Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
World Trade Centre, Centre No.1, 13th Floor, Cuffe Parade, Mumbai 400 005
Tel. No. 022 22163964/65/69 – Fax 022 22163976
E-mail: mercindia@merc.gov.in
Website: www.merc.gov.in

CASE No. 299 of 2019

Case of The Tata Power Company Ltd. (Transmission) for approval of True-up of Aggregate Revenue Requirement (ARR) for FY 2017-18 and FY 2018-19, Provisional Truing-up of Aggregate Revenue Requirement for FY 2019-20, and approval of ARR for the MYT 4th Control Period from FY 2020-21 to FY 2024-25

Coram

Anand B. Kulkarni, Chairperson
I.M. Bohari, Member
Mukesh Khullar, Member

ORDER

Date: 30 March, 2020

The Tata Power Company Limited (Transmission Business) (**TPC-T**), 24, Homi Mody Street, Fort, Mumbai, has filed a Multi-Year Tariff (**MYT**) Petition for the 4th Control Period on 1 November, 2019 comprising Truing-up of Aggregate Revenue Requirement (**ARR**) for FY 2017-18 and FY 2018-19, Provisional Truing-up of ARR for FY 2019-20 and approval of ARR for FY 2020-21 to FY 2024-25.

The Petition has been filed in accordance with the MERC (Multi Year Tariff) Regulations, 2015 ("MYT Regulations, 2015") for Truing-up of FY 2017-18 and FY 2018-19, and Provisional Truing-up of FY 2019-20, and in accordance with the MERC (Multi Year Tariff) Regulations, 2019 ("MYT Regulations, 2019") for approval of ARR for FY 2020-21 to FY 2024-25.

In exercise of its powers under Sections 62 (read with Section 61) and 86 of the Electricity Act (**EA**), 2003 and all other powers enabling it in this behalf, and after taking into consideration the submissions made by TPC-T, the public and stake-holders and all other relevant material, the Commission issues the following Order.

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List of Abbreviations

A&G	Administrative and General
AEML-T	Adani Electricity Mumbai Limited-Transmission
AIS	Air-Insulated Switchgear
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal for Electricity
BKC	Bandra Kurla Complex
Capex	Capital Expenditure
CSR	Corporate Social Responsibility
DPC	Delayed Payment Charges
DPR	Detailed Project Report
EHV	Extra High Voltage
FY	Financial Year
GFA	Gross Fixed Assets
GIS	Gas-Insulated Switchgear
GoM	Government of Maharashtra
HO & SS	Head Office and Support Services
IDC	Interest During Construction
InSTS	Intra-State Transmission System
IoWC	Interest on Working Capital
LA	Licenced Area
LCC	Load Control Centre
MAT	Minimum Alternate Tax
MBPT	Mumbai Port Trust, India
MCGM	Municipal Corporation of Greater Mumbai,
MCLR	Marginal Cost of Funds based Lending Rate
MERC/Commission	Maharashtra Electricity Regulatory Commission
MSETCL	Maharashtra State Electricity Transmission Company Ltd
MSLDC	Maharashtra State Load Despatch Centre.
MTR	Mid Term Review
MVA	Mega Volt Ampere
MYT	Multi Year Tariff
NFA	Net Fixed Assets
NPV	Net Present Value
NTI	Non-Tariff Income
O&M	Operation and Maintenance
PBT	Profit Before Tax
PSCC	Power System Control Centre
R&M	Repair and Maintenance
R/S	Receiving Station

RoE	Return on Equity
RoW	Right of Way
SLDC	State Load Despatch Centre
STU	State Transmission Utility
TBCB	Tariff Based Competitive Bidding
TPC	The Tata Power Company Limited
TPC-D	The Tata Power Company-Distribution Business
TPC-G	The Tata Power Company-Generation Business
TPC-T	The Tata Power Company-Transmission Business

1 BACKGROUND AND BRIEF HISTORY

1.1 Background

1.1.1 The Tata Power Company Limited (TPC) is a vertically integrated utility carrying out the functions of generation, transmission, wheeling and retail supply of electricity in the suburbs of Mumbai. TPC has been granted Transmission Licence No. 1 of 2014 vide Order dated 14 August 2014 in Case No. 112 of 2014. TPC is a Transmission Licensee under Alternative 2 as per the MERC (Transmission Licence Conditions) Regulations, 2004. The Transmission License granted to TPC-T is an asset specific Licence, which includes existing and proposed Transmission Lines as well as Transmission Bays.

1.1.2 The Commission has granted Transmission Licence No.1 of 2014 which was amended vide Order dated 01 August 2018 in Case No. 137 of 2016. Further, TPC-T has filed a Petition on 30 August 2019 in Case No. 249 of 2019 seeking second amendment to the Transmission Licence on account of changes in the Transmission system. Due procedure with respect to the Petition is under way. In view of this, TPC-T has considered the Transmission Lines and Bays as approved in the first amendment to the Transmission Licence in Case No. 137 of 2016.

1.2 MYT Regulations

1.2.1 The Commission notified the MYT Regulations, 2015 on 8 December 2015 which were amended vide notification dated 29 November, 2017. These Regulations are applicable for the 3rd Control Period from FY 2016-17 to FY 2019-20.

1.2.2 Subsequently, the Commission has notified the MYT Regulations, 2019 on 1 August 2019. These Regulations are applicable for the 4th Control Period from FY 2020-21 to FY 2024-25, and as may be extended by the Commission.

1.3 Petition and Main Prayers of TPC-T

1.3.1 TPC-T has filed its MYT Petition on 1 November 2019 for Truing-up of FY 2017-18 and FY 2018-19, and Provisional Truing-up of FY 2019-20, in accordance with the MYT Regulations, 2015 and for approval of ARR for FY 2020-21 to FY 2024-25, in accordance with the MYT Regulations, 2019. The Commission sought replies on the preliminary data gaps raised on 11 November 2019 and certain other information from the TPC-T. TPC-T replied on 22 November, 2019.

1.3.2 The Technical Validation Session (TVS) was held on 25 November, 2019. The list of persons who attended the TVS is at **Appendix-1**. The Commission asked TPC-T to provide additional information and clarifications on the issues raised at the TVS. TPC-T furnished its replies on 2 December, 2019 and 5 December, 2019 to data gaps and additional information sought by the Commission.

1.3.3 TPC-T filed the revised Petition on 10 December, 2019, incorporating replies to the queries raised in preliminary data gaps and clarifications on the issues raised during the discussion. The main prayers of TPC-T in its revised Petition are as below:

- *"Accept the Truing-up for FY 2017-18, FY 2018-19 and Provisional Truing-up of FY 2019-20 and past Gap / (Surplus) as worked out in this Petition in accordance with the guidelines & principles outlined in MYT Regulations, 2015 and its First Amendment dated 29th November, 2017;*

- *Accept the Projections of Aggregate Revenue Requirement for the period FY 2020-21 as worked out in this Petition in accordance with the guidelines & principles outlined in MYT Regulations, 2019;*

- *Allow the transfer of certain assets pertaining to Transmission from the Generation Business of Tata Power to the Transmission Business of Tata Power and from the Distribution Business of Tata Power to the Transmission Business of Tata Power;*

- *To direct MSETCL (STU) to reimburse **Rs. 135.55 Crores** along with carrying cost as applicable towards pre-development expenditure in "400 kV Receiving Station at Vikhroli";..."*

1.4 Admission of the Petition and Public Consultation Process

1.4.1 The Commission admitted the Petition on 10 December, 2019 and directed TPC-T to publish a Public Notice in accordance with Section 64 of the EA, 2003 in the prescribed form and manner and to reply expeditiously to any suggestions and objections received.

1.4.2 TPC-T published the Public Notice inviting suggestions and objections in the daily newspapers Financial Express and Indian Express (English), and Loksatta and Saamna (Marathi) on 12 December, 2019. The Petition and its Executive Summary were made available for inspection/purchase at TPC's offices and website (www.tatapower.com). The Public Notice and Executive Summary of the Petition were also made available on the website of the Commission (www.merc.gov.in) in downloadable format.

1.4.3 The Commission did not receive suggestions on the MYT Petition. The Public Hearing was held on 6 January, 2020 at the Office of the Commission, 13th Floor, Centre No. 1, World Trade Centre, Cuffe Parade, Mumbai. No oral submissions were made at the Public Hearing. The list of persons who attended the Public hearing is at **Appendix-2**.

1.4.4 The Commission has ensured that the due process contemplated under the law to ensure transparency and public participation was followed at every stage and adequate opportunity was given to all to express their views.

1.5 Organisation of the Order

1.5.1 This Order is organized in the following Sections:

- **Section 1** of the Order provides a brief history of the quasi-judicial regulatory process undertaken by the Commission.
- **Section 2** of the Order deals with suggestions/objections, TPC-T's responses and Commission's rulings.
- **Section 3** of the Order details the Truing up of expenses of TPC-T for FY 2017-18 and FY 2018-19 as per MYT Regulations, 2015.
- **Section 4** of the Order details the Provisional True up for FY 2019-20 as per MYT Regulations, 2015.
- **Section 5** of the Order details the Approval of ARR from FY 2020-21 to FY 2024-25 as per MYT Regulations, 2019, recovery of Transmission Charges and Applicability of this Order.

2 SUGGESTIONS/OBJECTIONS, TPC-T'S RESPONSES AND COMMISSION'S RULINGS

2.1 Objections

2.1.1 No objections have been received on TPC-T's Petition for Truing up of ARR for FY 2017-18 and FY 2018-19, Provisional Truing up for FY 2019-20, and approval of ARR for 4th MYT Control Period from FY 2020-21 to FY 2024-25.

3 TRUING-UP OF AGGREGATE REVENUE REQUIREMENT FOR FY 2017-18 and FY 2018-19

3.1 Truing up of ARR for FY 2017-18 and FY 2018-19

3.1.1 TPC-T has sought approval for Truing up of ARR for FY 2017-18 and FY 2018-19 based on actual expenditure and revenue as per the Audited Accounts, in line with Regulation 5 of the MYT Regulations, 2015. The Commission in MTR Order dated 12 September, 2018 in Case No. 204 of 2017 had approved the provisional True up of FY 2017-18 and revised estimate of ARR for FY 2018-19.

3.1.2 In this Section, the Commission has analysed all the elements of actual expenditure and revenue for FY 2017-18 and FY 2018-19 and the deviations with respect to the MTR Order, and has accordingly undertaken the truing-up of expenses and revenue after prudence check under the MYT Regulations, 2015.

3.2 Operation and Maintenance Expenses

3.2.1 Operation and Maintenance (O&M) expenditure comprises Employee related costs, Administrative and General (A&G) expenditure, and Repair and Maintenance (R&M) expenditure.

Table 1: Summary of O&M Expense for FY 2017-18 and FY 2018-19 as submitted by TPC-T (Rs. Crore)

Particulars	FY 2017-18	FY 2018-19
Employee Expenses	88.77	110.38
A&G Expenses (including Brand Equity)	36.51	64.57
R&M Expenses	25.99	37.19
Total (A)	**151.27**	**212.14**
Less		
Actual Tata Brand Equity (B)	1.90	-0.04
Add		
Allocation of Brand Equity Expenses to TPC-T as per MERC methodology (C)	1.50	0.00
Energy Charges (D)	-	10.52
Total (A-B+C+D)	**150.87**	**222.70**

Employee Expenses

TPC-T's Submission

3.2.2 TPC-T has submitted that the employee cost for FY 2017-18 and FY 2018-19 after considering allocated corporate expenses, was Rs. 88.77 Crore and Rs. 110.38 Crore, respectively. The increase in employee cost in FY 2018-19 is primarily due to lower staff expenses capitalised, increase in basic salary and terminal benefits, and increase in Interim Relief/Wage Revision.

3.2.3 As per auditor's certificate, the Employee Benefit Expenses for FY 2018-19 was Rs. 104.52 Crore. The difference of Rs. 5.86 Crore is due to the expenses pertaining to re-measurement of Defined Benefit Plans (including support service allocation) being shown separately in the auditor's certificate post implementation of IND-AS, which was earlier part of employee expenses.

Commission's Analysis and Ruling

3.2.4 The Commission observes that the actual employee expenses for FY 2017-18 have marginally increased from Rs. 88.43 Crore in FY 2016-17 to Rs. 88.77 Crore in FY 2017-18 by an amount of Rs. 0.34 Crore, i.e., 0.4% increase as shown in the following Table:

Table 2: Comparison of Employee Expenses of FY 2017-18 and FY 2016-17 (Rs. Crore)

Particulars	FY 2016-17	FY 2017-18	% change
Number of employees	394	421	6.9%
Officer/Managerial Cadre-Technical	149	130	(12.8%)
Staff cadre (Technical)	200	254	27.0%
Other employees	45	37	(17.8%)
Employee Expenses			
Salary, wages & other expenses	80.65	72.66	(9.9%)
Bonus/Ex-Gratia Payments	12.87	13.47	4.6%
Interim Relief / Wage Revision	(8.96)	1.14	(112.7%)
Staff welfare expenses	11.20	11.25	0.5%
Commission to Directors	1.02	1.65	61.7%
Terminal Benefits	10.13	8.67	(14.4%)
Remeasurement of Defined Benefit Plan	-	2.18	
Less: Expenses Capitalised	(18.47)	(22.23)	20.4%
Net Employee Expenses	**88.43**	**88.77**	**0.4%**

3.2.5 The above table shows that the total number of employees in FY 2017-18 has increased by 6.9% vis-à-vis that in FY 2016-17. The number of employees in Staff cadre-Technical has increased by 27% compared to the previous year, while there is a reduction in the number of employees in Officer/Managerial Cadre-Technical (12.8% reduction) and Other employees (17.8% reduction).

3.2.6 The marginal increase in Employee Expenses by 0.4% is attributable to the Interim Relief/Wage Revision and Remeasurement of Defined Benefit Plan. The Earned Leave Encashment has decreased from Rs. 3.90 Crore to Rs. 1.32 Crore and Terminal Benefits have reduced from Rs.10.13 Crore to Rs.8.67 Crore. The Interim Relief/ Wage Revision has increased from Rs. (8.96) Crore to Rs.1.14 Crore. Remeasurement of Defined Benefit Plan of Rs.2.18 Crore has been claimed in FY 2017-18, which was not there in the previous year. Hence, the Commission approves the actual employee expenses of TPC-T for FY 2017-18, after prudence check.

3.2.7 For FY 2018-19, the Commission observes that the actual employee expenses have increased by Rs. 21.61 Crore from Rs. 88.77 Crore in FY 2017-18 to Rs. 110.38 Crore in FY 2018-19, i.e., 24.3% increase, as shown in following Table:

Table 3: Comparison of Employee Expenses of FY 2018-19 and FY 2017-18 (Rs. Crore)

Particulars	FY 2017-18	FY 2018-19	% change
Number of employees	421	405	(3.8%)
Officer/Managerial Cadre-Technical	130	122	(6.2%)
Staff cadre (Technical)	254	246	(3.1%)
Other employees	37	37	0.0%
Employee Expenses			
Salary, wages & other expenses	72.66	77.66	6.9%
Bonus/Ex-Gratia Payments	13.47	13.31	(1.2%)
Interim Relief / Wage Revision	1.14	5.69	400.4%
Staff welfare expenses	11.25	10.56	(6.1%)
Commission to Directors	1.65	1.66	0.8%
Terminal Benefits	8.67	10.38	19.8%
Remeasurement of Defined Benefit Plan	2.18	4.68	
Less: Expenses Capitalised	(22.23)	(13.57)	(39.0%)
Net Employee Expenses	**88.77**	**110.38**	**24.3%**

3.2.8 The above table shows that the number of employees in FY 2018-19 has reduced by 3.8% vis-à-vis that in FY 2017-18. The major categories where the employees reduced are Officer/Managerial Cadre-Technical (6.2% reduction) and Staff Cadre-Technical (3.1% reduction).

3.2.9 However, Employee Expenses have increased by 24.3%, on account of increase in Employee Expenses relating to the Salary, wages & other allowances, Interim Relief/ Wage Revision, Terminal Benefits and Remeasurement of Defined Benefit Plan. Basic Salary has increased from Rs. 23.69 Crore to Rs. 25.41 Crore and Earned Leave Encashment has increased from Rs. 1.32 Crore to Rs. 4.98 Crore. Further, the Interim Relief/Wage Revision has increased from Rs.1.14 Crore to Rs.5.69 Crore. Expenses towards Terminal Benefits have also increased from Rs.8.67 Crore to Rs.10.38 Crore, while Remeasurement of Defined Benefit Plan has increased from Rs.2.18 Crore to Rs.4.68 Crore. Further, the lower capitalisation amount on account of staff expenses (Rs.13.57 Crore compared to Rs.22.23 Crore in the previous year) has also contributed to increase in Employee Expenses for FY 2018-19.

3.2.10 The Commission sought reasons from TPC-T for the increase in Interim Relief / Wage Revision to Rs.5.69 Crore in FY 2018-19. TPC-T clarified that the Wage Revision Agreement for union staff was finalised in January 2018. Based on the final agreement, the arrears were paid during FY 2018-19. Thus, the effect of Wage Revision was accounted during FY 2018-19. TPC-T submitted that the increase in Defined Benefit Plans to Rs.4.68 Crore in FY 2018-19 as against Rs. 2.18 Crore in FY 2017-18 is mainly due to the increase in actuarial valuation of employee retirement benefits such as Gratuity, Pension, etc., based on the discounting factor, attrition rate, escalation rate and number of employees, etc. As regards increase in expenses against Terminal Benefits to Rs.10.38 Crore in FY 2018-19 compared to Rs. 8.67 Crore in FY 2017-18, TPC-T submitted that it has a defined benefit gratuity/ pension and other retirement benefit plan. The present liability towards such benefits is determined by Actuarial valuation using various assumptions like rate of discount rate, salary growth rate, turnover rate, pension increase rate and mortality table. These assumptions may vary year on year depending upon interest rate and other relevant considerations. During FY 2018-19, the discount rate was revised to 7.40% per annum as against 7.70% used in FY 2017-18, therefore, it resulted in increase in Actuarial liability of pension and gratuity for FY 2018-19. The Commission accepts the justification submitted by TPC-T in this regard.

3.2.11 As regards capitalisation of Employee Expenses, TPC-T clarified that the amount of employee expenses capitalised pertains to cost of employees working towards execution of DPR capex schemes approved by the Commission. Under the capitalisation of employee expense, the salaries of employees working for execution of transmission projects rendering services like engineering, contracts finalisation, project execution, project monitoring, testing, commissioning, etc., gets capitalised based on the time spent by them for each of these activities. An employee working on the transmission projects inputs their manhours spent in SAP system wherein the cost is automatically calculated by SAP system. The said cost is deducted from employee expenses to arrive at the actual Employee Expenses to be charged as O&M expenses of TPC-T and gets added to the CWIP (Capital work in progress) of the DPR projects. Once the scheme/ project, approved by the Commission is put to use, the said CWIP gets capitalised. The Commission accepts the justification provided by TPC-T in this regard. **Hence, the Commission approves the actual employee expenses of TPC-T for FY 2018-19, after prudence check.**

3.2.12 In view of the above, the actual Employee Expenses approved by the Commission after truing up for FY 2017-18 and FY 2018-19 is shown in the Table below:

Table 4: Employee Expenses for FY 2017-18 and FY 2018-19, as approved by the Commission (Rs. Crore)

Particulars	FY 2017-18		FY 2018-19	
	TPC-T Petition	Approved after Truing Up	TPC-T Petition	Approved after Truing Up
Employee Expenses	**88.77**	**88.77**	**110.38**	**110.38**

Administration & General (A&G) Expenses

TPC-T's Submission

3.2.13 TPC-T submitted that the actual A&G expenditure for FY 2017-18 and FY 2018-19 was Rs. 36.51 Crore and Rs. 64.57 Crore respectively. The A&G expenses for FY 2017-18 are lower as compared to the A&G expenses approved for FY 2016-17 (Rs. 59.60 Crore), primarily due to one-time reversal of Mumbai Port Trust (MbPT) way leave fees of Rs. 15.28 Crore against past year provision under rent, rates and taxes, and partly due to lower doubtful debts during FY 2017-18. A&G expenses for FY 2018-19 are higher primarily due to increase in cost of services, Legal charges and Audit fee, V-sat, Internet and related charges, and loss on sale/retirement of assets.

Commission's Analysis and Ruling

3.2.14 Actual A&G expenses include rent, rates & taxes, professional, consultancy and technical fees, fees and subscription, insurance, legal & consulting charges, conveyance & travel, electricity & water charges, training, cost of services procured, V-sat, internet and related charges, brand equity, etc.

3.2.15 A comparison of major component-wise actual A&G Expenses claimed by TPC-T in FY 2017-18 against FY 2016-17 is shown in the Table below:

Table 5: Comparison of A&G Expenses of FY 2017-18 and FY 2016-17 (Rs. Crore)

Particulars	FY 2016-17	FY 2017-18	% Change
Rent, Rates & Taxes	17.64	5.05	(71.4%)
Insurance	3.73	2.30	(38.3%)
Legal charges & Audit fee	3.17	2.57	(18.9%)
Professional, Consultancy, Technical fee	2.55	2.51	(1.6%)
Conveyance & Travel	3.47	2.49	(28.2%)
Cost of services procured	13.73	11.21	(18.4%)
V-sat, Internet and related charges	4.01	5.24	30.7%
Tata Brand Equity	1.82	1.90	4.4%
Provision for Doubtful Debts	4.63	0.64	(86.2%)
Others	4.85	2.60	(46.4%)
Add: Adjustment for Brand Equity	(0.03)	(0.40)	-
Net A&G Expenses	**59.57**	**36.11**	**(39.4%)**

3.2.16 The Commission observes that there has been a reduction in most of the heads of A&G expenses in FY 2017-18 as compared to that in FY 2016-17, with the one-time reversal of MbPT way leave fees of Rs. 15.28 Crore against past year provision under rent, rates and taxes, and reduction in doubtful debts by Rs. 3.99 Crore during FY 2017-18, contributing mainly to the reduction in overall A&G expenses.

3.2.17 The Commission observes that TPC-T has shown Provision for Doubtful Debts in A&G expenses for FY 2017-18. In reply to the query, TPC-T submitted that this provision pertains to government security/Government deposits and is not related to any consumer. As per TPC policy, provision is made in the books of accounts with respect to deposits paid to Government Agencies having an ageing of more than 364 days. Accordingly, **TPC-T has made provision in its books under the head Provision for Doubtful Debts against deposits made to the government agencies (mainly MCGM) for transmission lines but not refunded back within the above stipulated time. However, whenever such amount is received in future, the credit of the same is being given to the same GL in the books of accounts by reversing the amount earlier provided**. TPC-T has been following the above practice for a long time. TPC-T further submitted that it has accommodated the provision for Doubtful Debt within the normative O&M expenditure and never claimed over above normative O&M expenditure. In the norms specified by the Commission in MYT Regulations, 2015, provision for Doubtful Debt was part of A&G expenses for the relevant years. Therefore, normative O&M expenditure is inclusive of such expenses.

3.2.18 As regards doubtful debts, the Commission notes that the MYT Regulations, 2015 do not specify allowance of the same for Transmission Licensees, and provision for bad and doubtful debts is allowed only to the Distribution Business in accordance with Regulations 73 and 82 for the Wires Business and Supply Business, respectively. As the MYT Regulations, 2015 do not allow Doubtful Debts for Transmission Licensees, the Commission has not considered the provision for doubtful debts of Rs. 0.64 crore under actual A&G expenses in FY 2017-18. Further, due to oversight, the Commission has allowed provision for doubtful debts in the truing up of FY 2016-17 and allowed sharing between normative and actual A&G expenses, though the same MYT Regulations, 2015 are applicable for FY 2016-17 also. As clarified by TPC, the provision of bad debts has been included in the A&G expenses and O&M norms specified in the MYT Regulations, 2015. Hence, the Commission has not modified the true-up of previous years in this Order, as data is not sufficient. However, in the MTR Petition, TPC-T should submit all the details of provision for doubtful debts claimed in previous years, and the impact along with carrying cost, accompanied by the necessary computations, if such provisioning is disallowed.

3.2.19 Further, V-sat, Internet and related charges have increased to Rs. 5.24 Crore in FY 2017-18 from Rs. 4.01 Crore in FY 2016-17. The Commission asked TPC-T about the use of V-sat and its benefits. TPC-T was also asked to provide break up of expenses of Rs. 5.24 Crore. TPC-T submitted that the **'V-sat, Internet and related charges' is the nomenclature of the GL account mapped in SAP ERP System for accounting of expenses towards SAP system, other software applications and expenses towards miscellaneous computer operations**. The SAP software product helps to manage projects, finances, logistics, human resources and other areas of business such as planning, maintenance scheduling, etc. TPC-T submitted that expenses of Rs. 5.24 Crore for V-sat, Internet and related charges include Licence fees for ERP-SAP System (Rs. 1.79 Crore), Software expenses for applications like Infra, Enterprise Content Management, Wrench, AMC for Non-SAP systems, AMC for video recorder server and video conference devices, etc. (Rs. 1.44 Crore) and HO SS allocation (Rs. 2.01

Crore). The Commission accepts TPC-T's justification for the expenses incurred against SAP software, as the same is required for its operations. However, TPC-T should ensure that such expenses are within control and do not keep increasing every year, merely because the same are pass through to the consumers, either directly or through the mechanism of sharing of gains and losses. The Commission is approving this expense on the basis that the entire facility under this expense is being used by TPC-T only.

3.2.20 The Commission approves the actual A&G expenses of TPC-T for FY 2017-18, after prudence check, after disallowing the provision for Doubtful Debts of Rs. 0.64 crore.

3.2.21 A comparison of major component-wise actual A&G Expenses claimed by TPC-T for FY 2018-19 against FY 2017-18 is shown in the Table below:

Table 6: Comparison of A&G Expenses of FY 2018-19 and FY 2017-18 (Rs. Crore)

Particulars	FY 2017-18	FY 2018-19	% Change
Rent Rates & Taxes	5.05	16.93	235.2%
Insurance	2.30	2.40	4.3%
Legal charges & Audit fee	2.57	6.26	143.5%
Professional, Consultancy, Technical fee	2.51	3.30	31.3%
Conveyance & Travel	2.49	3.84	54.2%
Cost of services procured	11.21	16.21	44.6%
V-sat, Internet and related charges	5.24	7.90	50.8%
Tata Brand Equity	1.90	(0.04)	(102.1%)
Provision for Doubtful Debts	0.64	(0.85)	(233.1%)
Others	2.60	8.63	231.8%
Add: Adjustment for Brand Equity	(0.40)	0.04	(110.0%)
Net A&G Expenses	**36.11**	**64.11**	**78.9%**

3.2.22 The Commission observes that there is a 235.2% increase in Rent Rates & Taxes from Rs. 36.11 Crore in FY 2017-18 to Rs. 16.93 Crore in FY 2018-19, which is on account of one-time reversal of MbPT way leave fees of Rs. 15.28 Crore against past year provision under rent, rates and taxes during FY 2017-18.

3.2.23 There is a 44.6% increase in Cost of Services from Rs. 11.21 Crore in FY 2017-18 to Rs. 16.21 Crore in FY 2018-19. TPC-T clarified that the increase in Cost of Services is primarily due to an additional amount of Rs. 3.50 Crore spent towards Security Services (Arrears payments, additional security deployment, old bills of FY 2017-18), increase in other services like housekeeping and maintenance cost and also due to higher HO-SS allocation.

3.2.24 Further, legal charges & audit fee have increased to Rs. 6.26 Crore in FY 2018-19 from Rs. 2.57 Crore in FY 2017-18. TPC-T clarified that the increase in legal charges and audit fees are primarily due to higher allocation of HOSS expenses.

3.2.25 Also, V-sat, Internet and related charges have increased to Rs. 7.90 Crore in FY 2018-19 from Rs. 5.24 Crore in FY 2017-18. TPC-T clarified that the increase in V-sat, Internet and related charges are due to renewal of PI SRP (One-time Fee) (Rs 0.47 Crore), Milestone licenses upgrade (care pack) One-time installation charges & Care Plus for Protect Corp Device License (Rs. 0.25 Crore), Google Map Internal License for Web and mobile and higher secondary cost allocation.

3.2.26 The Commission asked TPC-T to justify the higher HOSS allocation in FY 2018-19 as compared to FY 2017-18. TPC-T submitted that the HOSS A&G expenses are allocated on the basis of total direct A&G expenses of each basic area (TPC-G, TPC-T and TPC-D) before allocation. A&G expenses for FY 2017-18 were lower compared to that of FY 2016-17 and FY 2018-19 due to one-time reversal of MbPT Way Leave charges. This resulted in lower allocation of HOSS cost to TPC-T under A&G expenses for FY 2017-18, whereas for FY 2018-19 there was normal allocation of HOSS expenses. Hence, it appears that there was a higher allocation of HOSS in FY 2018-19.

3.2.27 In line with the approach adopted for FY 2017-18, the Commission has not considered the provision for doubtful debts of Rs. (0.85) crore under actual A&G expenses in FY 2018-19.

3.2.28 The Commission observes that the figures submitted against various heads of A&G expenses in the Petition Formats were not matching with the figures in the Audited Accounts for FY 2017-18 and FY 2018-19. Upon query raised by the Commission, TPC-T submitted the reconciliation statement for A&G expenses.

3.2.29 As elaborated in Section 3.2.49, the Commission has disallowed the Brand Equity Expenses as part of the O&M expenses, in view of the inadequate and inconsistent justification submitted by TPC-T. **Because of non-consideration of the provision for doubtful debts and Brand Equity Expenses for FY 2018-19, the amount approved by the Commission is higher than the amount claimed by TPC-T by Rs.0.85 Crore**.

3.2.30 In view of the above, the actual A&G Expenses approved by the Commission after truing up for FY 2017-18 and FY 2018-19 is shown in the Table below:

Table 7: A&G Expenses for FY 2017-18 and FY 2018-19, as approved by the Commission (Rs. Crore)

Particulars	FY 2017-18		FY 2018-19	
	TPC-T Petition	Approved after Truing Up	TPC-T Petition	Approved after Truing Up
Net A&G Expenses	**36.11**	**33.97**	**64.61**	**65.46**

Repair and Maintenance (R&M) Expenses

TPC-T's Submission

3.2.31 TPC-T submitted that total R&M expenditure for FY 2017-18 and FY 2018-19 was Rs. 25.99 Crore and Rs. 37.19 Crore, respectively. R&M expenses are higher in FY 2017-18 as compared to FY 2016-17 levels (Rs. 19.67 crore), primarily due to increased escalation in services related to overhead transmission lines and safety / process improvement projects under Building & Civil Works category. R&M expenses for FY 2018-19 are higher, primarily due to increase in AMC charges of unified SCADA (Rs. 1.66 Crore), fire incidents at Salsette and Ambernath receiving stations (Rs. 1.94 Crore), additional expenses towards attending safety measures / tower maintenance (Rs. 1.75 Crore), dismantling of towers (Rs. 2.36 Crore), attending to ABB breakers at Salsette (Rs. 0.55 Crore) and others (Rs. 2.94 Crore).

3.2.32 The component-wise breakup of R&M expenses is provided in the Table below:

Table 8: Actual R&M Expenses for FY 2017-18 and FY 2018-19, submitted by TPC-T (Rs. Crore)

Particulars	FY 2017-18	FY 2018-19
Building & Civil Works	15.50	17.56
Machinery & Hydraulic Works	6.34	14.85
Other R&M / Furniture, Vehicles, Etc.	1.45	0.92
Stores, oil consumed	2.70	3.86
Gross R&M Expenses	**25.99**	**37.19**
Less: Expenses Capitalised	-	-
Net R&M Expenses	**25.99**	**37.19**

Commission's Analysis and Ruling

3.2.33 The Commission observes that there is an increase in R&M expense to Rs. 25.99 Crore in FY 2017-18 from Rs. 19.67 Crore in FY 2016-17, i.e., increase of about 32% in R&M expenses. R&M expenses for Building & Civil Works category has increased to Rs.15.50 Crore from Rs.9.00 Crore. Further, expenses for Stores, Oil consumed has increased to Rs. 2.70 Crore in FY 2017-18 from Rs. 0.38 Crore in FY 2016-17.

3.2.34 Upon query raised by the Commission, TPC-T clarified that the major reasons for increase in R&M expense in FY 2017-18 as compared to FY 2016-17 are expenditure for Life enhancement of 315 MVA ICTs (Rs.1.56 Crore), Additional jobs of flashed over ICT Bay 6, 245 kV Switchgear at Carnac (Rs.1.46 Crore), Additional Civil work at Parel, Mahalaxmi, Vikhroli, Mankhurd and Chembur (Rs.1.03 Crore). TPC-T also submitted that these activities are one-time expenses carried out during FY 2017-18.

3.2.35 The Commission further asked TPC-T to provide the details of R&M activities done for Life enhancement of 315 MVA ICTs. TPC-T submitted that R&M activities included replacement of failed winding of 315 MVA ICT, replacement of corroded radiators, replacement of 33 kV bushing and 110 kV Neutral bushing and transportation & supervision charges. As regards R&M activities for Additional jobs of flashed over

ICT Bay 6, 245 kV Switchgear at Carnac, TPC-T submitted that it has carried out procurement of gaskets (O rings) and associated accessories from M/s. Siemens, OEM Expert services for replacement of pole of 220 kV ICT 6 Breaker and testing of pole 220 kV ICT 6 Breaker. The Commission accepts the justification submitted by TPC-T for the higher R&M expense in FY 2017-18.

3.2.36 The Commission observes that R&M expenses for FY 2018-19 have increased to Rs. 37.19 Crore from Rs. 25.99 Crore in FY 2017-18, i.e., increase of about 43% in R&M expenses. The increase is mainly on account of R&M expenses for Machinery & Hydraulic Works head, which has increased to Rs.14.85 Crore in FY 2018-19 from Rs. 6.34 Crore in FY 2017-18. Further, expenses for Building & Civil Works and Stores and Oil consumed have increased compared to expenses of FY 2017-18.

3.2.37 The Commission notes that the major reasons for increase in R&M expenses in FY 2018-19 compared to FY 2017-18 are dismantling of towers at various locations, Salsette and Ambernath civil maintenance and tree cutting, expenses for attending safety defects, AMC charges of Unified SCADA, attending to ABB breakers at Salsette, etc.

3.2.38 As regards dismantling of towers at various locations, the Commission enquired about reasons for the same and whether any income has been generated from dismantling and sale of towers. TPC-T submitted that these towers have been dismantled due to ageing and the expenses of Rs. 2.36 Crore is towards services for dismantling of tower members and its transportation cost from tower location to scrapyard in Transmission network. TPC-T submitted that as per practice, income generated through disposal of scrap is being passed through by way of Non-Tariff Income. However, there may be a gap between actual disposal and dismantling activity.

3.2.39 The Commission enquired if the expenses for AMC charges of Unified SCADA were also incurred in FY 2017-18. TPC-D submitted that AMC expense were not incurred in FY 2017-18 as prior to FY 2018-19, AMC of SCADA were under warranty period. The Commission accepts TPC-T's justification in this regard.

3.2.40 The Commission noted that TPC-T has shown expenditure of Rs. 0.39 Crore for 'Maintenance of ROW at Sanjay Gandhi National Park (SGNP). In this regard, TPC-T submitted that total 8 no. of 220/110 kV lines are passing through forest area of SGNP covering ROW of 22 km. The SGNP officials carry out tree trimming and maintain ROW from FY 2018-19, which is charged to TPC-T. The first-year expenses for FY 2018-19 were Rs.33.39 Lakh (excluding taxes) and second year onwards expense will be Rs. 10.24 Lakh per year.

3.2.41 The Commission observed that TPC-T has shown expenditure of Rs.1.94 Crore for 'Salsette and Ambernath civil maintenance and tree trimming'. Further, expenditure of Rs.1.75 Crore was shown for 'Expenses for attending safety defects and tree trimming jobs'. The Commission asked TPC-T to justify such a high expense for tree trimming.

TPC-T submitted that expenditure of Rs.1.94 Crore for 'Salsette and Ambernath civil maintenance and tree trimming' is actually towards repair work carried out for 110 kV Relay Panels & DCDB Room at Salsette and Ambernath, and there was no tree trimming expenditure. As regards expenditure of Rs.1.75 Crore shown for 'Expenses for attending safety defects and tree trimming jobs', TPC-T submitted that the mechanized tree trimming activity is part of annual preventive maintenance schedule. During FY 2018-19, TPC-T had undertaken tree trimming activities at Salsette, Kolshet, Kalyan, Ambernath, Borivali, Saki, Malad, etc. and also along 220/ 110 kV transmission lines. During FY 2018-19, a separate team had undertaken defect management in major receiving stations and identified the defects pertaining to safety compliance. All these defects were attended during FY 2018-19; hence, these expenses were on higher side.

3.2.42 The Commission is of the view that TPC-T's reply on higher expense for tree trimming is contradictory to its earlier submissions. The Commission is of the view that since tree trimming activity is part of annual preventive maintenance schedule of TPC-T, total expenditure of Rs. 4.08 Crore (Total expenditure of Rs. 0.39 Crore, Rs. 1.94 Crore and Rs.1.75 Crore) in a single year, i.e., in FY 2018-19 is not justified. Therefore, the Commission has approved these expenses at Rs. 1.02 Crore, which is 25% of amount claimed by TPC-T in FY 2018-19; thus, the balance expenses of Rs.3.06 Crore have been disallowed. The Commission is of the view that even Rs. 1.02 crore expense against tree cutting activity is on the higher side, however, the same is being allowed. TPC-T should ensure that the R&M expenses are incurred in a prudent manner.

3.2.43 As regards other R&M activities, the Commission notes that proactive R&M of the EHV substations and lines is a must to avoid the undesirable outages and thereby interruption of the supply. Accordingly, the Licensees are required to ensure that the appropriate level of preventive and break-down maintenance is done, so that the availability of the transmission system is ensured at all times. **In view of the above, the Commission has approved the actual R&M expenses claimed by TPC-T after true-up for FY 2017-18 and FY 2018-19, as shown in the Table below:**

Table 9: R&M Expenses for FY 2017-18 and FY 2018-19, as approved by the Commission (Rs. Crore)

Particulars	FY 2017-18		FY 2018-19	
	TPC-T Petition	Approved after Truing Up	TPC-T Petition	Approved after Truing Up
Net R&M Expenses	**25.99**	**25.99**	**37.19**	**34.13**

Brand Equity Expenditure

TPC-T's Submission

3.2.44 TPC-T submitted that the Commission had directed to compute the Brand Equity expenditure for FY 2017-18 truing up based on the revenue earned in the previous financial year, i.e., FY 2016-17, and revenue earned in FY 2017-18 for the purpose of truing up of FY 2018-19. There is a small difference between the actual Brand Equity Expenditure and the amount arrived at, on the basis as directed by the Commission. The actual O&M expenditure has been adjusted to the extent of this differential amount.

3.2.45 Brand Equity claimed by TPC-T for FY 2017-18 and the computation of the same as per the Commission's methodology as submitted by TPC-T, is provided in the Table below:

Table 10: Calculation of Brand Equity as per the Commission's methodology (Rs. Crore)

Particulars	Basis	FY 2017-18 (Based on Revenue of FY 2016-17)
Revenue from Mumbai Licenced Area Business based on allocation statement	a	534.95
Add: Cash Discount pertaining to Mumbai Licenced Area	b	0.00
Add: Income in respect of services rendered pertaining to Mumbai Licenced Area	c	1.34
Add: Delayed Payment Charges pertaining to Mumbai Licenced Area	d	0.00
Total Revenue to be considered for Mumbai Licenced Area	e=a+b+c+d	536.29
Contribution to Tata Brand Equity	**f=0.25%*e**	**1.34**
GST	g=GST 12%*f	0.16
Total contribution to Brand Equity including GST	**h=f+g**	**1.50**

3.2.46 TPC-T has submitted that for FY 2018-19, the Company has not paid any amount towards Brand Equity to Tata Sons on account of loss reported by it in the Accounts for FY 2017-18. Hence, TPC-T has not claimed any Brand Equity expenses for FY 2018-19.

3.2.47 TPC-T, in compliance of the Commission's directives, has submitted the benefits of acquiring the Tata Brand for a price, as elaborated below.

3.2.48 The Tata Group promotes the advertisement of TPC-T, which leads to brand building for Tata Power. The Group makes available central services like recruitment, training courses and common procurement services. It facilitates purchases at competitive prices and also provides access to best credit facilities and loan facilities at very competitive rates.

3.2.49 The Tata brand due to its positive image, also helps TPC-T in attracting good human resource talent. Further, the Group trains managers on the Tata Business Excellence Model and evaluates the Company every year to enable TPC-T to improve its processes and customer servicing abilities.

3.2.50 As regards the quantification of some of the benefits, TPC-T submitted that it is able to leverage the Tata Brand to get a better credit rating of AA- by CRISIL and ICRA, and AA by CARE and India Ratings. As a result of better credit rating, the Company has secured borrowings at a cheaper rate than its competitors. TPC-T submitted the comparison of consolidated interest cost for FY 2018-19, which shows its interest rate as 8.59% as against interest rate of 11.66% for Reliance Power, 11.33% for Adani, 10.63% for JSW Energy and 9.12% for CESC Ltd., and hence, an interest benefit of @1.25%.

3.2.51 Benefits due to payment of Brand Equity to Tata Sons is much more than the cost allocated in the ARR. Therefore, TPC-T has requested the Commission to allow pass through of the Brand Equity expenses.

Commission's Analysis and Ruling

3.2.52 As regards expenses on Brand Equity, the Hon'ble ATE in its Judgment in Appeal No. 138 of 2008 had held as below: -

> "*It is evident that the Tata Brand Equity entails many benefits to the Tata Power Company such as instilling confidence, attain market leadership through Tata Business Excellence Model of the Tata Code of Conduct. ……This facilitates purchases at competitive rates, provides access to credit and loan facilities at competitive rates. The Brand name helps in attracting good human resource talent etc."*

3.2.53 The Commission, in its MTR Order in Case No. 204 of 2017, directed TPC-T to submit all the necessary details and justification along with its next Petition, for being allowed pass through of the Brand Equity expenses. The relevant para of the Order is reproduced below:

> *"3.2.16 Thus, ATE has allowed pass through of the Brand Equity expenses for TPC-T, on the premise that TPC-T was benefiting in several ways on account of the arrangement with Tata Sons. While the Commission has since been allowing pass through of the Brand Equity expenses in accordance with the ATE Judgment, the Commission is of the view that it is necessary to evaluate whether TPC-T is still benefiting from the arrangement, to avail which, it is paying the Brand Equity fees to Tata Sons. Hence, though the amount of Brand Equity is approved, it is being kept aside by the Commission, and not being passed through at this point in time. TPC-T is directed to submit all the necessary details and justification for being allowed pass through of the Brand Equity expenses along with its next Petition, and if the Commission is satisfied that TPC-T is benefiting from the arrangement, then the Brand Equity expenses shall be allowed to be passed through, with the associated Carrying Cost, if applicable."*

3.2.54 In response to the Commission's query seeking justification in terms of lower rate of interest on long-term loans for FY 2015-16 to FY 2017-18, TPC-T submitted the summary of long-term interest rates approved by the Commission for different Transmission Licensees in the State of Maharashtra, as shown in the Table below:

Table 11: Long Term Interest Loan Approved by the Commission as submitted by TPC-T

Company	Rate of Interest (%)			MERC Order No.
	FY 2015-16	FY 2016-17	FY 2017-18	
Amravati Transmission	12.75%	13.27%	12.75%	197 of 2017
Adani - Transmission (India) Ltd.	12.20%	12.20%	12.20%	170 of 2017
Vidarbha Transmission	12.50%	11.77%	11.60%	198 of 2017
TPC-T	10.75%	9.47%	9.47%	204 of 2017
Jaigad Power	11.50%	10.79%	9.83%	167 of 2017

3.2.55 Further, TPC-T estimated the saving due to lower rate of interest by comparing the rate of interest approved for AEML-T and Jaigad Power. TPC-T, in comparison with AEML-T, computed savings in interest cost of Rs.14.53 Crore, Rs. 27.03 Crore and Rs. 26.36 Crore for FY 2015-16, FY 2016-17 and FY 2017-18, respectively. In comparison to Jaigad Power, savings in interest cost has been computed as Rs.7.51 Crore, Rs. 13.07 Crore and Rs. 3.48 Crore for FY 2015-16, FY 2016-17 and FY 2017-18, respectively.

3.2.56 The Commission observes that TPC-T has submitted the benefits of Brand Equity arrangement like recruitment, training courses and common procurement services. However, TPC-T has not been able to quantify such benefits, in terms of cost savings. Further, TPC has its own HR department for recruitment and training, the cost of which is allocated to TPC-T under Head Office & Support Services (HOSS) allocation.

3.2.57 As regards the lower interest rates on Term Loans, TPC-T may have got the lower interest rates based on its financial position, negotiation with the lending agencies, etc. Also, TPC-T's Transmission Business is well established with fixed RoE. Also, the entire ARR of TPC-T is being recovered through the InSTS pool account, and there is no uncertainty regarding recovery of ARR. Further, in response to a similar query in case of TPC-G's Petition, the issue of Brand Equity being common, TPC has replied that payment of Brand Equity has helped it to refinance its long-term loans at lower rates of interest. The Commission is of the view that had the benefits of the Tata Brand been available earlier, then TPC may not have had such high interest rate loans in the first place. The data submitted by TPC-T for FY 2015-16 to FY 2018-19 also shows that the interest rates were quite high in FY 2015-16, a period for which TPC-T has claimed Brand Equity expenses.

3.2.58 Therefore, TPC-T has not been able to conclusively demonstrate that the payment of Brand Equity to Tata Sons has benefitted TPC-T in terms of lower rate of interest. In view of the above, the Commission is of the view that the justification provided by TPC-T is insufficient. **Hence the amount of Brand Equity for FY 2017-18 is not**

approved.

Sharing of Load Control Centre Expenditure

TPC-T's Submission

3.2.59 The expenditure on TPC's Power System Control Centre (PSCC) (the erstwhile Load Control Centre (LCC)) was allocated to Generation, Transmission and Distribution business of TPC in a certain ratio till FY 2013-14. Since the expenditure is allocated to all the three Businesses, the principles detailed in Section 2.4 of the Petition have been applied for allocation of LCC expenditure for FY 2017-18 and FY 2018-19. Hence, PSCC expenditure has not been considered separately for FY 2017-18 and FY 2018-19, and the allocated PSCC expenditure for FY 2017-18 and FY 2018-19 is part of the O&M expenditure explained above.

Commission's Analysis and Ruling

3.2.60 The Commission asked for the amount of PSCC expenditure and details of its allocation to Generation, Transmission and Distribution Businesses of TPC, and clarification on the principle of allocation. TPC-T submitted that PSCC expenses are part of Licenced Area (LA) services included in O&M expenses, and are Rs. 7.04 Crore and Rs. 8.91 Crore for FY 2017-18 and FY 2018-19, respectively. The allocation of these expenses to Generation, Transmission and Distribution Businesses of TPC for FY 2017-18 and FY 2018-19 is shown in the Table below:

Table 12: PSCC expenditure for FY 2017-18 and FY 2018-19, as submitted by TPC-T (Rs. Crore)

Company	FY 2017-18	FY 2018-19
Tata Power- Generation	3.38	4.10
Tata Power- Transmission	**1.70**	**2.27**
Tata Power- Distribution	1.96	2.54
Total PSCC Expenditure	**7.04**	**8.91**

3.2.61 As regards principle of allocation, TPC-T submitted that that after FY 2013-14, the PSCC expenditure is considered under LA services (Common cost) and the same gets allocated to Generation, Transmission and Distribution Business of Tata Power as per allocation methodology explained in Section 1.4 of the MYT Petition and hence, it is not separately shown.

3.2.62 In view of the above, the Commission approves the sharing of LCC expenditure, which is included in the O&M expenses.

Energy Charges for Auxiliary Consumption

TPC-T's Submission

3.2.63 TPC-T submitted that the Commission, in its "In-Principle" approval of DPR dated 20 April, 2018 for "Establishing 220 kV GIS Receiving Station at Antop Hill" has directed TPC-T to adopt the methodology of treating auxiliary consumption of EHV substation as recommended by the State Transmission Utility (**STU**).

3.2.64 Further, the letter of STU dated 7 May, 2012 referred to by the Commission had also recommended the treatment to the auxiliary consumption of EHV substation in Intra-State Transmission network of Maharashtra as per the Commission's Order dated 2 September, 2011 in Case No. 77 of 2011.

3.2.65 In line with the Commission's directive and STU recommendation, TPC-T has started monitoring and measuring the auxiliary consumption of the Receiving Stations after ensuring appropriate and adequate metering at the Receiving Stations from May, 2018.

3.2.66 Accordingly, TPC-T has recorded auxiliary consumption for the month of June, 2018 to March, 2019 for all its Receiving Stations located in Mumbai Licence area where the auxiliary consumption of these receiving stations has been fed by TPC-D. The auxiliary consumption measured for this period for all such Receiving Stations taken together is 0.79 MU.

3.2.67 STU has recommended that the charges paid by Transmission Licensees towards the auxiliary consumption of their EHV substations should have separate treatment in the ARR of Transmission Licensees and should be reimbursed in addition to the O&M expenses. STU has also recommended separate tariff category with billing only for the energy consumed.

3.2.68 For majority of the Receiving Stations of TPC-T, the concerned Distribution Licensee is TPC-D. Since, no specific Tariff category is available in the Tariff Order of TPC-D, to arrive at the auxiliary consumption reimbursement, TPC-D has billed this consumption under Tariff category for "LT II(B): LT-Commercial 20-50 kW". Accordingly, the total expenditure towards auxiliary consumption for TPC-T (within TPC-D Licence Area) from June, 2018 to March, 2019 is Rs. 10.52 Crore during FY 2018-19.

3.2.69 As regards the auxiliary consumption for the Receiving Stations located outside Mumbai Licence Area (i.e., Salsette, Kolshet, Kalyan, Ambernath and Bhokarpada (earlier known as IXORA)), Tariff of MSEDCL in whose area these receiving stations are located, has been considered and the total expenditure towards auxiliary consumption for these receiving stations from June, 2018 to March, 2019 is Rs. 2.42 Crore during FY 2018-19. The auxiliary consumption measured for this period for all such Receiving Stations taken together is 0.21 MU.

3.2.70 Therefore, the total energy charges towards auxiliary consumption of all TPC-T receiving stations for the period from June, 2018 to March, 2019 is Rs. 12.94 Crore.

3.2.71 TPC-T has further submitted that the Commission had approved such expenses towards

Auxiliary Consumption in the MTR Order of AEML-T (earlier RInfra-T) in Case No. 201 of 2017 dated 12 September, 2018 over and above its normative O&M expenses. In line with this Order, TPC-T requested the Commission to approve additional expenditure towards Auxiliary Consumption of its Receiving Stations for FY 2018-19. TPC-T submitted that no payment has been made to any Distribution Licensee, and the amount pertaining to Auxiliary Consumption of Receiving Stations located outside Licence Area of TPC-D (Rs. 2.42 Crore) has not been included in the ARR of TPC-T.

3.2.72 In view of the above submission, TPC-T requested the Commission to include the expenditure of Rs. 10.52 Crore towards auxiliary consumption of its Receiving Stations while approving the O&M expenditure for FY 2018-19. Alternatively, the Commission may consider including the same in the O&M expenses but pass it on to the consumers through Non-Tariff Income.

Commission's Analysis and Ruling

3.2.73 The Commission asked TPC-T to clarify whether expenses towards auxiliary consumption of its Receiving Stations have been paid to TPC-D and MSEDCL. TPC-T clarified that it pays an expense incurred towards auxiliary consumption of such receiving stations to TPC-D as against electricity bill raised by TPC-D. Auxiliary consumption for the Receiving Stations located outside Mumbai Licence Area (i.e., Salsette, Kolshet, Kalyan, Ambernath and Bhokarpada (earlier known as IXORA)), is not billed currently by MSEDCL. The auxiliary consumption from June, 2018 to March, 2019 for all such receiving stations taken together is 0.21 MU and in absence of actual billing by MSEDCL, no amount has been considered against this consumption.

3.2.74 In the MYT Order of RInfra-T (now AEML-T) in Case No. of 13 of 2016, the Commission has allowed energy charges separately in addition to actual O&M expenses. The relevant ruling of the Commission from the MYT Order is quoted below:

> *"5.6.12. ….The Commission has been allowing Energy Charges as Auxiliary Consumption of EHV Sub-stations as an additional charge in O&M expenses. These charges have been approved since the norms specified in the MYT Regulations, 2011 do not provide for such expenses but these are legitimate expenses for the Transmission Licensee. The Commission has acknowledged this fact and considered these expenses over and above the O&M expenses derived as per norms in the Truing-up for FY 2012-13 and FY 2013-14 in the MTR Order."*

3.2.75 The Commission, in the past, had acknowledged the fact that such expenses are not covered under norms specified in the MYT Regulations and has approved such expenses additionally over and above the normative O&M expenses. Therefore, the Commission approves the Energy Charges of Rs. 10.52 Crore as proposed by TPC-T for auxiliary consumption of EHV substations for FY 2018-19. **TPC-T has to ensure that such amount is paid to the concerned Distribution Licensee, as the**

Commission has considered such amount as revenue for the concerned Distribution Licensee. Also, the Commission directs TPC-T to approach MSEDCL for billing of the auxiliary consumption for the substations located in the area for prospective period, within two months from the date of this Order.

Total O&M Expenditure

TPC-T's Submission

3.2.76 TPC-T submitted that the total actual O&M expenditure for FY 2017-18 and FY 2018-29 was Rs. 151.27 Crore and Rs. 212.14 Crore, respectively. In addition to the above O&M expenditure, TPC-T has considered expenses of Rs. 10.52 Crore towards auxiliary consumption of its Receiving Stations as part of its O&M expenses for FY 2018-19.

3.2.77 The summary of the actual O&M expenditure claimed by TPC-T is tabulated below:

Table 13: Actual O&M Expenses for FY 2017-18 and FY 2018-19, as submitted by TPC-T (Rs. Crore)

Particulars	FY 2017-18		FY 2018-19	
	MTR Order	TPC-T Petition	MTR Order	TPC-T Petition
Employee Expenses	185.63	88.77	201.07	110.38
A&G Expenses		36.11		64.57
R&M Expenses		25.99		37.19
Total		**151.27**		**212.14**
Less				
Actual Brand Equity		1.90		(0.04)
Add				
Allocation of Brand Equity expenses to TPC-T as per MERC methodology		1.50		0.00
Energy Charges		0.00		10.52
Total		**150.87**		**222.70**

Commission's Analysis and Ruling

3.2.78 The Commission has already analysed and approved the component-wise actual O&M expense for FY 2017-18 and FY 2018-19 after prudence check in the above paragraphs, as summarized in the Table below:

Table 14: Actual O&M Expenses for FY 2017-18 and FY 2018-19, as approved by the Commission (Rs. Crore)

Particulars	FY 2017-18			FY 2018-19		
	MTR Order	TPC-T Petition	Approved in this Order	MTR Order	TPC-T Petition	Approved in this Order
Employee Expenses	185.63	88.77	88.77	201.07	110.38	110.38
A&G Expenses		36.11	33.97		64.61	65.46
R&M Expenses		25.99	25.99		37.19	34.13
Add: Energy Charges					10.52	10.52
Total		**150.87**	**148.73**		**222.70**	**220.49**

3.3 Capital Expenditure and Capitalisation

TPC-T's Submission

3.3.1 TPC-T submitted that the actual capital expenditure in FY 2017-18 was Rs. 173.80 Crore without Interest During Construction (IDC) and Rs. 216.07 Crore including IDC. The actual capital expenditure for FY 2018-19 was Rs. 238.93 Crore and Rs. 348.40 Crore, without IDC and with IDC, respectively.

3.3.2 The capitalisation on account of DPR schemes and Non-DPR schemes during FY 2017-18 is to the extent of Rs. 178.99 Crore and Rs. 37.08 Crore, respectively. TPC-T submitted that the amount of capitalisation against Non-DPR schemes marginally exceeded the limit of 20% of DPR schemes, as one transmission line could not be capitalized as a lot of local opposition was faced for erection of tower.

3.3.3 The capitalisation on account of DPR schemes and Non-DPR schemes during FY 2018-19 is to the extent of Rs. 318.70 Crore and Rs. 29.69 Crore, respectively.

Table 15: Capitalization for FY 2017-18 and FY 2018-19 as submitted by TPC-T (Rs. Crore)

Sl. No.	Particulars	FY 2017-18		FY 2018-19	
		MTR Approved	TPC-T Petition	MTR Approved	TPC-T Petition
1	DPR Capitalisation	134.36	178.99	334.21	318.70
2	Non-DPR Capitalisation	26.87	37.08	37.26	29.69
3	**Total Capitalisation**	**161.23**	**216.07**	**371.47**	**348.40**

Commission's Analysis and Ruling

3.3.4 The Commission notes that TPC-T, in its Petition, has considered capitalisation against the following category of schemes phased across multiple years of two Control Periods, i.e., from FY 2017-18 till FY 2024-25:

- Capitalisation against 43 Nos. of in-principle approved DPRs by the Commission;

- Capitalisation against 4 Nos. of DPR schemes submitted to the Commission but yet to be approved;
- Capitalisation against 13 Nos. of DPR schemes yet to be submitted to the Commission for approval;
- Capitalisation against 125 Nos. of Non-DPR schemes.

3.3.5 The Commission has examined the capital expenditure and actual capitalisation claimed against the various approved schemes. As against approved capitalisation of Rs. 161.23 Crore for FY 2017-18 in the MTR Order; actual capitalisation claimed is Rs. 216.07 Crore. For FY 2018-19, actual capitalisation claimed by TPC-T is Rs. 348.40 Crore as compared to capitalisation of Rs. 371.47 Crore approved in the MTR Order. The Commission has analysed the year-wise cumulative expenditure as against the approved cost and year-wise capitalisation under the corresponding schemes.

3.3.6 The Commission asked TPC-T to submit details of the Capex schemes where the actual capitalisation for any scheme exceeds 10% of the approved capitalisation for FY 2017-18, FY 2018-19 and FY 2019-20. TPC-T replied that there is only one DPR scheme of Installation of 220/33 kV GIS and ICT at Mahalaxmi, wherein the total capitalisation has exceeded over 10% of approved DPR value. For this scheme, TPC-T has proposed total capitalisation of Rs. 155.50 Crore as against approved DPR scheme value of Rs. 132.76 Crore, which has resulted into cost overrun of Rs. 22.74 Crore (14.62% over approved DPR value).

3.3.7 TPC-T also clarified that there is no capex scheme approved for FY 2017-18, FY 2018-19 and FY 2019-20, but where work has not commenced.

3.3.8 The Commission sought the details from TPC-T on DPR approval details, physical and financial progress of schemes, details of assets put to use, technical and financial benefits achieved after completion of the schemes, reasons for time over-run and cost over-run of schemes. TPC-T submitted the relevant details for the approved DPR schemes.

3.3.9 It was observed that there was time over-run for 39 DPR schemes. TPC-T submitted that the main reasons for delay in project execution were Right of Way (RoW) issues, Court cases, delay in land acquisition, delay in clearance of hutment locations, availability of outages, delay in procurement and execution difficulties, etc. The Commission notes that these issues are not peculiar or unique to TPC-T but are common to most Transmission projects, and are to be factored in while executing the projects, and cannot be cited as a reason for delay.

3.3.10 The Commission observes that there was cost over-run for 4 DPR schemes. TPC-T provided justification and reasons, which include increase in civil cost, increase in IDC, additional scope of work with respect to original scope of work, increase in actual expenditure for procurement and services cost, etc. These issues have been analysed in the subsequent paragraphs while approving/disapproving capitalisation.

3.3.11 The Commission sought the details of type works carried out under Non-DPR schemes for FY 2017-18, FY 2018-19, and FY 2019-20, and their justification/benefits to consumers, which was submitted by TPC-T.

3.3.12 While approving the capitalisation against DPR schemes, the Commission has considered the schemes submitted by TPC-T on actuals for FY 2017-18 and FY 2018-19, in respect of which in-principle approval has been granted or whose DPRs have been submitted for in-principle approval. The approved DPR schemes were scrutinized based on in-principle approval of DPR schemes and Cost Benefit Analysis (CBA) submitted by TPC-T in response to queries raised by the Commission.

3.3.13 It is observed that some of the schemes are still work-in-progress, while capitalisation has been claimed based on assets partly put to use in respective years. The Commission has scrutinized the details of assets put to use against each scheme, and allowed capitalisation against them based on the respective year of capitalisation.

3.3.14 Actual capitalisation of Rs.1.18 Crore till FY 2016-17 against 400 kV Vikhroli project has been disallowed, as discussed in detail in the subsequent section of this Order, as the said scheme is being executed through Tariff Based Competitive Bidding. This disallowance has impact on earlier approved capitalisation and related revenue expenditure components, viz., depreciation, interest and Return on Equity (RoE), as elaborated in the subsequent sections.

3.3.15 The major capex schemes have been analysed under the following categories:

a) Schemes approved by the Commission, but there is cost over-run;
b) Claim against past disallowed capitalisation of DPRs;
c) Capitalisation for 400 kV Vikhroli Scheme;
d) Unutilised Bays; and
e) Non-DPR schemes.

a) Schemes approved by the Commission, but there is cost overrun

3.3.16 There are 4 DPRs wherein TPC-T has claimed the capitalisation more than the amount approved in-principle by the Commission, as discussed below:

145 kV GIS at BKC

3.3.17 DPR scheme of '145 kV GIS at BKC' was approved by the Commission on 9 May, 2008 and the scheme was initiated by TPC-T in FY 2008-09. TPC-T sought revised approval from the Commission, which was accorded on 12 October, 2017 with revised cost of Rs. 280.20 Crore and revised timeline for completion as FY 2017-18. However, TPC-T claimed capitalisation of Rs. 285.38 Crore against this DPR scheme (Rs. 273.05 Crore till FY 2016-17, Rs. 1.51 Crore in FY 2017-18, Rs. 6.44 Crore in FY 2018-19 and Rs. 4.38 Crore in FY 2019-20).

3.3.18 The Commission, in the MTR Order in Case No. 204 of 2017, had observes that the TPC-T's justification for cost over-run is not acceptable. Therefore, the Commission had accorded approval to this scheme on provisional basis limiting the capitalisation to the extent of revised approved in-principle cost. The relevant para of the MTR Order is reproduced as below:

> *"Two schemes viz. '145 kV GIS at BKC' and 'Installation of 220/33 kV GIS and ICT at Mahalaxmi' have been approved by the Commission with revised cost. The Commission observes that these 2 schemes are exceeding revised in-principle approval cost without any acceptable justification.* ***The Commission in its revised in-principle approval has already stated that these schemes will be accepted for capitalisation subject to the third party asset verification****. Therefore, the Commission considers approval to these schemes on provisional basis limiting its capitalisation to the extent of its revised in-principle approved cost.* ***Depending on the outcome of the third party asset verification, the Commission will consider the final capitalisation in subsequent tariff proceedings****."*

3.3.19 The Commission notes that TPC-T has recently submitted Scheme Closure Reports for this scheme. The Commission has yet not carried out third party asset verification for this scheme as the scheme was not completed in all respects and TPC-T has claimed the capitalisation up to FY 2019-20.

3.3.20 The Commission observes that 145 kV GIS BKC scheme is exceeding even revised in-principle approval cost by Rs. 5.18 Crore. Also, there is delay of two years in-spite of the revised approval of completion. In reply to the query, TPC-T submitted that cost over-run for 145 kV GIS at BKC is on account of expenditure on contingency due to MCGM requirement, Fire balconies and Electrical Inspector requirements. TPC-T incurred additional civil cost due to requirement of additional shore piles for slope protection to facilitate working in monsoon and additional works to meet MCGM and Chief Fire Officer's requirement such as rain water harvesting systems and fire balconies at all the three levels. In the revised approval, the Commission had disallowed contingency cost of Rs.5.75 Crore.

3.3.21 The Commission notes that the scheme was initiated in the year 2008 with a cost of Rs. 230.50 Crore. As per the old approval, TPC-T was expected to complete the scheme in FY 2010-11. However, the scheme got delayed because of various reasons. The Commission granted revised approval for the scheme in the year 2017, amounting to Rs. 280.20 Crore. As per the revised approval, TPC-T was expected to complete the scheme in FY 2017-18 as submitted by TPC-T itself. Now, TPC-T has claimed total capitalisation of Rs. 285.38 Crore stating that the scheme is completed in FY 2018-19. It is worth to note that the scheme was initiated in the year 2008 and took nearly 10 years to complete. Also, the reasons quoted by the TPC-T in this Petition were never mentioned at the time of revised approval of the schemes. Further, it is observed that as per TPC-T submission, there are 2 no. of 110 kV Bays and 3 no. of 33 kV Bays, which are erected but not put to use till date. Hence, to that extent the asset is not put to use and not benefiting the customers. Hence, the Commission is not inclined to approve the entire amount of cost over-run beyond the amount of in-principle approval. The claim of the additional work carried out by TPC-T justifying the increase in cost is routine and nothing new. However, TPC-T has failed twice to execute the scheme within the timelines proposed by itself in-spite of revised approval of the Commission. Such delay in execution of the scheme leads to the increased cost of the project and burdens the consumers without any benefit to them. **Hence, claim of TPC-T over and above the revised cost approved by the Commission is unjustified and not approved**.

3.3.22 In view of the above, the Commission has considered capitalisation for '145 kV GIS at BKC' scheme to the extent of the revised in-principle approved cost and disallowed cost overrun of Rs.5.18 Crore.

3.3.23 The Commission will undertake third party asset verification for this scheme at later stage and take appropriate view on additional capitalisation and unutilised Bays at the time of MTR proceedings, depending on the outcome of the third party asset verification.

Installation of 220/33 kV GIS and ICT at Mahalaxmi

3.3.24 DPR scheme of 'Installation of 220/33 kV GIS at Mahalaxmi' was approved by the Commission on 17 January 2008 with approved DPR cost of Rs. 63.58 Crore. Further, DPR scheme of 'Addition of ICT- 5 and 33 kV GIS at Mahalaxmi' was approved on 13 May 2010 for Rs. 39.00 Crore. The scheme was initiated by TPC-T in FY 2009-10. TPC-T sought revised approval from the Commission for Merged DPR of 'Installation of 220/33 kV GIS and ICT at Mahalaxmi', which was accorded on 15 November 2017 with revised cost of Rs. 132.76 Crore and revised timelines for completion as FY 2017-18, subject to third part asset verification after completion of the scheme. TPC-T has claimed capitalisation of Rs. 155.50 Crore against this DPR scheme (Rs. 136.65 Crore till FY 2016-17, Rs. 11.11 Crore in FY 2017-18, Rs. 7.71 Crore in FY 2018-19 and Rs. 0.02 Crore in FY 2019-20).

3.3.25 The Commission, in the MTR Order in Case No. 204 of 2017, had observes that the TPC-T's justification for cost over-run is not acceptable. Therefore, the Commission had accorded approval to this scheme on provisional basis limiting the capitalisation to the extent of the revised in-principle approved cost of Rs 132.76 Crore. TPC-T has recently submitted Scheme Closure Reports for this scheme. The Commission is yet to carry out third party asset verification for this scheme.

3.3.26 The Commission observes that scheme of 'Installation of 220/33 kV GIS and Additional ICT at Mahalaxmi' has cost over-run of Rs. 22.74 Crore. TPC-T clarified that the cost over-run for 220/33 kV GIS and ICT at Mahalaxmi is due to increase in IDC amount (Rs.16.77 Crore), one spare 220 kV GIS Bay (Rs.5.76 Crore) and additional amount for Consultancy services (Rs. 0.45 Crore). IDC was originally estimated for 4 years. However, as the project is delayed and has been completed in FY

2018-19, there is an increase in IDC.

3.3.27 From TPC-T's submission at the time of revised approval, it was notes that TPC-T had purchased major GIS equipment though building for erection of equipment was not ready and the various statutory approval were not in place. This is the main cause for increase in IDC of Rs. 16.77 Crore from Rs. 4.75 Crore to Rs. 21.52 Crore. Therefore, the Commission had approved only Rs.4.75 Crore towards IDC in the revised approval compared to IDC of Rs. 21.52 Crore proposed by TPC-T. Further, the Commission had not approved cost of Rs. 5.76 crore towards 220 kV spare Bay to be connected to 220 kV Parel sub-station in future since neither TPC-T had submitted the DPR of Parel sub-station nor had the STU approved it. It is worth to note that the said Bay is still unutilised. The Commission had not approved additional amount for Consultancy services of Rs. 0.45 Crore in revised approval as increase in Consultancy services was not justified considering the delay in execution of the project. The Commission also notes that TPC-T had not executed the project through competitive bidding as required under Commission's revised in-principle approval, which would have ensured transparency and cost competitiveness of the project.

3.3.28 The Commission notes that the scheme was initiated in FY 2009-10 with a cost of Rs. 63.58 Crore. As per the old approval, the scheme was expected to be competed in FY 2012-13. However, the scheme got delayed because of various reasons. Thereafter, the Commission accorded revised approval amounting to Rs. 132.76 Crore for the scheme in the year 2017 subject to third-party asset verification after completion of the scheme. As per the revised approval, TPC-T was expected to complete the scheme in FY 2017-18 as submitted by TPC-T itself. Now, TPC-T has claimed the total capitalisation of Rs. 155.50 Crore stating that the scheme is completed in FY 2018-19. It is worth noting that the scheme was initiated in the year 2009 and took nearly 10 years to complete. Further, it is observed as per TPC-T's submission that there are 1 No. of 220 kV Bay and 12 Nos. of 33 kV Bays, which are erected but not put to use. Hence, to that extent the asset is not benefiting the customers. **Hence, the Commission is not inclined to approve the cost over-run beyond the amount of revised in-principle approval.**

3.3.29 In view of the above, the Commission has considered capitalisation for 'Installation of 220/33 kV GIS and Additional ICT at Mahalaxmi' scheme to the extent of the revised in-principle approved cost and disallowed cost overrun of Rs.22.74 Crore (Rs 16.77 Crore + Rs 5.75 Crore).

3.3.30 The Commission may undertake third party asset verification for this scheme at later stage and will take appropriate view regarding additional capitalisation and unutilised Bays at the time of MTR proceedings, depending on the outcome of the third-party asset verification.

220 kV GIS at Sahar Airport

3.3.31 DPR scheme of '220 kV GIS at Sahar Airport' was approved by the Commission on 17

March 2010 and the scheme was initiated by TPC-T in FY 2009-10 with approved cost of Rs. 167.30 Crore. TPC-T claimed capitalisation of Rs. 173.20 Crore against this DPR scheme (Rs. 168.81 Crore till FY 2016-17, Rs. 3.17 Crore in FY 2017-18 and Rs. 1.23 Crore in FY 2018-19).

3.3.32 TPC-T submitted that GIS at Sahar has been commissioned and taken into service in FY 2012-13. Hence, major capitalization has been approved by the Commission in the MTR Order. The Capitalization claimed in truing up years, i.e., FY 2017-18 and FY 2018-19 is towards final payment (which is linked to milestone of obtaining Occupancy Certificate) released to vendor after final reconciliation and settlement including balance finishing works.

3.3.33 The Commission, in the MTR Order, has considered the capitalisation of the approved cost as per in-principle DPR approval since revised DPR was submitted to STU and it was not submitted to the Commission for in-principle approval. TPC-T submitted that STU has approved the additional scope with the total cost of Rs. 173.20 Crore in its revised DPR approval on 15 March, 2019; the revised DPR has been submitted to the Commission and its approval is awaited.

3.3.34 The Commission observes that this scheme has cost overrun of Rs. 5.90 Crore. TPC-T clarified that cost over-run against this scheme is on account of installation of 2 additional 220 kV Bays and 9 additional 33 kV bays (Rs. 20.38 Crore), increase in Civil cost (Rs.8.99 Crore) and Staff cost (Rs.6.05 Crore). TPC-T stated that the staff cost of Rs. 6.05 Crore was inadvertently missed out in the original DPR. However, the net cost over-run is Rs. 5.90 Crore.

3.3.35 From the detailed cost variance justification provided by TPC-T, the Commission observes that TPC-T has incurred lower than approved cost for majority of scope of work, except for 220 kV and 33 kV Bays and Civil works for Transformers on account of increased scope of work as per recommendation of STU , where there is cost over-run as mentioned above. The Commission notes TPC-T's submission that it had inadvertently missed the staff cost of Rs. 6.05 Crore in the original approved DPR. The Commission also notes that there are 2 x 220 kV GIS Bays and 6 x 33 kV GIS Bays, which are not utilised till date.

3.3.36 For the purpose of this Order, the Commission has not disallowed the capitalisation of GIS Bays, consistent with its stand on unutilised GIS Bays in the last MYT Order. However, as these GIS Bays have been unutilised since the beginning and such non-utilisation for several years unnecessarily burdens the consumers, the Commission directs TPC-T to utilise these unutilised GIS Bays as envisaged in the plan. As elaborated subsequently in this Section, in case these unutilised GIS Bays are not utilised from FY 2020-21 onwards, the Commission shall be constrained to disallow the capitalisation against these GIS Bays in the MTR Order.

3.3.37 In view of the above, the Commission approves the total capitalisation of Rs.173.20

Crore as submitted by TPC-T.

Replacement of 22 kV and 33 kV Bus Sections at Carnac Receiving Station (R/S)

3.3.38 The DPR for 'Replacement of 22 kV and 33 kV Bus sections at Carnac Receiving Station was approved by the Commission on 12 April 2012 with a cost of Rs.23.61 Crore. The scheme was initiated by TPC-T in FY 2012-13. TPC-T claimed capitalisation of Rs. 24.04 Crore against this DPR scheme (Rs. 14.60 Crore till FY 2016-17, Rs. 0.75 Crore in FY 2017-18 and Rs. 8.68 Crore in FY 2019-20).

3.3.39 The Commission observes that this scheme has cost overrun of Rs. 0.43 Crore. TPC-T clarified that the cost over-run pertains to additional cost of 33 kV Switchgear with respect to cost assumed in DPR and actual cost of procurement. The Commission also notes that there is 1 x 33 kV unutilised bay against this scheme and TPC -T has proposed its utilisation in the year 2021.

3.3.40 The Commission has analysed the other details of schemes and reasons provided by TPC-T for cost over-run and observes that the reasons provided by TPC-T are controllable in nature. Further, as per the approval of the Commission, TPC-T was expected to complete the scheme in FY 2013-14. However, TPC-T is claiming the capitalisation in FY 2019-20. There is time over-run of 6 years and corresponding IDC. As the scheme is substantially delayed, despite absence of RoW issues, the cost over-run has not been considered for capitalisation.

3.3.41 In view of the above, the summary of disallowance due to cost over-run is summarized in the Table below:

Table 16: Schemes in which capitalisation is disallowed due to cost over-run (Rs. Crore)

Sr. No.	Name of scheme	In-principle Approved cost	Cumulative capitalisation claimed by TPC-T	Total capitalisation approved in this Order	Total disallowed capitalisation
1	145 kV GIS at BKC	280.20	285.38	280.20	5.18
2	Installation of 220/33 kV GIS and Additional ICT at Mahalaxmi	132.76	155.50	132.76	22.74
3	220kV GIS at Sahar Airport	167.30	173.20	173.20	0.00
4	Replacement of 22 kV and 33 kV Bus sections at Carnac R/S	23.61	24.04	23.61	0.43

Note**: Year-wise disallowance is provided in **Appendix –7

b) Claim against past disallowed capitalisation of DPRs

3.3.42 In the previous MYT Order in Case No. 22 of 2016 and MTR Orders in Case No. 5 of 2015 and 204 of 2015, the Commission had disallowed certain capitalisation claimed by TPC-T due to assets not being put to use. TPC-T has considered capitalisation against such disallowed amount in the capitalisation for FY 2017-18 and FY 2018-19 on account of assets being put to use, along with IDC for intervening years, as shown in the Tables below:

Table 17: Capitalisation considered by TPC-T in FY 2017-18 against Disallowance in earlier Tariff Orders (Rs. Crore)

Particulars	Interest Rate	145 kV GIS at Versova & Mahalaxmi Station Land cost	33 kV Bays at Parel	145 kV GIS at Versova	Total FY 2017-18 (Addition to GFA)
		A	B	C	C=A+B+C
MERC Order Reference		**5 of 2015**	**22 of 2016**	**22 of 2016**	
Disallowed Amount		21.56	0.69	1.51	23.76
IDC for FY 2014-15	10.86%	1.64	0.05	0.00	1.69
IDC for FY 2015-16	10.75%	1.75	0.06	0.11	1.91
IDC for FY 2016-17	9.47%	1.65	0.05	0.11	1.81
IDC for FY 2017-18	9.26%	1.72	0.05	0.11	1.89
Total Capitalization		**28.32**	**0.90**	**1.84**	**31.07**

Table 18: Capitalisation considered by TPC-T in FY 2018-19 against Disallowance in earlier Tariff Orders (Rs. Crore)

Particulars	Interest Rate	110 kV Bays at Dharavi in Power supply to HDIL Kurla	145 kV GIS at IXORA	Land Cost for 145 kV GIS at Kurla	Total FY 2018-19 (Addition to GFA)
		A	B	C	C=A+B+C
MERC Order Reference		**22 of 2016**	**204 of 2017**	**22 of 2016**	
Disallowed Amount		5.20	29.99	8.38	43.57
IDC for FY 2015-16	10.75%	0.39	0.00	0.63	1.02
IDC for FY 2016-17	9.47%	0.37	0.00	0.60	0.97
IDC for FY 2017-18	9.26%	0.39	0.00	0.62	1.01
IDC for FY 2018-19	8.64%	0.38	0.00	0.62	1.00
Total Capitalization		**6.73**	**29.99**	**10.85**	**47.57**

3.3.43 The Commission, in its Order in Case No. 5 of 2015 has disallowed the capitalisation towards land cost of 145 kV GIS at Versova Receiving Station (Rs.21.56 Crore) and 245 kV GIS at Mahalaxmi (Rs.0.04 Crore) due to assets not being put to use. As the 145 kV GIS at Versova Receiving Station and 245 kV GIS at Mahalaxmi Receiving Station have now been commissioned and put to use during FY 2017-18, TPC-T has claimed capitalisation with IDC towards the same as shown in the above Table.

3.3.44 In the MYT Order in Case No. 22 of 2016, the Commission had not considered the capitalisation of Rs. 1.83 Crore towards 8 nos. 33 kV AIS bays at Parel due to unutilised Bays. TPC-T has utilised 3 no. of Bays out of 8 no. of Bays at Parel in FY 2017-18 and has considered the proportionate capitalisation of Rs. 0.69 Crore for 3 Bays in FY 2017-18. TPC-T has claimed capitalisation of Rs. 0.90 Crore including IDC.

3.3.45 The Commission, in the MYT Order, had not considered capitalisation of Rs. 1.51 Crore towards 145 kV GIS at Versova as both transformers were not put to use. As the 145 kV GIS at Versova is now commissioned and put to use during FY 2017-18, TPC-T has claimed the capitalisation of Rs. 1.51 Crore. TPC-T has claimed capitalisation of Rs. 1.84 Crore including IDC.

3.3.46 In the MYT Order, the Commission had disallowed the capitalisation of Rs. 6.70 Crore for "Power supply to HDIL Kurla" as 3 Nos of 110 kV GIS Bays were not put to use. TPC-T has utilised 2 out of the 3 Bays in FY 2018-19 and has considered capitalisation of Rs. 5.20 Crore in FY 2018-19. TPC-T has claimed capitalisation of Rs. 6.73 Crore including IDC. From the data provided by TPC-T, the Commission notes that 2 Nos. of 110 kV GIS at Dharavi sub-station have been put to use for "Power supply to HDIL Kurla" in FY 2018-19 and remaining 110 kV Metro 3 GIS Bay is unutilised.

3.3.47 TPC-T has submitted that the Commission, in the MTR Order in Case No. 204 of 2017, notes that the scheme '110/33 kV GIS at IXORA, Panvel' was likely to be 'put to use' in FY 2018-19. Accordingly, all capitalisation claimed by TPC-T till date against this DPR was deferred and depreciated cost of Rs. 29.99 Crore was taken as net capitalisation in FY 2018-19 against claim of Rs. 36.66 Crore. Accordingly, TPC-T has considered the capitalisation of Rs. 29.99 Crore for FY 2018-19.

3.3.48 Further, TPC-T in its MYT submission in Case No. 22 of 2016, had excluded the land cost of Rs. 8.38 Crore in the DPR of "Power supply to HDIL Kurla" as the GIS was not commissioned. The same has been acknowledged by the Commission in the MYT Order. As 145 kV GIS at Kurla is now commissioned and put to use during FY 2018-19, TPC-T has considered the capitalisation of Rs. 8.38 Crore in FY 2018-19. TPC-T has claimed capitalisation of Rs. 10.85 Crore including IDC.

3.3.49 The Commission sought justification for the claim of IDC as assets were idle since construction and same is neither benefiting to the system nor to the consumers. TPC-T responded that it had constructed and commissioned 33 kV AIS at Parel and 145 kV GIS at Versova as per DPR approved by STU/the Commission and after considering the bays requirement from Distribution Licensees around those areas. 145 kV GIS at

Versova is now commissioned and put to use during FY 2017-18. Further, 8 nos. 33 kV bays at Parel Receiving Station have been established and commissioned during FY 2014-15 and were ready for taking outlets. However, because the concerned Distribution Licensees did not connect their feeders, it has resulted into un-utilisation of these bays, which is beyond the control of TPC-T. TPC-T has invested in the scheme after due approvals and further continues to incur costs for maintenance of these bays as part of the Receiving Station. The transmission schemes require long-term planning in anticipation of the load growth in a particular area. Hence, TPC-T should not be penalised for installing the bays in the Receiving Station as per planned requirements and after due approvals from all statutory authorities. In view of the above, TPC-T requested the Commission to consider the capitalisation without its depreciated value and allow the full capitalisation with applicable IDC.

3.3.50 The Commission, in the MTR Order in Case No. 204 of 2017, had notes the schemes against which TPC-T had claimed capitalisation in the past, but the asset was not 'put to use', thereby not benefitting the consumers. Therefore, the Commission had allowed capitalisation against such schemes at depreciated cost till the year in which it is actually put to use. With the same approach, the Commission has considered capitalisation claimed by TPC-T as shown in the Tables above on Net Fixed Assets (NFA) basis, except in case of land cost for Versova, Mahalaxmi and Kurla stations, as there is no depreciation in land. **Further, the claim of additional IDC from year of initial disallowance to year of capitalisation approved in this Order has not been accepted, as the asset has been put to use in a delayed manner, and allowance of IDC will defeat the purpose of disallowing capitalisation in the first place. Therefore, the net capitalisation is considered for approval in the respective year in which the asset is finally put to use.**

3.3.51 Since TPC-T has claimed the capitalisation of Rs. 29.99 Crore for '110/33 kV GIS at IXORA, Panvel' in FY 2018-19, which has been put to use in FY 2018-19 and was approved by the Commission at depreciated cost; the Commission has considered the capitalisation of Rs. 29.99 Crore in FY 2018-19.

3.3.52 For 'Power supply to HDIL Kurla', the capitalisation of Rs.4.42 Crore has been considered for 2 no. of Bays without IDC, and at depreciated cost as these bays are put to use by TPC-T.

3.3.53 In view of the above, the Commission approves Rs.23.43 Crore against Rs.31.07 Crore proposed by TPC-T in FY 2017-18 for capitalisation against past disallowance. For FY 2018-19, approved capitalisation is Rs.42.79 Crore against Rs.47.57 Crore proposed by TPC-T. The summary of the Commission's approval is given in the Table below:

Table 19: Capitalisation allowed by the Commission against Disallowed Capitalisation claimed by TPC-T (Rs. Crore)

Particulars	Capitalisation claimed by TPC-T			Capitalisation approved in this Order	Disallowance in this Order
	Disallowed Amount	IDC	Total		
FY 2017-18					
145 kV GIS at Versova & Mahalaxmi Station Land Cost	21.56	6.76	28.32	21.56	6.76
33 kV Bays at Parel	0.69	0.22	0.90	0.58	0.32
145 kV GIS at Versova	1.51	0.33	1.84	1.28	0.56
Total FY 207-18	**23.76**	**7.31**	**31.07**	**23.43**	**7.64**
FY 2018-19					
110 kV Bays at Dharavi in Power supply to HDIL Kurla	5.20	1.53	6.73	4.42	2.31
110/33 kV kV GIS at IXORA	29.99	0.00	29.99	29.99	0.00
Land Cost for 145 kV GIS at Kurla	8.38	2.47	10.85	8.38	2.47
Total FY 2018-19	**43.57**	**4.00**	**47.57**	**42.79**	**4.78**

c) Capitalisation for "400 kV Receiving Station at Vikhroli"

3.3.54 The Commission notes that in view of the deemed closure of '400 kV GIS Receiving Station at Vikhroli' and the project being executed under TBCB, TPC-T has not claimed any capitalisation against this scheme for the period from FY 2017-18 to FY 2024-25. Further, TPC-T, in the Petition Formats, has shown the actual capitalisation of Rs. 7.34 Crore till FY 2016-17. However, the Commission observes that vide MYT Order in Case No. 22 of 2016, the capitalisation of Rs. 6.15 Crore was disallowed in FY 2014-15. Therefore, the actual capitalisation already allowed by the Commission for this scheme till FY 2016-17 is Rs. 1.18 Crore. As such, this capitalisation allowed by the Commission in the past, needs to be disallowed as it will not benefit the consumers, and the cost will also be recovered by the Successful Bidder. Capitalisation approved for 400 kV Vikhroli scheme in the past years is shown in the Table below:

Table 20: Capitalisation allowed by the Commission in the past for 400 kV Vikhroli GIS (Rs. Crore)

Sl.	Year	Capitalisation approved
1	Capitalisation up to FY 2016-17	1.18

3.3.55 Therefore, the Commission has disallowed Rs.1.18 Crore capitalisation allowed in the past for 400 kV Vikhroli. The Commission has worked out the impact of disallowance of this capitalisation on Depreciation, Interest on loan and Return on Equity along with corresponding holding cost and deducted the amount derived from the ARR of FY

2020-21, which is discussed in the subsequent section.

d) Unutilised Bays

3.3.56 The Commission sought the details from TPC-T on station wise and voltage-wise bays utilised with loading details, Bays allotted by STU to Distribution Licensee/individual consumers but not utilised (zero loading), unutilised Bays, and prospective plan for utilisation of Bays against the schemes completed in the past.

3.3.57 From the information provided by TPC-T, it is observed that there are some bays which are allocated by STU to the Distribution Licensees but actually not put to use. Considering the allocation by the STU, TPC-T has considered these bays as put to use and claimed all related expenses against these bays. It is observed that there are 82 no. of unutilised Bays in FY 2017-18 and 63 no. of unutilised Bays in FY 2018-19 which includes GIS as well as AIS for different voltage level and erected in the various years. The Commission notes that there are many unutilised bays in FY 2017-18, which are not utilised since their commissioning. The list of unutilised Bays for FY 2018-19 is provided in **Appendix-3**.

3.3.58 The Commission in the MYT Order in Case No. 22 of 2016 had taken a view that when the addition of unutilised assets financially burdens consumers without any assured benefit to them in a reasonable time. Capitalisation of such assets should generally not be considered. The relevant paras of this Order are reproduced below:

"4.3.24 In this context, the Commission's observations in the Order dated 18 May 2012 in Case No. 169 of 2011 relating to MSETCL are relevant:

"5.1.2. The Commission feels that the above reasons do not justify the non-utilization of assets commissioned by the utilities, as these have associated costs which are borne by the consumers through Tariff. It is also true that the utilities undertaking the electricity business need to do forward planning. Investments in assets need to be planned keeping in mind the long term requirement, for example a horizon of 5-10 years, instead of short term requirements. This need is greater for transmission utilities which has to plan for huge network expansion arising out of the generation evacuation and supply to the load centres. However, it is necessary to create a balance between long term planned investments and burdening the consumers with the associated cost of that planning. The consumer doesn't get benefit out of these unutilized bays/ assets, though they are required to pay for it…."

4.3.25 The Commission had accordingly disallowed capitalisation of unutilised Bays in MSETCL's MTR Order in Case No. 207 of 2014. The Commission has been of the view that, when the addition of unutilised assets financially burdens *consumers without any assured benefit to them in a reasonable time, capitalisation of such assets should generally not be considered."*

3.3.59 In MYT Order, the Commission had not considered disallowance for unutilised GIS Bays in view of difficulties that may arise later in the availability of matching configurations of GIS bus and inter-connection, compatibility of GIS switchgear, structural stability of additional Bays, additional spares of the same make, etc. However, the Commission had disallowed capitalisation against AIS Bays. The relevant paras of this Order are reproduced below:

"4.3.28 The Commission notes the reasons cited by TPC-T for erection of additional Bays at the beginning of execution of the GIS Sub-station. They include difficulties that may arise later in the availability of matching configurations of GIS bus and inter-connection, compatibility of GIS switchgear, structural stability of additional Bays, additional spares of the same make, etc. Hence, the Commission is not disallowing the capitalisation against these GIS Bays. However, these constraints do not apply to Air Insulated Sub-station (AIS) Bays, including 33 kV Bays, which are dealt with at para. 4.3.31 below.

…….

4.3. 31 However, the Commission is of the view that the claim for O&M expenses against the unutilised AIS and GIS Bays is not justified. Even though the capitalisation for the unutilised GIS Bays has been allowed, these Bays are not in use or remain idle in the network. Hence, allowing O&M expenses on these Bays would amount to approving expenditure without any benefit to consumers. Therefore, the Commission has considered the impact of unutilised GIS as well as AIS Bays while calculating the normative O&M expenses for FY 2014-15. The normative O&M expenses for FY 2014-15 have been worked out by reducing two 220 kV Bays, three 110 kV Bays and thirteen 33 kV Bays, and explained at para. 4.2 while approving O&M expenses.

4.3.32 The Commission has also excluded Rs 1.83 Crore as the cost of 8 AIS Bays of 33 kV at Parel from the total capitalisation in FY 2014-15, which have been idle since commissioning in FY 2014-15, and disallowed the O&M expenses on these Bays."

3.3.60 From the data submitted by TPC-T, the Commission observes that there are 3 no. of 220 kV AIS Bays at Trombay station, which are unutilised since their commissioning in FY 2015-16 and TPC-T has submitted that these Bays will be put to use by March 2021. Therefore, the Commission, in line with the approach adopted in the earlier MYT Order, has disallowed capitalisation against 3 no. of 220 kV unutilised AIS Bays at Trombay station. For disallowance, the per Bay cost of Rs.2.43 Crore has been considered as submitted by TPC-T for 220 kV AIS Bays at Trombay station and the total disallowance has been worked out at Rs. 7.29 Crore for 3 Nos. of 220 kV unutilised AIS Bays at Trombay.

3.3.61 It is to be notes that once the unutilised Bays are put to use by TPC-T, the Commission shall take a view to approve the disallowed cost appropriately.

3.3.62 The Commission also observes that there are 5 no. of 33 kV AIS Bays at Parel station, which are unutilised since their commissioning in FY 2014-15 and TPC-T has submitted that these Bays are allocated to BEST and Bays will be put to use by March 2020. It is notes that, in the MYT Order in Case No. 22 of 2016, capitalisation of Rs.1.83 Crore was disallowed for FY 2014-15 for 8 no. of unutilised AIS bays of Parel station. TPC-T has utilised 3 no. of Bays in FY 2017-18, which have now been allowed by the Commission. Therefore, no further disallowance has been considered for remaining 5 no. of 33 kV unutilised AIS Bays at Parel station, as the same have already been disallowed in the past.

3.3.63 Further, there is one 110 kV unutilised AIS Bay (Metro-3 AIS Bay) at Dharavi substation, which is commissioned in FY 2018-19 and TPC-T submitted that the Bay will be used for supply to Metro Rail in March 2020. TPC-T also submitted that this Bay is consumer funded. Hence, the Commission has not considered disallowance against this Bay, as there is no impact of depreciation, interest and RoE on account of this Scheme, as the same is consumer funded.

3.3.64 Further, TPC-T has added 60 no. of new Bays during FY 2019-20; out of which only 2 Nos. of Bays have been utilised till date. Out of remaining 58 Nos. of unutilised Bays, 3 Nos. of AIS Bays are consumer funded and remaining 55 Nos. of Bays are GIS Bays. Also, TPC-T has proposed the part utilisation of theses Bays in the FY 2019-20. Further, as provisional truing up for FY 2019-20 has been done in this Order, the Commission has not considered disallowance in FY 2019-20 against unutilised Bays. **In view of the above, the Commission will take an appropriate view on the unutilized Bays while approving the final True up for FY 2019-20.**

3.3.65 The Commission adopts the procedure for approval of capital cost for the Utilities in the State of Maharashtra in accordance with the "Guidelines for in-principle clearance of proposed investment schemes 2005" and the applicable MYT Regulations for respective Control Period. The Guidelines stipulate the capital cost approval in a two-stage process, i.e., in-principle approval prior to initiating the capital expenditure scheme; and during Tariff determination/ARR review process during and/or after completion of the capital expenditure scheme. A key factor for evaluating these schemes as specified in the Guidelines is to assess the benefits that have accrued to the consumers who are to pay for these schemes through tariffs. Further, Regulation 23 of MYT Regulations, 2015 provides as follows:

"23 Capital Cost and capital structure

23.1 Capital cost for a capital investment Project shall include:
(a)
.....
(e)

Provided further that the ***capital cost of the assets forming part of the Project but not put to use or not in use, shall be excluded from the capital cost" (Emphasis added)***

3.3.66 In view of the above, the Commission has disallowed the capitalization of assets, which are not put to use. However, in case of unutilised GIS Bays, the Commission has been allowing capitalisation against such GIS Bays though they are not actually put to use for many years from the year of commissioning. The Commission is of the view that only completion of erection of asset or asset being ready to use does not mean that the asset is put to use even without benefiting the consumers. The intention of the EA 2003 or the MYT Regulations is to allow the recovery of the ARR from the assets which are benefiting the consumers or the system by any means. Thus, allowing capitalisation for unutilised GIS Bays is against the basic intent of the Capex Guidelines and MYT Regulations as mentioned above to put the asset to use and provide benefits to consumers. It is worth noting that the trend of unutilised GIS Bays in Case of TPC-T is increasing over the years instead of decreasing. It seems that as the cost is being recovered irrespective of utilisation of GIS assets, planners and TPC-T management is tacit on this issue and over and above defending their claim of ARR towards unutilised assets stating one or the other reason. On one hand TPC-T is proposing the GIS on the pretext that it requires less space and time for construction and on other hand the said asset is being kept idle years together, which is not in the interest of consumers. If such trend of unutilized bays continues, there is possibility that some bays even get retired without any utilisation during their regulated life. It is a fact that load on the EHV substations do not get diverted at a time. It takes time to reorient the existing load and feed the upcoming load gradually. Hence, it is imperative to develop the Bays and installed capacity of the EHV substations and lines in the phased manner considering the trend of load growth and the system requirement to avoid the non utitisation of Bays like in the present case. Further, if there is no plan to utilise these Bays in the near future, TPC-T may explore the option of utilising these Bays/assets for other proposed projects, so that the assets are put to use. Therefore, though the Commission has not considered disallowance against unutilised GIS Bays for FY 2017-18 to FY 2019-20, disallowance shall be considered for unutilised GIS Bays, in addition to AIS Bays, from FY 2020-21 onwards.

3.3.67 The Commission observes that 3 no. of 220 kV unutilised AIS Bays at Trombay station pertains to DPR scheme 'Construction of New 220 kV bays (3 nos.) for Trombay Dharavi Salsette Saki lines', which is completed and fully capitalised. TPC-T has not claimed any capitalisation for this DPR scheme from FY 2017-18 onwards. Therefore, disallowance of Rs. 7.29 Crore for unutilised Bays (per Bays cost as Rs. 2.43 Crore) has been considered against the past approved Capitalisation till FY 2016-17.

3.3.68 As elaborated earlier, the Commission has disallowed Rs. 22.74 Crore for DPR scheme 'Installation of 220 kV GIS Mahalaxmi and installation of additional ICT No.5 and 33 kV GIS at Mahalaxmi substation due to cost over-run. Since, TPC-T has proposed total capitalisation of Rs.18.85 Crore for this scheme during FY 2017-18 to FY 2024-25; the same is disallowed and balance amount of Rs.3.99 Crore is disallowed against the past approved Capitalisation till FY 2016-17.

3.3.69 As discussed in the earlier section, the Commission has disallowed the past approved capitalisation of Rs.1.18 Crore for 400 kV Vikhroli on account of deemed closure. Therefore, the total disallowance of past capitalisation (Capitalisation approved till FY 2016-17) due to 400 kV Vikhroli, cost overrun, and unutilised Bays has been computed at Rs.12.38 Crore.

3.3.70 The DPR schemes against which disallowance is to be adjusted against past capitalisation allowed till FY 2016-17, are shown in the Table below:

Table 21: Disallowance of Capitalisation against the past approved Capitalisation (Rs. Crore)

Sr. No.	DPR scheme	Total disallowance adjusted against the past approved Capitalisation till FY 2016-17	Remark
1	400 kV Vikhroli	1.18	Disallowance of past capitalisation due to deemed closure of project
2	Installation of 220 kV GIS Mahalaxmi, installation of additional ICT No.5 and 33 kV GIS at Mahalaxmi substation	3.91	Disallowance of past capitalisation due to Cost overrun
3	Construction of New 220kV bays (3 nos.) for Trombay Dharavi Salsette Saki lines	7.29	Disallowance of past capitalisation due to unutilised AIS Bays
	Total Disallowance	**12.38**	

3.3.71 The Commission has computed the impact of disallowance of capitalisation of Rs.12.38 Crore on Depreciation, Interest on loan and Return on Equity along with corresponding holding cost, as Rs. 5.54 Crore for the period from FY 2013-14 to FY 2016-17, as summarised in the Table below:

Table 22: Impact of disallowance of past capitalisation due to 400 kV Vikhroli, cost overrun and unutilised Bays (Rs. Crore)

Particulars	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	Total
Depreciation Deduction	0.03	0.17	0.45	0.65					1.30
Interest Deduction	0.04	0.23	0.47	0.60					1.34
RoE Deduction	0.03	0.15	0.32	0.58					1.07
Total Deduction	**0.10**	**0.55**	**1.23**	**1.83**					**3.71**
Carrying/(Holding) Cost for the Year	(0.01)	(0.06)	(0.18)	(0.30)	(0.38)	(0.37)	(0.35)	(0.18)	(1.82)
Total Impact of disallowance of the past capitalisation due to 400 kV Vikhroli, cost overrun & unutilised Bays									**5.54**

3.3.72 Accordingly, the Commission has deducted the above amount from the ARR of FY 2020-21, as discussed in the next Chapter.

e) Non-DPR schemes

3.3.73 Non-DPR capitalisation for each year from FY 2017-18 to FY 2019-20 is considered as submitted by TPC-T. Non-DPR to DPR ratio for FY 2017-18 works out to be higher than the limit of 20%. However, Non-DPR to DPR ratio for the total capitalisation of DPR and Non-DPR schemes for the Control Period is within the 20% limit. Therefore, the Commission has approved Non-DPR schemes for FY 2017-18 as submitted by TPC-T. Non-DPR to DPR ratio for FY 2018-19 and FY 2019-20 are lower than 20%.

3.3.74 In view of the above, the summary of the capitalisation considered by the Commission in this Order is as shown in the Table below:

Table 23: Summary of Capitalisation approved by the Commission (Rs. Crore)

Particulars	3rd MYT Control Period		
	FY 2017-18	**FY 2018-19**	**FY 2019-20**
Capitalisation claimed by TPC-T			
DPR Capitalisation	178.99	318.70	589.63
In-principle Approved DPR	*178.99*	*318.70*	*589.63*
DPR submitted to the Commission; yet to be approved / *DPR yet to be submitted to the Commission*	*0.00*	*0.00*	*0.00*
Non-DPR Capitalisation	37.08	29.69	33.46
Total Capitalisation	**216.07**	**348.40**	**623.09**
Non-DPR to DPR Cap.	20.72%	9.32%	5.67%
Capitalisation approved by the Commission			

Particulars	**3rd MYT Control Period**		
	FY 2017-18	**FY 2018-19**	**FY 2019-20**
DPR Capitalisation	158.30	303.77	589.61
Non-DPR Capitalisation	37.08	29.69	33.46
Total Capitalisation	**195.37**	**333.47**	**623.07**
Non-DPR to DPR Cap.	23.42%	9.78%	5.67%

3.3.75 The list of DPR schemes against which capitalisation has been considered by the Commission for analysis and approval is at **Appendix – 6**.

3.3.76 The capitalisation approved by the Commission for FY 2017-18 and FY 2018-19 after prudence check is given in the Table below:

Table 24: Capitalisation approved for FY 2017-18 and FY 2018-19 (Rs. Crore)

Particulars	**FY 2017-18**			**FY 2018-19**		
	MTR Approved	**TPC-T Petition**	**Approved after Truing Up**	**MTR Approved**	**TPC-T Petition**	**Approved after Truing Up**
DPR Capitalisation	134.36	178.99	158.30	334.21	318.70	303.77
Non-DPR Capitalisation	26.87	37.08	37.08	37.26	29.69	29.69
Total Capitalisation	**161.23**	**216.07**	**195.37**	**371.47**	**348.40**	**333.47**

3.4 Depreciation

TPC-T's Submission

3.4.1 Depreciation has been computed by applying the rates as specified in the Deprecation Schedule under Regulation 27.1 (b) of the MYT Regulations, 2015. The Depreciation for FY 2017-18 and FY 2018-19 works out to Rs. 131.08 Crore and Rs. 138.27 Crore, respectively.

Commission's Analysis and Ruling

3.4.2 As discussed in earlier section, the Commission has disallowed the past capitalisation Rs.12.38 Crore from capitalisation approved till FY 2016-17 due to 400 kV Vikhroli, cost overrun and unutilised AIS Bays. In view of this, the Commission has revised the closing GFA, closing loan and closing equity approved for FY 2016-17 in the MTR Order in Case No. 22 of 2017 as shown in the Table below:

Table 25: Revised closing GFA, Equity and Loan for FY 2016-17 (Rs. Crore)

S. No.	**Particulars**	**Amount**
1	**Closing GFA for FY 2016-17**	

S. No.	Particulars	Amount
	Closing GFA approved in MTR Order	3146.56
	Reduction in GFA due to disallowance in capitalisation	12.38
	Revised Closing GFA	3134.18
2	**Closing Equity for FY 2016-17**	
	Closing Equity approved in MTR Order	1033.40
	Reduction in Equity due to disallowance in capitalisation	1.07
	Revised Closing Equity	1032.33
3	**Closing Loan for FY 2016-17**	
	Closing Loan approved in MTR Order	990.29
	Revised Closing Loan	982.92

3.4.3 The Commission has considered the revised closing GFA of FY 2016-17, as opening GFA of FY 2017-18. Capitalisation approved for FY 2017-18 in this Order, is added to above opening GFA to arrive at closing GFA of FY 2017-18. Further, closing GFA of FY 2017-18 is considered as opening GFA of FY 2018-19 and capitalisation approved for FY 2018-19 in this Order is added to arrive at closing GFA of FY 2018-19.

3.4.4 TPC-T has considered retirement of assets of Rs. 15.25 Crore and Rs.14.30 Crore during FY 2017-18 and FY 2018-19, respectively. TPC-T clarified that assets are retired after completion of useful life and technical obsolescence, etc. Closing GFA and average GFA for FY 2017-18 and FY 2018-19 are adjusted accordingly.

3.4.5 Regulation 27 of the MYT Regulations, 2015 specifies that the Transmission Licensee shall be permitted to recover depreciation on the value of fixed assets, and that it shall be computed annually based on the straight-line method at the specified rates.

3.4.6 The Commission has considered the actual depreciation rate for the year as submitted by TPC-T in the Truing up of FY 2017-18 and FY 2018-19. Such depreciation rates are applied on the average balance of GFA for FY 2017-18 and FY 2018-19 approved by the Commission to arrive at the depreciation expenses for FY 2017-18 and FY 2018-19.

3.4.7 The depreciation expenses claimed by TPC-T and approved by the Commission for FY 2017-18 and FY 2018-19 are summarised in the Table below:

Table 26: Depreciation approved for FY 2017-18 and FY 2018-19 (Rs. Crore)

Particulars	FY 2017-18			FY 2018-19		
	MTR Approved	TPC-T Petition	Approved after Truing Up	MTR Approved	TPC-T Petition	Approved after Truing Up
Opening GFA	3146.56	3146.56	3134.18	3307.79	3347.37	3314.30
Addition in GFA	161.23	216.07	195.37	371.47	348.40	333.47
Retirement of GFA	0.00	(15.25)	(15.25)	0.00	(14.30)	(14.30)
Closing GFA	3307.79	3347.37	3314.30	3679.26	3681.46	3633.46
Depreciation Rate	4.26%	4.04%	4.04%	4.26%	3.93%	3.93%
Depreciation	**137.55**	**131.08**	**130.11**	**148.90**	**138.27**	**136.94**

3.5 Interest on loan capital

TPC-T's Submission

3.5.1 TPC-T submitted that for FY 2017-18, the opening loan was Rs. 990.29 Crore, and addition during the year was Rs. 151.25 Crore. Amount repaid during the year was Rs. 131.08 Crore. The overall rate of interest is 9.26% and the interest cost is Rs. 92.59 Crore.

3.5.2 For FY 2018-19, the opening loan was Rs. 1010.46 Crore, and addition during the year was Rs. 243.88 Crore. Amount repaid during the year was Rs. 138.27 Crore. The overall rate of interest is 8.64% and the interest cost is Rs. 91.85 Crore.

Commission's Analysis and Ruling

3.5.3 The Commission has revised the closing balance of net normative loan of FY 2016-17 on account of disallowance of capitalisation as discussed in earlier section. The revised value has been considered as the opening balance of net normative loan for FY 2017-18. The closing balance of net normative loan for FY 2017-18 has been considered as opening balance of net normative loan for FY 2018-19.

3.5.4 For computing the addition of normative loan, the normative debt: equity ratio of 70:30, as specified in the MYT Regulations, 2015, has been considered on addition to GFA in FY 2017-18 and FY 2018-19. The normative loan repayment has been considered equal to the depreciation approved for the year.

3.5.5 The Commission reviewed the documentary evidence submitted by TPC-T for verifying computation of weighted average interest rate on loan based on the actual loan drawals and letters from banks indicating the loan drawals and interest rates.

3.5.6 The interest on loan had been calculated on the average normative loan for the year by applying the weighted average rate of interest of 9.26% for FY 2017-18 and 8.64% for FY 2018-19, in accordance with Regulation 29.5 of the MYT Regulations, 2015.

3.5.7 The summary of Interest expenses on Long-Term Loan as submitted by TPC-T and as approved by the Commission after Truing up for FY 2017-18 and FY 2018-19 is shown in the Table below:

Table 27: Interest on Loan approved for FY 2017-18 and FY 2018-19 (Rs. Crore)

Particulars	FY 2017-18			FY 2018-19		
	MTR Approved	TPC-T Petition	Approved after Truing Up	MTR Approved	TPC-T Petition	Approved after Truing Up
Opening loan	990.29	990.29	982.92	965.60	1010.46	989.58
Addition during the year	112.86	151.25	136.76	260.03	243.88	233.43
Repayment	137.55	131.08	130.11	148.90	138.27	136.94
Closing balance of loans	965.60	1010.46	989.58	1076.73	1116.07	1086.06
Overall Interest Rate	9.47%	9.26%	9.26%	9.47%	8.64%	8.64%
Interest Cost	**92.63**	**92.59**	**91.29**	**96.72**	**91.85**	**89.65**

3.6 Refinancing and Other Finance Charges

TPC-T's Submission

3.6.1 TPC-T submitted that during FY 2016-17, it had refinanced the IDBI loan of Rs. 400 Crore and IDBI loan of Rs. 300 Crore with interest rate of 11%, by SBI loan of 9.50% to reduce the interest burden on the consumers. The benefit of reduced rates has already been passed on in the truing up of FY 2016-17. However, TPC-T has not claimed its share of the benefit during Truing up of FY 2016-17, as the interest rate was computed based on the interest rate during the year.

3.6.2 TPC-T submitted that it has computed the impact of refinancing of loan on annuity basis. TPC-T claimed refinancing and other Finance Charges of Rs. 2.22 Crore for FY 2017-18, which includes Rs. 2.04 Crore towards cost of refinancing and benefits of refinancing expenses and Rs. 0.18 Crore towards other finance charges. The other Finance Charges are Rs. 0.06 Crore for FY 2018-19.

Commission's Analysis and Ruling

3.6.3 The Commission sought justification from TPC-T for the delay in seeking pass through of the impact of loan refinancing done in FY 2016-17, as the final true-up of FY 2016-17 has already been done in the MTR Order. TPC-T replied that it had not considered either the benefit or the cost of refinancing during Truing up of FY 2016-17. Therefore, TPC-T requested the Commission to approve the same as the benefit of refinancing has already been passed on to the beneficiaries from FY 2016-17 and is going to continue till the closure of the respective loans.

3.6.4 TPC-T has submitted the computation of the Net Present Value (NPV) of savings due to re-financing of loans in the Petition. In response to the Commission's query, TPC-T clarified that the Discount Rate of 11.44 % has been considered for computing NPV of the savings due to re-financing. TPC-T also clarified that the cost of refinancing considered as 0.2% of opening loan amount is as per Terms and Conditions mentioned in the Sanction Letter of lender, i.e., SBI.

3.6.5 The Commission is of the view that TPC-T should have claimed the share of benefit of refinancing in the true-up of FY 2016-17. Ideally, the true-up of FY 2016-17 should not be re-opened. However, as the benefit of refinancing has already been passed through, it is appropriate to allow TPC-T its share of the refinancing benefit, even though TPC-T has claimed the benefit in a delayed manner.

3.6.6 The Commission has computed the benefit of Refinancing to TPC-T on annuity basis, considering the discount rate equal to the revised interest rate of 9.5%. Further, the loan repayment has been considered equal to the depreciation, in accordance with regulatory principles. As there is a net benefit of the refinancing transaction, TPC-T has been allowed a share of 1/3rd of the benefit. The Commission has also considered the re-financing charges of Rs. 2.26 Crore. Further, other finance charges of Rs.0.18 Crore and Rs. 0.06 Crore claimed by TPC-T for FY 2017-18 and FY 2018-19, respectively, are reflected in the Audited Accounts for respective years.

3.6.7 In view of the above, the Commission approves the Refinancing and Other Finance Charges for FY 2017-18 and FY 2018-19 as shown below:

Table 28: Other Finance Charges approved for FY 2017-18 and FY 2018-19 (Rs. Crore)

Particulars	FY 2017-18			FY 2018-19		
	MTR Approved	TPC-T Petition	Approved after Truing Up	MTR Approved	TPC-T Petition	Approved after Truing Up
Other Finance Charges	0.00	2.22	2.44	0.00	0.06	0.06

3.7 Interest on Working Capital (IoWC)

TPC-T's Submission

3.7.1 TPC-T submitted that it has calculated the IoWC based on the elements specified in the MYT Regulations, 2015 and the amendment notified thereafter. The rate of interest considered for FY 2017-18 is 10.18% and the normative IoWC works out to Rs. 13.22 Crore. Further, for FY 2018-19 the interest rate works out to be 9.89% and the normative IoWC works out to Rs. 12.48 Crore.

Commission's Analysis and Ruling

3.7.2 For computing the normative working capital requirement, the Commission has considered one-twelfth (1/12) of the amount of O&M Expenses based on the normative O&M Expenses of FY 2017-18 and FY 2018-19 approved in this Order. One and half months of revenue received is also considered as approved in the InSTS Tariff Order applicable for the respective period. Rebate of Rs. 2.88 Crore and Rs.1.21 Crore provided by STU for FY 2017-18 and FY 2018-19, respectively, has been deducted from the revenue considered as per the InSTS Tariff Order applicable for the respective period.

3.7.3 Further, maintenance spares of one per cent of the opening balance of GFA for FY 2017-18 and FY 2018-19 as approved in the final True up of 2017-18 and FY 2018-19 in this Order are considered.

3.7.4 The Commission has computed the normative working capital requirement in accordance with the MYT Regulations, 2015, and the MERC (MYT) (First Amendment) Regulations, 2017 notified on 29 November, 2017. In the amendment, the Commission has revised the formulation for Base Rate, and linked the same to the one-year Marginal Cost of Funds-based Lending Rate (MCLR) of State Bank of India (SBI).

3.7.5 For computation of IoWC, the Commission has considered the rate of interest equal to the weighted average one-year MCLR during the year plus 150 basis points, from FY 2017-18 onwards. The rate of IoWC has been considered as 10.18% and 9.89% for FY 2017-18 and 2018-19, respectively.

3.7.6 The summary of the IoWC approved by the Commission after Truing up for FY 2017-18 and FY 2018-19 is shown in the Table below:

Table 29: IoWC approved for FY 2017-18 and FY 2018-19 (Rs. Crore)

Particulars	FY 2017-18			FY 2018-19		
	MTR Approved	TPC-T Petition	Approved after Truing Up	MTR Approved	TPC-T Petition	Approved after Truing Up
O&M expenses for one month	15.47	15.72	15.65	16.76	17.10	16.85
Maintenance spares @ 1% of Opening GFA	31.47	31.47	31.34	33.08	33.47	33.14
One and a half month equivalent of the expected revenue from Transmission Charges	82.71	82.71	82.35	66.11	75.60	75.45
Total Working Capital	**129.64**	**129.89**	**129.34**	**115.94**	**126.17**	**125.44**
Interest Rate (%)	10.20%	10.18%	10.18%	9.45%	9.89%	9.89%
Interest on Working Capital	**13.22**	**13.22**	**13.17**	**10.96**	**12.48**	**12.41**

3.8 Return on Equity (RoE)

TPC-T's Submission

3.8.1 TPC-T submitted that it has calculated the RoE on the basis of 70:30 Debt Equity ratio. TPC-T has considered the RoE as 15.5% as per MYT Regulations, 2015. The RoE is calculated to be Rs. 164.85 Crore and Rs. 177.28 Crore for FY 2017-18 and FY 2018-19, respectively.

Commission's Analysis and Ruling

3.8.2 The Commission has computed RoE for FY 2017-18 and FY 2018-19 in accordance with Regulation 28 of the MYT Regulations, 2015. RoE has been computed at 15.50% on the opening equity for the respective year and 50% of the asset addition during the year, by considering the normative equity as 30% of the capitalisation.

3.8.3 The Commission has revised the closing balance of equity of FY 2016-17 approved in the MTR Order on account of disallowance of capitalisation as discussed in earlier section. The opening balance of regulatory equity for FY 2017-18 has been considered equal to the revised closing equity for FY 2016-17. Similarly, closing balance of regulatory equity considered for FY 2017-18 has been considered as opening balance of regulatory equity for FY 2018-19. The Commission has considered reduction in equity at 30% of asset value of retired/de-capitalised assets, as detailed earlier for FY 2017-18 and FY 2018-19.

3.8.4 The RoE approved by the Commission after Truing up for FY 2017-18 and FY 2018-

19 is summarized in the following Table:

Table 30: RoE approved for FY 2017-18 and FY 2018-19 (Rs. Crore)

Particulars	FY 2017-18			FY 2018-19		
	MTR Order	TPC-T Petition	Approved after Truing Up	MTR Order	TPC-T Petition	Approved after Truing Up
Regulatory equity at the beginning of the year	1033.40	1033.40	1032.33	1081.77	1093.64	1086.37
Capitalisation during the Year	161.23	216.06	195.37	371.47	348.40	333.47
Equity portion of capitalisation during the year	48.37	64.82	58.61	111.44	104.52	100.04
Less: Equity Portion of Asset De-capitalised / retired During the Year	0.00	(4.58)	(4.58)	0.00	(4.29)	(4.29)
Regulatory equity at the end of the year	1081.77	1093.64	1086.37	1193.21	1193.87	1182.12
Return on Regulatory Equity @15.5% at the beginning of the year	160.18	160.18	160.01	167.67	169.51	168.39
Return on Regulatory Equity @ 50% of capitalisation during the year	3.75	4.67	4.19	8.64	7.77	7.42
Total Return on Equity	**163.93**	**164.85**	**164.20**	**176.31**	**177.28**	**175.81**

3.9 Income Tax (IT)

TPC-T's Submission

3.9.1 For arriving at the IT payable for the regulated business, TPC-T has computed the IT based on Regulatory Profit Before Tax (PBT) for Transmission Business. As per IT Rules, the higher of Corporate Tax/Minimum Alternate Tax (MAT) would be payable for each Business Unit. TPC-T submitted that as per Regulation 34 of MYT Regulations, 2015, IT is calculated as Rs. 55.36 Crore and Rs. 33.24 Crore for FY 2017-18 and FY 2018-19, respectively.

3.9.2 TPC-T has claimed 80-IA benefit of Rs. 254.79 Crore towards its Transmission Business in the Return of Income (ROI) for FY 2017-18. Since the submission under Section 80- IA for FY 2018-19 is under process, TPC-T requested the Commission to consider the impact in the future tariff.

3.9.3 TPC has started claiming 80-IA benefits towards Transmission and Distribution Businesses since FY 2013-14 in the Return of Income. The assessment of FY 2013-14 has been completed in December 2017, wherein the IT authority had denied the claim of 80-IA benefits towards Transmission and Distribution Businesses of Tata Power vide its Order dated 29 December 2017.

3.9.4 Further, the Dispute Resolution Panel (DRP) rejected the 80-IA claim of TPC for the Transmission and Distribution business. In this regard, TPC has preferred appeal before the Hon'ble Income Tax Appellate Tribunal (ITAT), Mumbai bench, which is pending for adjudication. TPC-T submitted that it will approach the Commission, once the claim materialises.

3.9.5 TPC-T further submitted that the Commission has wrongly disallowed IT computed by TPC-T in its MTR Petition for FY 2015-16 and FY 2016- 17 in line with the methodology followed by the Commission in its MYT Order in Case No. 22 of 2016 dated 22 June, 2016. TPC-T has challenged this disallowance before the Hon'ble ATE vide Appeal No. 88 of 2019, and the matter is still sub-judice.

3.9.6 In addition to the above, TPC-T has filed an Appeal before the Hon'ble ATE (Appeal No. 246 of 2015) where it has proposed to consider the Revenue Gap/(Surplus) amount approved during the truing up for that year, as it will reflect the actual tax liability on the consumers for that year. The appeal was not granted. Hence, TPC-T has approached the Hon'ble Supreme Court in Appeal Nos. 1356-1358 of 2017 and the matter is sub-judice.

3.9.7 Considering the above, without prejudice to the appeal of TPC-T before the Hon'ble Supreme Court, TPC-T has not considered the Revenue Gap/(Surplus) arrived at for FY 2017-18 and FY 2018-19, while computing the Income Tax for FY 2017-18 and FY 2018-19, respectively. TPC-T submitted that it will approach the Commission for IT re-computation depending on the Judgment of the Hon'ble Supreme Court.

Commission's Analysis and Ruling

3.9.8 The Commission has computed the IT in accordance with Regulation 33.1 of MYT Regulations, 2015 and as per the ATE Judgment dated 2 December 2013 in Case No. 138 and 139 of 2012.

3.9.9 As specified in the Regulations and ATE Judgment, the Commission has arrived at IT payable based on Regulatory PBT, considering the normative cost allowed by the Commission. The tax liability is calculated on the regulatory income and cost within the MYT regime considering the applicable tax depreciation for computation of the IT. Accordingly, the calculation of IT provides the tax payable for the Regulatory business whereby all the items of ARR and Revenue are considered on normative basis for tariff purposes. Also, in line with the MYT Regulations, 2015, efficiency gains and incentive earned are excluded while computing Income Tax on PBT basis.

3.9.10 The summary of the IT approved by the Commission after true-up for FY 2017-18 and FY 2018-19 is shown in the Table below:

Table 31: IT approved for FY 2017-18 and FY 2018-19 (Rs. Crore)

Particulars	Basis	FY 2017-18			FY 2018-19		
		MTR Order	TPC-T Petition	Approved after Truing Up	MTR Order	TPC-T Petition	Approved after Truing Up
Total Revenue less Efficiency Gain and incentive	*a*		657.26	660.53		618.35	614.96
Total Expenses	*b*		397.85	406.59		463.21	460.09
Profit Before Tax	***c=a-b***		**259.41**	**253.95**		**155.13**	**154.87**
Tax Adjustment							
Add							
Depreciation considered in Expenses	*d*		131.08	130.11		138.27	136.94
Other disallowance while computing IT	*e*		12.40	12.40		8.34	8.34
Total Tax Disallowances	***f=d+e***		**143.48**	**142.51**		**146.61**	**145.29**
Less							
Tax Depreciation	*g*		214.47	214.47		229.57	229.57
Other expenses allowed for computing Income Tax	*h*		4.55	4.55		0.21	0.21
Total Tax Allowances	***l=g+h***		**219.01**	**219.01**		**229.78**	**229.78**
Total Taxable Income	***m=c+f-l***		**183.88**	**177.45**		**71.97**	**70. 38**
Tax Payable at Normal rate (Corporate Tax Rate)	***n= m x Tax***		**63.64**	**61.41**		**25.15**	**24.59**
Tax Payable under MAT Rate	***q = MAT working***		**55.36**	**54.20**		**33.24**	**33.37**
Tax Applicable	***r=max (n,q)***		**63.64**	**61.41**		**33.24**	**33.37**
Tax Paid	***s***						
Less: MAT credit of previous years			8.27	7.21		0.00	0.00
Tax Paid to Tax Provision	*t=s/r*						
Tax to be recovered through ARR	***u = t x s***	**21.23**	**55.36**	**54.20**	**21.23**	**33.24**	**33.37**
MAT Computation							
Total Revenue	*a*		657.26	660.53		618.35	614.96
Total Expenses	*b*		397.85	406.59		463.21	460.09
Profit Before Tax	***c=a-b***		**259.41**	**253.95**		**155.13**	**154.87**
Add: Disallowances under Income Tax							
Disallowances under Income Tax (U/s 14 A, provision for doubtful debt)			0.00	0.00		(0.86)	0.00
Interest under Income tax Act							
Sub total	***d***		**0.00**	**0.00**		**(0.86)**	**0.00**
Less: Deductions under Income Tax							
Sub total	***e***		**0.00**	**0.00**		**0.00**	**0.00**
Book Profit	***k=c+d-e***		**259.41**	**253.95**		**154.27**	**154.87**
Tax Payable under MAT Rate		**21.23**	**55.36**	**54.20**	**21.23**	**33.24**	**33.37**

3.10 Contribution to Contingency Reserves

TPC-T's Submission

3.10.1 TPC-T submitted that as per Regulation 34.1 of MYT Regulations, 2015 the Contingency Reserve at 0.25% of opening GFA works out to Rs. 7.87 Crore and Rs. 8.37 Crore for FY 2017-18 and FY 2018-19, respectively.

Commission's Analysis and Ruling

3.10.2 The Commission has verified that the accumulated Contingency Reserves at the end of FY 2016-17 does not exceed 5% of the original cost of fixed assets as specified in Regulation 34.1 of MYT Regulations, 2015.

3.10.3 The Commission has computed the contribution to Contingency Reserves for FY 2017-18 and FY 2018-19 equivalent to 0.25% of opening GFA of FY 2017-18 and FY 2018-19, respectively, while ensuring that the cumulative balance of Contingency Reserves does not exceed 5% of the original cost of fixed assets for the respective year.

3.10.4 Further, the Commission sought details of investment of contingency reserve in specified securities for FY 2017-18 and FY 2018-19 along with documentary evidence. TPC-T submitted that it has invested the amount allowed towards contribution to contingency reserves in Government Securities combined for TPC-T and TPC-D businesses. This amount is calculated as Rs.13.69 Crore for FY 2017-18 and Rs. 14.77 Crore for FY 2018-19.

3.10.5 TPC-T submitted that it has invested an amount of Rs. 14.33 Crore on 27 September, 2018 for FY 2017-18 in Government Securities. Further, TPC-T has invested an amount of Rs. 15.57 Crore on 27 September, 2019 for FY 2018-19 in Government Securities. TPC-T also provided the documentary evidence for the same for FY 2017-18 and FY 2018-19.

3.10.6 Based on the above, the Commission approves the Contribution to Contingency Reserve after true-up for FY 2017-18 and FY 2018-19, as shown in the Table below:

Table 32: Contribution to Contingency Reserves approved for FY 2017-18 and FY 2018-19 (Rs. Crore)

Particulars	FY 2017-18			FY 2018-19		
	MTR Order	TPC-T Petition	Approved after Truing Up	MTR Order	TPC-T Petition	Approved after Truing Up
Opening Balance of Contingency Reserves	81.71	81.71	81.71	89.57	89.58	89.55
Opening Gross Fixed Assets	3146.56	3146.56	3134.18	3307.79	3347.37	3314.30

Particulars	FY 2017-18			FY 2018-19		
	MTR Order	TPC-T Petition	Approved after Truing Up	MTR Order	TPC-T Petition	Approved after Truing Up
Opening Balance of Contingency Reserves as % of Opening GFA	2.60%	2.60%	2.61%	2.71%	2.68%	2.70%
Contribution to Contingency Reserves during the year	**7.87**	**7.87**	**7.84**	**8.27**	**8.37**	**8.29**
Closing Balance of Contingency Reserves	89.58	89.58	89.55	97.84	97.94	97.83
Closing Balance of Contingency Reserves as % of Opening GFA	2.85%	2.85%	2.86%	2.96%	2.93%	2.95%

3.11 Non-Tariff Income (NTI)

TPC-T's Submission

3.11.1 TPC-T submitted that the actual NTI in FY 2017-18 was Rs. 14.58 Crore, of which Rs. 7.75 Crore is from recurring items and Rs. 7.04 Crore is from non-recurring items. The actual NTI in FY 2018-19 is Rs. 12.27 crore, of which Rs. 9.52 Crore is from recurring items and Rs. 2.75 Crore is from non-recurring items.

Commission's Analysis and Ruling

3.11.2 TPC-T has submitted the details of NTI under various heads like rents, interest on Contingency Reserve investments, interest on staff loans and advances, sale of scrap and stores, income on services rendered, liquidated damages, VAT Refund, etc.

3.11.3 The Commission observes that the NTI amounts considered in the Petition formats were not matching with the figures in the Audited Accounts for FY 2017-18 and FY 2018-19. TPC-T clarified that it has not considered income from Amortisation of Service Line Contributions of Rs. 3.65 Crore and Rs.2.43 Crore in NTI of FY 2017-18 and FY 2018-19, respectively. **However, the Commission has considered the income from Amortisation of Service Line Contributions in the NTI.**

3.11.4 The summary of the NTI approved by the Commission after Truing up for FY 2017-18 and FY 2018-19 is shown in the Table below:

Table 33: NTI approved for FY 2017-18 and FY 2018-19 (Rs. Crore)

Particulars	FY 2017-18			FY 2018-19		
	MTR Order	TPC-T Petition	Approved after Truing Up	MTR Order	TPC-T Petition	Approved after Truing Up
Income from rent of land or buildings	2.61	3.08	3.08	4.61	2.90	2.90
Income from sale of scrap	3.66	4.96	4.96	3.84	2.42	2.42

Particulars	FY 2017-18			FY 2018-19		
	MTR Order	TPC-T Petition	Approved after Truing Up	MTR Order	TPC-T Petition	Approved after Truing Up
Other/Miscellaneous receipts	0.25	1.24	1.24	0.31	0.19	0.19
Interest on Contingency Reserve Investments	4.30	4.39	4.39	10.43	6.57	6.57
Interest on staff loans & Advances	0.11	0.21	0.21	0.12	0.08	0.08
Income on Services rendered	2.45	0.08	0.08	0.07	0.05	0.05
Liquidated Damages	1.26	0.35	0.35	0.10	0.07	0.07
Transfer of Service Line Contribution	-	-	3.65	-	-	2.43
Claim received for Fire at Carnac Dec 2015	-	0.28	0.28	-	-	-
VAT Refund	3.47	(0.00)	(0.00)	-	-	-
DPC Income	-	-	-	-	-	-
Total	**18.11**	**14.58**	**18.23**	**19.49**	**12.27**	**14.70**

3.12 Incentive on Transmission Availability

TPC-T's Submission

3.12.1 The Availability of the Transmission System of TPC-T as certified by Maharashtra State Load Despatch Centre (MSLDC) is 99.48% and 99.50% for FY 2017-18 and FY 2018-19, respectively.

3.12.2 In accordance with Regulation 57.2 of the MYT Regulations, 2015, TPC-T is entitled to an incentive of Rs. 2.97 Crore and Rs. 3.37 Crore for FY 2017-18 and FY 2018-19, respectively, on achieving annual Availability beyond the target Availability.

Commission's Analysis and Ruling

3.12.3 The Commission has analysed the submission of TPC-T and also verified the Transmission System availability of 99.48% and 99.50% for FY 2017-18 and FY 2018-19, respectively, based on the certification provided by MSLDC. In line with Regulation 57.1 (b) of the MYT Regulations, **2015, the Commission has computed the incentive for achieving Transmission Availability more than 99%.** Further, for computing the incentive, the Annual Transmission charges are taken inclusive of Income Tax as per Regulation 54.10 of MYT Regulations, 2015.

3.12.4 Accordingly, the incentive on Transmission System Availability approved by the Commission after true-up for FY 2017-18 and FY 2018-19 is provided in the Table below:

Table 34: Transmission Availability Incentive approved for FY 2017-18 and FY 2018-19 (Rs. Crore)

Particulars	FY 2017-18			FY 2018-19		
	MTR Order	TPC-T Petition	Approved after Truing Up	MTR Order	TPC-T Petition	Approved after Truing Up
Annual Transmission Charges		612.88	605.66		668.05	657.89
Annual Availability achieved		99.48%	99.48%		99.50%	99.50%
Target Availability		99.00%	99.00%		99.00%	99.00%
Incentive	**NA**	**2.97**	**2.94**	**NA**	**3.37**	**3.32**

3.13 Sharing of Gains and (Losses) on O&M expenses

TPC-T's Submission

3.13.1 TPC-T has categorized various heads of expenditure as controllable and uncontrollable, and computed the Efficiency Gains/Losses for the controllable expenditure and proposed sharing of the same with the Distribution Licensees/ users of Transmission System.

3.13.2 TPC-T has considered the actual O&M expenses as Rs. 150.87 Crore for FY 2017-18 as compared to the approved expenditure of Rs. 188.59 Crore, and has considered a net Efficiency Gain of Rs. 25.14 Crore in O&M expenses. For FY 2018-19, TPC-T has considered the actual O&M expenses as Rs. 212.18 Crore as compared to the approved expenditure of Rs. 205.20 Crore, and has considered a net Efficiency loss of Rs. 2.33 Crore in O&M expenses.

3.13.3 As regards normative O&M expenditure, TPC-T submitted that it has considered the opening ckt. km. for Transmission Lines and opening no. of Bays according to the Order in Case No. 137 of 2016 dated 18 July 2019 in the matter of issue of amendment of its Transmission Licence. TPC-T submitted that during FY 2017-18, the following Bays and ckt. km were put to use:

- Overall 7 nos. Transmission Bays have been capitalised and commissioned in the category "Between 66 kV and 400 kV" at Versova Receiving Station;
- An additional 9 nos. Transmission Bays have been capitalised and commissioned in the category "< 66 kV" at Versova Receiving Station. All these bays have been commissioned and taken into service, i.e., "put to use";
- 9 nos. Transmission Bays have been put to use (which were earlier disallowed for O&M entitlement in the MTR Order in Case No. 204 of 2017 as not put to use) in the category "< 66 kV" at Mahalaxmi Receiving Station;
- In the case of Transmission Lines, no ckt. km have been added during FY 2017-18. Further, the opening as well as closing ckt. km. for Transmission Lines have

been considered as approved in the Order in Case No. 137 of 2016 in the first Transmission Licence Amendment.

3.13.4 TPC-T submitted that during FY 2018-19, the following Bays and ckt. km were put to use:

- Overall 10 nos. Transmission Bays have been capitalised and commissioned in the category "Between 66 kV and 400 kV" at Kurla (7 bays) and Saki (additional 3 bays) Receiving Stations;
- Further, 21 nos. Transmission Bays have been capitalised and commissioned in the category "< 66 kV" at Kurla (19 bays) and Mahalaxmi (2 bay) Receiving Stations;
- Overall 10 nos. Transmission Bays have been put to use (which were earlier disallowed for O&M entitlement in MYT Order in Case No. 22 of 2016 as not put to use) in the category "Between 66 kV and 400 kV" at Bhokarpada (earlier IXORA) (8 bays) and Dharavi (2 bays) Receiving Stations;
- Overall 34 nos. Transmission Bays have been put to use (which were earlier disallowed for O&M entitlement in MYT Order in Case No. 22 of 2016 as not put to use) in the category "< 66 kV" at Bhokarpada (earlier IXORA) (15 bays), Kurla (10 bays), Parel (3 bays) and Saki (6 bays) Receiving Stations;
- Overall 8 nos. Transmission Bays have been decommissioned in the category "< 66 kV" at Parel (4 bays), Salsette (2 bays), and Carnac (2 bays) Receiving Stations;
- In the case of Transmission Lines, 15.10 ckt. km. have been added as per DPR of "Power Supply to HDIL Kurla" during FY 2018-19;
- The 110 kV Parel-Carnac Transmission Line (5.41 km) from Parel Receiving Station to Carnac Receiving Station has been decommissioned. Thus, effective addition in FY 2018-19 is 9.69 ckt. km.

3.13.5 Details of the bays (including those capitalised in previous years but put to use in FY 2017-18 and FY 2018-19) and circuit kilometre of transmission lines considered by TPC-T for arriving at the normative O&M expenditure for FY 2017-18 and FY 2018-19, are shown in the Table below:

Table 35: Bays and Transmission Lines for FY 2017-18 and FY 2018-19, as submitted by TPC-T

Sr. No	Category	FY 2017-18	FY 2018-19
Bays (between 66 kV and 400 kV)			
1	Opening	341	348
2	Addition	7	20
3	Closing	348	368
4	Average	345	358

Sr. No	Category	FY 2017-18	FY 2018-19
Bays (<66 kV)			
5	Opening	886	904
6	Addition	18	47
7	Closing	904	951
8	Average	895	928
Lines ckt. km (between 66 kV and 400 kV)			
9	Opening	1190.10	1190.10
10	Addition	0	9.69
11	Closing	1190.10	1199.79
12	Average	1190.10	1194.95

3.13.6 TPC-T has calculated the Normative O&M Expenses as shown in the following Table:

Table 36: Normative O&M Expenses calculated by TPC-T for FY 2017-18 and FY 2018-19 (Rs. Crore)

Sr. No	Average No. of Bays	FY 2017-18			FY 2018-19		
		Norm (Rs. Lakh/ Bay)	No. of Bays	Normative O&M (Rs. Crore)	Norm (Rs. Lakh/ Bay)	No. of Bays	Normative O&M (Rs. Crore)
1	Between 66 kV and 400 kV	32.68	345	112.58	34.31	358	122.83
2	Less than 66 kV	6.83	895	61.13	7.18	928	66.59
Sr. No	**Average Length of Lines**	**Norm (Rs. Lakh/ ckt. km.)**	**No of ckt. km.**	**Normative O&M (Rs. Crore)**	**Norm (Rs. Lakh/ ckt. km.)**	**No of ckt. km.**	**Normative O&M (Rs. Crore)**
1	Between 66 kV and 400 kV	1.25	1190.10	14.88	1.32	1194.95	15.77
Normative O&M (Rs. Crore)		**188.59**			**205.20**		

3.13.7 TPC-T submitted that while computing the normative O&M expenses, it has considered only those Transmission Lines and Bays which have been 'put to use' in FY 2017-18 and FY 2018-19. TPC-T has mentioned that the above submission is without prejudice to their submission made in the Appeal against the issue of 'put to use'.

Commission's Analysis and Ruling

3.13.8 Regulation 58.3 of the MYT Regulations, 2015 specifies the norms for O&M expenses on voltage basis, considering length of the Transmission Lines in ckt. km and number of Bays in the Sub-stations of the Transmission Licensee.

3.13.9 The Commission notes that TPC-T has considered the opening ckt. km. of Transmission Lines and opening no. of Bays according to Order in Case No. 137 of 2016 and not as per the MTR Order in Case No. 204 of 2017. Since the Order in Case No. 137 of 2016 in first Transmission Licence Amendment provided the revised details for Transmission Lines and Bays, the Commission has also considered the opening ckt. km. for Transmission Lines and opening no. of Bays according to Order in Case No. 137 of 2016.

3.13.10 The Commission sought the details from TPC-T on station-wise, voltage-wise bays utilised with loading details for November and December 2019, Bays allotted by STU to utility/individual consumers but not utilised (zero loading), unutilised Bays and prospective plan for utilisation of Bays.

3.13.11 TPC-T, in its reply, revised the information on number of Bays for FY 2017-18 and FY 2018-19, as under:

Table 37: Revised Bays and Transmission Lines for FY 2017-18 and FY 2018-19

Sr. No	Category	FY 2017-18	FY 2018-19
Bays (between 66 kV and 400 kV)			
1	Opening	341	346
2	Addition	5	18
3	Closing	346	364
4	Average	344	355
Bays (<66 kV)			
5	Opening	886	906
6	Addition	20	47
7	Closing	906	953
8	Average	896	930

3.13.12 From the information provided by TPC-T, it was observed that there are 10 Nos. of Bays in FY 2017-18 and 33 Nos. of Bays in FY 2018-19, which are allocated by STU to the Distribution Licensees but not actually put to use. Considering the allocation by STU, TPC-T has considered these bays as put to use and claimed against these bays. Following are the details of such bays out of total bays submitted as put to use by TPC-T:

Table 38: Bays considered as put to use due to allocation to Distribution Licensees

Particulars	FY 2017-18	FY 2018-19
Bays utilised and in service	1242	1284
Allocated to Distribution Licensees	10	33
Closing of Bays considered by TPC-T	**1252**	**1317**

3.13.13TPC-T has considered 10 no. of 33 kV Bays as utilised Bays in FY 2017-18, which were allotted to Distribution Utilities but were not utilised. Similarly, for FY 2018-19, total 33 no. of Bays were considered as utilised Bays, which were allotted to Distribution Utilities but were not utilised. These 33 no. of Bays comprise 4 no. of 110 kV Bays and 29 no. of 33 kV Bays. **The list of 33 No. of Bays which were allotted to Distribution Utilities is provided in Appendix-4.**

3.13.14The Commission, in the MTR Order in Case No. 2014 of 2017, has not considered the Bays which are not 'put to use' for normative O&M expenses. The relevant para of this Order is reproduced below:

"4.14.13 The Commission notes that the basic purpose of construction of new substations, lines along with the bays is to provide improved services to the consumers in order to avail quality supply with certain redundancy. The construction of transmission assets requires sizeable capital investment which is to be recovered through the consumers through intra-state transmission tariff. In this case, TPC-T has constructed the bays but not actually put to use for benefit of the consumers. Hence, the Commission is of the view that allowing unutilized capitalisation of these assets will not serve any purpose and will increase burden on consumers. Hence, the Commission has not considered 41 nos. of 33 kV bays as 'put to use' as TPC-T has considered them as put to use only due to allocation to Distribution Licensees by STU. TPC-T may claim O&M Expense for these assets when they are actually 'put-to-use', not just 'allocated to the distribution licensees'."

3.13.15In view of the above, the Commission has not considered 10 no. of 33 kV Bays in FY 2017-18. Based on information provided by TPC-T, 6 no. of 33 kV Bays have been deducted from Opening Bays and 4 no. of 33 kV Bays have been deducted from number of Bays added during FY 2017-18. Since these 10 no. of 33 kV Bays are common for FY 2017-18 and FY 2018-19, the remaining 23 no. of Bays out of 33 no. of Bays are not considered in FY 2018-19. The Commission has deducted 4 no. of 110 kV Bays and 19 no. of 33 kV Bays from the number of Bays added during FY 2018-19.

3.13.16Based on the above, the Bays considered by the Commission for computation of normative O&M expenses for FY 2017-18 and FY 2018-19 are shown in the Table below:

Table 39: Bays for Normative O&M expenditure, as approved by the Commission

Category	FY 2017-18		FY 2018-19	
	TPC-T Petition	Approved after Truing Up	TPC-T Petition	Approved after Truing Up
Bays (between 66 kV and 400 kV)				
Opening	341	341	348	346

Category	FY 2017-18		FY 2018-19	
	TPC-T Petition	Approved after Truing Up	TPC-T Petition	Approved after Truing Up
Addition	7	5	20	14
Closing	348	346	368	360
Average	345	344	358	353
Bays (<66 kV)				
Opening	886	880	904	896
Addition	18	16	47	28
Closing	904	896	951	924
Average	895	888	928	910

3.13.17 The Commission obtained the network parameters in terms of Transmission Lines in ckt. km and number of Bays in Sub-stations and verified them based on the capitalisation approved in this Order. Based on the approved bays and ckt. km, the normative O&M expense approved by the Commission after truing up for FY 2017-18 and FY 2018-19 is provided in the Table below:

Table 40: Approved Normative O&M expenses for FY 2017-18 and FY 2018-19 (Rs. Crore)

Particulars	FY 2017-18			FY 2018-19		
	MTR Order	TPC-T Petition	Approved after Truing Up	MTR Order	TPC-T Petition	Approved after Truing Up
Length in Ckt Km (above 66 kV and less than 400 kV)	1188.18	1190.10	1190.10	1219.18	1194.95	1194.95
Applicable O&M cost Norm for Transmission Lines (Rs Lakh / Ckt Km)	1.25	1.25	1.25	1.32	1.32	1.32
Normative O&M expenses for Transmission Lines (Rs. Crore)	**14.85**	**14.88**	**14.88**	**16.09**	**15.77**	**15.77**
Average Number of Bays- above 66 kV and less than 400 kV	342	345	344	354	358	353
Average Number of Bays- 66 kV and below	864	895	888	887	928	910
Applicable O&M Cost Norm for Bays above 66 kV and less than 400 kV (Rs. Lakh / Bay)	32.68	32.68	32.68	34.31	34.31	34.31
Applicable O&M Cost Norm for 66 kV and below Bays (Rs. Lakh / Bay)	6.83	6.83	6.83	7.18	7.18	7.18
Normative O&M Expenses for Bays (Rs. Crore)	**170.78**	**173.71**	**172.91**	**184.97**	**189.42**	**186.45**

Particulars	FY 2017-18			FY 2018-19		
	MTR Order	TPC-T Petition	Approved after Truing Up	MTR Order	TPC-T Petition	Approved after Truing Up
Total Normative O&M expenses	**185.63**	**188.59**	**187.78**	**201.07**	**205.20**	**202.23**

3.14 Sharing of Gains and (Losses) on Interest on Working Capital (IoWC)

TPC-T's Submission

3.14.1 TPC-T submitted that it has availed short-term loans during FY 2017-18 and FY 2018-19 for the purpose of funding the working capital requirement. TPC-T has calculated IoWC on normative basis as Rs. 13.22 Crore and considered actual IoWC as Rs. 11.53 Crore for FY 2017-18. Thus, there is a net efficiency gain due to variation in IoWC equal to Rs. 1.69 Crore. Gain in IoWC to be passed on to the consumers works out to Rs. 1.13 Crore for FY 2017-18.

3.14.2 For FY 2018-19, TPC-T has calculated IoWC on normative basis as Rs. 12.48 Crore and considered actual IoWC as Rs. 14.64 Crore. Thus, there is a net efficiency loss due to variation in IoWC equal to Rs. 2.16 Crore. TPC-T has considered an Efficiency loss of Rs. 0.72 Crore to be passed on as rebate in Tariff to the Distribution Licensees for FY 2018-19.

Commission's Analysis and Ruling

3.14.3 The Commission observes that TPC-T has claimed sharing of Efficiency Gains/Losses between actual and normative IoWC for FY 2017-18 and FY 2018-19. TPC-T has provided documentary evidence along with the Petition to substantiate the claim of actual IoWC, which has been verified by the Commission.

3.14.4 The Commission approves net entitlement of IoWC, after sharing of Efficiency Gains/Losses as Rs. 12.08 Crore and Rs.13.15 Crore, after Truing up of FY 2017-18 and FY 2018-19, respectively.

3.15 Revenue from Transmission Business

TPC-T's Submission

3.15.1 TPC-T submitted that its Revenue for FY 2017-18 was based on the Transmission Order dated 22 July, 2016 in Case No. 91 of 2016 applicable for April, 2017 to March, 2018. The total revenue earned for FY 2017-18 was Rs. 661.68 Crore.

3.15.2 The Revenue for FY 2018-19 was derived from the Transmission Tariff Order dated 22 July, 2016 in Case No. 91 of 2016 for the period from April, 2018 to August, 2018 and Transmission Tariff Order dated 12 September, 2018 in Case No. 265 of 2018 for the period from September, 2018 to March, 2019. The total revenue earned for FY 2018-19 was Rs. 604.80 Crore.

Commission's Analysis and Ruling

3.15.3 The Revenue from Transmission Charges for FY 2017-18 and FY 2018-19 is considered as shown in the Table below:

Table 41: Revenue from Transmission Charges for FY 2017-18 and FY 2018-19 (Rs. Crore)

Order No.	Annual approved revenue (Rs. Crore)	Applicability of Order	Number of months	Revenue in Rs. Crore
FY 2017-18				
Order in Case No. 91 of 2016	661.68	April 2017 to March 2018	12	661.68
			Total	**661.68**
FY 2018-19				
Order in Case No. 91 of 2016	711.09	April, 2018 to August, 2018	5	296.32
Order in Case No. 265 of 2018	528.87	September 2018 to March, 2019	7	308.47
			Total	**604.80**

3.15.4 The summary of revenue from transmission charges approved by the Commission after truing up for FY 2017-18 and FY 2018-19 is shown in the Table below:

Table 42: Approved Revenue from Transmission Charges for FY 2017-18 and FY 2018-19 (Rs. Crore)

Particulars	FY 2017-18			FY 2018-19		
	MTR Order	TPC-T Petition	Approved in this Order	MTR Order	TPC-T Petition	Approved in this Order
Revenue from Transmission Charges	661.68	661.68	661.68	528.87	604.80	604.80

3.16 Summary of Truing up

TPC-T's Submission

3.16.1 TPC-T submitted that the net expenditure for FY 2017-18 is Rs. 632.47 Crore, resulting in a net surplus of Rs. 40.90 Crore. The break-up of expenses for FY 2017-18 along with the adjustments on account of sharing of Efficiency Gains/Losses as submitted by TPC-T is given in the following Table:

Table 43: Summary of Truing up including sharing of Efficiency Gains for FY 2017-18, as submitted by TPC-T (Rs. Crore)

Particulars	MTR Order	Actual	Efficiency Gains / (Loss)	Net Entitlement after sharing of Gains/(Losses)
Operation & Maintenance expenses	185.63	188.59	25.14	163.45
Depreciation expenses	137.55	131.08		131.08
Interest on long-term loan capital	92.63	92.59		92.59
Refinancing & Other finance charges	0.00	2.22		2.22
Interest on working capital	13.22	13.22	1.13	12.09
Income tax	21.23	55.36		55.36
Contribution to contingency reserves	7.87	7.87		7.87
Total revenue expenditure	**458.12**	**490.93**		**464.66**
Return on equity capital	163.93	164.85		164.85
Aggregate Revenue Requirement	**622.05**	**655.77**		**629.50**
Less: Non-Tariff Income	18.11	14.58		14.58
Less: Income from other business				
Aggregate Revenue Requirement from Transmission Tariff	**603.94**	**641.19**		**614.92**
Incentive		2.97		2.97
Revenue from Transmission Tariff				658.79
Revenue from Long-term Transmission System Users (TSUs) including Distribution Licensees	661.68	661.68		661.68
Less Cash Discount				*2.89*
Revenue Gap/(Surplus)	**(57.74)**	**(17.52)**		**(40.90)**

3.16.2 For FY 2018-19, the net expenditure works out to Rs. 683.69, resulting in a net gap of Rs. 68.07 Crore. The break-up of expenses for FY 2018-19 along with the adjustments on account of sharing of Efficiency Gains/Losses as submitted by TPC-T is given in the following Table:

Table 44: Summary of Truing up including sharing of Efficiency Gains for FY 2018-19, as submitted by TPC-T (Rs. Crore)

Particulars	MTR Order	Actual	Efficiency Gains / (Loss)	Net Entitlement after sharing of Gains/(Losses)
Operation & Maintenance expenses	201.07	205.20	(2.33)	218.04
Depreciation expenses	148.90	138.27		138.27
Interest on long-term loan capital	96.72	91.85		91.85
Refinancing & Other finance charges	0.00	0.06		0.06
Interest on working capital	10.96	12.48	(0.72)	13.20
Income tax	21.23	33.24		33.24
Contribution to contingency reserves	8.27	8.37		8.37
Total revenue expenditure	**487.15**	**489.47**		**503.04**
Return on equity capital	176.31	177.28		177.28

Particulars	MTR Order	Actual	Efficiency Gains / (Loss)	Net Entitlement after sharing of Gains/(Losses)
Aggregate Revenue Requirement	**663.46**	**666.75**		**680.32**
Less: Non-Tariff Income	19.49	12.27		12.27
Less: Income from other business				
Aggregate Revenue Requirement from Transmission Tariff	**643.97**	**654.48**		**668.05**
Incentive		3.37		3.37
Revenue from Transmission Tariff				603.35
Long-term TSUs incl Distribution Licensees		604.80		604.80
Less Cash Discount				1.45
Past Recoveries	(115.10)			
Revenue Gap/(Surplus)	**528.87**	**53.06**		**68.07**

Commission's Analysis and Ruling

3.16.3 The summary of the net ARR including sharing of Efficiency Gains/Losses as approved by the Commission for FY 2017-18 and FY 2018-19 is given in the following Table:

Table 45: Summary of Truing up including net entitlement after sharing of Efficiency Gains/(Loss) for FY 2017-18 and 2018-19, as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	FY 2017-18			FY 2018-19		
		MTR Order	TPC-T Petition	Approved in this Order	MTR Order	TPC-T Petition	Approved in this Order
1	Operation & Maintenance expenses	185.63	163.45	161.75	201.07	218.04	215.32
2	Depreciation expenses	137.55	131.08	130.11	148.90	138.27	136.94
3	Interest on long-term loan capital	92.63	92.59	91.29	96.72	91.85	89.65
4	Refinancing & Other finance charges	0.00	2.22	2.44	0.00	0.06	0.06
5	Interest on working capital	13.22	12.09	12.08	10.96	13.20	13.15
6	Income tax	21.23	55.36	54.20	21.23	33.24	33.37
7	Contribution to contingency reserves	7.87	7.87	7.84	8.27	8.37	8.29
8	**Total revenue expenditure**	**458.12**	**464.66**	**459.69**	**487.15**	**503.04**	**496.79**
9	Return on equity capital	163.93	164.85	164.20	176.31	177.28	175.81
10	Aggregate Revenue Requirement	**622.05**	**629.50**	**623.89**	**663.46**	**680.32**	**672.60**

Sr. No.	**Particulars**	**FY 2017-18**			**FY 2018-19**		
		MTR Order	**TPC-T Petition**	**Approved in this Order**	**MTR Order**	**TPC-T Petition**	**Approved in this Order**
11	Less: Non-Tariff Income	18.11	14.58	18.23	19.49	12.27	14.70
12	Less: Income from other business						
13	**Aggregate Revenue Requirement from Transmission Tariff**	**603.94**	**614.92**	**605.66**	**643.97**	**668.05**	**657.89**
14	Incentive		2.97	2.94		3.37	3.32
15	**Revenue from Transmission Tariff**	661.68	658.79	658.80		603.35	603.59
16	Long-term TSUs incl Distribution Licensees	661.68	661.68	661.68		604.80	604.80
17	Less Cash Discount		*2.89*	2.88		1.45	*1.21*
18	Past Recoveries				(115.10)		(115.10)
19	**Revenue Gap/(Surplus)**	**(57.74)**	**(40.90)**	**(50.21)**	**528.87**	**68.07**	**(57.47)**

3.16.4 As detailed in earlier paragraphs, the variation between the ARR sought by TPC-T and that approved by the Commission in this Order after true-up, is mainly on account of reduction in O&M expenses, Depreciation, Interest on Long Term Loan, and RoE, on account of non-consideration of Brand Equity expenses and disallowance of capitalisation.

3.16.5 The Commission approves stand-alone Revenue Surplus for FY 2017-18 and FY 2018-19, as shown in the above Table, which has been adjusted in the ARR of FY 2020-21, as elaborated in a subsequent Chapter.

4 PROVISIONAL TRUING-UP OF ARR FOR FY 2019-20

4.1 Background for Provisional Truing-up for FY 2019-20

4.1.1 TPC-T has sought the provisional True-up of expenditure and revenue for FY 2019-20 as per the provisions of the MYT Regulations, 2015. TPC-T has submitted the actual operating performance of the first half (H1) of FY 2019-20 and the revised estimates for the second half (H2). Based on the details provided and additional information sought, the Commission has carried out the provisional True-up for FY 2019-20.

4.2 Transfer of Assets from Generation Business and Distribution Business of TPC to Transmission Business

TPC-T's Submission

4.2.1 TPC-T submitted that certain assets have been proposed to be transferred from TPC Generation Business (TPC-G) to TPC-T. Due to decommissioning of Trombay Generating Stations Unit 1 to 4 and the fact that 110 kV switchyard 22 kV GIS is exclusively serving the purpose of transmitting electricity, TPC-T has proposed to transfer the following assets from TPC-G to TPC-T:

- 110 kV Switchyard at Trombay Station A;
- 22 kV GIS at Trombay Station A;
- The associated accessories of the above assets.

4.2.2 TPC-T submitted that under this transfer, total 29 nos. 110 kV bays of 110 kV switchyard and 30 nos. 22 kV bays of 22 kV GIS at Trombay have been considered. The transfer is considered to come into effect from 1 April, 2019. Accordingly, with this proposed transfer of assets, GFA of Rs. 69.19 Crore (pertaining to 110 kV switchyard, 22 kV switchyard, 3.3 kV and 415 V equipment, station building and all other associated equipment) has been added to asset base of TPC-T and the same amount of assets will get reduced from the asset base of TPC-G.

4.2.3 As regards the proposed transfer of assets from TPC Distribution Business (TPC-D) to TPC-T, TPC-T submitted that the entire 110 kV BKC Receiving Station is part of Transmission Licence except the 2 nos. 22 kV bus sections. These 22 kV bus sections were inadvertently not included in the Transmission License No. 1 of 2014. Therefore, TPC-T has also proposed to transfer the following assets from TPC-D to TPC-T:

- 2 nos. bus sections at BKC (Includes 19 nos. of 22 kV Bays)

4.2.4 TPC-T submitted that it had requested for transfer of assets during its earlier MTR Petition in Case No. 204 of 2017 wherein the Commission had taken a view that TPC may take up this matter of transfer of assets through a separate Petition for amendment of its Transmission Licence. Accordingly, TPC-T has filed the Petition for second amendment of its Transmission Licence in Case No. 249 of 2019 vide letter reference

CREG/MERC/2019/195 dated 30 August, 2019, which inter alia includes Licence amendment for transfer of assets as above.

4.2.5 Considering the above transfers, TPC-T has worked out the opening GFA of FY 2019-20 by adding GFA of the assets to be transferred from TPC-G and TPC-D to TPC-T, to the closing GFA of FY 2018-19, as shown in the Table below:

Table 46: GFA for FY 2019-20 submitted by TPC-T (Rs. Crore)

S. No	Category	FY 2019-20
1	Opening GFA of FY 2019-20	3681.46
2	Add: GFA of assets to be transferred from TPC-G to TPC-T	69.19
3	Add: GFA of assets to be transferred from TPC-D to TPC-T	7.23
4	**Opening GFA including assets to be transferred**	**3757.89**

4.2.6 Similarly, the opening equity for FY 2019-20, after considering the transfer of assets, is as follows:

Table 47: Equity for FY 2019-20 submitted by TPC-T (Rs. Crore)

S. No	Category	FY 2019-20
1	Opening Equity of FY 2019-20	1193.87
2	Add: GFA of assets to be transferred from TPC-G to TPC-T	20.76
3	Add: GFA of assets to be transferred from TPC-D to TPC-T	2.17
4	**Opening Equity including assets to be transferred**	**1216.80**

4.2.7 Depreciation of assets to be transferred has been considered in the Depreciation computation in line with the provisions of MYT Regulations, 2015. Further, opening loan for FY 2019-20, after considering the transfer of assets is as follows:

Table 48: Loan for FY 2019-20 submitted by TPC-T (Rs. Crore)

S. No	Category	FY 2019-20
1	Opening Loan of FY 2019-20	1116.07
2	Add: Loan balance of assets to be transferred from TPC-G to TPC-T	21.80
3	Add: Loan balance of assets to be transferred from TPC-D to TPC-T	2.45
4	**Opening Loan Balance including assets to be transferred**	**1140.32**

4.2.8 TPC-T submitted that the ARR for FY 2019-20 has been arrived at based on the revised opening GFA, Equity and Loan as above on account of transfer of assets. The addition in TPC-T's ARR will get deducted from the ARR of TPC-G and TPC-D respectively.

Commission's Analysis and Ruling

4.2.9 TPC-T, in its MTR Petition in Case No. 2014 of 2016 had sought the transfer of assets from TPC-G to TPC-T. In this regard, the Commission had ruled as under:

"5.2.18 The decision for transfer of assets of TPC-G to TPC-T can only be taken up by amendment to TPC-T's Transmission License through the process in accordance with MERC (Transmission License Conditions) Regulations, 2004 and subsequent amendments to it. TPC may take up this matter of transfer of assets through a separate Petition for amendment of its Transmission License subject to recommendation of STU justifying necessity of such transfer for InSTS and its benefits to the consumers. Further, any claim of the impact on the corresponding ARR can only be considered subsequent to such amendment of TPC-T's Transmission License."

4.2.10 Accordingly, TPC-T has filed a separate Petition before the Commission in Case No. 249 of 2019 on 30 August, 2019 for amendment of its Transmission Licence, which includes the proposed transfer of assets from TPC-G and TPC-D to TPC-T. However, the proceedings in Case No. 249 of 2019 are presently in progress and the Order on the said Petition is yet to be issued by the Commission.

4.2.11 Hence, the impact on ARR on account of the proposed transfer of assets from TPC-G and TPC-D to TPC-T is not considered in the present proceedings of MYT Order. If and when the transfer of assets from TPC-G and TPC-D to TPC-T is approved fully/partly, the corresponding impact shall be allowed at the time of true-up of respective years.

4.3 Operation and Maintenance Expenses

TPC-T's Submission

4.3.1 TPC-T submitted that O&M expenses have been estimated considering the number of Transmission Bays and Transmission Line length in ckt. km expected to be in operation during FY 2019-20. The revised normative O&M expenses for FY 2019-20 is proposed by considering the opening number of Transmission Bays and ckt. km of Transmission Lines equal to closing number of bays and ckt. km. of FY 2018-19. Further, the Transmission Bays and Lines from transfer of assets are added and the norms are applied for calculating the O&M expenses. TPC-T provided the revised number for Transmission Bays and Lines as shown below:

Table 49: Bays and Transmission Lines as submitted by TPC-T for FY 2019-20

Sr. No	Category	FY 2019-20			
		Existing system	Addition from TPC-G	Addition from TPC-D	Total
Bays (between 66 kV and 400 kV)					
1	Opening	368	26	0	394
2	Addition	44	0	0	44
3	Closing	412	26	0	438
4	Average	390	26	0	416

Sr. No	Category	FY 2019-20			
		Existing system	Addition from TPC-G	Addition from TPC-D	Total
Bays (<66 kV)					
5	Opening	951	24	19	994
6	Addition	16	0	0	16
7	Closing	967	24	19	1010
8	Average	959	24	19	1002
Ckt km (between 66 kV and 400 kV)					
9	Opening	1199.79	0	0	1199.79
10	Addition	25.50	0	0	25.50
11	Closing	1225.29	0	0	1225.29
12	Average	1212.54	0	0	1212.54

4.3.2 Considering the above, TPC-T derived the normative O&M expenditure for FY 2019-20 as under:

Table 4-50: Normative Expense submitted by TPC-T for FY 2019-20 (Rs. Crore)

Sr. No	Bays	FY 2019-20		
		Norm (Rs. Lakh/Bay)	No. of Bays	Normative O&M (Rs. Crore)
1	Between 66 kV and 400 kV	36.03	416	149.88
2	Less than 66 kV	7.53	1002	75.45
Sr. No	**Transmission Lines**	**Norm (Rs. Lakh/Ckt. kM.)**	**No. of Ckt. kM.**	**Normative O&M (Rs. Crore)**
1	Between 66 kV and 400 kV	1.38	1212.54	16.73
Normative O&M (Rs. Crore)		**242.07**		

4.3.3 Further, TPC-T also considered the expenditure towards Auxiliary consumption of Receiving Stations in O&M expenses. The actual expenditure of 10 months of FY 2018-19 has been pro-rated to annual expenditure to arrive at the expenditure towards Auxiliary consumption for FY 2019-20 and TPC-T estimated the Energy charges of Rs. 14.02 Crore towards auxiliary consumption. Therefore, the total O&M charges estimated have been projected by TPC-T as Rs. 256.09 Crore for FY 2019-20.

Commission's Analysis and Ruling

4.3.4 Regulation 58.3 of the MYT Regulations, 2015 specifies the norms for O&M Expenses for TPC-T for each year of the Control Period. For the purpose of provisional True up, normative O&M expenses have been allowed in accordance with the aforesaid Regulations.

4.3.5 TPC-T has added number of Bays on account of the proposed transfer of assets from

TPC-G and TPC-D to TPC-T. However, the Commission has not taken into consideration the impact of the proposed asset transfer as explained in the earlier sections of this Order.

4.3.6 TPC-T has added total 60 no. of Bays during FY 2019-20, which includes 5 no. of Bays capitalised in earlier FY but put to use in current year, and 55 nos. of new Bays added during FY 2019-20. The Commission sought details from TPC-T on station-wise and voltage-wise Bays utilised against Bays added in FY 2019-20. The details provided by TPC-T for 60 Nos. of Bays added during FY 2019-20 are provided in **Appendix-5**. TPC-T claimed that all 60 no. of Bays are put to use; however, from the information submitted by TPC-T, it was observed that there was no loading on 58 no. of Bays. Since these 58 no. of Bays are not put to use during FY 2019-20, the Commission has considered addition of only 2 no. of 33 kV Bays for determination of O&M expenses for FY 2019-20.

4.3.7 In view of the above, addition of Bays considered in FY 2019-20 are shown below:

Table 51: Addition of Bays considered for determination of O&M expenses for FY 2019-20

Particulars	Number of bays	
	TPC-T Petition	Approved after Provisional Truing Up
Above 66 kV and less than 400 kV		
Total	**44**	**-**
66 kV and below		
Total	**16**	**2**

4.3.8 Total Bays and Transmission Line length approved by the Commission for FY 2019-20 are as shown in the Tables below:

Table 52: Approved Transmission Line Length for FY 2019-20

Line Length Circuit km (between 66kV and 400kV)	MTR Order	TPC-T Petition	Approved after Provisional Truing Up
Opening		1199.79	1199.79
Additions		25.50	25.50
Closing		1225.29	1225.29
Average	**1,259.68**	**1212.54**	**1212.54**

Table 53: Approved Number of Transmission Bays for FY 2019-20

Number of Bays	MTR Order	TPC-T Petition	Approved after Provisional Truing Up
Bays (Between 66kV and 400kV)			
Opening		394	360
Additions		44	0

Number of Bays	MTR Order	TPC-T Petition	Approved after Provisional Truing Up
Closing		438	360
Average	**371**	**416**	**360**
Bays (<66kV)			
Opening		994	924
Additions		16	2
Closing		1010	926
Average	**923**	**1002**	**925**

4.3.9 Based on the above, the normative O&M expenses approved by the Commission after provisional truing up for FY 2019-20, is shown in the Table below:

Table 54: Approved Normative O&M Expenses for FY 2019-20

O&M Expenses	Units	MTR Order	TPC-T Petition	Approved after Provisional Truing Up
Transmission Lines				
Length of Transmission line	Ckt.km	1,259.68	1212.54	1212.54
Norms as per Regulations	Rs lakh/ ckt-km	1.38	1.38	1.38
Bays (Between 66 kV and 400 kV)				
No. of Bays	No.	371	416	360
Norms as per Regulations	Rs lakh/Bay	36.03	36.03	36.03
Bays (<66kV)				
No. of Bays	No.	922.50	1002	925
Norms as per Regulations	Rs lakh/Bay	7.53	7.53	7.53
O&M Expenses	**Rs. Crore**	**220.52**	**242.07**	**216.09**

4.4 Capitalisation

TPC-T's Submission

4.4.1 TPC-T has projected capitalisation of Rs. 623.09 Crore along with IDC capitalised for FY 2019-20, as shown in the Table below:

Table 55: Capitalisation as submitted by TPC-T for FY 2019-20 (Rs. Crore)

Particulars	FY 2019-20	
	MTR Approved	**Capitalization projected by TPC-T**
Non DPR Schemes		
Total Carry Forward Schemes		9.93
New Schemes		11.38
HO & SS Allocation		12.14
Total Non DPR	23.97	33.46
DPR Schemes		
Carry Forward Schemes		522.63
New Schemes		67.00
Total DPR	280.24	589.63
Total Capitalisation	**304.21**	**623.09**

Commission's Analysis and Ruling

4.4.2 The Commission observes that TPC-T has projected capitalisation of Rs.623.09 Crore for FY 2019-20 against the approved capitalisation of Rs. 304.21 Crore. TPC-T was asked to justify this steep increase in capitalisation along with scheme-wise justification.

4.4.3 TPC-T replied that out of the total capitalisation of Rs.623.09 Crore, it has estimated capitalisation of Rs. 589.63 Crore against DPR schemes during FY 2019-20. The increase in capitalisation of Rs.309.39 Crore against DPR schemes as compared to MTR approved DPR capitalisation of Rs.280.24 Crore, is primarily due to the following reasons:

1. Commissioning of the following major schemes in FY 2019-20:
   - Strengthening of 220 kV Carnac Receiving Station (Rs. 55.00 Crore)
   - 220 kV switching station at NMIA (Rs. 135.00 Crore)
   - 220 kV GIS at Versova (Rs. 115.00 Crore)
   - 220 kV GIS at Antop Hill (Rs. 140.00 Crore)
2. Capitalisation considered as part of earlier MTR submission but not approved by the Commission (Rs. 150.15 Crore);
3. Advancement of scheme of Strengthening of 220 kV Carnac Receiving Station (Rs. 55.00 Crore).

4.4.4 TPC-T submitted that the project for 'Strengthening of 220 kV Carnac Receiving Station' has been advanced by one year considering the criticality of South Mumbai power supply. TPC-T further submitted that the most of these DPR schemes have been planned for capitalisation and being put to use by March 2020 and TPC-T will submit the scheme completion report for these schemes post commissioning along with documentary evidence of put to use.

4.4.5 The Commission has taken a note of the submission by TPC-T as above. Further, the Commission has elaborated the analysis underlying its approval of the capitalisation for FY 2017-18 to FY 2019-20 in paragraph 3.3 of this Order.

4.4.6 The summary of disallowances by the Commission in capitalisation for FY 2019-20 on basis elaborated at paragraph 3.2 above is provided in the Table below:

Table 56: Capitalisation Disallowed for FY 2019-20 (Rs. Crore)

Particulars	Amount	Remarks
Installation of 220 kV GIS Mahalaxmi, installation of additional ICT	0.02	• The cost overrun of Rs.22.74 Crore above the approved DPR cost is disallowed. • Capitalisation of Rs.0.02 Crore was considered in FY 2019-20 by TPC-T which is disallowed as part of cost overrun.
Total Disallowance	**0.02**	

4.4.7 The capitalisation approved by the Commission after Provisional True-up for FY 2019-20 is summarized in the Table below:

Table 57: Capitalisation approved for FY 2019-20 (Rs. Crore)

Particulars	FY 2019-20		
	MTR Approved	TPC-T Petition	Approved after Provisional Truing Up
DPR Capitalisation	280.24	589.63	589.61
Non-DPR Capitalisation	23.97	33.46	33.46
Total Capitalisation	**304.21**	**623.09**	**623.07**

Deemed Closure for "400 kV Receiving Station at Vikhroli"

TPC-T's Submission

4.4.8 The Commission had issued deemed closure directive to TCP-T's "400 kV Vikhroli Receiving Station" vide its MTR Order in Case No. 204 of 2017 and subsequently in its Review Order in Case No. 3 of 2019 dated 29th January, 2019.

4.4.9 Accordingly, TPC-T has not considered any expenditure incurred/capitalised under this DPR capex schemes during truing up for FY 2017-18 and FY 2018-19 as well as for future years.

4.4.10 Further, aggrieved by the above decision of the Commission, TPC-T, along with certain other issues observes in the MTR Order in Case No. 204 of 2017, had filed Appeal No. 88 of 2019 before the Hon'ble ATE. The Hon'ble ATE, issued its Order in Appeal no. 88 of 2019 dated 23 September, 2019, wherein it has retained the directive of the

Commission dismissing the prayer of TPC-T in deemed closure of "400 kV Vikhroli Receiving Station". The relevant extract of this Order is reproduced below:

> *"14. With these averments they had sought for various reliefs, but at this stage we are concerned with prayer (g) only.*
> *g) Hold and declare that the Ld. Commission has erred in issuing directions for deemed closure of 400 kV Vikhroli Transmission Scheme;*
> *……………*
>
> *91. After narrating the conduct of the Appellant in implementing the scheme in question, the Respondent-Commission has observes in the impugned order that in terms of 'Request for Proposal' by the 2nd Respondent the successful bidder of the project shall have to pay the pre-development expenditure met by the Appellant, in order to reimburse the Appellant.* ***It has further safeguarded the interest of the Appellant by stating that even if any deviation in the pre-development expenditure of Rs.135.44 Crore by the Appellant, it shall be incorporated as part of its regulated business in its upcoming tariff petition.*** *By making these directions, the Respondent-Commission has balanced the equalities based on the facts and circumstances.*
> *…*
> *we are of the opinion that the impugned order in question with regard to relief 'g' does not warrant any interference. Accordingly, the Appeal so far as it relates to relief 'g' is dismissed. Hence the issue taken up for consideration at relief 'g' is answered against the Appellant. In the light of relief 'g' being answered against the Appellant, we direct the 2nd Respondent to issue LOI in favour of the successful bidder. No order as to costs."*

4.4.11 TPC-T submitted that the Hon'ble ATE has safeguarded the interest of TPC-T by allowing any deviation in the pre-development expenditure of Rs.135.44 Crore plus taxes and duties as applicable, to be incorporated as part of its regulated business in its upcoming Tariff Petition. Accordingly, TPC-T in the present Petition has requested the Commission to approve Rs. 135.55 Crore incurred plus taxes and duties as applicable (above pre-developmental expenditure of Rs.135.44 Crore) till 30 September, 2019 against the "400 kV Vikhroli Receiving Station" project. These expenses include an expenditure towards purchase of land at Kharghar and Vikhroli, statutory clearances, surveys and other pre-development jobs.

4.4.12 TPC-T further submitted that apart from the above expenditure of Rs. 135.55 Crore, it has estimated an additional expenditure of Rs. 52.20 Crore towards following heads, which will be incurred by the successful bidder for this project and reimbursed to TPC-T:

a. Cost of plot of land of 1591.03 sq. M. below existing transmission lines at Vikhroli (Rs. 20.50 Crore);

b. Compensation towards utilising of the Right of Way (RoW) below existing Transmission Line between Nerul and Vashi (Rs. 13.45 Crore);
c. 10% GST component on part of the pre-development expenditure (Rs. 8.25 Crore);
d. Expenditure to be incurred against short-closure of three Contracts (Rs. 10.00 Crore). These contracts were placed in anticipation of commencement of works prior to impugned Order dated 12 September 2018. The charges are to be paid towards design & engineering, statutory permission, finance charges. The purchase orders for these jobs have already been placed on vendors.

4.4.13 TPC-T has communicated to MSETCL regarding the expenditure to be incurred towards cost of plot of land at Vikhroli, compensation towards ROW and GST component, vide letter under reference TPC/T&D/2019-20/MSETCL/010 dated 2 August, 2019. MSETCL vide its response under letter reference MSETCL/CO/BDC/TBCB/05980 dated 7 August, 2019 and MSETCL/CO/BDC/TBCB/06032 dated 8 August, 2019 has communicated that TPC-T should approach the Commission regarding its claim of expenses related to transfer of approvals/clearances/land, etc.

4.4.14 TPC-T submitted that as the total expenditure of Rs. 187.75 Crore will be incurred for the handover of "400 kV Vikhroli Receiving Station Project" to successful bidder, the Commission should direct MSETCL/successful bidder of "400 kV Vikhroli Project" to pay all these expenses to TPC-T (along with associated carrying cost).

4.4.15 TPC-T submitted that it has not currently included Rs. 187.75 Crore as part of its ARR for FY 2019-20, as reimbursement is expected from STU/successful bidder. TPC-T further submitted that in case the Commission deems fit for any expenditure listed above to be claimed through ARR, the Commission may accordingly approve through this ARR.

Commission's Analysis and Ruling

4.4.16 The Commission had issued deemed closure directive to TCP-T's "400 kV Vikhroli Receiving Station" vide its MTR Order in Case No. 204 of 2017 and subsequently in its Review Order in Case No. 3 of 2019 dated 29th January, 2019. The relevant extract of MTR Order in Case No. 204 of 2017 is reproduced below:

"7.12.9 Considering above, the Commission notes that STU has observes that there is an inordinate delay in completion of this scheme and suggested to take up this scheme under Tariff Based Competitive Bidding (TBCB) route. The Commission is concerned about the approach adopted by TPC-T for execution of the scheme. This scheme is being treated as deemed closed by the Commission and the Commission directs STU to take a review of such critical schemes and propose a way forward. STU is directed to submit its report to the Commission on review of TPC-T's proposed 400 kV Vikhroli Receiving Station within a month."

4.4.17 The relevant extract of review Order issued by the Commission in Case No. 3 of 2019 is reproduced below:

"ORDER

a) Case No. 3 of 2019 is dismissed.

b) STU is directed to submit its recommendations regarding execution of the 400 kV Vikhroli Transmission Project under TBCB as per GoM's Resolution dated 4 January,2019 within 15 days from the date of this Order. STU should also setup a credible mechanism for continuous monitoring of the project to ensure that the project remains on track to avoid any further delay."

4.4.18 Accordingly, Tariff Based Competitive Bidding (TBCB) was carried out by STU and Adani Transmission Limited (ATL) was selected as successful bidder for development of 400 kV Vikhroli project.

4.4.19 APTEL has allowed any deviation in the pre-development expenditure of Rs 135.44 Crore plus taxes and duties as applicable to be incorporated as part of TPC-T's regulated business in its upcoming Tariff Petition. The Commission notes that TPC-T has not currently included the claim as part of its ARR for FY 2019-20, as reimbursement is expected from STU/successful bidder.

4.4.20 In this regard, the Commission, vide letter ref: MERC/Mumbai Transmission/2019/No. 170 dated 20 June, 2019 addressed to MSETCL (STU) and TPC-T, directed as under:

"…

ii. MSETCL in its RFP shall also clarify that the successful bidder of 400 kV Vikhroli Project shall have to pay the predevelopment expenses of Rs. 135.44 Crores to SPV ("Kharghar Vikhroli Transmission Pvt. Ltd.") which in turn would reimburse the same to TPC.

iii. Any deviation in the predevelopment expenses of Rs. 135.44 Crores on account of expenses required on transfer of approval/clearances/land etc. in favour of SPV, viz., Kharghar Vikhroli Transmission Pvt. Ltd., TPC-Transmission shall incorporate the same as a part of its regulated business in its upcoming Tariff Petition with requisite information and supporting documents in accordance with prevailing MYT Regulations.

iv. …

v. MSETCL/STU shall ensure there would not be double recovery of the expenses."

4.4.21 It is clarified that the amount of Rs. 135.55 crore as claimed by TPC-T till September 30, 2019, is also not finalised, and needs to be verified and validated by the STU, before being paid by the successful bidder and reimbursed to TPC-T. As regards the additional claim of Rs. 52.20 crore, TPC-T has not submitted any information or supporting documents. TPC-T may co-ordinate with STU for such recovery, as STU has to verify whether these expenses are a deviation with respect to the predevelopment expenses and the justification for such additional expenses. Hence, the Commission is of the view that this additional claim is a mere estimate and it is premature at this stage to evaluate the same.

4.4.22 Therefore, the Commission has not considered any impact of pre development expenditure of Rs 135.55 Crore as well as additional claim of Rs.52.20 Crore in the present proceeding. The issue is open and the Commission will consider the same at an appropriate time based on the due diligence of STU in consultation with TPC-T and AEML-T.

4.5 Depreciation

TPC-T's Submission

4.5.1 TPC-T submitted that it has computed the depreciation by applying the rates specified in the deprecation schedule under Regulation 27.1 (b) of the MYT Regulations, 2015. The depreciation projected for FY 2019-20 is Rs. 160.11 Crore.

Commission's Analysis and Ruling

4.5.2 As detailed in earlier Section, the Commission has not considered the impact of transfer of assets from TPC-G and TPC-D to TPC-T, in this Order. Accordingly, the closing GFA of FY 2018-19 approved in this Order is considered as opening GFA of FY 2019-20 and capitalisation approved during FY 2019-20 is added to arrive at closing GFA of FY 2019-20.

4.5.3 Regulation 27 of the MYT Regulations, 2015 stipulates that the Transmission Licensee shall be permitted to recover depreciation on the value of fixed assets, and that it shall be computed annually based on the straight-line method at the specified rates. For provisional Truing up of FY 2019-20, the Commission has considered the actual weighted average depreciation rate of 3.94% for FY 2018-19.

4.5.4 The above depreciation rate is applied on the average of GFA for FY 2019-20 approved by the Commission to arrive at the depreciation expenses for FY 2019-20. **The depreciation expense approved by the Commission is provided in the Table below**:

Table 58: Depreciation approved for FY 2019-20 (Rs. Crore)

Particulars	MTR Order	TPC-T Petition	Approved after Provisional Truing Up
Opening GFA	3,679.26	3757.89	3633.46
Closing GFA	3,983.47	4380.98	4256.53
Average GFA	3,831.36	4069.43	3945.00
Depreciation	**163.30**	**160.11**	**155.52**
Average depreciation rate	4.26%	3.93%	3.93%

4.6 Interest on loan capital

TPC-T's Submission

4.6.1 Based on the closing balance of loan for FY 2018-19, including impact of loan on account of transfer of assets, loan for additional capitalisation during FY 2019-20, interest rate equivalent to that computed for FY 2018-19 and repayment equal to depreciation of the assets including depreciation of assets transferred, the Interest on Loan for FY 2019-20 works out to Rs. 110.43 Crore.

Commission's Analysis and Ruling

4.6.2 As detailed in the earlier Section, **the Commission has not considered the impact of transfer of assets from TPC-G and TPC-D to TPC-T, in this Order**. The Commission has considered the closing loan balance for FY 2018-19 approved in this Order as the opening loan balance of FY 2019-20. Further, loan repayment has been considered equal to the depreciation approved for FY 2019-20 in this Order in accordance with Regulation 29 of the MYT Regulations, 2015, to arrive at the closing balance of loan for FY 2019-20.

4.6.3 In accordance with the MYT Regulations, 2015, for provisional true-up for FY 2019-20, the Commission has considered the interest rate of 8.94% prevailing as on 1st April 2019, as interest rate on Loan Capital for FY 2019-20. Interest on Loan Capital is calculated by applying this interest rate on average normative loan balance. At the time of true-up for FY 2019-20, the weighted average rate of interest during the year shall be considered, in accordance with the MYT Regulations, 2015.

4.6.4 The summary of the Interest on Long Term Loans approved by the Commission after provisional true-up for FY 2019-20 is shown in the Table below:

Table 59: Interest on Loan Capital approved for FY 2019-20 (Rs. Crore)

Particulars	MTR Order	TPC-T Petition	Approved after Provisional Truing Up
Opening balance of Loan	1076.74	1140.32	1086.06
Addition of Loan	212.95	436.16	436.15
Repayment of Loan	163.30	160.11	155.52
Closing balance of Loan	1126.39	1416.37	1366.69
Weighted average interest rate at the beginning of year	9.47%	8.64%	8.94%
Interest expenses	**104.34**	**110.43**	**109.64**

4.7 Interest on Working Capital

TPC-T's Submission

4.7.1 TPC-T submitted that it has calculated the IoWC based on the elements specified in the MYT Regulations, 2015 and the amendment notified thereafter. The rate of interest considered for FY 2019-20 is 9.80% and IoWC works out to Rs. 14.27 Crore.

Commission's Analysis and Ruling

4.7.2 The Commission has computed the normative working capital requirement in accordance with Regulation 31.2 of MYT Regulations, 2015. One-twelfth (1/12) of the normative O&M Expenses approved in this Order, plus one and half months of revenue approved for FY 2019-20 in the Intra-State Transmission System Tariff Order in Case No. 265 of 2018 has been considered. Maintenance spares have been considered at one per cent of opening GFA for FY 2019-20 approved after provisional True up of FY 2019-20 in this Order.

4.7.3 For computation of IoWC, the Commission has considered the rate of interest equal to the weighted average one-year MCLR during the year plus 150 basis points, which works out to 9.55% for FY 2019-20. **The IoWC approved by the Commission is provided in the Table below**:

Table 60: IoWC approved for FY 2019-20 (Rs. Crore)

Particulars	MTR Order	TPC-T Petition	Approved after Provisional Truing Up
Operations and Maintenance Expenses for one month	18.38	20.17	18.01
Maintenance spares at one per cent of the opening Gross Fixed Assets for the Year	36.79	37.58	36.33
One and a half month of the expected revenue from transmission charges at the prevailing tariffs	87.89	87.89	87.89
Total Working Capital Requirement	**143.06**	**145.65**	**142.24**
Rate of Interest (% p.a.)	9.45%	9.80%	9.55%
Interest on Working Capital	**13.52**	**14.27**	**13.58**

4.8 Other Finance Charges

TPC-T's Submission

4.8.1 TPC-T has projected the other finance charges as nil for FY 2019-20.

Commission's Analysis and Ruling

4.8.2 The Commission notes and considers the Other Finance Charges for FY 2019-20, as Nil.

4.9 Return on Equity (RoE)

TPC-T's Submission

4.9.1 TPC-T submitted that considering the capitalisation and the Debt: Equity norm of 70:30, and the additional equity on account of transfer of assets, the Return on Equity (RoE) allowed as per MYT Regulations, 2015 @15.5% works out to Rs. 203.09 Crore for FY 2019-20.

Commission's Analysis and Ruling

4.9.2 The Commission has computed RoE at the rate of 15.5%, in accordance with Regulation 28.2 of the MYT Regulations, 2015 on the opening equity of the year and on 50% of the equity portion of capitalisation approved for FY 2019-20 in this Order in accordance with Regulation 28.3 of the MYT Regulations, 2015.

4.9.3 The closing equity for FY 2018-19 approved in this Order is considered as the opening equity for FY 2019-20. TPC-T has not submitted information about retirement of assets during FY 2019-20, as it is being provisionally Trued up. The Commission will consider impact on account of retired/de-capitalised assets at the time of final Truing up. Accordingly, the closing balance of equity is arrived by adding the equity addition corresponding to the capitalisation approved by the Commission for FY 2019-20 in this Order to the opening balance of equity. As stated earlier, the Commission has not considered the impact of proposed asset transfer from TPC-G and TPC-D to TPC-T.

4.9.4 The RoE approved by the Commission after Provisional Truing up for FY 2019-20 is summarized in the following Table:

Table 61: Return on Equity for FY 2018-19, as approved by the Commission (Rs. Crore)

Particulars	MTR Order	TPC-T Petition	Approved after Provisional Truing Up
Regulatory equity at the beginning of the year	1193.21	1216.80	1182.12
Capitalisation during the year	304.21	623.09	623.07
Equity portion of assets capitalised during the year	91.26	186.93	186.92
Reduction in equity capital on account of retirement/replacement of assets	0.00	0.00	0.00
Regulatory equity at the end of the year	1284.47	1403.72	1369.04
Return on regulatory equity at the beginning of the year	184.95	188.60	183.23
Return on 50% of the equity portion of asset value capitalised during the year	7.07	14.49	14.49
Total Return on Regulatory Equity	**192.02**	**203.09**	**197.71**

4.10 Income Tax

TPC-T's Submission

4.10.1 As per the MYT Regulations, 2015, the Income Tax for the year of provisional truing up shall be considered based on actual Income Tax payable as per latest audited accounts subject to prudence check. In view of this, Income Tax for FY 2019-20 has been considered equal to that for FY 2018-19; i.e., Rs. 33.24 Crore.

Commission's Analysis and Ruling

4.10.2 The MYT Regulations, 2015 provides that the Income Tax for the future period shall be considered based on actual Income Tax payable as per latest Audited Accounts as allowed by the Commission subject to prudence check. The Commission in the earlier Sections of this Order, while approving the Income Tax for FY 2018-19, has worked out the Income Tax payable considering Trued-up amounts and Efficiency Gains.

4.10.3 Therefore, in accordance with Regulation 33.1, the Commission approves the Income Tax for FY 2019-20 equal to that approved in this Order for FY 2018-19, as shown in the Table below:

Table 62: Income Tax approved for FY 2019-20 (Rs. Crore)

Particulars	MTR Order	TPC-T Petition	Approved after Provisional Truing Up
Income Tax	21.23	33.24	33.40

4.11 Contribution to Contingency Reserves

TPC-T's Submission

4.11.1 TPC-T submitted that as per Regulation 34.1 of MYT Regulations, 2015, the contribution to Contingency Reserves for FY 2019-20 at 0.25% of opening GFA works out to Rs. 9.39 Crore.

Commission's Analysis and Ruling

4.11.2 The Commission, in accordance with Regulation 34.1 of MYT Regulations, 2015, has considered the contribution to Contingency Reserves for FY 2019-20 equivalent to 0.25% of opening balance of GFA for FY 2019-20. The Commission observes that the closing balance has not exceeded 5% of the original cost of fixed assets for FY 2019-20.

4.11.3 The contribution to Contingency Reserves approved by the Commission after provisional true-up for FY 2019-20, is provided in the Table below.

Table 63: Contribution to Contingency Reserves approved for FY 2019-20 (Rs. Crore)

Particulars	MTR Order	TPC-T Petition	Approved after Provisional Truing Up
Opening Balance of Contingency Reserves	97.84	97.94	97.83
Opening Gross Fixed Assets	3679.25	3757.89	3633.46
Opening Balance of Contingency Reserves as % of Opening GFA	2.66%	2.61%	2.69%
Contribution to Contingency Reserves	**9.20**	**9.39**	**9.08**

4.11.4 Further, the Commission observes that some Utilities have invested the contribution to Contingency Reserves in Mutual Fund Growth Option wherein the investments are market linked and carry greater market risk. The Net Asset Value (NAV) of Mutual Fund is volatile due to dependency on market conditions and there can be instances wherein the losses are incurred. Therefore, the investment in Mutual Funds does not serve the intent of the MYT Regulations, 2015 regarding making investment towards Contingency Reserves. The intent of making investment towards Contingency Reserves is to create a Reserve Fund by the Utility to deal with certain situations. The situations wherein the utility is allowed to draw from the Contingency Reserve are clearly identified in Regulation 34.2 of the MYT Regulations, 2015.

4.11.5 While framing of MYT Regulations, the Commission had envisaged that the Utilities will invest only in securities which are safe, and the reserve created out of these investments would be available to them in Force Majeure situations. However, though mutual funds are part of the list of securities authorised under the Indian Trusts Act, 1882, investment in such instruments exposes the reserve created to market risk. While the Regulation 34.3 of the MYT Regulations, 2015 clearly mentions that no diminution in the value of Contingency Reserve will be permitted, the Commission does not want the utilities to land in difficult situations wherein the value of the Contingency Reserve is negatively impacted due to market fluctuations. This in a way defeats the intent of the Regulations. Considering the above, the Commission is of the view that the Licensee shall not invest the Contingency Reserves amount in market linked instruments such as Mutual Funds, etc., since considering the purpose of this reserve, the risk cannot be passed on to consumers and also should not create situations wherein the fund is not available with the utility when it is required the most. Therefore, the Commission directs TPC-T to ensure that the Contribution to Contingency Reserve for future periods is invested only in safe and liquid instruments such as Government Securities (G-Sec).

4.12 Non-Tariff Income

TPC-T's Submission

4.12.1 TPC-T submitted that it has projected the Non-Tariff Income at Rs. 12.27 Crore for FY 2019-20.

Commission's Analysis and Ruling

4.12.2 The Commission has considered the Non-Tariff Income for FY 2019-20, in line with the Non-Tariff Income for FY 2018-19 approved in this Order, excluding income from Interest on Contingency Reserve Investments of FY 2018-19. The Commission has calculated the income from Interest on Contingency Reserve Investments for FY 2019-20 as shown in the Table below:

Table 64: Interest Income on Contribution to Contingency Reserves approved for FY 2019-20 (Rs. Crore)

Particulars	FY 2017-18	FY 2018-19	FY 2019-20
Opening Balance of Contingency Reserves	81.71	89.53	97.83
Closing Balance of Contingency Reserves	89.53	97.80	106.91
Average of Opening & Closing Balance of Contingency Reserves	85.62	93.66	102.37
Interest on Contingency Reserve Investments	4.39	6.57	7.18
Rate of Interest on Contingency Reserve Investments	5.12%	7.01%	7.01%

4.12.3 The Commission has calculated the income from Interest on Contingency Reserve Investments as Rs.7.18 Crore for FY 2019-20 by considering the actual rate of interest of 7.01% for FY 2018-19 and opening and closing balance of Contingency Reserve as approved in this Order.

4.12.4 The Non-Tariff Income approved by the Commission after provisional true-up for FY 2019-20 is shown in the Table below:

Table 65: Non-Tariff Income approved for FY 2019-20 (Rs. Crore)

Particulars	MTR Order	TPC-T Petition	Approved after Provisional Truing Up
Non-Tariff Income	20.97	12.27	12.89

4.13 Revenue from Transmission Charges

TPC-T's Submission

4.13.1 TPC-T submitted that the revenue for FY 2019-20 has been considered as Rs 703.15 Crore, in line with the Transmission Tariff Order in Case No. 265 of 2018 dated 12 September, 2018.

Commission's Analysis and Ruling

4.13.2 The Commission has considered the revenue from Transmission Charges for FY 2019-

20 in line with the InSTS Order in Case No. 265 of 2018 applicable for FY 2019-20, as shown in the following Table:

Table 66: Revenue from Transmission Charges for FY 2019-20, as approved by the Commission (Rs. Crore)

Particulars	MTR Order	TPC-T Petition	Approved after Provisional Truing Up
Revenue from Transmission charges	703.15	703.15	703.15

4.14 Summary of Provisional Truing up for FY 2019-20

TPC-T's Submission

4.14.1 TPC-T submitted the ARR for FY 2019-20 based on the various costs outlined above, as shown in the Table below:

Table 67: Provisional Truing up for FY 2019-20, as submitted by TPC-T (Rs. Crore)

Particulars	MTR Order	TPC-T Petition
Operation & Maintenance expenses	220.52	256.09
Depreciation expenses	163.30	160.11
Interest on loan capital	104.34	110.43
Other finance charges	0.00	0.00
Interest on working capital	13.52	14.27
Income tax	21.23	33.24
Contribution to contingency reserves	9.20	9.39
Total Revenue Expenditure	**532.11**	**583.53**
Add: Return on equity capital	192.02	203.09
Aggregate Revenue Requirement	**724.13**	**786.63**
Less: Non-Tariff Income	20.97	12.27
Aggregate Revenue Requirement from Transmission	**703.15**	**774.36**
Revenue from Transmission Tariff		**703.15**
Revenue Gap/(Surplus)		**71.21**

Commission's Analysis and Ruling

4.14.2 The summary of the ARR and Revenue Gap/(Surplus) approved by the Commission after provisional true-up for FY 2019-20 is given in the Table below:

Table 68: Provisional Truing up for FY 2019-20, as approved by the Commission (Rs. Crore)

Particulars	MTR Order	TPC-T Petition	Approved in this Order
Operation & Maintenance expenses	220.52	256.09	230.12

Particulars	**MTR Order**	**TPC-T Petition**	**Approved in this Order**
Depreciation expenses	163.30	160.11	155.52
Interest on loan capital	104.34	110.43	109.64
Other finance charges	0.00	0.00	0.00
Interest on working capital	13.52	14.27	13.58
Income tax	21.23	33.24	33.37
Contribution to contingency reserves	9.20	9.39	9.08
Total Revenue Expenditure	**532.11**	**583.53**	**551.31**
Add: Return on Equity capital	192.02	203.09	197.71
Aggregate Revenue Requirement	**724.13**	**786.63**	**749.03**
Less: Non-Tariff Income	20.97	12.27	12.89
Aggregate Revenue Requirement from Transmission	**703.15**	**774.36**	**736.13**
Revenue from Transmission Tariff		**703.15**	**703.15**
Revenue Gap/(Surplus)		**71.21**	**32.98**

4.14.3 As detailed in earlier paragraphs, the variation between the ARR sought by TPC-T and that approved by the Commission in this Order after provisional true-up, is mainly on account of reduction in O&M expenses, Depreciation, Interest on Long Term Loan, and RoE, on account of the transfer of assets from TPC-G and TPC-D to TPC-T not being considered in the present Order.

4.14.4 The Commission approves a provisional stand-alone Revenue Gap for FY 2019-20, as shown in the above Table, which has been adjusted in the ARR of FY 2020-21, as elaborated in the next Chapter.

5 AGGREGATE REVENUE REQUIREMENT FOR FY 2020-21 TO FY 2024-25

5.1 Background

5.1.1 In accordance with MYT Regulations, 2019, TPC-T submitted the projected ARR for each year of the Control Period from FY 2020-21 to FY 2024-25. The Commission has discussed the expenditure allowed on each of the expense heads and the total expenses approved by it for the Control Period in the subsequent paragraphs.

5.2 Operation and Maintenance Expenses

TPC-T's Submission

5.2.1 TPC-T submitted that the normative O&M expenses for the Control Period from FY 2020-21 to FY 2024-25 have been calculated as per Regulation 61 of the MYT Regulations, 2019. The opening Bays and Transmission Line lengths for FY 2020-21 have been considered equal to the closing values of FY 2019-20.

5.2.2 Addition of Bays and Line lengths have been considered based on either of the following: i) Approved DPRs, ii) DPRs approved by STU but yet to be approved by the Commission, iii) DPRs submitted to STU for approval, iv) Scheme is part of the STU Plan. The Transmission Line length in ckt. km and number of Bays as projected by TPC-T in its Petition for the Control Period from FY 2020-21 to FY 2024-25 are shown in the Table below:

Table 69: Projection of Bays and Transmission Line Length for FY 2020-21 to FY 2024-25, as submitted by TPC-T

Sr. No	Category	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Bays (between 66 kV and 400 kV)						
1	Opening	438	457	476	484	484
2	Addition	19	19	8	0	9
3	Closing	457	476	484	484	493
4	Average	448	467	480	484	489
Bays (<66 kV)						
5	Opening	1010	1014	1023	1023	1023
6	Addition	4	9	0	0	31
7	Closing	1014	1023	1023	1023	1054
8	Average	1012	1019	1023	1023	1039

Sr. No	Category	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Transmission Line Ckt. km (between 66 kV and 400 kV)						
9	Opening	1225.29	1281.79	1301.79	1321.79	1321.79
10	Addition	56.50	20.00	20.00	0.00	13.00
11	Closing	1281.79	1301.79	1321.79	1321.79	1334.79
12	Average	1253.54	1291.79	1311.79	1321.79	1328.29

5.2.3 Based on the above projections, the normative O&M expenses have been computed as shown in the Table below:

Table 70: Normative O&M Expense for FY 2020-21 to FY 2024-25, as submitted by TPC-T (Rs. Crore)

Average No. of Bays	FY 2020-21		FY 2021-22		FY 2022-23		FY 2023-24		FY 2024-25	
	No. of Bays	Normative O&M (Rs. Crore)	No. of Bays	Normative O&M (Rs. Crore)	No. of Bays	Normative O&M (Rs. Crore)	No. of Bays	Normative O&M (Rs. Crore)	No. of Bays	Normative O&M (Rs. Crore)
Between 66 kV and 400 kV	448	124.65	476	136.35	480	149.23	484	158.75	489	166.57
Less than 66 kV	1012	54.89	1023	55.08	1023	57.48	1023	59.44	1039	62.57
Average Length of Lines	**No. of ckt. km.**	**Normative O&M (Rs. Crore)**	**No. of ckt. km.**	**Normative O&M (Rs. Crore)**	**No. of ckt. km.**	**Normative O&M (Rs. Crore)**	**No. of ckt. km.**	**Normative O&M (Rs. Crore)**	**No. of ckt. km.**	**Normative O&M (Rs. Crore)**
Between 66 kV and 400 kV	1253.54	15.54	1301.79	16.66	1311.79	17.45	1321.79	18.37	1328.29	19.13
Normative O&M		**195.09**		**208.09**		**224.15**		**236.56**		**248.27**

5.2.4 Further, TPC-T has separately considered energy charges towards auxiliary consumption of the Transmission Receiving Stations under the projected O&M Expenses. In addition, TPC-T has proposed certain IT expenditure to be incurred during the MYT Control Period from FY 2020-21 to FY 2024-25 under Operational Expenditure (Opex) schemes, as per Regulation 61.8 of the MYT Regulations, 2019. The total O&M expenses projected by TPC-T for the Control Period from FY 2020-21 to FY 2024-25, including the auxiliary charges and IT projects are given in the following Table:

Table 71: O&M expenditure for FY 2020-21 to FY 2024-25, as submitted by TPC-T (Rs. crore)

Category	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Normative O&M Expenditure	195.09	208.09	224.15	236.56	248.27
Energy Charges	14.02	14.02	14.02	14.02	14.02
O&M Expenses towards IT projects	11.08	7.66	6.70	6.72	6.72

Category	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Total O&M Expenses	**220.19**	**229.78**	**244.88**	**257.30**	**269.01**

5.2.5 TPC-T submitted that while finalising the norms for O&M expenses in the MYT Regulations, 2019 for TPC-T for the Control Period from FY 2020-21 to FY 2024-25, the Commission had not considered the following submissions made by TPC-T, which has resulted into specifying of lower norms for O&M entitlement during the MYT Control Period:

- Lower A&G expenses for FY 2017-18 due to an exceptional item of reversal of MBPT wayleave provision of Rs. 14.94 Crore;
- Non-consideration of GIS impact for computation of O&M norms of bays.

5.2.6 Therefore, TPC-T requested the Commission to approve revised O&M norms for the Control Period, as shown in the Table below:

Table 72: Revised O&M Norms for the Control Period, as submitted by TPC-T (Rs. Crore)

Voltage Level	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
O&M Norms for TPC-T as per MYT Regulations 2019					
Rs Lakh/ckt km					
>66kV&<400 kV	1.24	1.29	1.33	1.39	1.44
Rs Lakh/Bay					
>66kV&<400 kV	32.38	33.63	34.92	36.26	37.66
66 kV and less	6.77	7.03	7.3	7.58	7.87
Revised O&M Norms proposed by TPC-T					
Rs Lakh/ckt km					
>66kV&<400 kV	1.28	1.33	1.38	1.43	1.48
Rs Lakh/Bay					
>66kV&<400 kV	39.96	41.47	43.03	44.66	46.35
66 kV and less	8.36	8.67	9.00	9.34	9.69

5.2.7 In view of the above, TPC-T submitted the revised O&M entitlement for the Control Period from FY 2020-21 to FY 2024-25, as per the revised norms, as shown in the Table below:

Table 73: Revised Normative O&M Expense for FY 2020-21 to FY 2024-25, as submitted by TPC-T (Rs. Crore)

Average No. of Bays	FY 2020-21		FY 2021-22		FY 2022-23		FY 2023-24		FY 2024-25	
	No. of Bays	Normative O&M (Rs. Crore)	No. of Bays	Normative O&M (Rs. Crore)	No. of Bays	Normative O&M (Rs. Crore)	No. of Bays	Normative O&M (Rs. Crore)	No. of Bays	Normative O&M (Rs. Crore)
Between 66 kV and 400 kV	448	153.81	476	168.13	480	183.91	484	195.53	489	205.00
Less than 66 kV	1012	67.75	1023	67.94	1023	70.85	1023	73.24	1039	76.91
Average Length of Lines	**No. of ckt. km.**	**Normative O&M (Rs. Crore)**	**No. of ckt. km.**	**Normative O&M (Rs. Crore)**	**No. of ckt. km.**	**Normative O&M (Rs. Crore)**	**No. of ckt. km.**	**Normative O&M (Rs. Crore)**	**No. of ckt. km.**	**Normative O&M (Rs. Crore)**
Between 66 kV and 400 kV	1253.54	16.05	1301.79	17.18	1311.79	18.10	1321.79	18.90	1328.29	19.79
Normative O&M		**237.61**		**253.24**		**272.86**		**287.67**		**301.71**

Table 74: Revised O&M expenditure for FY 2020-21 to FY 2024-25, submitted by TPC-T (Rs. Crore)

Category	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Normative O&M Expenses	237.61	253.24	272.86	287.67	301.71
Energy Charges	14.02	14.02	14.02	14.02	14.02
O&M Expenses towards IT projects	11.08	7.66	6.70	6.72	6.72
Total O&M Expenses	**262.71**	**274.93**	**293.59**	**308.41**	**322.45**

Commission's Analysis and Ruling

5.2.8 The Commission notes that TPC-T has proposed revision of O&M norms for the Control Period on account of non-consideration of lower A&G expenses for FY 2017-18 (due to an exceptional item of reversal of MBPT wayleave provision of Rs. 14.94 Crore) and impact of GIS Bays. However, the norms specified in MYT Regulations, 2019 were finalised after following due procedure of prior publication, inviting comments on the draft MYT Regulations, 2019 and the Explanatory Memorandum, and consideration of the comments received on the draft MYT Regulations, 2019. Further, TPC-T had not submitted any comments on the draft MYT Regulations, seeking revision of the O&M norms for TPC-T. The Commission has retained the same O&M norms, as proposed in the draft MYT Regulations, in the final notified MYT Regulations, 2019. The Commission is of the view that if the O&M norms are revised in the manner proposed by TPC-T, based on certain rationale, then there would be no sanctity to the process of framing of the MYT Regulations, 2019. **In view of the above, the Commission has considered O&M norms specified for TPC-T in the MYT**

Regulations 2019, for computation of normative O&M expenses.

5.2.9 The Commission has considered the closing no. of Bays and Lines for FY 2019-20 approved in this Order as opening no. of Bays and Lines for FY 2020-21. For FY 2020-21 and FY 2022-23, the Commission has considered addition to no. of Bays and Lines same as proposed by TPC-T. As explained subsequently, the Commission has approved the total capitalisation of Rs.57.06 Crore for FY 2021-22, against capitalisation of Rs.485.48 Crore proposed by TPC-T. Further, the Commission has approved capitalisation of Rs. 54.99 Crore against Rs.437.41 Crore and Rs.379.14 Crore proposed by TPC-T for FY 2023-24 and FY 2024-25, respectively, based on 20% of average capitalisation of past 5 years (FY 2015-16 to FY 2019-20). Therefore, no addition to Bays and Ckt. Km. are considered for calculation of normative O&M expenses for FY 2021-22, FY 2023-24 and FY 2024-25, as the number of Bays cannot be considered proportionate to the allowance of capitalisation, which is on gross basis and not linked to any particular scheme. The impact of actual number of Bays added and put to use in these years shall be considered at the time of true-up for the respective years. **The approved Bays and Transmission line length for the 4th Control Period is shown in the Table below**:

Table 75: Bays and Transmission Line Length approved for FY 2020-21 to FY 2024-25

Sr. No	Category	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Bays (between 66 kV and 400 kV)						
1	Opening	360	379	379	387	387
2	Addition	19	0	8	0	0
3	Closing	379	379	387	387	387
4	Average	370	379	383	387	387
Bays (<66 kV)						
5	Opening	926	930	930	930	930
6	Addition	4	0	0	0	0
7	Closing	930	930	930	930	930
8	Average	928	930	930	930	930
Transmission Lines ckt. km (between 66 kV and 400 kV)						
9	Opening	1225.29	1275.01	1275.01	1295.01	1295.01
10	Addition	49.72	0.00	20.00	0.00	0.00
11	Closing	1275.01	1275.01	1295.01	1295.01	1295.01
12	Average	1250.15	1275.01	1285.01	1295.01	1295.01

5.2.10 The normative O&M expenses approved by the Commission for FY 2020-21 to FY 2024-25 are summarised in the following Table:

Table 76: Normative O&M Expenditure approved for 4th Control Period (Rs. Crore)

O&M Expenses	Unit	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Transmission Lines- Between 66 kV and 400 kV						
Length of Transmission line	Ckt.km	1250.15	1275.01	1285.01	1295.01	1295.01
Norms as per Regulations	Rs Lakh/ ckt-km	1.24	1.29	1.33	1.39	1.44
O&M Expenses for Lines (A)	**Rs. Crore**	**15.50**	**16.45**	**17.09**	**18.00**	**18.65**
Bays (Between 66 kV and 400 kV)						
No. of Bays	No.	370	379	383	387	387
Norms as per Regulations	Rs Lakh/ Bay	32.38	33.63	34.92	36.26	37.66
Bays (<66 kV)						
No. of Bays	No.	928	930	930	930	930
Norms as per Regulations	Rs Lakh/ Bay	6.77	7.03	7.3	7.58	7.87
O&M Expenses for Bays (B)	**Rs. Crore**	**156.44**	**162.44**	**167.35**	**172.40**	**179.04**
Total O&M Expenses (A+B)	**Rs. Crore**	**171.94**	**178.88**	**184.44**	**190.40**	**197.69**

5.2.11 As per the provision of the Regulation 61.7 of the MYT Regulations 2019, the O&M expenses for the GIS bays are worked out by multiplying 0.70 to the norms approved for TPC-T.

5.2.12 The Commission has additionally considered the energy charges towards auxiliary consumption of the Transmission Receiving Stations, same as energy charges approved for FY 2019-20 in this Order.

5.2.13 As regards Opex Schemes proposed by TPC-T, the MYT Regulations, 2019 allows the Transmission Licensee to incur O&M expenditure toward IT schemes and this expenditure will be passed through in its ARR over and above normative O&M expenses, after prudence check. The relevant provisions of MYT Regulations, 2019 are reproduced as below:

"61.8 A Transmission Licensee may undertake Opex schemes for system automation, new technology and IT implementation, etc., and such expenses may be allowed over and above normative O&M Expenses, subject to prudence check by the Commission:

Provided that the Transmission Licensee shall submit detailed justification, cost benefit analysis of such schemes as against capex schemes, and savings in O&M expenses, if any."

5.2.14 The Commission notes that TPC-T has projected IT expenditure of Rs. 38.88 Crore towards Opex Schemes for the Control Period. TPC-T has provided the list of such schemes and expected benefits in brief along with the Petition. The Opex schemes proposed by TPC-T are as shown in the Table below:

Table 77: Opex Expenses for 4th Control Period, as submitted by TPC-T

Sr. No.	Category	Opex Scheme	Value (Rs. Crore)
1	Communication Upgradation	L3 network feature Communication Upgradation: Updation and warranty extension	0.20
2	Communication Upgradation	Telephony exchange upgradation -Dharavi, Carnac, Trombay	0.50
3	Communication Upgradation	Fibre infra standardisation services	0.80
4	IT implementation	Information and Communication Technology (Transmission) Software upgradation	20.29
5	IT implementation	License for Power System Analysis Software	0.80
6	IT implementation	Robotics and AI implementation in Switchgear	1.20
7	New Technology	Image Analytics for UAV based (DRONE)transmission lines inspection	2.50
8	System Automation	Automation of Transmission KPI Dashboard	2.00
9	System Automation	SCADA	3.30
10	System Automation	E Security for infra-installations	5.92
11	System Automation	Asset performance Management under Reliability Centered Maintenance (RCM)	0.52
12	System Automation	PI server implementation	0.85
	Total projected Opex Expenses		**38.88**

5.2.15 The Commission asked TPC-T to submit detailed justification, cost benefit analysis of such schemes as against capex schemes, and corresponding savings in O&M expenses. TPC-T submitted certain details of proposed scheme, present practice/system at TPC-T, benefits of scheme, etc. **However, the Commission notes that the cost benefit analysis submitted by TPC-T is very generic; further, TPC-T has not provided clear quantification of benefits as well as savings in O&M expenses. Therefore, the Commission has not approved the IT expenditure proposed by TPC-T under Opex schemes for the Control Period, at this stage.**

5.2.16 In view of the above, the normative O&M expenses including energy charges for auxiliary consumption approved by the Commission for the Control Period are shown in the Table below:

Table 78: O&M expenses approved for FY 2020-21 to FY 2024-25 (Rs. Crore)

Category	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Normative O&M Expenses	171.94	178.88	184.44	190.40	197.69
Energy Charges	14.02	14.02	14.02	14.02	14.02
O&M Expenses towards IT projects	0.00	0.00	0.00	0.00	0.00
Total O&M Expenses	**185.97**	**192.91**	**198.47**	**204.43**	**211.71**

5.3 Capitalisation

TPC-T's Submission

5.3.1 TPC-T has projected the capitalization for the Control Period from FY 2020-21 to FY 2024-25, as shown in the Table below:

Table 79: Capitalization for FY 2020-21 to FY 2024-25, as submitted by TPC-T (Rs. Crore)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Non DPR Schemes					
Total Carry Forward Schemes	13.45	9.74	5.14	0.00	0.00
New Schemes	6.25	3.85	4.25	17.80	0.00
HO & SS Allocation	12.14	12.14	12.14	12.14	12.14
Total (A)	31.84	25.74	21.54	29.94	12.14
DPR Schemes					
Carry Forward Schemes	407.31	31.91	170.06	1.50	0.00
DPR submitted to MERC	4.66	17.50	280.71	0.00	0.00
DPR submitted to STU and yet to be submitted to Commission	59.99	410.33	0.00	405.97	367.00
Total (B)	471.96	459.74	450.77	407.47	367.00
Total Transmission (A+B)	**503.79**	**485.48**	**472.31**	**437.41**	**379.14**

5.3.2 The Petitioner has submitted the revised DPRs for the capital expenditure schemes where there has been a change in scope or project cost. The major projects to be executed during FY 2020-21 to FY 2024-25 are as follows:

- 220 kV GIS at Versova;
- 220 kV switching station at NMIA;
- 220 kV Receiving Station at Antop Hill;
- Laying of addition 110 kV cable between Carnac and Backbay;
- Replacement of old 110 kV old oil filled cables between Carnac to Backbay and Carnac to BEST-Backbay;
- Strengthening of 220 kV Carnac Receiving Station;

- Refurbishment of fire protection systems at various receiving stations;
- 33 kV GIS replacing AIS at Dharavi; and
- Life enhancement of 220 kV and 145 kV GIS.

Commission's Analysis and Ruling

5.3.3 The Commission has elaborated the analysis underlying its approval of the DPR and Non-DPR schemes initiated prior to the Control Period from FY 2020-21 to FY 2024-25 but having spill-over capitalisation over the Control Period, in Section 3.3 and 4.3 of this Order. The analysis of the schemes projected to commence in the Control Period from FY 2020-21 to FY 2024-25 is given below.

a) DPR schemes submitted to the Commission for approval

5.3.4 TPC-T has proposed capitalisation against 4 No. of DPRs submitted to the Commission, but yet to be approved by the Commission at the time of submission of MYT Petition. The Commission notes that TPC-T has considered DPR scheme for 'Additional 110 kV Feed to BKC RS and Kurla RS' as yet to be approved. However, the 'In-Principle Approval' was already given to this DPR on 25 September 2019 with approved cost of Rs.139.99 Crore (Rs. 0.615 Crore in FY 2020-21, Rs. 5.70 Crore in FY 2021-22 and Rs.133.68 Crore in FY 2022-23) against proposed Rs.139.99 Crore.

5.3.5 Further, the Commission has given 'In-Principle Approval' to following two no. of DPR schemes, after submission of MYT Petition by TPC-T:

- 'Replacement of Towers in Vashi and Vagholi Creek' was approved on 6 November 2019 with approved cost of Rs.28.89 Crore (Rs. 9.94 Crore in FY 2021-22 and Rs.18.95 Crore in FY 2022-23) against proposed Rs.28.80 Crore;

- 'Replacement of aged 110 kV Oil Filled Cables of Trombay-Chembur and Khopoli-Chembur' was approved on 23 December 2019 with approved cost of Rs.98.03 Crore (Rs. 98.03 Crore in FY 2022-23) against proposed Rs.121.87 Crore by TPC-T.

5.3.6 Further, DPR Scheme of Rs. 12.23 Crore for 'Installation of Lightning Arrestors in Transmission Network' has been withdrawn by TPC-T. Accordingly, the Commission has not considered capitalisation of Rs. 12.23 Crore (Rs.4.66 Crore in FY 2020-21 and Rs.7.56 Crore in FY 2021-22) under the scheme.

b) DPR schemes yet to be submitted to the Commission for approval

5.3.7 TPC-T has proposed capitalisation during FY 2020-21 to FY 2024-25 against 13 DPRs, which are yet to be submitted for approval.

5.3.8 If DPR schemes are pending approval, then additional capitalisation up to 20% of capitalisation approved for that year may be added, in accordance with Regulation 24.6 of MYT Regulations, 2019, as reproduced below:

"24.6 The Commission may approve, for each year of the Control Period, an additional amount equivalent to 20% of the total capital expenditure approved for that year, towards planned or unplanned capital expenditure that is yet to be approved by the Commission."

5.3.9 Based on the above approach, even after considering the approval of the additional capitalisation towards planned/unplanned capital expenditure equivalent to 20% of the approved capitalisation as per the Regulation 24.6 of the MYT Regulations, 2019 and the approval of non-DPR schemes subject to the cap of 20% of the approved DPR schemes in line with the Regulation 24.7 of MYT Regulations, 2019, the Commission observes that the total capitalisation approvals in the later part of the Control Period are significantly lower than that observed based on past trends.

5.3.10 The Commission notes that unapproved DPR schemes claimed by TPC-T in the present Petition for the 4th Control Period are part of the Five Year Plan for the period FY 2018-19 to FY 2023-24 published by the STU. While TPC-T has the option of getting the in-principle approval of DPRs from the Commission for such presently unapproved schemes, which would be executed in the later part of the 4th Control Period before the upcoming MTR proceedings, however, in the interim, the capitalisation in those years would appear to be significantly lower than the past trends. Accordingly, there may be a sudden increase in the ARR for TPC-T at the time of MTR proceedings on account of the impact of including this capitalisation.

5.3.11 Accordingly, to avoid such significant increases in the ARR during the MTR proceeding, the Commission has considered the actual approved capitalisation for the past 5 years (FY 2015-16 to FY 2019-20) and allowed additional amount towards capitalisation for the period from FY 2023-24 and FY 2024-25 so as to ensure that the total capitalisation approval in this period, i.e., FY 2023-24 and FY 2024-25 is at least equal to 50% of the average capitalisation approved for TPC-T during the past 5 years (FY 2015-16 to FY 2019-20).

Table 80: Past Trend of Capitalisation for TPC-T (Rs. Crore)

Particulars	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Average Value
DPR Capitalisation	225.47	141.79	158.30	303.77	545.52	274.97
Non-DPR Capitalisation	38.78	28.36	34.70	12.93	23.53	27.66
Total Capitalisation	264.25	170.15	193.00	316.70	569.05	302.63
50% average capitalisation of past 5 years						**151.32**

5.3.12 For FY 2021-22, FY 2023-24 and FY 2024-25, the sum of DPR and Non-DPR capitalisation approved by the Commission is lower than 50% of the average capitalisation, i.e., Rs.151.32 Crore, therefore, the Commission has allowed additional capitalisation equal to the difference between the approved capitalisation and Rs. 151.32 Crore towards DPRs yet to be submitted. For FY 2022-23, the DPR and Non-DPR capitalisation approved by the Commission is higher than Rs.151.32 Crore, therefore, no capitalisation is considered towards DPR schemes yet to be approved and DPRs yet to be submitted. Further, the Commission has not considered any additional capitalisation for FY 2020-21 since no DPR is pending and DPRs yet to be submitted cannot be completed in FY 2020-21.

5.3.13 It is to be noted that mere consideration of capital expenditure/capitalisation in the MYT Order does not mean that the same is approved. No scheme shall be undertaken unless the same is approved by the Commission under the separate in-principle approval process or qualifies under Non-DPR scheme.

5.3.14 The capitalisation approved by the Commission for FY 2020-21 to FY 2024-25 is provided in the Table below:

Table 81: Summary of Capitalisation approved by the Commission (Rs. Crore)

Particulars	4th MYT Control Period				
	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
DPR Capitalisation	407.92	126.10	420.72	126.10	139.17
Approved DPR	*407.92*	*47.55*	*420.72*	*1.50*	*0.00*
DPR submitted; yet to be approved *DPR yet to be submitted*	*0.00*	*78.54*	*0.00*	*124.60*	*139.17*
Non-DPR Capitalisation	31.84	25.22	21.54	25.22	12.14
Total Capitalisation	**439.76**	**151.32**	**442.26**	**151.32**	**151.32**

DPR schemes where TPC-T is required to submit Completion Report

5.3.15 There are certain schemes that have been capitalised by TPC-T, for which TPC-T is required to submit project completion final report, as provided in Table below:

Table 82: DPR schemes for which Completion Report is to be submitted by TPC-T

Sl. No.	Project Title	MERC Approval Date	Approved Date of Completion	Actual Date of Completion	Actual Capitalisation till FY 2016-17 (Rs. Crore)
1	145 kV and 33 kV GIS at Powai	10-Jun-08	2010-11	2015-16	121.46
2	Additional Power Transformers at Borivali	25-Nov-10	2012-13	2014-15	14.58
3	RTUs for SCADA (Kalyan)	18-May-11	2012-13	2013-14	4.32
4	Khopoli-Bhivpuri Tie line	22-Oct-12	2014-15	2015-16	14.27

Sl. No.	Project Title	MERC Approval Date	Approved Date of Completion	Actual Date of Completion	Actual Capitalisation till FY 2016-17 (Rs. Crore)
5	Replacement of 250 MVA ICT#7 at Dharavi	27-Sep-13	2013-14	2014-15	16.85

*Note" *Capitalisation in FY 2017-18.*

5.4 Depreciation

TPC-T's Submission

5.4.1 TPC-T has computed the depreciation for FY 2020-21 to 2024-25 by applying the weighted average depreciation rate considered for FY 2019-20, as shown in the Table below:

Table 83: Depreciation for FY 2020-21 to FY 2024-25, as submitted by TPC-T (Rs. Crore)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Opening GFA	4380.98	4884.77	5370.25	5824.56	6279.97
Addition during the year	503.79	485.48	472.31	437.41	379.14
Retirement	0.00	0.00	0.00	0.00	0.00
Closing	4884.77	5370.25	5842.56	6279.97	6659.12
Depreciation Rate	3.93%	3.93%	3.93%	3.93%	3.93%
Depreciation	**182.28**	**201.74**	**220.58**	**238.48**	**254.54**

Commission's Analysis and Ruling

5.4.2 For computing Depreciation for the Control Period from FY 2020-21 to FY 2024-25, the Commission has considered closing GFA for FY 2019-20 as provisionally Trued up earlier in this Order as opening balance of GFA for FY 2020-21. The asset addition during the year has been considered equal to the capitalisation approved in this Order for each year of the Control Period.

5.4.3 The depreciation approved by the Commission for FY 2020-21 to FY 2024-25 is shown in the Table below:

Table 84: Depreciation approved for FY 2020-21 to FY 2024-25 (Rs. Crore)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Opening GFA	4256.53	4696.29	4847.61	5289.86	5441.18
Addition during the year	439.76	151.32	442.26	151.32	151.32
Retirement	0.00	0.00	0.00	0.00	0.00
Closing	4696.29	4847.61	5289.86	5441.18	5592.49
Depreciation Rate	3.94%	3.94%	3.94%	3.94%	3.94%
Depreciation	**176.46**	**188.12**	**199.81**	**211.51**	**217.48**

5.5 Interest on loan capital

TPC-T's Submission

5.5.1 TPC-T submitted it has been availing loans for financing its capital expenditure and would continue to tie up loans during the 4th Control Period depending on the capital expenditure requirements, phasing and for refinancing. It may be difficult to predict the interest rates for FY 2020-21 to FY 2024-25 at the time of submission of MYT Petition. Hence, the interest on Loan has been arrived at based on the closing balance of loan for FY 2019-20, additional capitalisation during FY 2020-21 to FY 2024-25 and considering the interest rate equivalent to that computed for FY 2019-20.

5.5.2 TPC-T submitted the projected calculation of Interest on Loan as per the Table below:

Table 85: Interest on Loan for FY 2020-21 to FY 2024-25, as submitted by TPC-T (Rs. Crore)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Opening balance of loan	1416.37	1586.75	1724.85	1834.88	1902.59
Addition during the year	352.66	339.84	330.62	306.19	265.40
Repayment	182.28	201.74	220.58	238.48	254.54
Closing balance of Loan	1586.75	1724.85	1834.88	1902.59	1913.45
Interest Rate	8.64%	8.64%	8.64%	8.64%	8.64%
Interest Cost	**129.71**	**143.03**	**153.75**	**161.43**	**164.43**

Commission's Analysis and Ruling and Ruling

5.5.3 The opening loan for FY 2020-21 has been considered equal to the closing loan for FY 2019-20 as approved in the provisional Truing-up for FY 2019-20, in earlier Sections of this Order.

5.5.4 The Commission has considered the debt amount for each year of the 4th Control Period equal to 70% of the capitalisation approved. The loan repayments have been considered equal to the depreciation approved for the respective years, in accordance with Regulation 30 of the MYT Regulations, 2019. The interest rate has been considered equal to the rate of interest considered for FY 2019-20 and the interest on long-term loan has been computed on the normative average loan for each year of the 4th Control Period.

5.5.5 The interest expenses on long-term loans approved by the Commission for FY 2020-21 to FY 2021-22 are summarised in the Table below:

Table 86: Interest on Loan approved for FY 2020-21 to FY 2024-25 (Rs. Crore)

Particulars	**FY 2020-21**	**FY 2021-22**	**FY 2022-23**	**FY 2023-24**	**FY 2024-25**
Opening balance of loan	1366.69	1498.06	1415.86	1525.63	1420.03
Addition during the year	307.83	105.92	309.58	105.92	105.92
Repayment	176.46	188.12	199.81	211.51	217.48
Closing balance of Loan	**1498.06**	**1415.86**	**1525.63**	**1420.03**	**1308.48**
Interest Rate	8.94%	8.94%	8.94%	8.94%	8.94%
Interest Cost	**128.05**	**130.25**	**131.48**	**131.67**	**121.96**

5.6 Interest on Working Capital

TPC-T's Submission

5.6.1 TPC-T submitted that it has computed the IoWC based on the elements specified in the MYT Regulations 2019. The rate of Interest of 9.80% has been considered for FY 2020-21 to FY 2024-25, i.e., at the same level as considered for FY 2019-20. The computation of IoWC claimed by TPC-T for the Control Period is submitted in the following Table:

Table 87: IoWC for FY 2020-21 and FY 2024-25, as submitted by TPC-T (Rs. Crore)

Particulars	**FY 2020-21**	**FY 2021-22**	**FY 2022-23**	**FY 2023-24**	**FY 2024-25**
O&M expenses for one month	21.89	22.91	24.47	25.70	26.87
Maintenance spares @ 1% of Opening GFA	43.81	48.85	53.70	58.43	62.80
One and a half month equivalent of the expected revenue from transmission charges	106.73	116.01	125.58	133.99	141.20
Total Working Capital	172.43	187.77	203.75	218.12	230.87
Interest Rate (%)	9.80%	9.80%	9.80%	9.80%	9.80%
Interest on Working Capital	**16.89**	**18.39**	**19.96**	**21.37**	**22.62**

Commission's Analysis and Ruling

5.6.2 The Commission has considered the rate of interest for computation of IoWC as 9.55% considering the applicable MCLR of SBI plus 150 basis points, in accordance with the MYT Regulations, 2019.

5.6.3 The computation of normative IoWC approved by the Commission for the Control Period from FY 2020-21 to FY 2024-25, is summarized in the Table below:

Table 88: IoWC approved for FY 2020-21 to FY 2024-25 (Rs. Crore)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
O&M expenses for one month	15.50	16.08	16.54	17.04	17.64
Maintenance spares @ 1% of Opening GFA	42.57	46.96	48.48	52.90	54.41
One and a half month equivalent of the expected revenue from transmission charges	79.58	97.81	102.03	106.28	107.66
Total Working Capital	**137.64**	**160.85**	**167.04**	**176.22**	**179.71**
Interest Rate (%)	9.55%	9.55%	9.55%	9.55%	9.55%
Interest on Working Capital	**13.14**	**15.36**	**15.95**	**16.83**	**17.16**

5.7 Return on Equity (RoE)

TPC-T's Submission

5.7.1 TPC-T submitted that it has calculated the RoE on the basis of 70:30 Debt Equity ratio and considered the Base RoE rate as 14% as per MYT Regulations, 2019. The RoE for FY 2020-21 to FY 2024-25 computed by TPC-T is shown in the Table below:

Table 89: RoE for FY 2020-21 and FY 2024-25, as submitted by TPC-T (Rs. Crore)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Equity at the beginning of the year (A)	1403.72	1554.86	1700.51	1842.20	1973.43
Capitalization during the year (B)	503.79	485.48	472.31	437.41	379.41
Equity portion of the capital expenditure capitalised during the year (C=B*30%)	151.14	145.64	141.69	131.22	113.74
Equity at the end of the year	1554.86	1700.51	1842.20	1973.42	2087.17
Return on equity at the beginning of the year (D=A* 17.82%)	250.12	277.05	303.00	328.25	351.63
Return on Equity on Capitalization during the year	13.47	12.98	12.62	11.69	10.13
Total Return on Regulatory Equity	**263.59**	**290.03**	**315.63**	**339.94**	**361.76**

5.7.2 As per the MYT Regulations, 2019 an additional RoE will be allowed based on the actual performance during the Truing-up of the respective financial year. TPC-T submitted that such provision will create a Regulatory Gap during Truing-up to be recovered in future years. With the Tariff Policy stating that no new Regulatory Assets should be created, TPC-T requested the Commission to consider allowing the entire RoE at the rate of 15.5% at the Tariff determination stage itself and recompute the RoE based on actual performance at the time of Truing-up to avoid Regulatory Asset build up.

Commission's Analysis and Ruling

5.7.3 The Commission has computed the RoE for the Control Period in accordance with Regulation 29 of the MERC MYT Regulations, 2019. The Closing Equity of FY 2019-20 has been considered as Opening Equity of FY 2020-21 and onwards. Addition to equity is considered equal to 30% of the capitalization approved in this Order for respective year of the Control Period as specified in the MYT Regulations, 2019.

5.7.4 Further, Regulation 34 of the MYT Regulations, 2019 provides for pre-tax RoE to be computed for the Control Period. The MYT Regulations specify that the effective tax rate as per latest truing up year shall be considered for grossing up the RoE for MYT Control Period. The MAT rate for FY 2017-18 and FY 2018-19 was 21.34% and 21.55%, respectively. The Corporate Tax Rate for FY 2017-18 and FY 2018-19 was 34.608% and 34.95%, respectively. However, the Government of India (GoI) has reduced the effective Income Tax rates recently. The effective MAT rate is reduced to 17.47% and effective Corporate Tax rate is reduced to 25.17%. Therefore, the Commission has considered the Effective Income Tax rate after factoring the reduced Tax rates, for allowing pre-tax RoE for the MYT Control Period, so that the benefit of reduced Tax rates is passed on to the consumers.

5.7.5 Since Tax payable for TPC-T for FY 2018-19 has been calculated under MAT rate, the

Commission has considered the effective Tax rate of 17.47% and it has been applied on base rate of RoE of 14% to arrive at pre-tax RoE to be allowed for the Control Period. Further, as regards TPC-T's request to consider the RoE rate as 15.5% at the tariff determination stage itself, the Commission is of the view that this would be in violation of the provisions of the MYT Regulations, 2019, and amount to pre-empting the process of assessment of performance at the true-up stage, to ascertain whether the Licensee is entitled to the additional RoE. Hence, the Commission has allowed the RoE at the Base Rate of 14% only, duly grossed up by the applicable Tax rate.

5.7.6 The pre-tax ROE approved by the Commission for the Control Period is shown in the Table below:

Table 90: RoE approved for FY 2020-21 and FY 2024-25 (Rs. Crore)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Equity at the beginning of the year (A)	1369.04	1500.96	1546.36	1679.03	1724.43
Capitalization during the year (B)	439.76	151.32	442.26	151.32	151.32
Equity portion of the capital expenditure capitalised during the year (C=B*30%)	131.93	45.39	132.68	45.39	45.39
Equity at the end of the year	**1500.96**	**1546.36**	**1679.03**	**1724.43**	**1769.82**
Return on equity at the beginning of the year (D=A* 16.964%)	232.24	254.62	262.32	284.83	292.53
Return on Equity on Capitalization during the year	11.19	3.85	11.25	3.85	3.85
Total Return on Regulatory Equity	**243.43**	**258.47**	**273.58**	**288.68**	**296.38**

5.8 Contribution to Contingency Reserves

TPC-T's Submission

5.8.1 TPC-T submitted that in line with Regulation 35 of the MYT Regulations, 2019, the Contribution towards the Contingency Reserves for FY 2020-21 to FY 2024-25 has been considered as 0.25% of opening GFA, as shown in the Table below:

Table 91: Contribution of Contingency Reserves for FY 2020-21 to FY 2024-25 as submitted by TPC-T (Rs. Crore)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Opening GFA	4380.98	4884.77	5370.25	5842.56	6279.97
Maximum Permissible	219.05	244.24	268.51	292.13	314.00
Amount of Contingency Reserve	107.34	118.29	130.50	143.93	158.54
Created in respective year	10.95	12.21	13.43	14.61	15.70
Cumulative Amount of Contingency Reserve	**118.29**	**130.50**	**143.93**	**158.54**	**174.24**

Commission's Analysis and Ruling

5.8.2 The Commission has computed the Contribution to Contingency Reserves at 0.25 % of the opening GFA in accordance with the MYT Regulations, 2019 and based on the capitalisation approved for FY 2020-21 to FY 2024-25, as shown in the Table below:

Table 92: Contribution of Contingency Reserves approved for FY 2020-21 to FY 2024-25 (Rs. Crore)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Opening Balance of Contingency Reserves	106.91	117.56	129.30	141.42	154.64
Opening Gross Fixed Assets	4256.53	4696.29	4847.61	5289.86	5441.18
Opening Balance of Contingency Reserves as % of Opening GFA	2.51%	2.50%	2.67%	2.67%	2.84%
Contribution to Contingency Reserves during the year	**10.64**	**11.74**	**12.12**	**13.22**	**13.60**
Closing Balance of Contingency Reserves	**117.56**	**129.30**	**141.42**	**154.64**	**168.24**
Closing Balance of Contingency Reserves as % of Opening GFA	2.76%	2.75%	2.92%	2.92%	3.09%

5.9 Non-Tariff Income

TPC-T's Submission

5.9.1 TPC-T submitted that the Non-Tariff Income for FY 2020-21 to FY 2024-25 has been considered same as that estimated for FY 2018-19, i.e., Rs 12.27 Crore.

Commission's Analysis and Ruling

5.9.2 The Commission has considered Non-Tariff income for FY 2020-21 to FY 2024-25, same as that approved for FY 2018-19 approved in this Order, excluding income from Interest on Contingency Reserve Investments. The Commission has computed the income from Interest on Contingency Reserve Investments for FY 2020-21 to FY 2024-25 as shown in the Table below:

Table 93: Interest Income on Contribution to Contingency Reserves for FY 2020-21 to FY 2024-25, as computed by the Commission (Rs. Crore)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Opening Balance of Contingency Reserves	106.91	117.56	129.30	141.42	154.64
Closing Balance of Contingency Reserves	117.56	129.30	141.42	154.64	168.24
Average of Opening & Closing Balance of Contingency Reserves	112.24	123.43	135.36	148.03	161.44
Interest on Contingency Reserve Investments	7.87	8.65	9.49	10.38	11.32
Rate of Interest on Contingency Reserve Investments	7.01%	7.01%	7.01%	7.01%	7.01%

5.9.3 The Commission has calculated the income from Interest on Contingency Reserve Investments for FY 2020-21 to FY 2024-25 by taking the actual rate of interest of 7.01% for FY 2018-19 and opening and closing balance of Contingency Reserve for FY 2020-21 to FY 2024-25 as approved in this Order. The income from Interest on Contingency Reserve Investments have been added to the Non-Tariff income for FY 2018-19 to arrive at Non-Tariff Income for FY 2020-21 to FY 2024-25.

5.9.4 The summary of Non-Tariff Income approved by the Commission for the Control Period is shown in the Table below:

Table 94: Non-Tariff Income approved for FY 2020-21 to FY 2024-25 (Rs. Crore)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Non-Tariff Income	13.58	14.37	15.21	16.09	17.04

5.10 Past Recoveries

TPC-T's Submission

5.10.1 TPC-T submitted that the Commission in its MTR Order in Case No. 5 of 2015 has provisionally approved Rs. 87.61 Crore as Non-Tariff Income considering Delayed Payment Charges (DPC) of Rs. 69.37 Crore for FY 2015-16. TPC-T had filed an Appeal before the Hon'ble ATE bearing Appeal No. 246 of 2015 challenging the issue of DPC being considered as part of Non-Tariff Income. The Hon'ble ATE vide its Judgment in Appeal No. 246 of 2015 dated 3rd June, 2016, upheld the decision of the Commission of considering DPC as part of Non-Tariff Income. This Judgment in Appeal No. 246 of 2015 by Hon'ble ATE was challenged by TPC-T in the Hon'ble Supreme Court in Civil Appeal No. 1356-1358 of 2017, which is currently sub judice before the Hon'ble Supreme Court.

5.10.2 Further, during truing up of FY 2015-16, the Commission in its MYT Order in Case No. 22 of 2016 once again approved Rs. 111.30 Core as Non-Tariff Income considering DPC of Rs. 93.06 Crore for FY 2015-16. Subsequent to the MYT Order, TPC-T filed its petition for True up of ARR for FY 2015-16 and FY 2016-17, Provisional True up of ARR for FY 2017-18 and revised estimates of ARR for FY 2018-19 to FY 2019-20 (Case No. 204 of 2017). The Commission vide its Order dated 12 September, 2018 has proceeded with the same approach and approved the Non-Tariff Income including the DPC claimed by TPC-T. Aggrieved by the decision of the Commission, TPC-T inter alia challenged the present issue before the Hon'ble ATE in Appeal No. 88 of 2019, which is pending adjudication before the Hon'ble ATE.

5.10.3 TPC-T submitted that during the pendency of the aforementioned Civil Appeal Nos. 1356-1358 of 2017 and Appeal No. 88 of 2019, on 29 May, 2019, the Hon'ble ATE has passed its Judgment in Appeal No. 250 of 2016 in the case of Adani Transmission (India) Limited vs. MERC, returning the findings that DPC is not to be treated as a part of Non-Tariff Income. The relevant findings of the Hon'ble ATE in its Judgment dated 29th May, 2019 in Appeal No. 250 of 2016 is reproduced herein below for ease of reference:

> *"9.2 The delayed payment charges have been considered by the Respondent Commission as Non-tariff Income for reduction of ARR. After careful consideration of all the aspects in the matter, we decide that the delayed payment charges are not to be considered as Non-Tariff Income to be deducted from the allowed ARR. This issue is thus decided in favour of the Appellant."*

5.10.4 Without prejudice to the pending appeals of TPC-T, i.e., Civil Appeal No. 1356-1358 of 2017 before Hon'ble Supreme Court and Appeal No. 88 of 2019 before the Hon'ble ATE, TPC-T has requested the Commission to consider the findings of the Hon'ble ATE in Appeal No. 250 of 2016 and appropriately reverse the DPC income of Rs. 93.06 Crore (along with the carrying cost) which have been passed on as Non-Tariff Income in Order in Case No. 204 of 2017 and Case No. 5 of 2015.

5.10.5 TPC-T submitted that the Commission in its MTR Order in Case No. 204 of 2017 had allowed a Surplus of Rs. 115.10 Crore inclusive of carrying cost to be adjusted in FY 2018-19.

5.10.6 TPC-T further submitted that in accordance with the justification submitted for its claim of Brand Equity, as elaborated earlier, the impact of claim towards Brand Equity expenses of FY 2015-16 and FY 2016-17 have also been claimed along with the other

Past Recoveries, along with the applicable carrying cost.

5.10.7 Based on this approved Surplus, past recoveries of previous period (Impact of brand equity considered for FY 2016-17 and FY 2017-18 and DPC amount of Rs. 93.06 Crore passed through as Non-Tariff Income in FY 2015-16), actual Gap/(Surplus) of FY 2017-18 and FY 2018-19 and revised ARR of FY 2019-20, the total amount of past recoveries for future Tariff as submitted by TPC-T is shown in the Table below:

Table 95: Impact of Brand Equity of FY 2015-16 and FY 2016-17, as submitted by TPC-T (Rs. Crore)

Particulars	Legend	FY 2015-16	FY 2016-17
Normative O & M Expenses	a	197.23	176.05
Employee Expenses	b	82.65	88.43
A&G Expenses (After adjustment of Brand Equity Computation)	c	52.38	59.43
R&M Expenses	d	23.59	19.67
Less: Centenary Celebration	e	(0.75)	(0.11)
Actual Operation & Maintenance Expenses (Net of capitalisation)	f=b+c+d+e	157.87	167.41
Gain /(loss) retained by TPC-T	g=(a-f) *2/3	26.24	2.88
Net Entitlement	h=f+g	184.11	170.29
Net O&M Entitlement allowed in MTR Order	i	183.51	169.19
Incremental Gap	**j=h-i**	**0.60**	**1.10**

5.10.8 The computation of holding cost as submitted by TPC-T is shown in the Table below:

Table 96: Holding Cost - Interest Computation for Gap Recovery in FY 2019-20, as submitted by TPC-T (Rs. Crore)

Particulars	Legend	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Holding Cost Rate	**A**	**14.75%**	**10.79%**	**10.18%**	**9.89%**	**9.80%**
Opening Balance	B	-	93.66	94.76	50.89	0.49
Addition during the year	C	93.66	1.10	(40.90)	(47.03)	71.21
Less Incentive	D			2.97	3.37	
Closing Balance	E=(B+C-D)	93.66	94.76	50.89	0.49	71.69
Holding Cost on Opening	F=(A*B)	-	10.11	9.65	5.03	0.05
Holding Cost on Addition	G=(A*C/2)	6.91	0.06	(2.08)	(2.33)	
Holding Cost	**H=(F+G)**	**6.91**	**10.16**	**7.56**	**2.71**	**0.05**
Total Holding Cost	**I**					**27.39**

5.10.9 TPC-T requested the Commission to approve the past recovery amount of Rs. 105.43

Crore as computed below:

Table 97: Past Recovery Computation for Gap Recovery in FY 2019-20, as submitted by TPC-T (Rs. Crore)

Particulars		FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Opening Balance	A	-	93.66	94.76	53.86	6.83	78.04
Gap/(Surplus) Addition during the year	B	93.66	1.10	(40.90)	68.07	71.21	-
Revenue Gap/(Surplus) approved in MTR Order 204 of 2017	C	-	-	-	(115.10)	-	-
Interest on past recovery	D						27.39
Closing Balance	E=(A+B-C+D)	93.66	94.76	53.86	6.83	78.04	105.43
Total of past recoveries in FY 2020-21	**F=(D+E)**						**105.43**

Commission's Analysis and Ruling

5.10.10 The Commission observes that TPC-T has computed the past gap recovery of Rs. 105.43 Crore in FY 2019-20, which includes DPC amount of Rs. 93.06 Crore passed through as Non-Tariff Income in FY 2015-16, with associated carrying cost. However, the Appeals in the matter of considering DPC as Non-Tariff Income in case of TPC-T is pending in Appeals before the Hon'ble ATE and Hon'ble Supreme Court, and hence, no relief can be granted to TPC-T at this stage. Hence, the Commission has not considered reversal of DPC Amount of Rs. 93.06 Crore, as sought by TPC-T. Further, as elaborated in earlier Sections of this Order, the expenses on Brand Equity have not been approved on account of inconsistent and inadequate justification submitted by TPC-T for the benefits of the Brand Equity payment.

5.10.11 Accordingly, the Commission has computed the carrying/(holding) cost till FY 2020-21 on past Revenue Gap/(Surplus) after truing up for FY 2017-18 and FY 2018-19, and provisional truing up for FY 2019-20, as shown in the Table below:

Table 98: Carrying/(Holding) Cost approved for Gap/(Surplus) Recovery till FY 2020-21 (Rs. Crore)

Particulars	Legend	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Carrying/(Holding) Cost Rate	**A**	**14.75%**	**10.79%**	**10.18%**	**9.89%**	**9.55%**	**9.55%**
Opening Balance	B	-	-	-	(53.14)	(113.93)	(113.93)
Addition during the year	C	-	-	(50.21)	(57.47)		113.93
Less: Incentive	D			2.94	3.32		
Closing Balance	E=(B+C-D)	-	-	(53.14)	(113.93)	(113.93)	-

Particulars	Legend	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Carrying/(Holding) Cost	**F= Average(B, E) x A**	**-**	**-**	**(2.70)**	**(8.26)**	**(10.88)**	**(5.44)**
Total Carrying/(Holding) Cost	**I**						**(27.29)**

5.10.12The past recoveries approved by the Commission are as shown in the Table below:

Table 99: Past Gap/(Surplus) Recovery approved till FY 2020-21 (Rs. Crore)

Particulars	Legend	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Opening Balance	A	-	-	-	(50.21)	(107.67)	(74.69)
Gap/(Surplus) Addition during the year	B	-	-	(50.21)	(57.47)	32.98	-
Revenue Gap/(Surplus) approved in MTR Order 204 of 2017	C	-	-	-		-	-
Interest on past recovery	D					-	(27.29)
Closing Balance	E=(A+B-C+D)	-	-	(50.21)	(107.67)	(74.69)	(101.98)
Total of past recoveries till FY 2020-21	**F=(D+E)**						**(101.98)**

5.10.13Accordingly, the total past recovery to be adjusted in FY 2020-21 is a Surplus of Rs. 101.98 Crore inclusive of holding cost, as against a Gap of Rs. 105.43 Crore submitted by TPC-T.

5.11 Aggregate Revenue Requirement for FY 2020-21 to FY 2024-25

TPC-T's Submission

5.11.1 TPC-T submitted the ARR projected for FY 2020-21 to FY 2024-25, as shown in the Table below:

Table 100: Aggregate Revenue Requirement for FY 2020-21 to FY 2024-25, as submitted by TPC-T (Rs. Crore)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
O&M Charges	262.71	274.93	293.59	308.41	322.45
Interest on Loan	129.71	143.03	153.75	161.43	164.82
Interest on Working Capital	16.89	18.39	19.96	21.37	22.62
Depreciation	182.28	201.74	220.58	238.48	254.54
Return on Equity	263.59	290.03	315.63	339.94	361.76
Contribution to Contingency reserves	10.95	12.21	13.43	14.61	15.70
Annual Transmission Charges	**866.13**	**940.33**	**1016.94**	**1084.23**	**1141.90**
Less: Non-Tariff Income	12.27	12.27	12.27	12.27	12.27
Net ARR from Transmission	**853.86**	**928.06**	**1004.66**	**1071.96**	**1129.62**

5.11.2 Considering the Gap / (Surplus) of the previous years, the net ARR projected by TPC-T for FY 2020-21 to FY 2024-25 is presented in the Table below:

Table 101: Net ARR for FY 2020-21 to FY 2024-25, as submitted by TPC-T (Rs. Crore)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Past Recovery upto FY 2019-20	105.43	-	-	-	-
Stand-alone ARR	853.86	928.06	1004.66	1071.96	1129.62
Total ARR	**959.29**	**928.06**	**1004.66**	**1071.96**	**1129.62**

Commission's Analysis and Ruling

5.11.3 Based on the analysis detailed in the previous paragraphs, the Commission has approved the ARR for TPC-T for the 4th Control Period as shown in the Table below:

Table 102: Aggregate Revenue Requirement for FY 2020-21 to FY 2024-25, as approved by the Commission (Rs. Crore)

Particulars	TPC-T Petition					Approved by the Commission				
	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Operation & Maintenance expenses	262.71	274.93	293.59	308.41	322.45	185.97	192.91	198.47	204.43	211.71
Depreciation expenses	182.28	201.74	220.58	238.48	254.54	176.46	188.12	199.81	211.51	217.48
Interest on loan capital	129.71	143.03	153.75	161.43	164.82	128.05	130.25	131.48	131.67	121.96
Other finance charges	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest on working capital	16.89	18.39	19.96	21.37	22.62	13.14	15.36	15.95	16.83	17.16
Contribution to contingency reserves	10.95	12.21	13.43	14.61	15.70	10.64	11.74	12.12	13.22	13.60
Total Revenue Expenditure	**602.54**	**650.3**	**701.31**	**744.3**	**780.13**	**514.27**	**538.38**	**557.84**	**577.67**	**581.92**
Add: Return on equity capital	263.59	290.03	315.63	339.94	361.76	243.43	258.47	273.58	288.68	296.38
Aggregate Revenue Requirement	**866.13**	**940.33**	**1016.94**	**1084.23**	**1141.90**	**757.71**	**796.85**	**831.42**	**866.35**	**878.30**
Less: Non-Tariff Income	12.27	12.27	12.27	12.27	12.27	13.58	14.37	15.21	16.09	17.04
Less: Total Impact of disallowance of capitalisation from previous period due to 400 kV Vikhroli, cost overrun & unutilised Bays						5.54				
Add: Past Recoveries	105.43					(101.98)				
Aggregate Revenue Requirement	**959.29**	**928.06**	**1004.66**	**1071.96**	**1129.62**	**636.61**	**782.48**	**816.21**	**850.25**	**861.27**

5.12 RECOVERY OF TRANSMISSION CHARGES

5.12.1 In accordance with the Transmission Pricing Framework specified under the MYT Regulations, 2019, the approved ARR of a Transmission Licensee for a particular financial year of the 4th MYT Control Period shall be considered for recovery through the TTSC of that year.

5.12.2 As TPC-T forms a part of the InSTS, its approved ARR for the Control Period from FY 2020-21 to FY 2024-25 shall be allowed to be recovered through the InSTS Transmission Tariff approved for each Year in the InSTS Order of the Commission.

5.13 APPLICABILITY OF THE ORDER

5.13.1 This Order shall come into effect from 1 April, 2020

The Petition of The Tata Power Co. Ltd. (Transmission Business)'s in Case No. 299 of 2019 stands disposed of accordingly.

Sd/-	Sd/-	Sd/-
(Mukesh Khullar) **Member**	**(I. M. Bohari)** **Member**	**(Anand B. Kulkarni)** **Chairperson**

(Abhijit Deshpande)
Secretary

Appendix-1: List of persons who attended the Technical Validation Session held on 25 November, 2019

Sr. No.	Name	Company
1.	Ms. Swati Mehendale	TPC-T
2.	Shri Manoj Kapse	TPC-T
3.	Shri V. R. Shrikhande	TPC-T
4.	Shri P. D. Gaikwad	TPC-T
5.	Shri Tushar Dhande	TPC-T
6.	Shri Vikrant Ambole	TPC-T
7.	Shri Prashant Kumar	TPC-T

Appendix-2: List of individuals who attended the Public Hearing held on 6 January, 2020

Sr. No.	Name	Company
1.	Shri Prashant Kumar	TPC-T
2.	Ms. Prajakta Wadke	TPC-T
3.	Shri V. R. Shrikhande	TPC-T
4.	Shri Arvind Singh	TPC-T
5.	Shri Soumya R. Mishra	TPC-T
6.	Shri Vikrant Ambole	TPC-T

Appendix-3: List of Unutilised Bays submitted by TPC-T for FY 2018-19

Sr. No.	Name of Station	Voltage Level	Name of Bay	Type of Bay	Year of Commissioning	Year since Bay is Unutilized	Tentative Year of Utilization
1	110 kV Backbay	110 kV	Spare Bay	GIS	FY 2011	FY 2011	FY 2022
2		33KV	BEST 1	GIS	FY 2016	FY 2016	FY 2021
3		33KV	BEST 2	GIS	FY 2016	FY 2016	FY 2021
4		33KV	BEST 3	GIS	FY 2016	FY 2016	FY 2021
5	110 kV Bhokarpada	33KV	NUPLLP#2 (Spare)	GIS	FY 2019	FY 2019	FY 2021
6		33KV	NUPLLP#4 (Spare)	GIS	FY 2019	FY 2019	FY 2021
7	110 kV BKC	110 kV	Spare Transformer Breaker	GIS	FY 2015	FY 2015	FY 2020
8		110 kV	Spare Line Breaker	GIS	FY 2015	FY 2015	FY 2022
9		33KV	OG Feeder (AEML)	GIS	FY 2015	FY 2015	FY 2020
10		33KV	OG Feeder (NHSRCL)	GIS	FY 2015	FY 2015	FY 2020
11		33KV	OG Feeder (NHSRCL)	GIS	FY 2015	FY 2015	FY 2020
12	Carnac	33 KV	OG 1 (TPC-D)	GIS	FY 2017	FY 2017	FY 2021
13	Dharavi	110 kV	Metro -3 AIS Bay	AIS	FY 2019	FY 2019	FY 2020
14		110 kV	Metro -3 GIS Bay	GIS	FY 2019	FY 2019	FY 2020
15		33KV	Outgoing 1	GIS	FY 2017	FY 2017	FY 2021

Sr. No.	Name of Station	Voltage Level	Name of Bay	Type of Bay	Year of Commissioning	Year since Bay is Unutilized	Tentative Year of Utilization
16		33KV	Outgoing 2	GIS	FY 2017	FY 2017	FY 2021
17		33KV	Outgoing 3	GIS	FY 2017	FY 2017	FY 2021
18	Kurla	33KV	OG Feeder (TPC-D)	GIS	FY 2019	FY 2019	FY 2021
19		33KV	OG Feeder (TPC-D)	GIS	FY 2019	FY 2019	FY 2021
20		33KV	OG Feeder (AEML)	GIS	FY 2019	FY 2019	FY 2021
21		33KV	OG Feeder (AEML)	GIS	FY 2019	FY 2019	FY 2021
22		33KV	OG Feeder (AEML)	GIS	FY 2019	FY 2019	FY 2021
23		33KV	OG Feeder (AEML)	GIS	FY 2019	FY 2019	FY 2021
24	Mahalaxmi	220 kV	Parel Mahalaxmi	GIS	FY 2016	FY 2016	FY 2025
25		33KV	Love Groove#1	GIS	FY 2018	FY 2018	FY 2020
26		33KV	OG Feeder 10 (BEST)	GIS	FY 2018	FY 2018	FY 2020
27		33KV	OG Feeder 13 (BEST)	GIS	FY 2018	FY 2018	FY 2020
28		33KV	OG Feeder 15 (BEST)	GIS	FY 2018	FY 2018	FY 2020
29		33KV	OG 3 Feeder (Spare)	GIS	FY 2018	FY 2018	FY 2021
30		33KV	BS 5 OG 1 (Spare)	GIS	FY 2018	FY 2018	FY 2021
31		33KV	BS 5 OG 2 (Spare)	GIS	FY 2018	FY 2018	FY 2021
32		33KV	BS 6 OG 1 (Spare)	GIS	FY 2018	FY 2018	FY 2021
33	Parel	33KV	BS 3 OG 1 (Spare)	AIS	FY 2015	FY 2015	FY 2020
34		33KV	BS 3 OG 2 (Spare)	AIS	FY 2015	FY 2015	FY 2020
35		33KV	BS 3 OG 5 (Spare)	AIS	FY 2015	FY 2015	FY 2020
36		33KV	BS 3 OG 6 (Spare)	AIS	FY 2015	FY 2015	FY 2020
37		33KV	BS 3 OG 7 (Spare)	AIS	FY 2015	FY 2015	FY 2020
38	Powai	110 kV	Proposed Saki Bay	GIS	FY 2012	FY 2012	FY 2026
39		110 kV	Spare -1	GIS	FY 2012	FY 2012	FY 2026
40		33KV	OG 12 (Spare)	GIS	FY 2012	FY 2012	FY 2021
41		33KV	OG 14 (Spare)	GIS	FY 2012	FY 2012	FY 2021
42		33KV	OG 15 (Spare)	GIS	FY 2012	FY 2012	FY 2021
43	Sahar	220 kV	Spare Transformer Bay	GIS	FY 2013	FY 2013	FY 2026
44		220 kV	Spare Line Bay	GIS	FY 2013	FY 2013	FY 2024
45		33KV	Bus Section 1A OG 4 (TPC-D)	GIS	FY 2013	FY 2013	FY 2021
46		33KV	Bus Section 1B OG 11(TPC-D)	GIS	FY 2013	FY 2013	FY 2021
47		33KV	Bus Section 1B OG 10 (TPC-D)	GIS	FY 2013	FY 2013	FY 2021
48		33KV	Bus Section 1B OG 9 (TPC-D)	GIS	FY 2013	FY 2013	FY 2021
49		33KV	Bus Section 2A OG 8 (TPC-D)	GIS	FY 2013	FY 2013	FY 2021
50		33KV	Bus Section 2B OG 13 (TPC-D)	GIS	FY 2013	FY 2013	FY 2021
51	Saki	110 kV	Metro # 1	GIS	FY 2019	FY 2019	FY 2020
52		110 kV	Metro # 2	GIS	FY 2019	FY 2019	FY 2020

Sr. No.	Name of Station	Voltage Level	Name of Bay	Type of Bay	Year of Commissioning	Year since Bay is Unutilized	Tentative Year of Utilization
53		33KV	BS 1 OG 4 (Spare)	GIS	FY 2014	FY 2014	FY 2021
54		33KV	BS 1 OG 5 (Spare)	GIS	FY 2014	FY 2014	FY 2021
55		33KV	BS 2 OG 13 (Spare)	GIS	FY 2014	FY 2014	FY 2021
56		33KV	BS 2 OG 14 (Spare)	GIS	FY 2014	FY 2014	FY 2021
57	Trombay	220 kV	Trombay Salsette # 3 (Spare)	AIS	FY 2016	FY 2016	FY 2021
58		220 kV	Trombay Salsette # 4 (Spare)	AIS	FY 2016	FY 2016	FY 2021
59		220 kV	Trombay Antop Hill (Spare)	AIS	FY 2016	FY 2016	FY 2021
60	Versova	110 kV	ICT # 1	GIS	FY 2018	FY 2018	FY 2020
61		33KV	BS 1 OG 4 (AEML)	GIS	FY 2019	FY 2019	FY 2020
62		33KV	BS 2 OG 9 (AEML)	GIS	FY 2019	FY 2019	FY 2020
63		33KV	BS 2 OG 17 (TPC-D)	GIS	FY 2019	FY 2019	FY 2020

Appendix-4: List of Bays allocated to Distribution Licensees/Individual consumers, as submitted by TPC-T for FY 2018-19

S.No.	Name of Station	Voltage Level	Name of Bay	Type of Bay	Year of Commissioning
1	Sahar	33KV	Bus Section 1A OG 4 (TPC-D)	GIS	FY 2013
2		33KV	Bus Section 1B OG 11(TPC-D)	GIS	FY 2013
3		33KV	Bus Section 1B OG 10 (TPC-D)	GIS	FY 2013
4		33KV	Bus Section 1B OG 9 (TPC-D)	GIS	FY 2013
5		33KV	Bus Section 2A OG 8 (TPC-D)	GIS	FY 2013
6		33KV	Bus Section 2B OG 13 (TPC-D)	GIS	FY 2013
7	Carnac	33 KV	OG 1 (TPC-D)	GIS	FY 2017
8	Dharavi	33KV	Outgoing 1	GIS	FY 2017
9		33KV	Outgoing 2	GIS	FY 2017
10		33KV	Outgoing 3	GIS	FY 2017
11	Kurla	33KV	OG Feeder (TPC-D)	GIS	FY 2019
12		33KV	OG Feeder (TPC-D)	GIS	FY 2019
13		33KV	OG Feeder (AEML)	GIS	FY 2019
14		33KV	OG Feeder (AEML)	GIS	FY 2019
15		33KV	OG Feeder (AEML)	GIS	FY 2019
16		33KV	OG Feeder (AEML)	GIS	FY 2019
17	BKC	33KV	OG Feeder (AEML)	GIS	FY 2015
18		33KV	OG Feeder (NHSRCL)	GIS	FY 2015
19		33KV	OG Feeder (NHSRCL)	GIS	FY 2015
20	Backbay	33KV	BEST 1	GIS	FY 2016
21		33KV	BEST 2	GIS	FY 2016
22		33KV	BEST 3	GIS	FY 2016
23	Mahalaxmi	33KV	Love Groove#1	GIS	FY 2018
24		33KV	OG Feeder 10 (BEST)	GIS	FY 2018
25		33KV	OG Feeder 13 (BEST)	GIS	FY 2018

S.No.	Name of Station	Voltage Level	Name of Bay	Type of Bay	Year of Commissioning
26		33KV	OG Feeder 15 (BEST)	GIS	FY 2018
27	Dharavi	110 kV	Metro -3 AIS Bay	AIS	FY 2019
28		110 kV	Metro -3 GIS Bay	GIS	FY 2019
29	Saki	110 kV	Metro # 1	GIS	FY 2019
30		110 kV	Metro # 2	GIS	FY 2019
31	Versova	33KV	BS 1 OG 4 (AEML)	GIS	FY 2019
32		33KV	BS 2 OG 9 (AEML)	GIS	FY 2019
33		33KV	BS 2 OG 17 (TPC-D)	GIS	FY 2019

Appendix-5: List of new Bays added in FY 2019-20, as submitted by TPC-T

S. No.	Name of Station	Voltage Level	Name of Bay	Type of Bay	Year of Commissioning	Bay Status
1	BKC	110 kV	Transformer # 3	GIS	FY 2015	To be utilised by Mar'20
2	Mahalaxmi	33 kV	OG Feeder 10 (BEST)	GIS	FY 2018	To be utilised by Mar'20
3		33 kV	OG Feeder 13 (BEST)	GIS	FY 2018	To be utilised by Mar'20
4		33 kV	OG Feeder 15 (BEST)	GIS	FY 2018	To be utilised by Mar'20
5		33 kV	OG 3 Feeder (Spare)	GIS	FY 2018	To be utilised by Mar'20
6	Antop Hill	220 kV	Trombay Dharavi 9 Antop Hill 1	GIS	FY 2020	To be utilised by Mar'20
7		220 kV	Trombay Antop Hill-2	GIS	FY 2020	To be utilised by Mar'20
8		220 kV	Transformer # 1	GIS	FY 2020	To be utilised by Mar'20
9		220 kV	Transformer # 2	GIS	FY 2020	To be utilised by Mar'20
10		220 kV	Bus Section Breaker	GIS	FY 2020	To be utilised by Mar'20
11		220 kV	PT # 1	GIS	FY 2020	In Service/ Utilised
12		220 kV	PT # 2	GIS	FY 2020	In Service/ Utilised
13	Carnac	220 kV	Bus Coupler	GIS	FY 2020	To be utilised by Mar'20
14		220 kV	Trombay-Salsette 1 Carnac	GIS	FY 2020	To be utilised by Mar'20
15		220 kV	Carnac Backbay	GIS	FY 2020	To be utilised by Mar'20
16		220 kV	PT # 1	GIS	FY 2020	To be utilised by Mar'20
17		220 kV	PT # 2	GIS	FY 2020	To be utilised by Mar'20
18	Dharavi	110 kV	Metro-1	AIS	FY 2020	To be utilised by Mar'20
19		110 kV	Metro-2	GIS	FY 2020	To be utilised by Mar'20
20	Karanjade	220 kV	Bhira Karanjade-1	GIS	FY 2020	To be utilised by Mar'20
21		220 kV	Bhira Karanjade-2	GIS	FY 2020	To be utilised by Mar'20
22		220 kV	Karanjade-Waghivali-1	GIS	FY 2020	To be utilised by Mar'20
23		220 kV	Karanjade-Waghivali-2	GIS	FY 2020	To be utilised by Mar'20
24		220 kV	Bus Section Breaker	GIS	FY 2020	To be utilised by Mar'20
25		220 kV	PT # 1	GIS	FY 2020	To be utilised by Mar'20
26		220 kV	PT # 2	GIS	FY 2020	To be utilised by Mar'20
27		110 kV	Khopoli Karanjade-1	GIS	FY 2020	To be utilised by Mar'20
28		110 kV	Khopoli Karanjade-2	GIS	FY 2020	To be utilised by Mar'20
29		110 kV	Karanjade-Waghivali-3	GIS	FY 2020	To be utilised by Mar'20
30		110 kV	Karanjade-Waghivali-4	GIS	FY 2020	To be utilised by Mar'20
31		110 kV	Bus Section Breaker	GIS	FY 2020	To be utilised by Mar'20
32		110 kV	PT # 1	GIS	FY 2020	To be utilised by Mar'20
33		110 kV	PT # 2	GIS	FY 2020	To be utilised by Mar'20

S. No.	Name of Station	Voltage Level	Name of Bay	Type of Bay	Year of Commissioning	Bay Status
34	Mahalaxmi	110 kV	Metro-1	GIS	FY 2020	To be utilised by Mar'20
35		110 kV	Metro-1	GIS	FY 2020	To be utilised by Mar'20
36	Malad	110 kV	Metro-1	AIS	FY 2020	To be utilised by Mar'20
37		110 kV	Metro-2	AIS	FY 2020	To be utilised by Mar'20
38	Versova	220 kV	AEML Versova-Tata Versova 1	GIS	FY 2020	To be utilised by Mar'20
39		220 kV	AEML Versova-Tata Versova 2	GIS	FY 2020	To be utilised by Mar'20
40		220 kV	ICT # 1	GIS	FY 2020	To be utilised by Mar'20
41		220 kV	ICT # 2	GIS	FY 2020	To be utilised by Mar'20
42		220 kV	Bus Coupler	GIS	FY 2020	To be utilised by Mar'20
43		220 kV	PT # 1	GIS	FY 2020	To be utilised by Mar'20
44		220 kV	PT # 2	GIS	FY 2020	To be utilised by Mar'20
45		220 kV	Line Bay	GIS	FY 2020	To be utilised by Mar'20
46		220 kV	Transformer Bay	GIS	FY 2020	To be utilised by Mar'20
47		110 kV	Metro-1	GIS	FY 2020	To be utilised by Mar'20
48		110 kV	Metro-2	GIS	FY 2020	To be utilised by Mar'20
49	Antop Hill	33 kV	33 kV Transformer 1 Incomer	GIS	FY 2020	To be utilised by Mar'20
50		33 kV	33 kV Transformer 2 Incomer	GIS	FY 2020	To be utilised by Mar'20
51		33 kV	Bus Section Breaker	GIS	FY 2020	To be utilised by Mar'20
52		33 kV	Station Transformer 1	GIS	FY 2020	To be utilised by Mar'20
53		33 kV	Station Transformer 2	GIS	FY 2020	To be utilised by Mar'20
54		33 kV	BEST Feeder # 1	GIS	FY 2020	To be utilised by Mar'20
55		33 kV	BEST Feeder # 2	GIS	FY 2020	To be utilised by Mar'20
56		33 kV	BEST Feeder # 3	GIS	FY 2020	To be utilised by Mar'20
57		33 kV	BEST Feeder # 4	GIS	FY 2020	To be utilised by Mar'20
58		33 kV	BEST Feeder # 5	GIS	FY 2020	To be utilised by Mar'20
59		33 kV	PT#1	GIS	FY 2020	To be utilised by Mar'20
60		33 kV	PT 2	GIS	FY 2020	To be utilised by Mar'20

Appendix-6: Allowed capitalisation for in-principle approved DPR schemes (Rs. Crore)

S No.	Project Code	Project Title	Allowed Capitalisation (Rs. Cr)		
			FY 2017-18	FY 2018-19	FY 2019-20
DPR Approved Schemes					
1	T140332O7014	Construction of 220 kV Trombay – Dharavi - Salsette.	0.00	24.27	3.00
2	T14012108006	245KV GIS at Saki	-	6.94	5.00
3	T14011208013	145 kV GIS at BKC	-	2.77	4.38
4	T14012308002	145 KV GIS at Versova	66.06	6.07	2.15
5	T14010209002	Installation of 220 kV GIS Mahalaxmi, installation of additional ICT No.5 and 33 kV GIS at Mahalaxmi substation	-	-	-
6	T14012109004	220kV GIS at Sahar Airport	3.17	1.23	-
7	T14033210046	PROVIDING OPGW ON110 kV BHIRA-KHO LINE 1	1.40	0.09	0.75
8	T14012110004	Replacement of 22kV BS 1 &2 with 33kV	0.49	-	-

S No.	Project Code	Project Title	Allowed Capitalisation (Rs. Cr)		
			FY 2017-18	FY 2018-19	FY 2019-20
9	T14011211007	220 KV Rec Stn at Antop Hill Wadala	-	-	140.00
10	T14012311006	Replacement of 22kV Switchgear at Borivali	-	-	12.00
11	T14010211006	75 MVA, 110/33 kV transformer and 33 kV GIS at Parel Receiving Station	0.75	1.49	-
12	T14011111002	145 kV GIS at Mankhurd	1.54	0.03	-
13	T14011211010	Power Supply to HDIL Kurla	-	154.91	20.02
14	T14012211004	Replacement of 250 MVA ICT#3 at Salsette	0.02	-	-
15	T14049612001	400KV Receiving Station at Vikhroli	-	-	-
16	T14011212004	33 kV GIS for replacing AIS at Dharavi	-0.01	0.02	-
17	T14012312001	Replacement of SERCK RTUs at Borivli	0.03	-	-
18	T14033212008	110/33KV S/S at Ixora, Panvel.	-	0.94	0.38
19	T14033212010	Replacement of Cond. on Kalwa-Salset3&4	-	-	-
20	T14011212006	Replacement of Power Transformer at Dharavi	0.16	-	5.00
21	T14010112002	Replacement of 33KV switch gear by 33KV GIS	0.25	-	-
	T14010112006	Replacement of 22KV Bus Section # 1 & 3	0.07	0.00	8.68
22	T14012312002	Additional 33 KV outlet from Borivali	-	0.00	-
	T14012313003	Additional 22kV Outlets at Malad	0.27	-	-
	T14010112001	Augmentation of 33KV outlets at Backbay	0.11	-	-
23	T14012212001	LIFE ENHANCEMENT OF 245 AND 145 KV GIS	5.12	2.65	3.00
24	T14033212015	Khopoli-Bhivpuri Tie line	0.00	-	-
25	T14012313001	Replacement of 110KV Breakers	0.44	-	-
	T14011313002	Replacement of relays for transmission	3.98	-	0.55
26	T14011213004	Replacement of 250 MVA ICT#7 at Dharavi	0.05	-	-
27	T14012313004	220 kV GIS at Versova	10.75	-	115.00
28	T14011213006	22 kV GIS Replacement of 22 kV BS I to V	0.35	0.07	-
29	T14012313005	Replacement of 22 kV Bus sections at Mal	-	-	-
30	T14011213008	Check metering system with remote data	4.04	1.58	1.75
31	T14012115002	Replacement of Transformer 1 & 2 at Saki	17.47	1.69	-
32	T14010115003	Replacement of NGTs in Transmission	-	0.14	2.10
33	T14010215003	Replacement of Transformers at Mahalaxmi	-	9.98	18.02
34	T14012316002	Refurbishment of Transmission protection System	0.69	1.44	4.00
	T14012315001	Protection System Refurbishment in Transmission	3.98	-	-
35	T14010216002	Replacement of 22kV AIS by 33kV GIS at Mahalaxmi	0.77	1.42	0.40
36	T14010216003	Additional 33kV Bus Section at Mahalaxmi and Replacement of 33 kV BS 1 and 2 at Versova	10.03	2.03	0.03
37	T14033216001	220 kV switching station at NMIA	-	-	135.00
38	T14012216008	Provision of HVWS for DT#6 at Salsette	0.20	-	-

S No.	Project Code	Project Title	Allowed Capitalisation (Rs. Cr)		
			FY 2017-18	FY 2018-19	FY 2019-20
	T14011215004	Refurbishment of Fire fighting system in Transmission	-	0.05	14.00
39	T14012118001	110KV GIS at Saki Receiving Station	-	34.61	4.39
40	T14010217001	Replacement of Station Batteries, Charger	-	0.98	-
	T14011317001	22kv and 110kv RTU replacement at Chembur and Prot. System Refurbishment	-	-	4.61
	T14012217003	Procurement of Testing Equipment in Transmission	1.24	2.65	0.35
	T14011217010	220kV&110kV PT and CT Replacement in Trans.	-	0.36	0.16
	T14013117003	Replacement of 110kV CBs at Kalyan Node	0.06	0.77	0.20
	T14010117004	33KV SF6 breakers for Reactor at Carnac	0.15	0.32	-
	T14010217005	33kV Capacitor Banks at Mahalaxmi	-	-	0.69
	T14012317009	Replacement of Capacitor Bank 1 at Borivali	-	-	0.45
	T14010115001	Procurement of recommended safety equipment	1.24	1.15	0.56
41	T14011218008	Installation of 125 MVA Power Transformer at BKC	-	-	15.84
42	T14033216004	Rehabilitation of old Transmission Towers	-	0.35	2.00
43	T14010118003	Strengthening of 220kV Carnac Receiving Station	-	-	55.00
44	T14010218005	Replacement of 75 MVA 110/22kV Transformer-3 by 90MVA Transformer at Mahalaxmi	-	-	10.15
Capitalisation disallowed in earlier MYT/MTR Orders included in present Order					
46	-	145 kV GIS at Versova Station land cost	21.56		
47	-	145 kV GIS at Versova	0.58		
48	-	110 kV Bays at Parel	1.28		
49	-	145 kV GIS at IXORA		29.99	
50	-	2 Nos. 110 kV Bays at Dharavi in Power supply to HDIL Kurla		4.42	
51	-	Land Cost for 145 kV GIS at Kurla		8.38	

Appendix-7: Disallowed capitalisation for in-principle approved DPR schemes (Rs. Crore)

S No.	Project Code	Project Title	Disallowed Capitalisation (Rs. Crore)				Remark
			FY 2016-17 & Before	FY 2017-18	FY 2018-19	FY 2019-20	
	DPR schemes						
1	T14011208013	145 kV GIS at BKC		1.51	3.67		Disallowed cost overrun of Rs. 5.18 Crores
2	T14010209002	Installation of 220 kV GIS Mahalaxmi, installation of additional ICT No.5 and 33 kV GIS at Mahalaxmi substation	3.91	11.11	7.71	0.02	Disallowed cost overrun of Rs. 22.74 Crores. Rs.18.83 Crore disallowed in FY 2017-18 and FY 2018-19, balance Rs. 3.91 Crore disallowed from capitalisation allowed till FY 2016-17
3	T14010112002, T14010112006	Replacement of 33KV switchgear by 33KV GIS & 22KV Bus Section # 1 & 3 at Carnac		0.43			Disallowed cost overrun of Rs. 0.43 Crores
4	G100191090I7	Construction of New 220kV bays (3 nos.) for Trombay Dharavi Salsette Saki	7.29				Disallowance of past capitalisation due to unutilised AIS Bays
5	T14049612001	400KV Receiving Station at Vikhroli	1.18		-1.24		Disallowance of past capitalisation due to deemed closure of project
	Capitalisation disallowed in earlier MYT/MTR Orders included in present Order						
6	-	145 kV GIS at Versova Station land cost		6.76			Disallowance of IDC
7	-	145 kV GIS at Versova		0.56			Disallowance of IDC, capitalisation at depreciated cost
8	-	33 kV Bays at Parel		0.32			Disallowance of IDC, capitalisation at depreciated cost
9	-	110 kV Bays at Dharavi in Power supply to HDIL Kurla			2.31		Disallowance of IDC, capitalisation at depreciated cost
10	-	Land Cost for 145 kV GIS at Kurla			2.47		Disallowance of IDC
		Total Disallowance	**12.38**	**20.69**	**14.92**	**0.02**	