78	1413.89
Normative Equity-Closing (C) = (A) + (B)	129356.45	129903.19	131855.87	133021.64	134435.53
Average Normative Equity (D) = (A+C)/2	128842.23	129629.82	130879.53	132438.76	133728.59
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)	19970.55	20092.62	20286.33	20528.01	20727.93

Interest on Loan

34. 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."

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

- a. The gross normative loan of Rs. 365308.61 lakh has been considered on 1.4.2014, in line with the gross normative loan balance of Rs. 365418.26 lakh as on 31.3.2014 in order dated 14.9.2016 in Petition No. 206/GT/2015, after adjusting the same with the rectification entry of Rs.109.65 lakh (74% of Rs.148.16 lakh) in debt equity ratio. In addition to this, loan component towards additional capitalization has been considered as per the approved debt equity ratio.
- b. Cumulative repayment of loan as on 31.3.2014 has been considered as cumulative repayment as on 1.4.2014.
- 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.
- e. In line with the provisions of the Regulations, the weighted average rate of interest 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 case of loans carrying floating rate of interest the rate of interest as provided by the Petitioner has been considered for the purpose of tariff. The necessary calculation for interest on loan is as follows:

(Rs in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Gross opening loan (A)	365308.61	367708.30	368984.03	373540.27	376260.41
Cumulative repayment of loan up to previous year (B)	72691.40	110773.22	149727.65	189015.27	228709.97



	2014-15	2015-16	2016-17	2017-18	2018-19
Net Loan Opening (C) = (A) - (B)	292617.21	256935.08	219256.38	184525.00	147550.44
Addition due to additional capital expenditure (D)	2399.68	1275.73	4556.24	2720.14	3299.07
Repayment of loan during the year (E)	38081.82	38954.43	39287.62	39694.70	40024.71
Less: Repayment adjustment on account of de-capitalization (F)	0.00	0.00	0.00	0.00	0.00
Net Repayment (G) = (E) - (F) + (H)	38081.82	38954.43	39287.62	39694.70	40024.71
Net Loan Closing (H) =(C) +(D) -(G)	256935.08	219256.38	184525.00	147550.44	110824.80
Average Loan (I) = (C+H)/2	274776.15	238095.73	201890.69	166037.72	129187.62
Weighted Average Rate of Interest of loan (J)	10.1798%	10.3831%	10.2311%	9.4480%	9.8721%
Interest on Loan (K) = (I)*(J)	27971.77	24721.70	20655.58	15687.21	12753.53

Depreciation

36. 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 licensee, 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.”

37. 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.”

38. The cumulative depreciation amounting to Rs. 72691.39 lakh as on 1.4.2014, as per order dated 14.9.2016 in Petition No. 206/GT/2015, has been retained for the purpose of tariff. The weighted average rate of depreciation, calculated in terms of the Regulation 53(2)(iii) read with Regulation 27 of the 2014 Tariff Regulations, has been considered for the 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. Accordingly, depreciation worked out and allowed are as under:

(Rs. in lakh)



	2014-15	2015-16	2016-17	2017-18	2018-19
Average Capital Cost (A)	495350.69	497975.98	502141.68	507339.10	511638.53
Value of freehold land included in average capital cost (B)	0.00	0.00	0.00	0.00	0.00
Aggregated Depreciable Value (C)= (A-B) *90%	445815.62	448178.39	451927.51	456605.19	460474.68
Remaining aggregate depreciable value at the beginning of the year (D) = [(C) - (Cumulative Depreciation of Previous year)]	373124.23	337405.18	302199.87	267589.93	231764.72
No. of completed years at the beginning of the year (E)	2.14	3.14	4.14	5.14	6.14
Balance useful life at the beginning of the year (F) = 25 - (E)	22.86	21.86	20.86	19.86	18.86
Weighted Average Rate of Depreciation (WAROD) (G)	7.6878%	7.8226%	7.8240%	7.8241%	7.8228%
Depreciation during the year/ period (H) = Minimum of [(A)*(G) or (D)]	38081.82	38954.43	39287.62	39694.70	40024.71
Cumulative depreciation at the end of the year (before adjustment for de-capitalization) (I) = (H) + (K of the previous year)	110773.21	149727.64	189015.26	228709.96	268734.67
Less: Depreciation adjustment on account of de-capitalization (J)	0.00	0.00	0.00	0.00	0.00
Cumulative depreciation at the end of the year* (K) = (I) - (J)	110773.21	149727.64	189015.26	228709.96	268734.67

Operation & Maintenance Expenses

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

(Rs in lakh/MW)

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

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

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
16000.00	17010.00	18080.00	19220.00	20430.00

41. As the O&M expenses claimed by Petitioner, is in terms of Regulation 29(1)(a) of



the 2014 Tariff Regulations, the same is allowed.

Water Charges

42. 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 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:

43. The Petitioner has claimed water charges as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
0.00	3149.55	1562.79	1057.38	1074.95

44. As regards water charges claimed, the Commission vide ROP of the hearing dated 25.5.2021, had directed the Petitioner to submit year-wise audited computation of actual water charges claimed for the period 2014-19, including the actual quantity of water consumed; rate (Rs./M³) charged by the State authorities; any other charges included in the water charges, in addition to the charges calculated based on the above; and Auditor certificate to the effect that such other charges above were booked under the head ‘water charges’ during the period 2014-19. In compliance to the same, the Petitioner vide its affidavit dated 1.7.2021, has submitted the auditor certificate in support of the water charges.

45. The Respondent BYPL has submitted that in terms of Regulation 29(2) of the 2014 Tariff Regulations, Water Charges are to be allowed separately, based on water consumption depending upon type of plant, type of cooling water system, etc. subject to prudence check. The Respondent KSEBL has submitted that actual water consumption of Petitioner is higher than the normative water consumption corresponding to the same gross electricity generation for the period 2014-19.



46. The Petitioner in its rejoinder, has submitted that the Commission in the Statement of Objects and Reasons (SOR) to the 2014 Tariff Regulations, has noted the uncontrollable nature of water charges. The Petitioner has also submitted that in line with the norms for specific water consumption, for all existing Cooling Tower-based Thermal Power Plants as 3.5 m³/MWh, which was set by the Ministry of Environment, Forest and Climate Change (MoEFCC), GOI in the Environment (Protection) Amendment Rules, 2015 on 7.12.2015, it has taken steps for reduction in specific water consumption and improvement in specific water consumption was reflected in the year 2017-18 onwards. The Petitioner has further submitted that the higher water consumption during the 2014-15, 2015-16 and 2016-17 is attributable to the fact that there has been no proper methods to collect wastewater from the various drains and pits in the plant, as well as from the ash pond, for re-use of the same, in places like ash sump. However, it has submitted that during the recent years, several technical modifications (civil work) have been carried out at the ash pond as well as at the pipelines from the ash pond to plant, that include mending of different leakages, manholes, channel repairing, repairing of defunct pumps, augmentation of area for decantation at ash pond, etc. The Petitioner has stated that all these modifications have increased the wastewater recovery, thereby improving the water consumption efficiency of the generating station.

47. The matter has been considered, Regulation 29(2) provides for consideration of the actual consumption of water depending upon type of plant, type of cooling water system etc, subject to prudence check. The Petitioner vide affidavit dated 1.7.2021, has furnished the audited water consumption and charges incurred thereof, for the period 2014-19. It is however noticed that the Petitioner has booked the water consumption charges for the 2014-15 and 2015-16 in the audited accounts for 2015-16. The details of water charges claimed are as follows:



Year	Water Use	Quantity of water consumed (M ³)	Rate of water charges (Rs. /M ³)	Water Charges as per Rate (Rs. Lakh)	Water Charges apportioned as per Annual Accounts
2014-15	Industrial	24163806	5.70	1377.34	0.00
	Domestic	81160	1.15	0.93	
	Total	24244966		1378.27	
2015-16	Industrial	27181471	5.70	1549.34	3149.55
	Domestic	90788	1.15	1.04	
	Total	27272259		1550.39	
2016-17	Industrial	25729275	5.70	1466.57	1562.79
	Domestic	88171	1.15	1.01	
	Total	25817446		1467.58	
2017-18	Industrial	20506992	5.70	1168.90	1057.38
	Domestic	75381	1.15	0.87	
	Total	20582373		1169.77	
2018-19	Industrial	21710055	5.70	1237.47	1074.95
	Domestic	78623	1.15	0.90	
	Total	21788678		1238.38	
Total for 2014-19 tariff period		61353679	119705722	6804.38	6844.67

48. 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 have been excluded from the audited apportioned water charges. Accordingly, the water charges allowed are as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Claimed	0.00	3149.55	1562.79	1057.38	1074.95
Allowed	0.00	3147.58	1561.78	1056.51	1074.05

Capital Spares

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



Provided that the generating station shall submit the details of year wise actual capital spares consumed at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance or special allowance or claimed as a part of additional capitalisation or consumption of stores and spares and renovation and modernization.”

50. The Petitioner has claimed total actual expenditure of Rs. 18.63 lakh for capital spares in 2014-15 and has prayed that the capital spares replaced/consumed by the generating station during the period 2014-19 may be allowed.

51. The Respondent BYPL has submitted that the Petitioner has included capital spares in the category of additional capitalization and hence, the capital spares cannot form part of the capital cost and has to be included in the O&M expenses. DVPCA has submitted that the Petitioner may be directed to submit proper justification for incurring the expenditure on capital spares and to substantiate as to whether the expenditure incurred is funded through compensatory allowance or special allowance or claimed as a part of additional capitalization or consumption of stores & spares and renovation & modernization. It has also submitted that the Petitioner has also not provided any documentary evidence to substantiate its claim of expenditure held towards capital spares for the period 2014-19.

52. The Petitioner, in its rejoinder, has submitted that the details of the capital spares have been furnished in Form-17 for the period 2014-19. It has also submitted that in order to ensure reliable and efficient operation at all times by the generating station, the units/equipment is taken under overhaul/ maintenance and inspected regularly for wear and tear and during such works, spares parts of equipment which become damaged/ unserviceable are replaced/ consumed, so that the machine continue to perform at expected efficiency, on sustained basis.

53. The matter has been examined. It is observed that capital spares comprise of two



categories i.e. (i) spares which form part of the capital cost and (ii) spares which do not form part of the capital cost of the project. In respect of capital spares which form part of the capital cost of the project, the tariff is being recovered since their procurement and, therefore, the same cannot be allowed as part of additional O&M expenses. Accordingly, only those capital spares, which do not form part of the capital cost of the project, are to be considered. It is pertinent to mention that the term ‘capital spares’ has not been defined in the 2014 Tariff Regulations. The term capital spares, in our view, is a piece of equipment or a spare part, of significant cost that is maintained in inventory for use in the event that a similar piece of critical equipment fails or must be rebuilt.

54. 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. Further, it is also observed that the Petitioner has claimed capitalization of initial spares till 2016-17, which the Commission has allowed under Regulation 14(i)(iii) read with Regulation 54 (Power to relax) and 55 (Power to remove difficulties) of the 2014 Tariff Regulations. As such, the capital spares claimed under Regulation 29(2) of the 2014 Tariff Regulations for the period 2014-17 are already form part of the capital cost and cannot be allowed as additional O&M expenses. Based on this, the details of the capital spares considered and allowed for the period 2014-19 is summarized below:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Capital Spares (not part of capital cost) claimed (A)	730.82	383.26	346.04	705.83	1413.20
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



	2014-15	2015-16	2016-17	2017-18	2018-19
Value of capital spares disallowed as these are already part of Capital Cost (C)	730.82	383.26	346.04	0.00	0.00
Net total value of capital spares considered (D) = (A) - (B) - (C)	0.00	0.00	0.00	705.83	1413.20

55. 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)	0.00	0.00	0.00	705.83	1413.20
Salvage value @ 10% (B)	0.00	0.00	0.00	70.58	141.32
Net Claim allowed (C) = (A)*(B)	0.00	0.00	0.00	635.25	1271.88

56. Accordingly, the total O&M expenses allowed are summarised below:

(Rs. in lakh)

		2014-15	2015-16	2016-17	2017-18	2018-19
Installed Capacity (MW) (A)		1000.00	1000.00	1000.00	1000.00	1000.00
O&M Expenses under Reg.29(1) in Rs. lakh / MW (B)		16.00	17.01	18.08	19.22	20.43
Total O&M Expenses (in Rs. lakh) (C) = (A)*(B)	Claimed	16000.00	17010.00	18080.00	19220.00	20430.00
	Allowed	16000.00	17010.00	18080.00	19220.00	20430.00
Water Charges (in Rs. lakh) (D)	Claimed	0.00	3149.55	1562.79	1057.38	1074.95
	Allowed	0.00	3147.58	1561.78	1056.51	1074.05
Capital Spares Consumed (in Rs. lakh) (E)	Claimed	730.82	383.26	346.04	705.83	1413.20
	Allowed	0.00	0.00	0.00	635.25	1271.88
Total O&M Expenses as allowed (including Water Charges and Capital Spares Consumed) (F) = (C+D+E)	Claimed	16730.82	20542.82	19988.83	20983.21	22918.16
	Allowed	16000.00	20157.58	19641.78	20911.76	22775.93

Operational Norms

57. 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) (%)	83%	83%	83%	83%	83%
Gross Station Heat Rate (kCal/kWh)	2372	2372	2372	2372	2372
Auxiliary Power Consumption (%)	5.25%	5.25%	5.25%	5.25%	5.25%
Specific Oil Consumption (ml/kWh)	0.5	0.5	0.5	0.5	0.5

Normative Annual Plant Availability Factor

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

“(A) Normative Annual Plant Availability Factor(a) All Thermal generating stations, except those covered under clauses (b), (c),(d) &(e)- 85%.

Provided that in view of the shortage of coal and uncertainty of assured coal supply on sustained basis experienced by the generating stations, the NAPAF for recovery of fixed charges shall be 83% till the same is reviewed.

The above provision shall be reviewed based on actual feedback after 3 years from 1.4.2014.”

59. The Petitioner has claimed Normative Annual Plant Availability Factor (NAPAF) of 83% for the period 2014-19 and has submitted that the Commission, in the 2014 Tariff Regulations, has provided for consideration of coal shortage, while specifying NAPAF. However, it has submitted that in order dated 3.10.2016 in Petition No. 207/GT/2015, the Commission, has specified NAPAF as 83% (except 85% for 2017-18 & 2018-19) for the period 2014-19.

60. The matter has been considered. Considering the nationwide coal stock availability, Regulation 36(A) of 2014 Tariff Regulations provided for NAPAF of 83% for three (3) years i.e., from 2014-15 to 2016-17, with a provision to review the same thereafter. In line with this, the coal availability after 2016-17, was reviewed and it was observed that the availability of coal to the thermal generating stations in the country was normal and therefore, the NAPAF was revised as 85% in 2017-18 and 2018- 19. In our view, the non-availability of coal to the generating station of the Petitioner, is a localised or a plant specific issue and cannot be a factor to reduce NAPAF, particularly, keeping



in view that arrangement of coal supply is the sole responsibility of the generator (Petitioner). Accordingly, the NAPAF of 83% for 2014-15 to 2016-17 and 85% for 2017-18 and 2018-19 is allowed in accordance with the provisions of Regulation 36 (A) of the 2014 Tariff Regulations.

Gross Station Heat Rate

61. As the Gross Station Heat Rate of 2371.61 Kcal/ kWh, claimed by Petitioner is in accordance with the provisions of Regulation 36 (C)(a) of the 2014 Tariff Regulations, the same is allowed.

Auxiliary Energy Consumption

62. The Petitioner has claimed Auxiliary Energy Consumption (AEC) of 5.25%. Regulation 36(E)(a) of the 2014 Tariff Regulations provides for the Auxiliary Energy Consumption of 5.25%, for coal based generating stations of 500 MW sets, with steam driven boiler feed pump. Accordingly, the AEC of 5.25% claimed is in line with the Regulations and hence, the same is allowed.

Secondary Fuel Oil Consumption

63. Regulation 36(D)(a) of 2014 Tariff Regulations provides for secondary fuel oil consumption to the generating station as 0.50 ml/kWh during the period 2014-19 and the same is allowed.

64. Accordingly, the operational norms allowed are summarized below:

	2014-15	2015-16	2016-17	2017-18	2018-19
Normative Annual Plant Availability Factor (NAPAF) (%)	83%	83%	83%	85%	85%
Gross Station Heat Rate (kCal/kWh)	2371.61	2371.61	2371.61	2371.61	2371.61
Auxiliary Power Consumption (%)	5.25%	5.25%	5.25%	5.25%	5.25%
Specific Oil Consumption (ml/kWh)	0.50	0.50	0.50	0.50	0.50



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 a^s 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 vide affidavit dated 15.11.2021 is as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of Coal/Lignite for Stock and Generation	25058.09	25126.75	25058.09	25058.09	25058.09
Cost of oil for 2 months (B)	370.37	371.39	370.37	370.37	370.37
O&M expenses - 1 month (C)	1333.33	1679.96	1636.90	1689.78	1792.08
Maintenance Spares - 20% of O&M (D)	3200.00	4031.91	3928.56	4055.48	4300.99
Receivables - 2 months (E)	46941.44	47700.50	47487.71	47515.91	46030.97
Total Working Capital (F) = (A+B+C+D+E)	76903.24	78910.51	78481.63	78689.63	77552.50



	2014-15	2015-16	2016-17	2017-18	2018-19
Rate of Interest (G)	13.50%	13.50%	13.50%	13.50%	13.50%
Total Interest on Working capital (H) = (F)x(G)	10381.94	10652.92	10595.02	10623.10	10469.59

Fuel Cost for Working Capital

67. Sub-clauses (i), (ii) and (iii) of Regulation 28(1) (a) of the 2014 Tariff Regulations provides for cost of coal 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:

xxx

(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

$$ECR = \left\{ \frac{(GHR - SFC \times CVSF) \times LPPF}{CVPF + SFC \times LPSFi + LC \times LPL} \right\} \times 100 / (100 - AUX)$$

(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. 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 for the following:

“(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 3542.37 Kcal/kg on “as received” basis for the period from January 2014 to March 2014. The Petitioner has also submitted that it has filed a separate petition before the Commission vide affidavit dated 6.3.2018 (Petition No. 133/MP/2018), wherein, the Petitioner has submitted that it determines the GCV of the coal on ‘as Received basis’ by taking sample manually from the wagon top 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 with regard to measurement of the GCV at the receiving end as submitted in the Petition 133/MP/2018 along with this Petition and determine tariff for the generating station, based on GCV to be 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. Accordingly, the cost for fuel components in working capital has been computed considering the fuel details (price and GCV) as per Form-15, and GCV of coal as 3542.37 Kcal/kg. It is observed that while the Petitioner in Form-15 of the signed hard copy has submitted the details of coal quantity in Million Metric Tonne till two decimal places whereas, in Form-15 of excel soft copy the figures are provided up to 7-8 decimal places. Accordingly, the information furnished in excel soft copy has been considered. In this regard 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. Accordingly, the weighted average cost and GCV of primary and secondary fuel considered for working out cost of fuel components in working capital allowed is as under:

	Unit	Allowed
Weighted average GCV of oil	Kcal/lit	10162.99
Weighted Average GCV of Coal for Jan to March 2014	Kcal/kg	3542.37
Weighted average price of oil	Rs. /KL	61127.44
Weighted average price of Coal	Rs. /MT	3095.28

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

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of Coal towards stock (30 days)	12357.42	12357.42	12357.42	12655.19	12655.19
Cost of Coal towards Generation (30 days)	12357.42	12357.42	12357.42	12655.19	12655.19
Cost of Secondary fuel oil 2 months	370.37	371.39	370.37	379.30	379.30

Working Capital for Maintenance Spares

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



<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
3200.00	4031.91	3928.56	4055.48	4300.99

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 under:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
3200.00	4031.52	3928.36	4182.35	4555.19

Working Capital for O&M expenses

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

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
1333.33	1679.96	1636.90	1689.78	1792.08

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:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
1333.33	1679.80	1636.81	1742.65	1897.99

Energy Charge rate (ECR) and Working Capital for Receivables



77. The Petitioner has claimed Energy Charge Rate (ECR) ex-bus of 221.47 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 2014-19. Accordingly, the allowable Energy Charge Rate (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 Rs. 2.215 / kWh.

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

- a) ECR of Rs. 2.215/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 installed capacity of 1000 MW normative availability of 83% for first three years and 85% for last two years and Auxiliary Energy Consumption of 5.25%.

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

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
25432.20	25501.88	25432.20	26045.02	26045.02

Working Capital for Receivables

80. Receivables equivalent to two months of capacity charge and energy charge has been worked out, duly considering mode of operation of the generating station on secondary fuel, as follows:

<i>(Rs.in lakh)</i>					
	2014-15	2015-16	2016-17	2017-18	2018-19
Variable Charges - for two months (A)	25432.20	25501.88	25432.20	26045.02	26045.02
Fixed Charges – for two months (B)	18662.57	19015.64	18319.26	17835.59	17755.75
Total (C) = (A+B)	44094.77	44517.52	43751.46	43880.61	43800.77

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:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Working Capital for Cost of Coal for Stock (30 days) (A)	12357.42	12357.42	12357.42	12655.19	12655.19
Working Capital for Cost of Coal for Generation (30 days) (B)	12357.42	12357.42	12357.42	12655.19	12655.19
Working Capital for Cost of oil for 2 months (C)	370.37	371.39	370.37	379.30	379.30
Working Capital for O&M expenses - 1 month (D)	1333.33	1679.80	1636.81	1742.65	1897.99
Working Capital for Maintenance Spares - 20% of O&M (E)	3200.00	4031.52	3928.36	4182.35	4555.19
Working Capital for Receivables - 2 months (F)	44094.77	44517.52	43751.46	43880.61	43800.77
Total Working Capital (G) = (A+B+C+D+E+F)	73713.31	75315.05	74401.83	75495.28	75943.62
Rate of Interest (H)	13.50%	13.50%	13.50%	13.50%	13.50%
Total Interest on Working capital (I) = (G)*(H)	9951.30	10167.53	10044.25	10191.86	10252.39

Additional O&M Expenses

82. The Petitioner has also claimed additional O&M expenses over and above the normative O&M expenses, allowable to the generating station, in accordance with the provisions of the 2014 Tariff Regulations. These expenditure heads include Mega Insurance, Expenses for CISF Security, Ash Evacuation Expenses, Impact of GST, Impact of Pay Revision, Share of Pension & Gratuity (P&G) and Share of Subsidiary Activities. 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 total amount of Rs. 19368.79 lakh (Rs. 4767.75 lakh in 2014-15, Rs. 4245.43 lakh in 2015-16, Rs. 5335.24 lakh in 2016-17, Rs. 2811.88 lakh in 2017-18 and Rs. 2208.49 lakh in 2018-19) towards Ash Disposal expenses, as additional O&M expenses for the generating station. In justification of the same, the Petitioner has submitted that due to statutory directions of the Ministry of Environment, Forest and Climate Change (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 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 Ltd (ECL) has allowed the Petitioner to utilize its abandoned mines for this. Accordingly, the Petitioner has submitted that it 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 Units 1 to 8 of the Project (MTPS) has been booked in the annual accounts in a consolidated manner and subsequently apportioned among the various units of Meija TPS based on the actual gross generation of the units, for the respective years of the period 2014-19. The Petitioner has therefore prayed that the Commission may approve the proposed 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 notifications under Regulation 8(3)(ii) of the 2014 Tariff Regulations.



84. DVPCA has submitted that the Commission has disallowed the claim of expenses towards Ash evacuation in a number of orders, stating that the Petitioner was fully aware of the MOEFCC Notification, 2009 which mandate 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 submitted that the Petitioner must have taken necessary steps for installation of the evacuation system at the inception stage. However, the Petitioner has claimed Ash Transportation charges on the ground that it has not complied with MoEF&CC Notification, 2009 and is taking appropriate measures now. DVPCA has further submitted that as the actual O&M expenses including Ash evacuation expenses are lower than the normative O&M expenses, there is no requirement to allow the ash evacuation expenses additionally. It has also pointed out that the Commission in its order dated 3.10.2016 in Petition No. 207/GT/2015 had not allowed the 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 therein 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 therein, 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 Vs 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 effected 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 by auditors.

(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 follows:



(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 the recovery of the ash transportation charges from 25.1.2016, through monthly bills of beneficiaries, in terms of the MoEF&CC notification dated 29.7.2020 as ‘change in law’ event and the Commission vide its order dated 29.7.2020, disposed of the same, after observing that the MOEF&CC notification dated 25.1.2016



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 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 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 kilometer, 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:

<i>(Rs. in lakh)</i>						
	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 above 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:

<i>(Rs. in lakh)</i>						
	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 plant-wise details along with the year-wise income received from sale of fly ash, from 26.10.2016 to 31.3.2019 is as under:

<i>(Rs. in lakh)</i>						
	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



	DSTPS	DTPS	KTPS	CTPS	MTPS	BTPS
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 from 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 transportation charges allowed as above, during the period 2014-19 in respect of this generating station (MTPS) are apportioned to the various stages, based on their actual generation as under:

(Rs. in lakh)

Stage	2014-15	2015-16	2016-17	2017-18	2018 -19	Total
MTPS 1, 2 & 3	0.00	497.90	1947.02	1824.89	1097.08	5366.89
MTPS 4	0.00	89.28	291.57	475.09	356.84	1212.78
MTPS 5 & 6	0.00	722.50	3027.51	1397.99	1119.73	6267.73
MTPS 7 & 8	0.00	1400.65	5335.24	2792.65	2095.20	11623.75
MTPS (all stages)	0.00	2710.33	10601.33	6490.63	4668.86	24471.15

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 11623.75 lakh, towards fly ash transportation charges 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 the date of this order. Considering the fact that the reimbursement of the ash transportation expenses is being allowed based on the MOEF&CC notification and keeping in view the interest of the beneficiaries, 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 total expenses for Rs.549.50 lakh (Rs.114.27 lakh in 2014-15, Rs.14.99 lakh in 2015-16, Rs.102.50 lakh in 2016-17, Rs.232.33 lakh in 2017-18 and Rs.85.41 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. The Petitioner has further submitted that the expenses for Mega Insurance for Mejia TPS have been booked in the annual accounts in a consolidated manner. Therefore, the accounted mega Insurance expenses for Mejia TPS has been apportioned amongst Mejia TPS Unit-1 to 8 based on the installed capacity and the same are claimed in the instant petition.

95. DVPCA has submitted that the Commission in its earlier orders had disallowed the expenditure on Mega Insurance and the same was to be recovered as part of the normative O&M expenses. It has stated that the actual O&M expenses, including the mega insurance expenses for the period 2014-19, is lower than the normative O&M expenses specified under the 2014 Tariff Regulations, and thus, the normative O&M expenses are sufficient to cover such expenses. Accordingly, the respondent has stated that the claim of the Petitioner may not be considered separately. In response, the



Petitioner has submitted that the subject expenditure is necessitated due to 'substantial increase in the risk profile of power plants' on account of various issues (including lenders covenants), natural calamities, law and order etc, and it protects the customers from any tariff shock, in the event of any substantial loss, arising out of damage or destruction of the power plant. Accordingly, it shall be allowed as an additional pass-through, over and above, the norms. The Petitioner has further submitted, that the Commission in its various orders (i.e., order dated 13.12.2005 in Petition No. 163/2004, order dated 9.7.2013 in Petition No. 269/GT/2012, order dated 29.7.2016 in Petition No. 465/GT/2014, order dated 7.8.2013 in Petition No. 275/GT/2012 and order dated 29.7.2016 in Petition No. 470/GT/2014) while determining tariff had allowed expenses towards Mega Insurance.

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

(C) CISF Security Expenses

97. The Petitioner has claimed total expenses for Rs. 9658.59 lakh (Rs.1413.99 lakh



in 2014-15, Rs.1648.96 lakh in 2015-16, Rs. 2117.12 lakh in 2016-17, Rs. 2191.18 lakh in 2017-18 and Rs.2287.34 lakh in 2018-19) towards CISF Security expenses as additional O&M expenses for the generating station. In justification of the same, the Petitioner has made identical submissions:

- (a) The generating station is located in high alert security zone and any untoward situation arising due to the terrorist attack or theft, may cause loss of property and prolonged interruption of generation. The concerned Ministry, from time to time has directed the Petitioner, to take appropriate security arrangements at hydro generating stations, dams etc. and to strengthen the physical security of various generating stations and tighten personal security.
- (b) The Ministry of Home Affairs, GOI, had granted approval for creation of additional security personnel posts to be stationed at the generating station. Thus, accordingly, the Petitioner has deployed CISF personnel in its plants, to ensure adequate security at the plants, as well as to comply with the directives, on security measures. Accordingly, the Petitioner has been incurring expenses towards CISF security for deployment of CISF personnel and associated CISF activities.
- (c) The expenses for CISF Security for the project have been booked in the annual accounts in a consolidated manner. Therefore, the accounted CISF Security expenses for the project for the 2014-19 period has been apportioned among Unit- 1 to 8 of the projects, based on the installed capacity of the units. Accordingly, the apportioned CISF Security expenses for Units- 1 to 3 (the generating station) has been claimed.
- (d) 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 TPS (Units 1 to 3) *vide* dated 7.8.2013 in Petition No. 275/GT/2012 and order dated 29.7.2016 In Petition No. 470/GT/2014. Accordingly, the Commission may allow the CISF expenses as incurred by and apportioned to the generating station during the 2014-19 tariff period to be recovered in full, in exercise of the 'Power to Relax' under the 2014 Tariff Regulations, similar to the Commission's treatment in the aforesaid orders.

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. It has further submitted that the provisions of the 2014 Tariff Regulations, does not allow security expenses over and above the O&M norms. Accordingly, 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 Thermal 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 its Power to relax, but was not allowed for other projects of the Petitioner. Further, the Commission while specifying the O&M expense norms for the period 2014-19, had considered security expenses for the generating station, as part of the O&M expenses and had factored the same in the said norms. Considering the above, we do not find any reason to allow additional O&M expenses towards CISF security expense.

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

100. The Petitioner has claimed additional O&M expenses on account of GST for Rs. 67.10 lakh for the period 2017-18 and Rs.229.40 lakh for 2018-19. DVPCA has submitted that the Petitioner's claim is extraneous to the provisions of 2014 Tariff Regulations and various orders of the Commission. In response, the Petitioner has clarified that the Commission in order dated 14.3.2018 in Petition No. 13/SM/2017 and order dated 17.12.2018 in Petition No. 01/SM/2018 had considered the implementation of GST as "change in law".

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



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

102. 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 2014-19 tariff period, 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.

(E) Share of Subsidiary Activities

103. The Petitioner has claimed total Rs.2753.90 lakh (Rs.560.27 lakh in 2014-15, Rs.684.97 lakh in 2015-16, Rs.571.06 lakh in 2016-17, Rs.549.50 lakh in 2017-18 and Rs.388.10 lakh in 2018-19) towards Share of Subsidiary Activities as additional O&M expenses. In justification of the same, the Petitioner has submitted that it has been undertaking various subsidiary activities in terms of Section 12 of the DVC Act, 1948. It has also submitted that in terms of the judgment of the Appellate Tribunal for Electricity ('APTEL') dated 23.11.2007 in Appeal No. 273 of 2006 and batch, the expenses with regard to Subsidiary activities are to be allowed as a pass-through element in tariff. The Petitioner has stated that above judgment of APTEL has been affirmed by the Hon'ble Supreme Court vide its judgment dated 23.7.2018 in Civil Appeal Nos. 971-973 of 2008 along with Civil Appeal Nos. 4289 of 2008 (Bhaskar Shrachi Alloys Ltd. Vs. DVC) referred to in (2018) 8 SCC 281. The Petitioner has further submitted that the expenses toward share of subsidiary activities was allowed in case of this generating station vide order dated 9.7.2013 in Petition No. 269/GT/2012 and order dated 29.7.2016 in Petition No. 465/GT/2014 and for Chandrapura TPS, Units-1 to 3 vide order dated 7.8.2013 in Petition No. 275/GT/2012 and order dated 29.7.2016 in Petition No. 470/GT/2014, in



relaxation of the provisions of the Tariff Regulations. Accordingly, the Petitioner has prayed that the Commission may allow the expenses toward share of subsidiary activities, as incurred and apportioned to the generating station during the period 2014-19 for recovery in full, in exercise of the power to relax' under the 2014 Tariff Regulations.

110. DVPCA has submitted that the Petitioner has also claimed expenses towards subsidiary activities including additional capital, O&M, Return on Equity, Interest on loan and Depreciation. It has submitted that the contribution to subsidiary fund is not allowable as the Return on Equity, Interest on loan and Depreciation, on common assets, have been claimed separately. 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 31.8.2016 in Petition No. 347/GT/2014. It has stated that the actual O&M expenses including the share of subsidiary expenses are lower than the normative O&M expenses and thus, there is no requirement of allowing the share of subsidiary expenses additionally. In response, the Petitioner has clarified as under:

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

(b) DVC cannot generate required revenue from the users of service in regard to schemes such as drainage, flood control, improvement in the flow conditions, navigation, afforestation and control of soil erosion or the promotion of public health and general well-being in the Damodar Valley. The main revenue earning activity performed by DVC is generation and sale of power. DVC is undertaking various activities in a comprehensive manner for the betterment of Damodar Valley and using the revenues earned from various



sources including generation and sale of electricity for the above varied purposes for which DVC has been established. In the facts and circumstances mentioned herein above, DVC occupies a special position.

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

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

111. 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 basis of capital cost for the purpose of determination of tariff:*

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

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

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

112. It is noticed that the Commission in its various tariff orders of the Petitioner for the period 2014-19 has observed that as per SOR to the 2014 Tariff Regulations, the site



specific norms in case of thermal generating stations may not serve much purpose as there is a set of advantages and disadvantages associated with every site, which average out, and the proposed norms are also based on multiple stations with wide geographical spread and therefore, such aspects are already factored in the norms and accordingly, the additional O&M expenses claimed by the Petitioner, including share of subsidiary activities was not allowed. In this regard the relevant sections of the 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.”

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



23.7.2018 in Civil Appeal No. 4289 of 2008 and batch thereof, upheld the decision of APTEL as under:

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

114. Accordingly, the expenses of ‘other activities’ is allowed as claimed by the Petitioner during the period 2014-19.

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

115. 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.

116. It is noticed that the Petitioner, in its tariff petitions for true-up for the period 2009-14 had made additional claims towards P&G liability based on actuarial valuation. This prayer was, however, rejected by the Commission by its various orders, on the ground that the P&G liability formed part of the O&M expense norms specified under the 2009, Tariff Regulations. Aggrieved by this order, the Petitioner has filed Appeal No.268-275



of 2016 before APTEL and the same is pending. The Petitioner, had made similar prayers in its 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 2014-19 tariff period) granted liberty to the Petitioner to claim the said relief through a separate application along with all relevant details, so that a holistic view can be taken in the matter, in accordance with law. Accordingly, the Petitioner had filed Petition No.197/MP/2016, wherein P&G contribution of Rs.3228.86 crore and impact of pay revision from January, 2016 as Rs.420.27 crore for 2014–19 was claimed over and above the normative O&M expenses specified under Regulation 29 of the 2014 Tariff Regulations. The Commission, vide its order dated 4.9.2019, while holding that the said petition was maintainable, disposed of the same as under:

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

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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.”

117. 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

118. The Petitioner has claimed total amount of Rs.3820.22 lakh (Rs.1214.62 lakh in 2016-17, Rs.1528.78 lakh in 2017-18 and Rs.1076.82 lakh in 2018-19) towards impact on account of Pay revision during the period 2014-19, due to recommendations of the 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.

119. The Commission *vide* ROP of the hearing dated 25.5.2021, directed the Petitioner to furnish the following information:

“True-up for 2014-19 tariff period

“i. Break-up of the actual O&M expenses of the generating station under various subheads (as per Annexure-A enclosed) after including the pay revision impact (employees, CISF and Corporate Centre) and wage revision impact (minimum wages), if applicable. (in both MS Excel and PDF format).

ii. Break-up of the actual O&M expenses of Corporate Centre/other offices including pay revision impact (as per Annexure-B enclosed) for the generating station along with the allocation of the total O&M expenses to the various generating stations under construction, operational stations and any other offices/business activity, along with basis of allocating such expenditure (in both MS Excel and PDF format).

iii. Breakup of the pay revision impact claimed in respect of employees of the Petitioner Company, Security personnel stationed at the generating station and Corporate Centre/other offices employee cost allocated to the generating station. (as per Annexure-C enclosed in both MS Excel and PDF format).”

120. In compliance to the aforesaid directions, the Petitioner *vide* affidavit dated



1.7.2021, has furnished the information and submitted that additional O&M expenses including P&G liability claimed as elements of Part B of the total 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:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
9872.33	11315.38	13178.98	15044.52	12421.31

121. 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 the 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 considered in Annexure-A (as furnished), are also apportioned in above manner. 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 by Petitioner, it is difficult to find out the station-wise impact of pay revision. Accordingly, the impact of pay revision of



Petitioners' employees has been determined in totality, towards Power business and thereafter, apportioned to transmission and generation projects, 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.

122. 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 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 submitted that the O&M expense norms 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, it has submitted that 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

123. The Petitioner has claimed share of P&G Contribution for the period 2014-19 as under:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
1462.04	3755.79	4135.52	9315.10	1783.72

124. The Petitioner, in terms of the directions contained in order dated 4.9.2019, in Petition No.197/MP/2016, has furnished the following data, duly certified by auditor:

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

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

126. 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.

127. In response, the Petitioner in its response has clarified as follows:

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

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

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

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

- (i) Earlier, as there was no fund maintained for receiving the Pension and Gratuity Contribution, the same was being discharged by DVC on revenue basis pay as you go as in the case of any other Government Department. However, as per the mandate of the Comptroller and Auditor General and in accordance with the directions given by the Central Government, now, DVC has to maintain the Pension and Gratuity Fund. Accordingly, the contributions are being made not only for the present year working of the employees but also for all the past years of services including for persons who have retired from DVC in the past;
- (ii) There has been a substantial increase in Pension and Gratuity payment to the employees on account of wage revision pursuant to the decision taken by the Central Government, firstly, in the year 2006 and secondly in the year 2016. These higher contributions to be made are not confined to the current year but also relates to the payment for the past services including the services rendered by the retired employees;
- (iii) The liability under Contributory Provident Fund ceases with the year in which it is contributed. There is no actuary valuation or adjustment for upward revision on account of any wage revision etc. however, the pension payment is payable by DVC after the retirement of the employees on a continuous basis along with the revision to the pension from time to time as per the decision of the Central Government applicable to all retired employees; further the pension payment liability continues even after the death of the employee. The family pension needs to be given to the widows and other eligible members under the pension scheme.

(c) Thus, the matter relating to Pension & Gratuity Contribution and other aspects of



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

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

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

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

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

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

129. 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

130. 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 P&G but has claimed the actual P&G. 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.

131. 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.

132. 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.

133. 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 2014-19 tariff period. 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 period 2014-19 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:

	2014-15	2015-16	2016-17	2017-18	2018-19	(Rs. in lakh) TOTAL
A. ACTUAL O&M AS PER DVC AUDITED FINANCIAL STATEMENTS						
Note No.27-Employee Benefit Expenses-Power Segment	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

134. A comparison of the normative O&M expenses (including allowable water charges) with the normalized actual O&M expenses in respect of the various true-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:



<i>(Rs. in lakh)</i>		
Petition No.	Generating Station / Transmission Petitions	Normative O&M expenses
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 Station 1-2	3991.24
713/TT/2020	New Elements of Transmission and Distribution (T&D) System	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

135. It is evident from the above, that the total normative O&M expenses allowable in respect of all the generation and transmission tariff petitions of the Petitioner for the period 2014-19 is Rs.1044745.04 lakh, in terms of the 2014 Tariff Regulations. Also, considering the actual water charges of Rs.38226.00 lakh and Ash Evacuation Charges w.e.f. 26.1.2016 of Rs.39334.64 lakh, the total works out to Rs.1122305.68 lakh, which is higher than the normalised actual O&M expenses of Rs.1101392.70 lakh, as per audited financial statements pertaining to Power segment. As per Regulation 29(2) of



the 2014 Tariff Regulations, capital spares are allowable separately, and in this petition an amount of Rs.1907.13 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)

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

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
2099.40	2246.36	2403.61	2571.86	2751.89

137. The Petitioner has allocated sinking fund contribution and interest for DVC Bonds of Rs. 3100 crores, amongst the generating stations of DVC as follows:

<i>(Rs. in crore)</i>					
	2014-15	2015-16	2016-17	2017-18	2018-19
Total Contribution and Interest for Debt Borrowing	152.77	163.47	174.91	187.15	200.25
MTPS 5&6	12.22	13.08	13.99	14.97	16.02
CTPS 7&8	22.18	23.73	25.39	27.17	29.07
MTPS 7&8	20.99	22.46	24.04	25.72	27.52
DSTPS	43.37	46.40	49.65	53.13	56.85
KTPS	47.26	50.57	54.11	57.90	61.95
RTPS-I	6.75	7.22	7.73	8.27	8.85
BTPS-A	-	-	-	-	-
Total	152.77	163.47	174.91	187.15	200.25

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



vide its by judgement dated 23.7.2018 in Civil Appeal Nos. 971-973 of 2008 & batch matters.

139. 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, the Petitioner has relied on 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.

140. 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,

141. 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.

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

“8.5 We have carefully considered the submissions of learned counsel for the Appellants and learned counsel for Respondent Nos. 1 & 2 and also took note of the various judgments relied upon by the parties. While the main contentions of the learned counsel for the Appellants are against the allowance of contribution to sinking fund to DVC and its utilisation, on the other hand, learned 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”.

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

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
2099.40	2246.36	2403.61	2571.86	2751.89

(B) Share of Common Office Expenditure

144. The Petitioner has submitted that the expenditure pertaining to common offices such as Direction Office, Central Office, Other Offices, Subsidiary activities, IT centre and R&D caters services to all generating stations as well as composite transmission and distribution systems. In this regard, it is noted that the Petitioner vide affidavit dated 9.9.2022 in Petition No. 567/GT/2020 (DTPS 3 & 4) has updated the additional capital



expenditure pertaining to common offices. The revised additional capital expenditure claimed by the Petitioner towards various offices under Common offices is summarised as below:

	<i>(Rs. in lakh)</i>				
	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

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

	<i>(Rs. in lakh)</i>				
	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
Power House	0.00	0.00	38.84	0.00	5.42
Sub Station equipment	0.00	8.01	1.15	431.94	52.08
Other assets, Office Furniture and Personal computer	77.91	128.60	124.77	198.34	29.09
Cyber Security	0.00	0.00	0.00	0.00	97.85
EBA	37.69	0.00	0.00	0.00	0.00
Machinery & equipment	0.00	(-)0.88	(-)0.88	(-)0.01	0.00
Tower Pole & Fixtures	0.00	0.00	0.00	(-)0.28	0.00
Assets Held for Disposal	0.00	0.00	0.00	0.00	0.76
Total	119.82	174.04	163.88	1173.23	386.48

146. The Petitioner has computed 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
Total	1323.73	1257.14	1252.29	1352.25	1411.48

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Common Office Expenditure apportioned to all generating Stations of DVC	1218.63	1157.33	1152.86	1244.88	1299.41
Common Office Expenditure 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

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

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Common Office Expenditure apportioned to Mejia- 7 & 8	194.80	182.27	154.94	167.78	179.55

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

Land and Land Rights

149. 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 in another Petition No. 567/GT/2020 (DTPS 3 & 4), the Petitioner 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

150. 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

151. 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

152. 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

153. 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 & Fixtures

154. 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

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

EBA- Integrated Software

156. 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

157. The Petitioner has claimed following additional capital expenditure under the head



‘Other Assets’, ‘Office Furniture’ and ‘Personal computer’ towards procurement of like personal computer, software, hardware, office equipment etc.

(Rs. in lakh)

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

158. 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

159. 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 this head is not allowed.

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

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Land and Land Rights	2.72	0.00	0.00	508.33	70.80
Buildings	1.49	38.31	0.00	34.91	130.47



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

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

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

162. 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 the period 2014-19, 'Nil' rate has been considered as effective tax rate for respective financial year for the purpose of grossing up of ROE in terms of the provisions of the 2014 Tariff Regulations and the rate of ROE is considered as 15.50% for the period 2014-19.

163. 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
Total	2212622.86	1160.85	1069.90	994.98	979.69	1010.37

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

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

xxx

The Commission has considered the O&M norms for this generating station as specified for 500 MW units including the expenditure for Common Offices in respect of depreciation and interest on loan. Therefore, only return on equity has been allowed as computed in the above table. Accordingly, return on equity of Rs. 87.01 lakh in 2014-15, Rs. 93.07 lakh in 2015-16, Rs. 115.68 lakh in 2016-17, Rs. 154.82 lakh in 2017-18 and Rs. 175.65 lakh in 2018-19 is allowed as



part of share of Common office expenditure and annual fixed charges for the generating station.”

165. Since, the Commission has considered the O&M norms for this generating station as specified for 500 MW units, including the expenditure for Common Offices in respect of depreciation and interest on loan, therefore, in terms of above quoted order dated 3.10.2016, only return on equity has been allowed as computed in the above table. Accordingly, the share of Common office expenses computed for this generating station, is as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Total Common Office Expenditure for generating stations (A)	1068.68	984.95	915.98	901.90	930.14
Total Common Office Expenditure for T&D (B)	92.17	84.95	79.00	77.79	80.22
Total Common Office Expenditure for generating stations and T&D C=(A+B)	1160.85	1069.90	994.98	979.69	1010.37
Total Depreciation for generating stations and T&D (D)	471.40	407.64	343.93	348.25	368.72
Total Interest on loan for generating stations and T&D (E)	140.86	111.83	99.77	67.56	58.18
Total Return on equity on for generating stations and T&D (F)	548.59	550.43	551.28	563.88	583.46
Total of Depreciation, Interest on Loan and ROE of Generating Station and T&D (G)	1160.85	1069.90	994.98	979.69	1010.37
Return on equity corresponding to the generating stations only (A/C) *F (H)	505.03	506.73	507.51	519.11	537.14
Apportionment of the common office expenditure as claimed to Mejia 7&8 including depreciation, interest on loan and ROE. (I)	170.83	155.12	123.11	121.56	128.52
Apportioned amount of only “Return on Equity” corresponding to the generating station (I/A) x H (J)	80.73	79.81	68.21	69.97	74.22

	<i>(Rs. in lakh)</i>				
Common Office Expenditure	2014-15	2015-16	2016-17	2017-18	2018-19
MTPS Units 7-8 <i>(this generating station)</i>	80.73	79.81	68.21	69.97	74.22

166. 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	38,081.82	38,954.43	39,287.62	39,694.70	40,024.71
Interest on loan	27,971.77	24,721.70	20,655.58	15,687.21	12,753.53
Return on Equity	19,970.55	20,092.62	20,286.33	20,528.01	20,727.93
Interest on Working Capital	9,951.30	10,167.53	10,044.25	10,191.86	10,252.39
O&M Expenses	16000.00	17010.00	18080.00	19220.00	20430.00
Water Charges	0.00	3147.58	1561.78	1056.51	1074.05
Capital Spares	0.00	0.00	0.00	635.25	1271.88
Compensation Allowance	0.00	0.00	0.00	0.00	0.00
Sub-Total (A)	111975.43	114093.86	109915.55	107013.54	106534.49
Additional O&M Expenses					
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
Share of Pension & Gratuity Contribution	0.00	0.00	0.00	0.00	0.00
Share of Subsidiary Activities	560.27	684.97	571.06	549.50	388.10
Mega Insurance Expenses	0.00	0.00	0.00	0.00	0.00
CISF Security Expenses	0.00	0.00	0.00	0.00	0.00
Interest & Contribution on Sinking Fund (As per section 40, Part IV of DVC Act)	2099.40	2246.36	2403.61	2571.86	2751.89
Share of Common Office Expenses	80.73	79.81	68.21	69.97	74.22
Sub-Total (B)	2740.40	3011.14	3042.88	3191.32	3214.21
Total Annual Fixed Charges (C) = (A) + (B)	114715.82	117105.00	112958.43	110204.86	109748.70
Annual fixed charges allowed vide order dated 3.10.2016 in Petition No. 207/GT/2015	111191.37	108636.85	106235.87	104110.68	101920.61

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

167. The Ash disposal expenses to be reimbursed in six monthly instalments, in terms of paragraph 93 above, is as under.

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
0.00	1400.65	5335.24	2792.65	2095.20

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

DETERMINATION OF TARIFF FOR THE PERIOD 2019-24

169. 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 are as under:

Capital Cost claimed

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost (A)	514260.14	520010.92	524368.76	530723.82	531690.50
Add: Additional Capital Expenditure (B)*	6264.60	5034.19	6739.78	987.13	1419.86
Less: Decapitalization during the year /period (C)	513.82	676.35	384.71	20.45	134.07
Less: Undischarged liabilities (D)	0.00	0.00	0.00	0.00	0.00
Add: Discharges during the year / period (E)	0.00	0.00	0.00	0.00	0.00
Closing Gross Block (F) = (A+B-C-D+E)	520010.92	524368.76	530723.82	531690.50	532976.29
Average Gross Block (G) = (A+F)/2	517135.53	522189.84	527546.29	531207.16	532333.40

Annual Fixed Charges claimed

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	40454.73	40850.13	41269.15	41555.54	41643.64
Interest on loan	9275.98	5686.98	1969.41	54.35	5.80
Return on Equity	26735.68	26991.00	27269.18	27478.85	27544.69
Interest on Working Capital	9028.82	9033.56	9058.14	9110.51	9207.72
O&M Expenses	22510.00	23300.00	24120.00	24970.00	25840.00
Water Charges	2780.49	3050.18	3355.20	3690.72	4070.91
Security Expenses	2455.48	2573.61	2697.41	2827.17	2963.17
Special Allowance	0.00	0.00	0.00	0.00	0.00
Sub-Total (A)	113241.19	111485.46	109738.49	109687.14	111275.94
Interest & Contribution on Sinking Fund (As per section 40, Part IV of DVC Act)	2944.52	3150.64	3371.18	3607.16	3859.67
Share of P&G	3726.44	3901.61	4085.01	4277.03	4478.08
Share of Common Office Expenditure	196.65	211.05	213.71	183.79	167.53
Expenses for Ash Evacuation, Mega Insurance and Subsidiary Activities	2811.18	2946.41	3088.15	3236.70	3392.40
Sub-Total (B)	9678.79	10209.70	10758.05	11304.69	11897.68
Total Annual Fixed Charges (A+B)	122919.98	121695.16	120496.54	120991.83	123173.62

Capital Cost

170. Clause (1), Clause (3) and Clause (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.”

171. The opening capital cost claimed by the Petitioner as on 1.4.2019, is Rs. 514260.14 lakh. However, the closing capital cost of Rs.513995.01 lakh, as on 31.3.2019, as approved by the Commission, for the period 2014-19, in this order, 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

172. Regulations 25 and Regulation 26 of the 2019 Tariff Regulations, provides as under:

“25. Additional Capitalisation within the original scope and after the cut-off date:

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



- (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*
- (b) Change in law or compliance of any existing law;*
- (c) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (d) Liability for works executed prior to the cut-off date;*
- (e) Force Majeure events;*
- (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and*
- (g) Raising of ash dyke as a part of ash disposal system.*

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

- (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;*
- (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;*
- (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and*
- (d) The replacement of such asset or equipment has otherwise been allowed by the Commission.*

26. Additional Capitalisation beyond the original scope

(1) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts beyond the original scope, may be admitted by the Commission, subject to prudence check:

- (a) Liabilities to meet award of arbitration or for compliance of order or directions of any statutory authority, or order or decree of any court of law;*
- (b) Change in law or compliance of any existing law;*
- (c) Force Majeure events;*
- (d) Need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security;*
- (e) Deferred works relating to ash pond or ash handling system in additional to the original scope of work, on case-to-case basis:*

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

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



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

173. The year-wise projected additional capital expenditure claimed by the Petitioner in respect of the generating station are as under:

(Rs. in lakh)

	Regulation	2019-20	2020-21	2021-22	2022-23	2023-24	Total
C&I system							
Upgradation of HMI of DCS Unit- 7	25 (2) (c)	600.00	-	-	-	-	600.00
Installation of CCTV at MTPS plant vital locations	26 (1) (d)	26.00	-	-	-	-	26.00
Upgradation of DM plant PLC system.	25 (2) (c)	82.00	-	-	-	-	82.00
Upgradation of HMI of DCS Unit-8	25 (2) (c)	-	600.00	-	-	-	600.00
Upgradation of HMI of AHP & fire water PLC system	25 (2) (c)	-	-	50.00	-	-	50.00
Upgradation of HMI of PLC system of CPU	25 (2) (c)	-	-	15.00	-	-	15.00
Upgradation of HMI of PLC system of Raw Water & CWPT	25 (2) (c)	-	-	30.00	-	-	30.00
Procurement, Erection & Commissioning of UPS Battery Bank for MTPS Unit-7.	25 (2) (a)	-	-	-	-	200.00	200.00
Sub Total		708.00	600.00	95.00	-	200.00	1603.00
Electrical system of Coal Handling Plant Units- 7 & 8 (CHES)							
Different types of LT Motors	25 (2) (a)	7.00	-	-	-	-	7.00
In Line Magnet Separator for CHP, Units-7&8	25 (2) (a)	-	-	32.25	-	-	32.25
Replacement of Battery Bank	25 (2) (a)	-	-	35.00	-	-	35.00
Suspended Magnet	25 (2) (a)	-	-	-	28.00	-	28.00
Sub-Total		7.00	-	67.25	28.00	-	102.25
OPH (Electrical) Units-7&8							
Replacement of the Battery Bank of CW P/H & Raw water PH Unit 7&8	25 (2) (a)	-	-	60.00	-	-	60.00
DSM compliant ABT Metering system	76 & 77	-	-	50.00	-	-	50.00
Upgradation of SAS at 400KV Switchyard	25 (2) (c)	-	-	50.00	-	-	50.00



	Regulation	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Replacement of 02 sets of 220V Battery Bank at 400KV Switchyard & at Raw water (01 set for each)	25 (2) (a)	-	-	0.00	-	250.00	250.00
Circuit Breaker for HT SWGR (Make- BHEL & Siemens)	25 (2) (a)	-	-	-	-	200.00	200.00
Sub Total		-	-	160.00	-	450.00	610.00
POWERHOUSE CIVIL & AHP							
Ash Dyke Raising - Electro-mechanical Work							
a. Augmentation of existing ash slurry disposal pumping system	26 (1) (e)	730.00	1274.00	-	-	-	2004.00
b. Replacement of Ash Slurry Disposal Pipes of 350 NB size after thickness assessment for reliable operation due to raise in dyke height	25 (2) (c)	-	263.75	281.25	-	-	545.00
Ash Dyke raising work in phased manner	26 (1) (e)	-	1350.00	575.00	-	-	1925.00
Installation of Feeder Ejector Below APH Hopper of MTPS U#7&8.	76 & 77	70.00	200.00	-	-	-	270.00
Construction of pucca drain from main outlet of unit # 7 & 8 upto north east corner of Ash Pond, DVC, MTPS	26 (1) (a)	20.00	248.75	-	-	-	268.75
Supply and installation of permanent water sprinkling system with 52.8 HP diesel pump set at Ash Pond, DVC, MTPS.	26 (1) (a)	-	40.00	-	-	-	40.00
Laying of compressed air line and erection of lamp post at both end of track hopper 1, 2 & 3.	76 & 77	7.50	-	-	-	-	7.50
Dismantling of 52 Kg old rails & sleepers from existing Railway line (Raniganj east cabin to Damodar bridge) and lying of 60 Kg rail with proportionary sleepers for a approx. length of 3 Km.	25 (2) (a)	-	29.50	-	-	-	29.50
Dismantling and transportation of rails,	76 & 77	-	35.40	-	-	-	35.40



	Regulation	2019-20	2020-21	2021-22	2022-23	2023-24	Total
sleepers & track fitting from unused rail track between Matabel Jn and Kalidaspur end, DVC, MTPS							
Replacement of 52 kg rails and sleepers at different locations by recovered material from Kalidaspur.	25 (2) (a)	-	29.40	-	-	-	29.40
Repairing of level crossing approach road and fixing of security goomty with gate barrier arrangement at Barabaid village (DVC KM 15/12-13) under Captive Railway System of DVC	76 & 77	-	5.43	-	-	-	5.43
Repair & maintenance of Railway cabin and LC gate building under Captive Railway System, DVC, MTPS.	76 & 77	-	29.50	-	-	-	29.50
Sub Total		827.50	3505.73	856.25	-	-	5189.49
Capital Spares		4722.10	928.45	5561.28	959.13	769.86	12940.83
Grand Total		6264.60	5034.19	6739.78	987.13	1419.86	20445.56

174. The Respondent BYPL has submitted that the Petitioner has included capital spares in the category of additional capitalization. Referring to Regulation 35(6) of the 2019 Tariff Regulations, the Respondent has submitted that the Water Charges, Security Expenses and Capital Spares for thermal generating stations shall be provided separately for the period 2019-24. Accordingly, it has stated that the capital spares cannot be part of the capital cost, but should form part of the O&M expenses and capital spares cannot be capitalized. The Respondent has further submitted that the Petitioner may be directed to indicate the availability of 'initial spares' to facilitate prudence check. Accordingly, the Respondent BYPL has submitted that the claim for additional capitalization under Regulations 76 and 77 of the 2019 Tariff Regulations, may be rejected. It has further submitted that the Petitioner has failed to satisfy the conditions laid down by APTEL in its judgment in Tata Power Company Limited v. Jharkhand State



Electricity Regulatory Commission to substantiate its prayer for invocation of the Power to Relax and Power to Remove Difficulties vested with the Commission.

175. The Respondent, KSEBL has submitted that the claim of the Petitioner is not in line with the regulations and are also not properly justified. The Respondent has further stated that the Petitioners claims under 'Power to relax' and 'Power to remove difficulties' can be invoked only under extra ordinary circumstances.

176. 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(2) and Regulation 26(1) of the 2019 Tariff Regulations. It has also submitted that the Petitioner has not furnished detailed reasons for additional capitalization claimed under these Regulations and has put the onus on the Commission to decide and undertake analysis of claims. The Objector has added that it is settled law that '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 77 of 2019 Tariff Regulations may be rejected. According to the objector, DVPCA the following additional capital expenditure may only be allowed to the Petitioner:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
1685.00	3512.00	956.00	90.00	200.00

177. 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 this generating station, for the period 2019-24, has been on the following grounds:

- (a) For maintaining the minimum level of defined inventory already identified as assigned pool spares for MTPS Unit- 7&8.
- (b) Technology obsolescence and upgradation / Pool Spares or critical spares
- (c) Critical Tools for plant to ensure reliable and efficient operation.

178. Accordingly, the Petitioner has claimed the additional capital expenditure for the generating station under sub-clauses (a), (c), (d) and (e) of Regulations 25(2) and sub-clause (e) of Regulation 26(1) 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 Regulations 25(2) and 26(1) of the 2019 Tariff Regulations.

179. 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 for the period 2019-24, is examined and allowed as under:

<i>(Rs. in lakh)</i>						
Sl. No	Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount Allowed
2019-20						
1	C&I system					
	Upgradation of HMI of DCS U # 7	600 .00	25(2)(c)	HMI of the DCS is Windows XP based for which support service is not available. In addition to the above Network Switches are old & slow. Hence, for safety of the M/c upgradation is required.	The expenditure has been claimed for replacement of asset under the original scope, due to obsolescence. It is observed that the Petitioner has also provided the decapitalization amount of Rs.447.15 lakh as gross value of the old asset, to be replaced. Accordingly, the claim is allowed under Regulation 25(2)(C) of 2019 Tariff Regulations. However, the OEM	600 .00



SI. No	Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount Allowed
					certificate for obsolescence shall be submitted by the Petitioner at the time of truing up of tariff.	
	Installation of CCTV at MTPS plant vital locations	26.00	26(1)(d)	MTPS is in highly sensitive zone from security point of view. So, for security reason CCTV installation is required.	Considering the submissions of the Petitioner, the claim is allowed under Regulation 26(1)(d) of 2019 Tariff Regulations. However, the Petitioner is directed to submit the documentary evidence indicating the advice/directions by appropriate authority	26.00
	Upgradation of DM plant PLC system.	82.00	25(2)(c)	GE make PLC system of DM plant of Unit 7 & 8 is declared obsolete by the OEM & Its HMI is Windows XP based requires upgradation.	Since the replacement of asset, which is within the under original scope, is due to obsolescence, the claim of the Petitioner, is allowed under Regulation 25(2)(C) of 2019 Tariff Regulations along with decapitalization of old asset at gross value of 61.11 lakh.	82.00
	Total	708.00				708.00
2	Electrical system of Coal Handling Plant Unit-7 & 8 (CHES)					
	Different types of LT Motors	7.00	25 (2) (a)	Procurement of Different types of LT Motors have been proposed as these motors are vital to run the CHP system smoothly. Spare motor will be used to replace the damaged motor, so that uninterrupted coal feeding can be done to the bunkers without hampering generation moreover system reliability will also increase.	Since the capitalization of spares is not allowed after the cut-off date, the claim of the Petitioner, is not allowed . The Petitioner is at liberty to claim the same under 'capital spares consumed" as and when actually put into service. In view of this, the corresponding de-capitalisation of Rs.5.57 lakh is also ignored	0.00
	Total	7.00				0.00
3	Power House					
	Augmentation of existing ash slurry disposal pumping system	730.00	26 (1) (e)	Supply of Plant & Equipment and Mandatory Spares along with the installation, erection and commissioning including civil and structural works,	As the work related to ash pond and ash handling is of a continuous nature, the expenditure claimed is allowed under Regulation 26 (1) (e) of the 2019 Tariff Regulations. However, the Petitioner shall at the time	730.00



Sl. No	Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount Allowed
				insurance covers other than transit insurance and any other services plus applicable taxes, duties, levies, cess etc. for Augmentation of existing ash slurry disposal pumping system due to increase in proposed dyke height	of truing up, furnish the complete details with regard to the ash generated, ash transported, ash utilized for ash dyke raising for consideration of the Commission.	
	Installation of Feeder Ejector Below APH Hopper of MTPS U#7&8.	70.00	76 & 77	For reliable and efficient operation of the system	Since no proper justification has been furnished by the Petitioner, seeking invocation of Regulation 76 & Regulation 77 of the 2019 Tariff Regulations, the additional capital expenditure claimed is not allowed .	0.00
	Construction of pucca drain from main outlet of unit # 7 & 8 upto north east corner of Ash Pond, DVC, MTPS	20.00	26 (1) (a)	Work related to Pollution Control at Plant, Ash Pond and compliance of directives of NGT	Considering the submissions of the Petitioner, the claim is allowed under Regulation 26(1)(a) of 2019 Tariff Regulations. However, the Petitioner is directed to furnish the relevant directions of NGT, in support of the claim, at the time of truing up of tariff.	20.00
	Laying of compressed air line and erection of lamp post at both end of track hopper #1, 2 & 3.	7.50	76 & 77	To facilitate the Railway personnel for checking of empty coal wagon at MTPS	Since no justification has been furnished by the Petitioner seeking invocation of Regulation 76 & Regulation 77 of the 2019 Tariff Regulations, the additional capital expenditure claimed is not allowed .	0.00
	Total	827.50				750.00
5	Capital Spares (total 41 items)	4722.00		For ensuring reliable and efficient operation of the units	Though Regulation 35(1)(6) of the 2019 Tariff Regulations provides for claiming capital spares separately and on actual consumption basis, the Petitioner has claimed capital spares, as part of the additional capital expenditure, on provisional basis. Hence, the additional capital expenditure claimed by the Petitioner towards	0.00



SI. No	Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount Allowed
					capital spares is not allowed . The claim of the Petitioner, if any, at the time of truing up, of tariff, shall be considered on merits, after prudence check subject to the declaration that the expenditure has not been funded through compensatory allowance or special allowance or claimed as a part of additional capitalization or consumption of stores & spares and Renovation & Modernization.	
	Amount claimed	6264.60				
	Amount allowed					1458.00
2020-21						
1	C&I system					
	Upgradation of HMI of DCS Unit-8	600.00	25 (2) (c)	HMI of the DCS is Windows XP based for which support service is not available. In addition to the above Network Switches are old & slow. Hence, for security of the M/c upgradation is required.	The expenditure has been claimed for replacement of asset under the original scope, due to obsolescence. The Petitioner has also provided the decapitalization amount of Rs. 449.15 lakh, as gross value of the old asset to be replaced. Accordingly, the claim of the Petitioner is allowed under Regulation 25(2) (C) of 2019 Tariff Regulations. However, the OEM certificate for obsolescence shall be submitted by the Petitioner at the time of truing up of tariff.	600.00
	Total	600.00				600.00
2	POWER HOUSE CIVIL & AHP					
	Augmentation of existing ash slurry disposal pumping system	1274.00	26 (1) (e)	Supply of Plant & Equipment and Mandatory Spares along with the installation, erection and commissioning including civil and structural works, insurance covers other than transit insurance and any other services plus	Considering the fact that work related to ash pond and ash handling is of a continuous nature, the expenditure claimed is allowed under Regulation 26 (1) (e), of 2019 Tariff Regulations. However, the Petitioner shall, at the time of truing up of tariff, submit complete details with regard to ash generated,	1274.00



Sl. No	Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount Allowed
				applicable taxes, duties, levies, cess etc. for Augmentation of existing ash slurry disposal pumping system due to increase in proposed dyke height	ash transported, ash utilized for ash dyke raising for consideration of the Commission.	
	Replacement of Ash Slurry Disposal Pipes of 350 NB size after thickness assessment for reliable operation due to raise in dyke height	263.75	25 (2) (c)	Nearly around 2KM of pipe & 31 mtr fittings (bend of Cast Basalt) of 350NB will be required to be replaced, in view of Augmentation of existing ash slurry disposal pumping system due to increase in proposed dyke height of MTPS, Unit- 7 & 8.	Considering the fact that work related to ash pond and ash handling is of continuous nature, the incidental expenditure for replacement of the existing piping is allowed under Regulation 25(2)(a) of 2019 Tariff Regulations along with the decapitalization value (gross) of the old asset for Rs.185.73 lakh and Rs.191.02 lakh during 2019-20 and 2020-21.	263.75
	Ash Dyke raising work in phased manner	1350.00	26 (1) (e)	Ash pond originally existed for MTPS U#1-3 only with an area of 600 acre and life of 25 years. Phase wise Capacity augmentation of MTPS from 630 MW to 2340 MW occurred, but ash pond area remained same. Though continuous efforts to enhance the utilisation of Dry Fly Ash has also been taken and MTPS is utilising 42-45% of DFA generated, yet condition of Ash Pond is very critical. Raising of Ash Dyke is required to enhance the capacity of Ash Pond on very urgent basis.	Considering the fact that work related to ash pond and ash handling is of a continuous nature, the expenditure on ash dyke raising is allowed under Regulation 26(1)(e) of 2019 Tariff Regulations.	1350.00
	Installation of Feeder Ejector Below APH Hopper of MTPS U#7&8.	200.00	76 & 77	For reliable and efficient operation of the system	Since no justification has been furnished by the Petitioner seeking invocation of Regulation 76 & Regulation 77 of the 2019 Tariff Regulations, the additional capital	0.00



Sl. No	Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount Allowed
					expenditure claimed is not allowed .	
	Construction of pucca drain from main outlet of unit # 7 & 8 upto north east corner of Ash Pond, DVC, MTPS	248.75	26 (1) (a)	Work related to Pollution Control at Plant, Ash Pond and compliance of directives of NGT	Considering the submissions of the Petitioner, the claim is allowed under Regulation 26(1)(a) of 2019 Tariff Regulations. However, the Petitioner is directed to furnish the relevant directions of NGT, in support of the claim, at the time of truing up of tariff.	248.75
	Supply and installation of permanent water sprinkling system with 52.8 HP diesel pump set at Ash Pond, DVC, MTPS.	40.00	26 (1) (a)	Work related to Pollution Control at Plant, Ash Pond and compliance of directives of NGT		40.00
	Dismantling of 52 Kg old rails & sleepers from existing Railway line (Raniganj east cabin to Damodar bridge) and laying of 60 Kg rail with proportionary sleepers for a approx. length of 3 Km.	29.50	25 (2) (a)	Existing 52 Kg rails has been damaged due to prolonged movement of coal rake, and it will be replaced phase wise starting from Raniganj east cabin to Damodar bridge by laying of 60 Kg rail with proportionary sleepers for a approx. length of 3 Km. Surplus 60 Kg rail is available in DSTPS which can be utilised for this purpose.	The claim of the Petitioner is under Regulation 25(2) (a) of 2019 Tariff Regulations which is applicable in case the asset life is not commensurate with the plant life. In terms of this, the Petitioner has to establish that the life of rails is only 8-9 years for consideration of the Commission. In view of this and considering the COD of the project is 2012, the claim of the Petitioner is not allowed . However, the Petitioner is at liberty to claim the said expenditure if incurred, by producing proper justification along with relevant documents, from Railways for establishing the useful life of rails. The decapitalization amount of Rs.20.77 lakh towards gross value of the damaged rails is also being ignored for the purpose of tariff.	0.00
	Dismantling and transportation of rails, sleepers & track fitting	35.40	76 & 77	Since inception of MTPS Plant, the railway track between Matabel Jn and Kalidaspur end is not in function and there	Considering the justification furnished by the Petitioner, we find no reason to allow the additional capital expenditure claimed by	0.00



Sl. No	Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount Allowed
	from unused rail track between Matabel Jn and Kalidaspur end, DVC, MTPS			is very less chance to use it in future. Therefore, that rails, sleepers and track fittings can be utilised at other places.	invocation of Regulation 76 & Regulation 77 of the 2019 Tariff Regulations, at this stage.	
	Replacement of 52 kg rails and sleepers at different locations by recovered material from Kalidaspur.	29.40	25 (2) (a)	The rails, sleepers and track fittings obtained from line between Matabel Jn and Kalidaspur end is to be replaced at different locations for proper utilisation.	Since the scope of work and the material obtained from the referred activity is not clear, the claim of the Petitioner is not allowed .	0.00
	Repairing of level crossing approach road and fixing of security goomty with gate barrier arrangement at Barabaid village (DVC KM 15/12-13) under Captive Railway System of DVC	5.43	76 & 77	There is poor visibility for both loco pilot and pedestrians due to a series of curves towards the Raniganj end. Recently on 21/06/2019 an accident occurred and due to strong agitation by the villagers rake movement suffered for more than 18 hours. After negotiations between DVC higher officials and villagers with an assurance to provide a manned level crossing, the agitation was withdrawn and rake movement was restored. Therefore, to fulfil this demand of villagers, this work is required to be taken up.	No provision exists under the 2019 Tariff Regulations to allow such expenditure. However, Regulation 26(1)(d) of the 2019 Tariff Regulations allows additional capital expenditure for higher safety and security as advised/directed by appropriate authority. Though the Petitioner has not furnished any advice/direction from appropriate authority, we, considering the submissions of the Petitioner and keeping in view the safety of officials and villagers, allow the expenditure under Regulation 26(1)(d) of the 2019 Tariff Regulations, by exercising the power under Regulation 76 of the 2019 Tariff Regulations.	5.43
	Repair & maintenance of Railway cabin and LC gate building under Captive Railway System, DVC, MTPS.	29.50	76 & 77	One-time maintenance contract is required for repairing and maintaining the cabins and LC gate of Captive Railway System for proper functioning of the system.	Expenses towards Repair and Maintenance form part of the normative O&M expenses allowed to the generating station. As such, the additional capitalization claimed by the Petitioner is not allowed .	0.00
	Total	3505.73				3181.93
3	Capital Spares (total 39 items)	928.45		For ensuring reliable and efficient operation of the units	Though Regulation 35(1)(6) of the 2019 Tariff Regulations provides for claiming capital spares	0.00



Sl. No	Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount Allowed
					separately and on actual consumption basis, the Petitioner has claimed capital spares, as part of the additional capital expenditure, on provisional basis. Accordingly, the additional capital expenditure claimed by the Petitioner towards capital spares is not allowed . The claim of the Petitioner, if any, at the time of truing up, of tariff, shall be considered on merits, after prudence check subject to the declaration that the expenditure has not been funded through compensatory allowance or special allowance or claimed as a part of additional capitalization or consumption of stores & spares and Renovation & Modernization.	
	Amount claimed	5034.19				
	Amount allowed					3781.93
2021-22						
1	C&I system					
	Upgradation of HMI of AHP & fire water PLC system	50.00	25 (2) (c)	HMI of AHP & Fire Water PLC system is Windows XP based for which support service is no longer available. Hence Upgradation is required.	The expenditure claimed is for replacement of the asset, which is within the original scope, due to obsolescence. Accordingly, the claim of the Petitioner is allowed under Regulation 25(2)(c) of the 2019 Tariff Regulations along with decapitalization of old asset at gross value of 34.81 lakh. However, the Petitioner is directed to furnish the OEM certificate for obsolescence at the time of truing up of tariff.	50.00
	Upgradation of HMI of PLC system of CPU	15.00	25 (2) (c)	HMI of CPU PLC system is Windows XP based for which support service is no longer available. Hence Upgradation is required.	The expenditure is claimed for replacement of asset, which is within the original scope, due to obsolescence. Accordingly, the claim is allowed under Regulation 25(2)(c) of the 2019 Tariff	15.00



Sl. No	Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount Allowed
					Regulations along with decapitalization of old asset at gross value of 10.441 lakh. However, the Petitioner is directed to furnish the OEM certificate for obsolescence at the time of truing up of tariff	
	Upgradation of HMI of PLC system of Raw Water & CWPT	30.00	25 (2) (c)	HMI of Raw Water & CWPT is Windows XP based for which support service is no longer available. Hence Upgradation is required.	The expenditure is claimed for replacement of asset, which is within the original scope, due to obsolescence. Accordingly, the claim is allowed under Regulation 25(2)(c) of the 2019 Tariff Regulations along with decapitalization of the old asset at gross value of 20.88 lakh. However, the Petitioner is directed to furnish the OEM certificate for obsolescence at the time of truing up of tariff	30.00
	Total	95.00				95.00
2	Electrical system of Coal Handling Plant UNIT # 7-8 (CHES)					
	In Line Magnet Separator for CHP, U#7&8	32.25	25 (2) (a)	The CHP system of U#7&8 is associated with 04 nos. of In Line Magnetic separators which have been installed in the conveying system to remove any ferrous material from the coal; hence these protect the crushers and coal mills from damage which may cause the loss of generation and reduce the reliability of system. Spare ILMS will be used to replace damaged ILMS unit without hampering the system. Recommended by NTPC audit team pg.52	As capitalization of spares/spare assets is not allowed after the cut-off date; the claim of the Petitioner is not allowed. However, the Petitioner is at liberty to claim the asset, under 'capital spare/s consumed' as and when the same is actually put to service. The corresponding de-capitalisation for Rs.24.19 lakh is also ignored	0.00
	Replacement of Battery Bank	35.00	25 (2) (a)	The 220 V dc supply is used for controlling Vacuum Circuit Breakers & Air Circuit Breakers and also utilized for	The battery bank deployed is within the original scope of work of the project (since COD of 2012) and is being replaced before 17 years, which is the	0.00



Sl. No	Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount Allowed
				emergency lighting throughout the entire CHP, U#7&8 at the time of normal power failure. The Battery bank of CHP, U#7&8 was installed and commissioned in the year 2010. Since then, it is in service. Now the health of the battery bank in totality is deteriorating rapidly and it is required to be replaced the entire battery bank with a new one within 2 year so that generation will not be hampered and system reliability will improve.	period required for recovery of full depreciation. In view of this, the additional capital expenditure claimed as replacement, before the asset is fully depreciated, is not allowed . Normally, it is expected that battery banks should be maintained on regular basis from O&M expenditure. The de-capitalisation value of the old asset has also been ignored for the purpose of tariff.	
	Total	67.25				0.00
3	OPH(Electrical), U#7&8					
	Replacement of the Battery Bank of CW P/H & Raw water PH Unit 7&8	60.00	25 (2) (a)	Required replacement, in use since last 10 years.	The battery bank deployed is within the original scope of work of the project (since COD of 2012) and is being replaced before 17 years, which is the period required for recovery of full depreciation. In view of this, the additional capital expenditure claimed as replacement, before the asset is fully depreciated, is not allowed . Normally, it is expected that battery banks should be maintained on regular basis from O&M expenditure. The corresponding de-capitalisation value of Rs.24.96 lakh is also ignored for the purpose of tariff	0.00
	DSM compliant ABT Metering system	50.00	76 & 77	Required for implementation of DSM as per CERC norms Recommended by NTPC audit team	As per Annexure 18 referred by the Petitioner, the ABT system is in practice for ABT gap analysis. The recommendation of audit team is for installing advanced software for ABT guidance. As such,	0.00



SI. No	Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount Allowed
					considering the fact that new DSM Regulations have been notified in 2022, the Petitioner may revisit the software requirement and may claim the asset along with decapitalization of the existing asset, at the time of truing up of tariff. if implemented. Since no justification has been furnished for claiming this asset in exercise of the powers under Regulation 76 & Regulation 77 of the 2019 Tariff Regulations. In view of the above, the claim of the Petitioner, is not allowed	
	Upgradation of SAS at 400KV Switchyard	50.00	25 (2) (c)	Required to avoid the problems of frequent hanging of the servers.	The expenditure is claimed for replacement of asset, which is within the original scope, due to obsolescence. Accordingly, the claim of the Petitioner is allowed under Regulation 25(2) (c) of 2019 Tariff Regulations along with the decapitalization value (gross) of the old asset for Rs.35.62 lakh.	50.00
	Total	160.00				50.00
4	POWER HOUSE CIVIL & AHP					
	Replacement of Ash Slurry Disposal Pipes of 350 NB size after thickness assessment for reliable operation due to raise in dyke height	281.25	25 (2) (c)	Nearly around 2KM of pipe & 31 mtr fittings (bend of Cast Basalt) of 350NB will be required to be replaced, in view of Augmentation of existing ash slurry disposal pumping system due to increase in proposed dyke height of MTPS, Unit # 7-8.	Considering the fact that the work related to ash pond and ash handling is of a continuous nature, the incidental expenditure for replacement of the existing piping is allowed under Regulation 25(2)(a) of the 2019 Tariff Regulations along with decapitalization value (gross) of old asset for Rs.185.73 lakh and Rs.191.02 lakh during 2019-20 and 2020-21.	281.25
	Ash Dyke raising work in phased manner	575.00	26 (1) (e)	Ash pond originally existed for MTPS U#1-3 only with an area of 600 acre and life of 25 years. Phase wise Capacity augmentation of	Considering the fact that work related to ash pond and ash handling is of a continuous nature, the expenditure on ash dyke raising is allowed under	575.00



Sl. No	Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount Allowed
				MTPS from 630 MW to 2340 MW occurred, but ash pond area remained same. Though continuous efforts to enhance the utilisation of Dry Fly Ash has also been taken and MTPS is utilising 42-45% of DFA generated, yet condition of Ash Pond is very critical. Raising of Ash Dyke is required to enhance the capacity of Ash pond on very urgent basis.	Regulation 26(1)(e) of 2019 Tariff Regulations.	
	Total	856.25				856.25
5	Capital Spares (Total 30 items)	5561.28		For ensuring reliable and efficient operation of the units	Though Regulation 35(1)(6) of the 2019 Tariff Regulations provides for claiming capital spares separately and on actual consumption basis, the Petitioner has claimed capital spares, as part of the additional capital expenditure, on provisional basis. Accordingly, the additional capital expenditure as claimed by the Petitioner towards capital spares is not allowed . The claim of the Petitioner, if any, at the time of truing up, of tariff, shall be considered on merits, after prudence check subject to the declaration that the expenditure has not been funded through compensatory allowance or special allowance or claimed as a part of additional capitalization or consumption of stores & spares and Renovation & Modernization.	0.00
	Amount claimed	6739.78				
	Amount allowed					1001.25
2022-23						
1	Electrical system of Coal Handling Plant Units 7 & 8 (CHES)					



SI. No	Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount Allowed
	Suspended Magnet	28.00	25 (2) (a)	The CHP system of U#7&8 is associated with 02 nos. of Suspended Magnets which have been installed in the conveying system before the crusher to remove any ferrous material from the coal; hence these protect the crushers from damage which may cause loss of generation. Since no spare SM is available to cope up with any kind of unforeseen eventuality, so this suspended magnet is required which will be used to replace the damage SM and hence improve system reliability. Recommended by NTPC audit team	As capitalization of spares/spare assets is not allowed after the cut-off date; the claim of the Petitioner is not allowed . However, the Petitioner is at liberty to claim the asset, under 'capital spare/s consumed' as and when the same is actually put to service. The corresponding decapitalization, if any, is also ignored for the purpose of tariff	0.00
	Total	28.00				0.00
2	Capital Spares (Total 36 items)	959.13		For ensuring reliable and efficient operation of the units	Though Regulation 35(1)(6) of the 2019 Tariff Regulations provides for claiming capital spares separately and on actual consumption basis, the Petitioner has claimed capital spares, as part of the additional capital expenditure, on provisional basis. Accordingly, the additional capital expenditure as claimed by the Petitioner towards capital spares is not allowed . The claim of the Petitioner, if any, at the time of truing up, of tariff, shall be considered on merits, after prudence check subject to the declaration that the expenditure has not been funded through compensatory allowance or special allowance or claimed as a part of additional capitalization or consumption of stores &	0.00



Sl. No	Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount Allowed
					spares and Renovation & Modernization.	
	Amount claimed	987.13				
	Amount allowed					0.00
2023-24						
1	C&I System					
	Procurement, Erection & Commissioning of UPS Battery Bank for MTPS Unit # 7.	200.00	25 (2) (a)	To replace old & depleted battery Bank.	The battery bank deployed is within the original scope of work of the project (since COD of 2012) and is being replaced before 17 years, which is the period required for recovery of full depreciation. In view of this, the additional capital expenditure claimed as replacement, before the asset is fully depreciated, is not allowed . Normally, it is expected that battery banks should be maintained on regular basis from O&M expenditure. The corresponding de-capitalisation value of Rs. 134.07 lakh has also been ignored for the purpose of tariff	0.00
	Total	200.00				0.00
2	OPH(Electrical), Units-7&8					
	Replacement of 02 sets of 220V Battery Bank at 400KV Switchyard & at Raw water (01 set for each)	250.00	25 (2) (a)	The battery banks were commissioned in the year 2009 & are in use since then. Spare battery bank is to be kept for any sort of future problem.	As capitalization of spares/spare assets is not allowed after the cut-off date; the claim of the Petitioner is not allowed . However, the Petitioner is at liberty to claim the asset, under 'capital spare/s consumed' as and when the same is actually put to service.	0.00
	Circuit Breaker for HT SWGR (Make- BHEL & Siemens)	200.00	25 (2) (a)	The Circuit breakers were commissioned in the year 2009 & are in use since then. Spare circuit breaker is to be kept for any sort of future problem.		0.00
	Total	450.00				0.00
3	Capital Spares (Total 26 items)	769.86		For ensuring reliable and efficient operation of the units	Though Regulation 35(1)(6) of the 2019 Tariff Regulations provides for claiming capital spares separately and on actual consumption basis, the Petitioner has claimed	0.00



Sl. No	Asset/Work	Amount Claimed	Regulations	Petitioner Submission	Reason for admissibility	Amount Allowed
					capital spares, as part of the additional capital expenditure, on provisional basis. Accordingly, the additional capital expenditure as claimed by the Petitioner towards capital spares is not allowed . The claim of the Petitioner, if any, at the time of truing up, of tariff, shall be considered on merits, after prudence check subject to the declaration that the expenditure has not been funded through compensatory allowance or special allowance or claimed as a part of additional capitalization or consumption of stores & spares and Renovation & Modernization.	
	Amount claimed	1419.86				
	Amount allowed					0.00
	Total Gross amount claimed	20445.56				
	Total Gross amount allowed					6241.19

180. Accordingly, the projected additional capital expenditure claimed allowed/disallowed for the period 2019-24 is as under:

(Rs. in lakh)

Additional Capital Expenditure	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Claimed	6264.60	5034.19	6739.78	987.13	1419.86	20445.56
Allowed	1458.00	3781.93	1001.25	0.00	0.00	6241.19
Disallowed	4806.60	1252.25	5738.53	987.13	1419.86	14204.38

Discharge of Liabilities

181. The Petitioner has submitted that the entire projected additional capital expenditure claimed in Form-9, are on accrual basis, and un-discharged liabilities, if any, will be submitted on actuals, at the time of truing up of tariff. Accordingly, no discharge



of liabilities has been considered/allowed 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, along with 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.

De-capitalization

182. The Petitioner has claimed the total decapitalisation of Rs.1200.60 lakh for the period 2019-24 as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24	Total
513.82	676.35	384.71	20.45	134.07	1729.41

183. The following decapitalisation has been allowed against the allowed assets, after prudence check.

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24	Total
508.26	634.87	292.77	0.00	0.00	1435.90

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

Additional Capital Expenditure eligible for Normal ROE

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Admitted additions in projected additional capital expenditure (A)	682.00	863.75	426.25	0.00	0.00
Less: De-capitalization considered for assets (B)	508.26	634.87	292.77	0.00	0.00
Less: Un-discharged Liabilities (C)	0.00	0.00	0.00	0.00	0.00
Add: Discharges of liabilities (against allowed assets / works) (D)	0.00	0.00	0.00	0.00	0.00
Net projected additional capital expenditure allowed (on cash basis) (E) = (A-B-C+D)	173.74	228.88	133.48	0.00	0.00



Additional Capital Expenditure eligible for WAROI ROE

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Admitted additions in projected additional capital expenditure (A)	776.00	2918.18	575.00	0.00	0.00
Less: De-capitalization considered for assets (B)	0.00	0.00	0.00	0.00	0.00
Less: Un-discharged Liabilities (C)	0.00	0.00	0.00	0.00	0.00
Add: Discharges of liabilities (against allowed assets / works) (D)	0.00	0.00	0.00	0.00	0.00
Net projected additional capital expenditure allowed (on cash basis) (E) = (A-B-C+D)	776.00	2918.18	575.00	0.00	0.00

Exclusions

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

Capital cost allowed for the period 2019-24

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

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost (A)	513995.01	514944.76	518091.82	518800.30	518800.30
Add: Addition during the year / period (Net of Exclusion not allowed) (B)	1458.00	3781.93	1001.25	0.00	0.00
Less: Decapitalisation during the year /period (C)	508.26	634.87	292.77	0.00	0.00
Less: Undischarged liabilities (D)	0.00	0.00	0.00	0.00	0.00
Add: Discharges during the year /period (E)	0.00	0.00	0.00	0.00	0.00
Net Additional Capitalisation (F) = (B-C-D+E)	949.74	3147.06	708.48	0.00	0.00
Closing Gross Block (G) = (A+F)	514944.76	518091.82	518800.30	518800.30	518800.30
Average Gross Block (H) = (A+G)/2	514469.88	516518.29	518446.06	518800.30	518800.30

Debt Equity Ratio

187. 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.*

(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

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

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

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

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

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.”

....

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.”*

188. The gross loan and equity amounting to Rs.379559.48 lakh and Rs. 134435.63 lakh respectively, as on 31.3.2019, as determined in this order, for the period 2014-19 as above, has been considered as the gross loan and equity, as on 1.4.2019. In terms of Regulation 18 of the 2019 Tariff Regulations, the debt-equity ratio of 70:30, has been



applied on the year-wise admitted additional capital expenditure, for arriving at the additions to loan and equity during each year of the period 2019-24. Accordingly, the details of the debt and equity in respect of the generating station is as follows:

	Capital Cost as on 1.4.2019 (Rs. in lakh)	%	Additional Capital Expenditure (Rs. in lakh)	%	De-Capitalization during the period 2019-24 (Rs. in lakh)	%	Capital Cost as on 31.3.2024 (Rs. in lakh)	%
Debt	379559.48	73.84%	4368.83	70.00%	1062.57	74.00%	382865.74	73.80%
Equity	134435.53	26.16%	1872.36	30.00%	373.33	26.00%	135934.56	26.20%
Total	513995.01	100.00%	6241.19	100.00%	1435.90	100.00%	518800.30	100.00%

Return on Equity

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

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

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

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

Provided further that:

i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

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

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

a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;

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

Provided that the detailed guidelines in this regard shall be issued by National Load



Dispatch Centre by 30.6.2019.”

190. Regulation 31 of the 2019 Tariff Regulations provide as follows:

“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 trueing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”

191. The Respondent, KSEBL has submitted that the Return on Equity (ROE) shall be



reduced by 1% for such period, as may be decided by the Commission, if the generating station has not implemented RGMO or FGMO, data telemetry, Communication system upto load despatch centre based on the report submitted by the respective RLDC. It has further submitted that the Petitioner has not furnished the details of above mandatory requirements in the instant petition. Therefore, it has submitted that the ROE may be fixed only based on achievement of operation of RGMO/FGMO, data telemetry and communication system.

192. 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 needs to be claimed based on the actual tax paid in terms of Regulation 31 of the 2019 Tariff Regulations. Regarding the Petitioner's claim with regard to the ROE at weighted average rate of interest on actual loan portfolio, DVPCA has submitted that the Petitioner has neither submitted any details of assets nor any justification for claiming the additional capitalisation, after the cut-of date and which is 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, for any year of the period 2019-24, as and when it arises in the future. The Petitioner has submitted that the details of assets and detailed justifications have been furnished in Form-9, for the period 2019-24.

193. The matter has been considered. The Petitioner has not been paying any income tax in any of the financial year of the period 2014-19. Also, considering the submissions of the Petitioner above, the effective tax rate has been considered as 'nil' for the purpose of grossing up of ROE and the rate of ROE has been considered as 15.50% for the



period 2019-24. Accordingly, ROE has been worked out and allowed as under:

(a) Return on Equity at Normal Rate

(Rs. in lakh)

		2019-20	2020-21	2021-22	2022-23	2023-24
Normative Equity - Opening	A	134435.53	134507.98	134602.04	134653.80	134653.80
Addition to Equity due to additional capital expenditure	B	204.60	259.13	127.88	-	-
De-capitalization	C	(132.15)	(165.07)	(76.12)	-	-
Normative Equity - Closing	D=(A+B+C)	134507.98	134602.04	134653.80	134653.80	134653.80
Average Normative Equity	E=Average (A, D)	134471.76	134555.01	134627.92	134653.80	134653.80
Return on Equity (Base Rate) (%)	F	15.500%	15.500%	15.500%	15.500%	15.500%
Tax Rate for the year (%)	G	0.000%	0.000%	0.000%	0.000%	0.000%
Rate of Return on Equity (Pre-Tax) (%)	H=F/(1-G)	15.500%	15.500%	15.500%	15.500%	15.500%
Return on Equity (Pre-Tax) annualized	I=(ExH)	20843.12	20856.03	20867.33	20871.34	20871.34

(b) Return on Equity at WAROI

(Rs. in lakh)

		2019-20	2020-21	2021-22	2022-23	2023-24
Normative Equity-Opening	A	-	232.80	1108.25	1280.75	1280.75
Addition to Equity due to additional capital expenditure	B	232.80	875.45	172.50	-	-
De-capitalization	C	(-)	(-)	(-)	(-)	(-)
Normative Equity - Closing	D=(A+B+C)	232.80	1108.25	1280.75	1280.75	1280.75
Average Normative Equity	E=Average (A, D)	116.40	670.53	1194.50	1280.75	1280.75
Return on Equity (Base Rate) (%)	F	9.963%	10.098%	10.186%	10.186%	10.186%
Tax Rate for the year (%)	G	0.000%	0.000%	0.000%	0.000%	0.000%
Rate of Return on Equity (Pre-Tax) (%)	H=F/(1-G)	9.963%	10.098%	10.186%	10.186%	10.186%
Return on Equity (Pre-Tax) annualized	I=(ExH)	11.60	67.71	121.67	130.46	130.46



Total Return on Equity allowed

(Rs. in lakh)

		2019-20	2020-21	2021-22	2022-23	2023-24
Return on Equity at Normal Rate	A	20843.12	20856.03	20867.33	20871.34	20871.34
Return on Equity at WAROI	B	11.60	67.71	121.67	130.46	130.46
Total Return on Equity allowed	C=(A+B)	20854.72	20923.74	20989.00	21001.80	21001.80

194. The Petitioner is directed to furnish the report of RLDC with regard to the commissioning of any Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre, along with relevant information regarding the achievement of 'Ramp Rate' in compliance to proviso (i) and (iii) of Regulation 30(2) of the 2019 Tariff Regulations, at the time of truing-up of tariff.

Interest on Loan

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

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

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

(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.

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

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

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

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



generating company or the transmission licensee as a whole shall be considered.

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

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

“61. Sharing of saving in interest due to re-financing or restructuring of loan: (1) If re-financing or restructuring of loan by the generating company or the transmission licensee, as the case may be, results in net savings on interest after accounting for cost associated with such refinancing or restructuring, the same shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 50:50.

(2) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for settlement of the dispute:

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

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

- a. Gross normative loan amounting to Rs.379559.48 lakh on 31.3.2019 as considered in for the period 2014-19 in this order, has been considered as on 1.4.2019;
- b. Cumulative repayment of Rs. 268734.68 lakh as on 31.3.2019, as considered for the period 2014-19 in this order, has been considered as on 1.4.2019;
- c. Accordingly, the net normative opening loan as on 1.4.2019 works out to Rs. 110824.80 lakh;
- d. Weighted average rate of interest on loan, as claimed by the Petitioner has been considered;
- e. The repayments for the respective years of the period 2019-24, has been considered equal to the depreciation allowed for that year. Further, repayments have been adjusted for de-capitalization of assets considered for the purpose of tariff;
- f. Interest on loan has been calculated on the normative average loan of the year by applying the weighted average rate of interest.

197. 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	379559.48	380203.97	382381.52	382865.74	382865.74
Cumulative repayment of loan up to previous year	B	268734.68	308696.27	348734.19	382865.74	382865.74
Net Loan Opening	C=(A-B)	110824.80	71507.70	33647.33	0.00	0.00



		2019-20	2020-21	2021-22	2022-23	2023-24
Addition due to additional capital expenditure	D	1020.60	2647.35	700.88	0.00	0.00
Adjustment for De-Capitalization	E	376.11	469.81	216.65	0.00	0.00
Repayment of loan during the year	F	40246.21	40406.45	34336.50	0.00	0.00
Repayment adjustment on account of decapitalization	G	284.62	368.53	204.94	0.00	0.00
Net repayment of the loan during the year	H=(F-G)	39961.58	40037.92	34131.56	0.00	0.00
Net Loan Closing	I=(C+D+EE-H)	71507.70	33647.33	0.00	0.00	0.00
Average Loan	I=Average (C,I)	91166.25	52577.52	16823.67	0.00	0.00
Weighted Average Rate of Interest of loan	J	9.9633%	10.0978%	10.1861%	10.1861%	10.1861%
Interest on Loan	K=(IxJ)	9083.12	5309.17	1713.67	0.00	0.00

Depreciation

198. 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.

.....

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:

.....

(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."*

199. Depreciation has been worked out considering the admitted capital cost of Rs. 513995.01 lakh as on 1.4.2019, and the cumulative depreciation of Rs.268734.67 lakh as on 31.3.2019, as determined in this order, for the period 2014-19. Accordingly, in terms of Regulation 33 read with 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
Opening Capital Cost	A	513995.01	514944.76	518091.82	518800.30	518800.30
Add: Net Additional Capital Expenditure	B	949.74	3147.06	708.48	0.00	0.00
Closing Capital Cost	C = (A+B)	514944.76	518091.82	518800.30	518800.30	518800.30
Average Capital Cost	D = Average (A, C)	514469.88	516518.29	518446.06	518800.30	518800.30
Value of freehold land	E	0.00	0.00	0.00	0.00	0.00
Value of software and IT equipment included in average capital cost (F)	F	0.00	0.00	0.00	0.00	0.00
Aggregated Depreciable Value	G= [(D-E-F) *90%+F]	463022.89	464866.46	466601.45	466920.27	466920.27
Remaining Aggregate Depreciable value at the beginning of the year	H=[(G)- (Cumulative Depreciation of Previous year)]	194288.22	156170.20	117867.27	77833.78	37248.81
Balance useful life at the beginning of the year	I	17.86	16.86	15.86	14.86	13.86
Weighted Average Rate of Depreciation (WAROD)	J	7.8228%	7.8228%	7.8228%	7.8228%	7.8228%
Combined Depreciation during the year/ period	K = Min(D * J,H)	40246.21	40406.45	40557.26	40584.97	37248.81
Depreciation (annualized)	L	40246.21	40406.45	40557.26	40584.97	37248.81
Cumulative depreciation (at the end of the year)	M= [(Cumulative Depreciation of Previous year) +(L)]	308980.88	349102.71	389291.43	429671.46	466920.27
Less: Depreciation adjustment on account of de-capitalization	N	284.62	368.53	204.94	0.00	0.00
Cumulative depreciation at the end of the year	O= (M - N)	308696.26	348734.18	389086.49	429671.46	466920.27

Operation & Maintenance Expenses

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



<i>(Rs/lakh/MW)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
22.51	23.30	24.12	24.97	25.84

201. The Normative O&M expenses claimed by the Petitioner in terms of the above Regulations, is as under:

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
22510.00	23300.00	24120.00	24970.00	25840.00

202. 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

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

“35(1)(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;

xxxxxxx.”

Water Charges

204. 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 m³/MWh, generation as per NAPAF and claimed as follows:

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
2780.49	3050.18	3355.20	3690.72	4070.91

205. The Respondent, BYPL has submitted that in terms of Regulation 35(6), the Petitioner was required to submit details of water consumption. It has also submitted that the said Regulation does not allow for any year-to-year escalation in the rate / charges. Therefore, the Respondent has submitted that in the absence of requisite details / documents, the claim of the Petitioner is liable to be rejected.



206. DVPCA has submitted that the actual water charge rate was Rs. 5.7/KL and Rs. 1.15/KL for industrial use and domestic use respectively for each year of the control period 2014-19 and accordingly, the weighted average water charge rate is Rs. 5.68/KL. DVPCA has pointed out that 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, it has further submitted that the Petitioner has not furnished the relevant OM dated 23.7.2019. DVPCA has also submitted that the increase sought by the Petitioner is more than 85%, which is unreasonable and has therefore prayed that the Commission may exercise prudence check, on arriving at the allowable water charge rate, so that the same is comparable with the rates prevailing in other States and there should be no cross-subsidisation of other activities of the Petitioner. Accordingly, DVPCA has stated that arbitrary escalation of 10% ought to be rejected as there is neither any basis for the same nor has been provided in the 2019 Tariff Regulations. 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 DVC, vide OM dated 23.7.2019.

207. The matter has been considered. Keeping in view the above submissions and in consideration of the MOEF&CC norms, the generation as per NAPAF and water charges rate of Rs 10.64/KL and annual escalation of 10% thereof, as per Petitioner's OM dated 23.7.2019, the water charges for the period 2019-24 is allowed as under, on projection basis, based on actual consumption:

	Units	2019-20	2020-21	2021-22	2022-23	2023-24
Projected Gross Generation @ 85% load factor	MU	7466.40	7446.00	7446.00	7446.00	7466.40
Normative Specific Water	Cubic Meter/MWh	3.50	3.50	3.50	3.50	3.50



	Units	2019-20	2020-21	2021-22	2022-23	2023-24
Consumption as per MoEFCC stipulations						
Normative Water Consumption as per MoEFCC's Norms	Cubic Meter	26132400	26061000	26061000	26061000	26132400
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)	2780.49	3050.18	3355.20	3690.72	4070.91

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

Security Expenses

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

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
2455.48	2573.61	2697.41	2827.17	2963.17

210. It is observed that the Petitioner has escalated the actual Security expenses for the year 2018-19, at the rate of 4.81% per annum, to claim the projected security expenses for the period 2019-24. The Petitioner has also submitted that the escalation of Security expenses has been proposed to accommodate the year-on-year growth of salary expenditure and associated CISF activities, that are primarily governed by the CISF Rules.

211. The Respondent, BYPL has submitted that in terms of the said Regulation 35(6), the Petitioner was required to submit an assessment of the security requirement for



arriving at the estimated Security expenses. The Respondent has also pointed out that the said Regulation does not allow for any year-to-year escalation in the rate / charges and the Petitioner has failed to provide the necessary details regarding security requirements, as assessed by a competent authority.

212. DVPCA has submitted that there is no requirement for separate allowance of CISF security expenses as they are covered under normative O&M expenses and separate allowance of same would lead to unjust enrichment of the Petitioner. DVPCA has also submitted that the security expenses claimed by the Petitioner is premature, without any detailed justifications and rationale and cannot be allowed at this stage.

213. In response, the Petitioner has submitted that the actual Security expenses for 2018-19 has been escalated at 4.81% (which is the CAGR of Normative O&M expenses of this generating station from 2018-19 to 2023-24) per annum to obtain the projected figures for the period 2019-24. The Petitioner has further 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.

214. The matter has been considered. Keeping in view that the claim of the Petitioner is based on actual Security expenses for 2018-19, and that the annual escalation rate of 4.81% is reasonable, we allow the projected Security expenses, as claimed by the Petitioner, as above. However, considering the fact that Security expenses for thermal generating stations for the period 2019-24 are to be allowed separately, after prudence check, based on the assessment of the security requirement and estimated expenses furnished by the Petitioner, the Petitioner shall, at the time of truing up, 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

215. The Petitioner has not claimed capital spares for the period 2019-24, but has submitted that the same shall be claimed at the time of truing-up of tariff, on actual. The last proviso to Regulation 35 (1)(6) of the 2019 Regulations provides for considering capital spares, after prudence check, on consumption basis at the truing-up. In line with the Regulations, the Petitioner shall substantiate that the capital spares have not been funded through Compensatory Allowance or Special Allowance or claimed as a part of additional capitalisation or consumption of stores and spares and Renovation and Modernization, at the time of truing-up of tariff.

216. Based on the above discussion, the O&M expenses allowed under Regulation 35(1)(1) of the 2019 Tariff Regulations including Water Charges, Security expenses and Capital Spares allowed under Regulation 35(1)(6) of the 2019 Tariff Regulations is summarised as follows:

		<i>(Rs. in lakh)</i>				
		2019-20	2020-21	2021-22	2022-23	2023-24
Installed Capacity (MW)		1000.00	1000.00	1000.00	1000.00	1000.00
O&M Expenses under Regulation 35(1) in Rs lakh / MW		22.51	23.30	24.12	24.97	25.84
Total O&M Expenses (A)	Claimed	22510.00	23300.00	24120.00	24970.00	25840.00
	Allowed	22510.00	23300.00	24120.00	24970.00	25840.00
Water Charges (B)	Claimed	2780.49	3050.18	3355.20	3690.72	4070.91
	Allowed	2780.49	3050.18	3355.20	3690.72	4070.91
Security Expenses (C)	Claimed	2455.48	2573.61	2697.41	2827.17	2963.17
	Allowed	2455.48	2573.61	2697.41	2827.17	2963.17
Capital Spares (D)	Claimed	0.00	0.00	0.00	0.00	0.00
	Allowed	0.00	0.00	0.00	0.00	0.00
Total O&M Expenses as allowed (including Water Charges and Security Expenses) (D=A+B+C)	Claimed	27745.97	28923.78	30172.61	31487.88	32874.08
	Allowed	27745.97	28923.78	30172.61	31487.88	32874.08



Operational Norms

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

“Norms of operation for thermal generating station

49. The norms of operation as given hereunder shall apply to thermal generating stations:

(A) Normative Annual Plant Availability Factor (NAPAF)

(a) For all thermal generating stations, except those covered under clauses (b), (c), (d), & (e) - 85% ;

xxx

(C) Gross Station Heat Rate:

xxx

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

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

1.05 X Design Heat Rate (kCal/kWh)

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

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

Pressure Rating (Kg/cm ²)	150	170	170
SHT/RHT (°C)	535/535	537/537	537/565
Type of BFP	Electrical Driven	Turbine Driven	Turbine Driven
Max Turbine Heat Rate (kCal/kWh)	1955	1950	1935
Min. Boiler Efficiency			
Sub-Bituminous Indian Coal	0.86	0.86	0.86
Bituminous Imported Coal	0.89	0.89	0.89
Max. Design Heat Rate (kCal/kWh)			
Sub-Bituminous Indian Coal	2273	2267	2250
Bituminous Imported Coal	2197	2191	2174

(D) Secondary Fuel Oil Consumption:

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

xx

(E) Auxiliary Energy Consumption:

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

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

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



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

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

218. The operational norms claimed by the Petitioner are as follows:

Parameters	Value
Normative Annual Plant Availability Factor (NAPAF) (%)	85.00
Gross Station Heat Rate (kcal/kwh)	2374.10
Auxiliary Power Consumption (%)	5.75
Specific Oil Consumption (ml/kwh)	0.50

219. The Petitioner has sought liberty to claim relaxation of PAF, under Regulation 76 and Regulation 77 of the 2019 Tariff Regulations, for unforeseen event or uncontrollable factors.

220. The matter has been considered. We find no merit in the claim of the Petitioner to allow the relaxation of NAPAF specified in terms of the 2019 Tariff Regulations. Accordingly, the claim of the Petitioner is not allowed. It is observed that the generating station is of 500 MW units with induced draft and tube type coal mills. Accordingly, the operational norms, is allowed, in line with the above regulations, as under:

Parameter	Value
Normative Annual Plant Availability Factor (NAPAF) (%)	85.00
Gross Station Heat Rate (kcal/kwh)	2374.10
Auxiliary Power Consumption (%)	5.75
Specific Oil Consumption (ml/kwh)	0.50

Interest on Working Capital

221. 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.”

222. 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.”

223. The Petitioner has claimed the weighted average GCV and cost of coal as 3628.73 kCal / kg and Rs. 3980.90/kg, respectively, and those of Secondary oil as 10000 kCal/kg and Rs. 45279.85/Kl. Accordingly, the Interest on working capital as claimed by the Petitioner is as under:

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Cost of Coal/Lignite for Stock and Generation (A)	26951.89	26878.25	26878.25	26878.25	26951.89
Cost of oil for 2 months (B)	281.73	280.96	280.96	280.96	281.73
O&M expenses - 1 month (C)	2312.16	2410.32	2514.38	2623.99	2739.51
Maintenance Spares - 20% of O&M (D)	5549.19	5784.76	6034.52	6297.58	6574.82
Receivables – 45 days (E)	39832.99	39613.04	39463.21	39525.12	39864.70
Total Working Capital (F) = (A+B+C+D+E)	74927.97	74967.32	75171.32	75605.90	76412.64
Rate of Interest (G)	12.05%	12.05%	12.05%	12.05%	12.05%
Total Interest on Working capital (H) = (F)x(G)	9028.82	9033.56	9058.14	9110.51	9207.72



Fuel Cost and Cost of Liquid Stock for Working Capital

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

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Cost of coal for 50 Days	26951.89	26878.25	26878.25	26878.25	26951.89
Cost of Secondary fuel oil 2 months	281.73	280.96	280.96	280.96	281.73

225. 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.

226. 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:

$$ECR = \{(SHR - SFC \times CVSF) \times LPPF / CVPF + SFC \times LPSFi + LC \times LPL\} \times 100 / (100 - AUX)$$

(b) For gas and liquid fuel-based stations:

$$ECR = SHR \times LPPF \times 100 / \{(CVPF) \times (100 - AUX)\}$$

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.”

227. In line with the above Regulations, a margin of 85 kCal/kg in weighted average Gross Calorific value (GCV) of coal on ‘as received’ for coal based generating stations on account of variation during storage at the generating station has been considered. As such, the fuel components of working capital have been worked out and allowed as under:

	<i>(Rs. in Lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Cost of coal for 20 days	10858.37	10858.37	10858.37	10858.37	10858.37
Cost of coal for generation for 30 days	16287.55	16287.55	16287.55	16287.55	16287.55
Cost of Secondary fuel oil 2 months	281.73	280.96	280.96	280.96	281.73

228. In the present petition, the computation of working capital is based on the GCV and fuel cost furnished for third quarter of the year 2018-19. However, Regulation 34 (C) (2) of the 2019 Tariff Regulations provides that the cost of fuel shall be based on the landed fuel cost (taking into account normative transit and handling losses, in terms of Regulation 39 of these Regulations) by the generating station and the 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 this, the fuel cost computed above, is subject to the actual data to be furnished by Petitioner, for each year, at the time of truing-up of tariff.

b) Energy Charges for 45 days for Working Capital

229. The Petitioner has claimed Energy Charge Rate (ECR) of Rs.2.7816/kWh based on the weighted average price and GCV of coal as received, during the preceding three months i.e., October 2018, November 2018 and December 2018 as follows:



	Unit	Claimed
Energy Charge Rate Secondary fuel-	Rs./kWh	0.0236
Energy Charge Rate Primary fuel	Rs./kWh	2.599
Total Energy Charge Rate [ex-bus]	Rs./kWh	2.782

230. 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 follows:

	(Rs./kWh)	
	Claimed	Allowed
Weighted average price of coal (Rs./MT)	3980.90	3980.90
Weighted average GCV of coal (kCal/kg)	3628.73	3543.73*
Weighted average price of oil (Rs./kl)	45279.85	45279.85
Weighted average GCV of oil (kCal/l)	10000.00	10000.00
Energy Charge rate ex-bus	2.782	2.848

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

231. Energy charges for 45 days, on the basis of weighted average GCV and weighted average cost allowed as above for coal and oil, 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
24641.32	24641.32	24641.32	24641.32	24641.32

c) Working Capital for Maintenance Spares

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

(Rs. in lakh)				
2019-20	2020-21	2021-22	2022-23	2023-24
5549.19	5784.76	6034.52	6297.58	6574.82

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



follows:

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
5549.19	5784.76	6034.52	6297.58	6574.82

d) Working Capital for Receivables

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

<i>(Rs. in lakh)</i>					
	2019-20	2020-21	2021-22	2022-23	2023-24
Variable Charges (45 days)	24641.32	24641.32	24641.32	24641.32	24641.32
Fixed Charges (45 days)	13122.90	12795.07	12465.14	12425.33	12153.20
Total	37764.23	37436.39	37106.47	37066.65	36794.52

e) Working Capital for O&M Expenses

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

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
2312.16	2410.32	2514.38	2623.99	2739.51

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

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
2312.16	2410.32	2514.38	2623.99	2739.51

g) Rate of Interest for Working Capital

237. Regulation 34(3) of the 2019 Tariff Regulations provides for the rate of interest on working capital considered on projection basis, for the period 2019-24 as 12.05% (i.e. 1-year SBI MCLR of 8.55% as on 1.4.2019 + 350 basis points). As the tariff of the generating station for the period 2019-24, is being determined during the year 2022-23, the SBI MCLR as on 1.4.2020 (7.75%), as on 1.4.2021 (7.00%) and as on 1.4.2022 (7.00%) is also available. Since, the rate of interest on working capital is subject to



revision at the time of truing-up of tariff, based on the bank rate as on 1st April of each financial year, we find it prudent to allow the rate of interest as on 1.4.2020, 1.4.2021 and 1.4.2022, for the subsequent financial years. Accordingly, the rate of interest for the year 2019-20 is 12.05%, 2020-21 is 11.25%, 2021-22 is 10.50%, 2022-23 is 10.50% and for the subsequent years the rate of interest of 10.50% has been considered (i.e., 1 year 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 1 year SBI MCLR of 7.00% as on 1.4.2022 + 350 basis points). Accordingly, Interest on working capital is allowed as follows:

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for non-pit-head Thermal Generating Station					
Working Capital for Cost of Coal towards Stock – 20 days	10858.37	10858.37	10858.37	10858.37	10858.37
Working Capital for Cost of Coal towards Generation – 30 days	16287.55	16287.55	16287.55	16287.55	16287.55
Working Capital for Cost of Secondary fuel oil – 2 months	281.73	280.96	280.96	280.96	281.73
Working Capital for Maintenance Spares @ 20% of O&M expenses	5549.19	5784.76	6034.52	6297.58	6574.82
Working Capital for Receivables - 45 days	37764.23	37436.39	37106.47	37066.65	36794.52
Working Capital for O&M expenses - 1 month	2312.16	2410.32	2514.38	2623.99	2739.51
Total Working Capital (A+B+C+D+E+F)	73053.24	73058.35	73082.26	73415.10	73536.50
Rate of Interest	12.05%	11.25%	10.50%	10.50%	10.50%
Interest on Working capital (G x H)	8802.92	8219.06	7673.64	7708.59	7721.33

Additional Claims

238. In addition to the Depreciation, Interest on Loan, Return on Equity, O&M Expenses, Water Charges, Security Expenses, Interest on Working Capital, in accordance with the 2019 Tariff Regulations, the Petitioner has also claimed expenditure towards Interest & Contribution on Sinking Fund (As per section 40, Part IV of DVC Act), Share of P&G, Share of Common Office Expenditure, Ash Evacuation Expenses, Mega



Insurance Expenses and Expenditure for Subsidiary activity as given below:

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Interest & Contribution on Sinking Fund (As per section 40, Part IV of DVC Act)	2944.52	3150.64	3371.18	3607.16	3859.67
Share of P&G	3726.44	3901.61	4085.01	4277.03	4478.08
Share of Common Office Expenditure	196.65	211.05	213.71	183.79	167.53
Expenses due to Ash evacuation, Mega insurance & expenditure for Subsidiary activity	2811.18	2946.41	3088.15	3236.70	3392.40
Total	9678.79	10209.70	10758.05	11304.69	11897.68

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

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

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
2944.52	3150.64	3371.18	3607.16	3859.67

240. The Petitioner has allocated sinking fund contribution and interest for DVC Bonds of Rs. 3100 Crore amongst the generating stations of DVC as follows:

	<i>(Rs. in Crore)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Total Contribution and Interest for Debt Borrowing	214.27	229.27	245.32	262.49	280.87
MTPS 5&6	17.14	18.34	19.63	21.00	22.47
CTPS 7&8	31.10	33.28	35.61	38.10	40.77
MTPS 7&8	29.45	31.51	33.71	36.07	38.60
DSTPS	60.83	65.08	69.64	74.51	79.73
KTPS	66.29	70.93	75.89	81.20	86.89
RTPS-I	9.47	10.13	10.84	11.60	12.41
BTPS-A	0.00	0.00	0.00	0.00	0.00
Total	214.27	229.27	245.32	262.49	280.87

241. The Respondent KSEBL and Respondent BYPL have submitted that the contribution to the sinking fund alone may be allowed and interest may be disallowed. DVPCA has submitted that the linkage of Bonds has to be established with each specific generating station. It has submitted that the allocation of principal cannot be the norm as



different power plants of the Petitioner supply power to different entities/ beneficiaries. DVPCA has further submitted that neither the provisions of Electricity Act, 2003 nor the 2019 Tariff Regulations, sanction the recovery of cost of generation assets twice over through a) allowance of Contribution to Sinking Fund; and b) Depreciation and allowance of Interest on Loan by treating the amount realised through bonds as normative debt. It has also pointed out that in the past tariff orders relating to Petitioner's old plants, the Commission has treated the amount realised through bonds as normative debt, and accordingly proceeded to grant interest thereon over and above the allowance of contribution to Sinking Fund in terms of Regulation 72(2)(iv) of the 2019 Tariff Regulations, which is applicable only in cases where normative debt is not allowed for funding capital cost. DVPCA has added that the Petitioner cannot be allowed both contributions to Sinking Fund, as well as depreciation and interest on loan by treating the funds realised through bond issue as normative loan. It has further submitted that Petitioner is allowed capital cost including IDC, time over and cost overrun, to the extent permissible under the 2019 Tariff Regulations. It has stated that the loan repayment is also taken care through higher depreciation for initial 12 years and the Commission also allows interest on working capital on normative basis. DVPCA further submitted that the creation of funds without any specific purpose cannot be allowed to be recovered as expenditure in tariff even if it is mentioned in the DVC Act and the 2019 Tariff Regulations. Accordingly, DVPCA has prayed that the Commission may seek details about the purpose of borrowing of such funds, when all expenses related to capital funding and working capital funding are allowed.

242. The Petitioner has reiterated that the matter related to Sinking fund has already been settled through various litigations by APTEL from the period from 2007 to 2019 in favour of the Petitioner, which subsequently, was upheld by the Hon'ble Supreme Court



in its judgement dated 23.7.2018 in BSAL v CERC & ors (2018) 8 SCC 281. The Petitioner further submitted that though Review Petition No. 4 of 2019 has been filed by the Objector, DVPCA in the matter of MAL vs CERC & ors, there is no stay of the judgment by APTEL and therefore the same is binding on all the parties. Accordingly, the Petitioner has submitted that the plea of the Objector may be rejected.

243. We have examined the matter. Section 40 of the DVC Act provides that the Petitioner shall make provision for depreciation and for reserve and other funds at such rates and on such terms as may be specified by the C&AG in consultation with the Central Government. Regulation 72(2)(iv) of the 2019 Tariff Regulations categorically provides that the funds created under Section 40 of the DVC Act, 1948 shall be considered as item of expenditure to be recovered through tariff. It is observed that the sinking funds have been created only for redemption of bonds. Accordingly, the amount approved for this generating station is as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
2944.52	3150.64	3371.18	3607.16	3859.67

Share of P&G Contribution

244. 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
3726.44	3901.61	4085.01	4277.03	4478.08

245. 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. The Objector has also stated that the P&G contribution claimed in 2019-20 is higher by 108% than the P&G contribution claimed in 2018-19. It



has further stated that the Petitioner has not furnished any justification for claiming such higher amount in 2019-20. DVPCA has further pointed out that during the process of framing the 2019 Tariff Regulations, all the generating companies including the Petitioner, had submitted the operational data for the past years, including O&M expenses, which also included the contribution towards P&G. It has added that the normative O&M expenses specified under Regulation 35 of the 2019 Tariff Regulations was only after giving due consideration to the requirement of the various generating companies including P&G contribution. In response, the Petitioner has reiterated its submissions in the made in the petition.

246. 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

247. The Petitioner has claimed projected expenditure towards Ash Evacuation, Mega Insurance and share of Subsidiary Activities, as additional O&M expenses as under:

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Ash Evacuation Expenses	2314.89	2426.25	2542.97	2665.30	2793.51
Mega Insurance Expenses	89.51	93.82	98.33	103.06	108.02
Share of Subsidiary activities	406.77	426.34	446.84	468.34	490.87
Total	2811.18	2946.41	3088.15	3236.70	3392.40



248. The Respondents BYPL, KSEBL and the Objector, DVPCA have submitted that the claim for expenses towards ash evacuation, mega insurance and subsidiary activities ought to be rejected by the Commission, as such expenses are already built-in the normative O&M expenses and cannot be allowed separately. We examine the same below:

Ash Evacuation Expenses

249. The Petitioner has claimed total expenses for Rs.12742.92 lakh (Rs. 2314.89 lakh in 2019-20, Rs.2426.25 lakh in 2020-21, Rs.2542.97 lakh in 2021-22, Rs. 2665.30 lakh in 2022-23 and Rs.2793.50 lakh in 2023-24) towards Ash Evacuation expenses. In justification for the same, the Petitioner has submitted that due to statutory directives by the MOEF&CC notification dated 14.9.1999, the fly ash generated during the course of operation of the coal power plant is required to be utilized under various designated modes. Accordingly, the Petitioner has claimed Ash evacuation expenses under Regulation 76 and Regulation 77 of the 2019 Tariff Regulations. 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, the objector has stated that there is no rationale to allow such expenses over and above the normative O&M expenses for the period 2019-24.

250. 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 utilize 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.

251. The Petitioner has proposed ash transportation charges for the period 2019-24, based on the ash transportation charges, associated with the generating station for 2018-19 with an annual escalation rate of 4.40% thereof. As noted, the ash transportation charges for the generating station in 2018-19, are based on apportioned audited ash transportation charges of Mejia TPS and the same was allowed during the period 2014-19. 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. In this background, we are inclined to allow only 90% of the projected ash transportation charges claimed, as additional O&M



expenses, for the period 2019-24. The Petitioner is permitted to recover the said expenses from 1.4.2019 up to the date of this order, in 6(six) equal instalments commencing from the date of this order, in accordance with Regulation 10 of the 2019 Tariff Regulations and thereafter, the recovery of the same, may be affected 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 @ 90% of the claimed expenses are as follows

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
2083.40	2183.63	2288.67	2398.77	2514.16

Mega Insurance Expenses

252. The Petitioner has claimed total amount of Rs. 492.76 lakh (Rs. 89.51 lakh in 2019-20, Rs. 93.82 lakh in 2020-21, Rs. 98.33 lakh in 2021-22, Rs. 103.06 lakh in 2022-23 and Rs. 108.02 lakh in 2023-24) towards Mega Insurance expenses under Regulation 76 and Regulation 77 of the 2019 Tariff Regulations. 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.

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

Share of Subsidiary Activities

254. The Petitioner has claimed total amount of Rs. 2239.16 lakh (ie Rs. 406.77 lakh in 2019-20, Rs. 426.34 lakh in 2020-21, Rs. 446.84 lakh in 2021-22, Rs. 468.34 lakh in 2022-23 and Rs. 490.87 lakh in 2023-24) towards Share of Subsidiary activities under Regulation 76 and Regulation 77 of the 2019 Tariff Regulations. DVPCA has submitted that the Petitioner has also claimed contribution to subsidiary funds and has claimed the Return on Equity, Interest on Loan and Depreciation on the common assets namely Direction Office, Subsidiary Activities, Other Offices, R&D, IT Centre and Central Office for the period 2019-24 under the nomenclature "share of common office expenditures". Accordingly, 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 have already been claimed separately. The Objector has further submitted that the Commission, in its order dated 31.8.2016 in Petition No. 347/GT/2014, had disallowed the expenditure on subsidiary activity and the same was to be recovered as part of the



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 specified under the 2014 Tariff Regulations. Similarly, the normative O&M expenses provided under the 2019, Tariff Regulations would be sufficient to cover such expenses during the period 2019-24 also. In response, the Petitioner has reiterated its submissions made in the petition.

255. The matter has been considered. It is noted that APTEL vide its judgement dated 23.11.2007 and Hon'ble Supreme Court judgement dated 23.7.2018 had observed that the apportioned expenditure associated with subsidiary activities can be recovered through electricity tariff. However, the claim of the Petitioner is not considered at this stage. The Petitioner is directed to furnish the actual audited apportioned expenditure associated with subsidiary activities along with proper justification for the expenses claimed, at the time of truing-up of tariff.

Share of Common Office Expenditure

256. 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:

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Direction Office	0.00	0.00	0.00	0.00	0.00
Subsidiary Activities	0.00	0.00	0.00	0.00	0.00
Other Offices	132.00	66.39	222.42	15.52	0.00
R&D	0.00	0.00	0.00	0.00	0.00
IT	960.00	1240.00	0.00	0.00	0.00
Central Office	0.00	0.00	0.00	0.00	0.00



	2019-20	2020-21	2021-22	2022-23	2023-24
Total	1092.00	1306.39	222.42	15.52	0.00

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

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Sub Station equipment	132.00	66.39	222.42	15.52	0.00
Network Access Controller and Data Centre	960.00	1240.00	0.00	0.00	0.00
Total	1092.00	1306.39	222.42	15.52	0.00

258. 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:

	<i>(Rs. in lakh)</i>				
	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 COMMON OFFICE EXPENDITURE	1536.55	1649.04	1,69.83	1436.05	1308.98

	<i>(Rs. in lakh)</i>				
	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



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

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Common Office Expenditure apportioned to Mejia- 7 & 8	196.65	211.05	213.71	183.79	167.53

260. 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:

		<i>(Rs. in lakh)</i>				
		2019-20	2020-21	2021-22	2022-23	2023-24
1	Fully automated microprocessor-based portable CT&PT Analyzer (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	-
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	-

261. As regards the 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.

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



GOI guidelines dated 12.4.2010 and therefore the claim is allowed. Further, considering the nature of works, additional capitalization claimed against the head 'IT Equipment' are allowed. 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.

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

	<i>(Rs. in lakh)</i>				
	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

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

	<i>(Rs. in lakh)</i>				
	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

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

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

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The Commission has considered the O&M norms for this generating station as specified for 500 MW units including the expenditure for Common Offices in respect of depreciation and interest on loan. Therefore, only return on equity has been allowed as computed in the above table. Accordingly, return on equity of Rs. 87.01 lakh in 2014-15, Rs. 93.07 lakh in 2015-16, Rs. 115.68 lakh in 2016-17, Rs. 154.82 lakh in 2017-18 and Rs. 175.65 lakh in 2018-19 is allowed as part of share of Common office expenditure and annual fixed charges for the generating station.”

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



computed this generating station, is as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Total Common Office Expenditure for generating stations (A)	981.93	965.06	958.12	957.47	874.16
Total Common Office Expenditure for T&D (B)	84.69	83.23	82.63	82.58	75.39
Total Common Office Expenditure for generating stations and T&D C=(A+B)	1066.62	1048.29	1040.75	1040.05	949.55
Total Depreciation for generating stations and T&D (D)	458.06	357.82	300.14	310.67	232.58
Total Interest on loan for generating stations and T&D (E)	91.10	136.51	163.38	148.52	135.87
Total Return on equity on for generating stations and T&D (F)	517.46	553.96	577.23	580.86	581.10
Total of Depreciation, Interest on Loan and ROE of Generating Station and T&D (G)	1066.62	1048.29	1040.75	1040.05	949.55
Return on equity corresponding to the generating stations only (A/C) *F (H)	476.38	509.98	531.40	534.74	534.96
Apportionment of the common office expenditure as claimed to Mejia 7&8 including depreciation, interest on loan and ROE. (I)	135.68	133.35	132.39	132.30	120.79
Apportioned amount of only "Return on Equity" corresponding to the generating station (I/A)xH (J)	65.82	70.47	73.43	73.89	73.92

(Rs. in lakh)

Common Office expenses	2019-20	2020-21	2021-22	2022-23	2023-24
MTPS (7&8) (this generating station)	65.82	70.47	73.43	73.89	73.92

Annual Fixed Charges allowed

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

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	40246.21	40406.45	40557.26	40584.97	37248.81
Interest on loan	9083.12	5309.17	1713.67	0.00	0.00
Return on Equity	20854.72	20923.74	20989.00	21001.80	21001.80
Interest on Working Capital	8802.92	8219.06	7673.64	7708.59	7721.33
O&M Expenses	22510.00	23300.00	24120.00	24970.00	25840.00
Water Charges	2780.49	3050.18	3355.20	3690.72	4070.91
Security Expenses	2455.48	2573.61	2697.41	2827.17	2963.17
Special Allowance	0.00	0.00	0.00	0.00	0.00
Sub-total (A)	106732.94	103782.21	101106.17	100783.23	98846.02



	2019-20	2020-21	2021-22	2022-23	2023-24
Interest & Contribution on Sinking Fund (As per section 40, Part IV of DVC Act)	2944.52	3150.64	3371.18	3607.16	3859.67
Share of P&G contribution	0.00	0.00	0.00	0.00	0.00
Share of Common Office expenditure	65.82	70.47	73.43	73.89	73.92
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)	3010.34	3221.10	3444.61	3681.05	3933.58
Total Annual Fixed Charges allowed	109743.28	107003.31	104550.78	104464.29	102779.60

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.

268. The Ash Evacuation expenses, which shall be recovered separately in terms of this order, is as under:

<i>(Rs in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
2083.40	2183.63	2288.67	2398.77	2514.16

269. 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

270. 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.

271. 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.

272. Petition No. 568/GT/2020 is disposed of in terms of the above.

**Sd/-
(Pravas Kumar Singh)
Member**

**Sd/-
(Arun Goyal)
Member**

**Sd/-
(I.S. Jha)
Member**

