Before the

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

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

CASE No. 204 of 2017

In the matter of
Petition of The Tata Power Company Ltd. (Transmission Business) for True up of Aggregate Revenue Requirement (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

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

ORDER

Date: 12 September, 2018

The Tata Power Company Limited's Transmission Business (TPC-T), Bombay House, 24, Homi Modi Street, Fort, Mumbai 400 001, has filed a Mid-term Review (MTR) Petition for the 3rd Control Period on 27 December, 2017 comprising of truing up of ARR for FY 2015-16 and FY 2016-17, provisional truing up of ARR for FY 2017-18 and Revised Forecast of ARR for FY 2018-19 & FY 2019-20. The original Petition was filed on 27 December, 2017 and the revised Petition was filed on 14 June, 2018.

The Petition has been filed in accordance with the MERC (Multi Year Tariff) Regulations, 2011 ("MYT Regulations, 2011"), for Truing up of FY 2015-16 and in accordance with MERC (Multi Year Tariff) Regulations, 2015 ("MYT Regulations, 2015") for Truing up of FY 2016-17, Provisional Truing up of FY 2017-18, and revised ARR for FY 2018-19 and FY 2019-20.

The Commission, in exercise of the powers vested in it under Sections 61 and 62 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, upon Public consultation process, and upon considering all other relevant material, has approved the Truing up of ARR for FY 2015-16 and FY 2016-17, Provisional Truing up of ARR for FY 2017-18 and Revised ARR for FY 2018-19 and FY 2019-20 in this Order.

TABLE OF CONTENTS

LIST OF TABLES

List of Abbreviations

Abbreviations	Definitions
A&G	Administrative and General
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal for Electricity
BKC	Bandra Kurla Complex
COD	Commercial Operation Date
Ckt Km	Circuit Kilometers
DD	Demand Draft
DPC	Delayed Payment Charges
DPR	Detailed Project Report
DRP	Dispute Resolution Panel
EA	Electricity Act
FY	Financial Year
GFA	Gross Fixed Assets
GTD	Generation Transmission Distribution
HDFC	Housing Development Finance Corporation
HOSS	Head Office and Support Services
HPCL	Hindustan Petroleum Corporation Limited
ICTs	Interconnecting Transformers
IDC	Interest During Construction
IoWC	Interest on Working Capital
IDBI	Industrial Development Bank of India Limited
IDFC	Infrastructure Development Finance Company Limited
InSTS	Intra State Transmission System
MAT	Minimum Alternative Tax
MbPT	Mumbai Port Trust
MCRL	Marginal Cost of Lending Rate
MERC or the Commission	Maharashtra Electricity Regulatory Commission
MoEF	Ministry of Environment & Forest
MSLDC	Maharashtra State Load Dispatch Centre
MT	Metric Tonnes
MTR	Mid-Term Review
MU	Million Units
MW	Mega Watt
MYT	Multi Year Tariff
NUPLLP	Nidar Utilities Panvel LLP
OA	Open Access
O&M	Operation and Maintenance
PLR	Prime Lending Rate
PPA	Power Purchase Agreement

Abbreviations	Definitions
RTGS	Real Time Gross Settlement
RoE	Return on Equity
R&M	Repair and Maintenance
SBI	State Bank of India
SBI-PLR	State Bank of India-Prime Lending Rate
STU	State Transmission Utility
SBAR	State Bank Advance Rate
TBCB	Tariff Based Competitive Bidding
TPC	The Tata Power Company Ltd.
TPC-D	Tata Power Company-Distribution
TPC-G	Tata Power Company-Generation
TPC-T	Tata Power Company-Transmission
TSU	Transmission System User
VAT	Value Added Tax

1 INTRODUCTION

1.1 Background

1.1.1 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. Tata Power Company Limited has been granted Transmission License No. 1 of 2014 vide Order dated 14 August, 2014 in Case No. 112 of 2014. Tata Power Company Limited is a Transmission Licensee under Alternative 2 as per the MERC (Transmission License Conditions) Regulations, 2004 as amended on 01 August 2018. The License granted to TPC-T is an asset specific License which includes list of existing and proposed Transmission Line and also proposed Transmission Bays.

1.1.2 In accordance with the directions given by the Commission in MYT Order dated 30 June, 2016, TPC-T had filed a Petition for amendment of its Transmission License for reflecting the revised asset position on account of commissioning/decommissioning /modification to the Transmission Lines /Bays post grant of the License. The Commission vide Order dated 01 August, 2018 in Case No. 137 of 2016 amended the Transmission License No.1 of 2014.

1.2 Multi Year Tariff Regulations

1.2.1 The Commission notified the MYT Regulations, 2011 on 4 February 2011. These Regulations are applicable for the Second Control Period starting from FY 2011-12 to FY 2015-16 and amended on 21 October 2011.

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

1.3 Filing of Petition under MYT Regulations, 2015

1.3.1 Regulation 3 of the MYT Regulations, 2015 specifies its scope. Regulation 5.1 (b) requires filing of MTR Petition by Utilities, including Transmission Licensees, for the 3rd Control Period.

1.4 Petition and Prayers of TPC-T

1.4.1 TPC-T has filed its MTR Petition on 27 December, 2017 for Truing up of ARR for FY 2015-16 under the MYT Regulations,2011, Truing up of ARR for FY 2016-17 and Provisional Truing up of ARR for FY 2017-18, and for approval of Revised ARR for FY 2018-19 and FY 2019-20 in accordance with the MYT Regulations, 2015. The main prayers of TPC-T in its revised Petition are as below:

- *Accept the Truing-up for FY 2015-16 in accordance with the guidelines & principles outlined in MYT Regulations, 2011;*
- *Accept the Truing-up for FY 2016-17 in accordance with the guidelines & principles outlined in MYT Regulations, 2015 and in accordance with the MERC (MYT) (First Amendment) Regulations, 2017;*
- *Accept Provisional Truing-up of FY 2017-18 & past Gap / (Surplus) thereof in accordance with the guidelines & principles outlined in MYT Regulations, 2015 and in accordance with the MERC (MYT) (First Amendment) Regulations, 2017;*
- *Allow Transfer of assets pertaining to Transmission from Generation Business of Tata Power to Transmission Business of Tata Power*
- *Accept the revised projections for FY 2018-19 to FY 2019-20 in accordance with the guidelines & principles outlined in MYT Regulations, 2015 and in accordance with the MERC (MYT) (First Amendment) Regulations, 2017;*

1.4.2 Pre-admittance discussions were held on 5 January, 2018 and 16 February, 2018 to discuss the Petition and the data gaps. The list of persons who attended the discussion dated 16 February, 2018 is at **Appendix - 1**. TPC-T submitted its replies on 14 May, 2018 to the data gaps and additional information sought by the Commission.

1.4.3 TPC-T filed the revised Petition on 14 June 2018, in accordance with the relevant provisions of MYT Regulations, 2015, incorporating replies to the queries raised in preliminary data gaps and clarifications on the issues raised during the discussion.

1.5 Admission of the Petition and Public Consultation Process

1.5.1 The Commission admitted the Petition on 15 June, 2018 and directed TPC-T to publish it in accordance with Section 64 of the EA 2003, in the specified abridged form and manner, and to reply expeditiously to any suggestions and comments received.

1.5.2 TPC-T published a Public Notice inviting comments/suggestions/objections on its Petition. The Public Notice was published in English in Financial Express and Indian Express, and in Marathi in Loksatta and Saamana, all daily newspapers, on Saturday, 20 June 2018. The Petition and its Summary was made available for inspection/purchase at TPC-T's offices and Website (www.tatapower.com). The Public Notice and Executive Summary of the Petition were also made available on the websites of the Commission (www.mercindia.org.in, www.merc.gov.in) in downloadable format.

1.5.3 The Commission did not receive any suggestion or Objection on the Petition. A Public Hearing was held on 24 July 2018, at 10:00 hours in the office of the Commission. No

Oral suggestion/objection was put forward at the Public Hearing either. The List of Persons who attended the Public Hearing is at **Appendix 2**.

1.5.4 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 persons concerned to express their views.

1.6 ORGANISATION OF THE ORDER

1.6.1 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 impact of ATE judgments.
- **Section 3:** of the Order details the Truing up of expenses of TPC-T for FY 2015-16 as per MYT Regulations, 2011 and related Amendments.
- **Section 4:** of the Order details the Truing up of expenses of TPC-T for FY 2016-17, as per MYT Regulations, 2015 and related Amendments.
- **Section 5:** of the Order details the Provisional True up for FY 2017-18 as per MYT Regulations, 2015
- **Section 6:** of the Order details the Approval of ARR from FY 2018-19 to FY 2019-20 as per MYT Regulations, 2015
- **Section 7:** sets out the directives in the MYT Order, their compliance and the Commission's rulings
- **Section 8:** Sets out the Mechanism for Recovery of Transmission Charges.
- **Section 9:** Deals with the Applicability of this Order.

2 IMPACT OF ATE JUDGMENTS, ORDER ON REVIEW PETITION AND WRIT PETITION

2.1 Appeal challenging the 2015 MTR Order and MYT Order

TPC-T's Submission

2.1.1 TPC-T had filed an Appeal No. 246 of 2015 before the Appellate Tribunal for Electricity (ATE) challenging the MTR Order ("2015 MTR Order") dated 26 June, 2015 in Case No. 5 of 2015 with respect to certain disallowances. The Appeal has been disposed of by the ATE on 3 June, 2016. Thereafter, TPC-T has challenged the ATE Judgment vide Civil Appeal No. 1356-1358 of 2017 before the Supreme Court. Further action on the appeal of TPC-T would be taken as may be directed by the Supreme Court.

2.1.2 Also, the Commission had passed the MYT Order for 3rd Control Period in Case No. 22 of 2016 on 30 June, 2016 ("MYT Order"). TPC-T had filed a Petition for review of the above Order in respect of certain issues and disallowances. The Commission has issued the Order on the Review Petition on 19 July, 2017. The impact of this Order has been factored in this Petition which is around Rs. 2.95 Crore. Further, TPC-T has challenged this Order before the ATE vide Appeal dated 1 September, 2017. The appeal is under hearing.

Commission's Analysis and Ruling

2.1.3 The Commission notes that these Appeals are under hearing before the respective Courts.

2.1.4 As and when the Appeals are decided by the respective Courts, further action would be initiated as directed.

2.1.5 Further, the Commission had considered certain review points in the above-mentioned Order dated 19 July, 2017 in Case No. 110 of 2016 on the Review Petition ("Review Order") and allowed TPC-T to claim the impact of the same in the MTR Petition. Accordingly, TPC-T has claimed the impact of the above in the present MTR Petition and the Commission has considered the same in the following sections.

2.2 Impact of Review Order on capitalisation & GFA of FY 2014-15

TPC-T's Submission

2.2.1 TPC-T has sought revision of capitalisation of FY 2014-15 from Rs. 412.37 Crore to Rs. 434.11 Crore taking into account impact of additional capitalisation of Rs. 21.74 Crore.

2.2.2 Closing GFA of FY 2014-15 is sought to be revised to Rs. 2753.94 Crore from Rs. 2732.20 Crore taking into account impact of additional capitalisation of Rs. 21.74 Crore.

Commission's Analysis and Ruling

Impact on Capitalisation for FY 2014-15

2.2.3 The relevant extract with respect to IDC for 145 kV GIS Sub-Station at BKC in the Review Order (Case No. 110 of 2016) is reproduced below:

7.10. From the details and material now provided, the Commission has reconsidered its earlier conclusion in the impugned Order that the long delay was attributable to TPC-T, and the consequential disallowance of the IDC for the years from FY 2008-09 to FY 2011-12. Accordingly, TPC-T may claim the disallowed IDC and its impact on its ARR of the respective years in its forthcoming MTR Petition.

2.2.4 Accordingly, the impact of additional capitalisation of Rs. 21.74 Crore due to allowance of IDC for a period of FY 2008-09 to FY 2011-12 for the Transmission project of 145 kV GIS Substation at BKC is as follows:

Table 1: Revised Capitalisation for FY 2014-15, as approved by the Commission (Rs. Crore)

Particular	MTR Petition	Approved in this Order
Total Capitalisation allowed for FY 2014-15	412.37	412.37
Add:		
Capitalisation approved towards IDC of 145 kV GIS at BKC as per Order in Case 110 of 2016	21.74	21.74
Revised Capitalisation	**434.11**	**434.11**

Impact on GFA for FY 2014-15

2.2.5 Further, on account of additional capitalisation as approved above, the closing balance of GFA for FY 2014-15 will be as follows:

Table 2: Revised Closing GFA for FY 2014-15, as approved by the Commission (Rs. Crore)

Particular	MTR Petition	Approved in this Order
Closing GFA approved for FY 2014-15	2732.20	2732.20
Add:		
GFA for IDC capitalisation towards BKC land	21.74	21.74
Revised Closing GFA for FY 2014-15	**2753.94**	**2753.94**

2.2.6 Impact of Review Order on account of change in RoE, depreciation, interest on long term loan capital and change in O&M entitlement is taken in ARR of FY 2016-17 and is discussed separately in detail in chapter for Truing up of ARR of FY 2016-17.

2.3 Writ Petition before Bombay High Court and Maharashtra Land Revenue Tribunal

TPC-T's Submission

2.3.1 TPC-T has received Collector Order of demand of Rs. 150.37 Crore towards revision of lease rent from FY 2004-05 and again in FY 2014-15 which includes past recovery for 12 years starting from FY 2004-05 for the land of its Backbay Transmission Receiving Station vide its letter dated 12 April, 2017 and revised rent has been fixed as Rs. 43.13 Crore per annum as against existing rent of Rs. 5.14 Crore. This rent revision is as per the terms and conditions issued at the time of allotment of the plot and revised rate is calculated on the basis of PLR of the respective financial year and ready reckoner rate and also the permissible FSI.

2.3.2 Subsequent to this demand, challenging the Order of the Collector, TPC-T has filed a Writ Petition under No.446/2017 dated 18 April, 2017 at High Court. The High Court has issued stay Order against the Collector's demand Order vide its Order dated 21st April, 2017 and also directed that TPC-T shall file their application before Maharashtra Land Revenue Tribunal. Accordingly, an appeal has been filed before Maharashtra Land Revenue Tribunal on 8 May, 2017 & the matter has not been heard so far. The said demand has not been considered in this petition; however, TPC-T would like to reserve their right to recover in future, should the claim arise in future.

2.3.3 Further, TPC-T has filed a Writ Petition 2011 of 2003 against MbPT on 8 August 2003, at Bombay High Court as a result of notice seeking removal of the HT lines mentioned below as the payment of way leave fees (ROW) levied towards the installation of these transmission lines in the premises of MbPT was disputed. Hence the following 220 kV transmission lines which part of Transmission Licence No. 1 of 2014 of TPC-T are under dispute -

a. 220 kV Trombay-Carnac 5 Transmission Line (12.39 km) from Trombay Receiving Station to Carnac Receiving Station (Item No. 12 of Transmission License)

b. 220 kV Trombay-Carnac 6 Transmission Line (12.39 km) from Trombay Receiving Station to Carnac Receiving Station (Item No. 13 of Transmission License)

2.3.4 The permissions issued by MbPT inter-alia contained conditions for payment of way leave fees was not accepted & contested by TPC-T on the basis of provisions in Telegraph & Electricity Acts. The transmission lines were laid during FY 1985-86, but the dispute continued. The contentions of TPC-T were finally rejected by MbPT in FY 2003-04 & the legal notices were served upon TPC-T to remove these transmission lines.

2.3.5 The said disputed amount has not been considered in this petition and the company had raised this dispute to protect the interest of the consumers, however, TPC-T would like to reserve their right to recover in future, should the claim arise in future.

Commission's Analysis and Ruling

2.3.6 The Commission notes that, TPC-T has not considered any impact of the aforesaid Writ Petitions in the present MTR petition. Further, as the Judgement on the same is pending, the Commission has also not included the impact presently and any impact based on the outcome of the appeal may be incorporated in a later proceeding.

3 TRUING UP OF ARR FOR FY 2015-16

3.1 Truing up of ARR for FY 2015-16

3.1.1 TPC-T has sought approval of Truing up of ARR for FY 2015-16 as per MYT Regulations, 2011. The Commission in MYT Order dated 30 June, 2016 in Case No. 22 of 2016 had approved the provisional True up of FY 2015-16.

3.1.2 The Commission has undertaken the Truing up after prudence check of the actual expenditure and revenue for FY 2015-16. The Commission has also approved the sharing of Efficiency Gains and Losses on account of controllable factors, in accordance with Regulation 14 of the MYT Regulations, 2011.

3.2 Operation and Maintenance Expenses

3.2.1 O&M expenditure comprises employee expenses, Administrative and General (A&G) expenses, and Repair and Maintenance (R&M) expenses.

Table 3: Summary of O&M Expense as submitted by TPC-T for FY 2015-16 (Rs. Crore)

Particular	Amount
Employee Expenses	82.65
A&G Expenses (including Brand Equity)	52.46
R&M Expenses	23.59
Total	**158.69**
Less	
Actual Tata Brand Equity	1.86
Add	
Allocation of Brand Equity Expenses to TPC-T as per MERC methodology	1.78
Total	**158.62**

Employee Cost

TPC-T's Submission

3.2.2 The actual employee expenses for FY 2015-16 were Rs. 82.65 Crore. TPC-T submitted that the employee expense for FY 2015-16 were lower vis-à-vis that for FY 2014-15 on account of the lower contribution towards Bonus/Ex-Gratia Payments Staff welfare expenses due to reduction in Employee headcount and Gratuity Payment. This reduction in employee expenses has been partly offset by payments towards pension expenses and house rent allowance as this has increased due to new Housing policy which allows Self-House Maintenance Allowance.

Commission's Analysis and Ruling

3.2.3 The Commission observed that the actual employee expenses have decreased from Rs. 89.18 Crore in FY 2014-15 to Rs. 82.65 Crore in FY 2015-16 by an amount of Rs. 6.54 Crore, i.e. 7.3% reduction in following table.

Table 4: Comparison of Employee Expenses of FY 2015-16 vis-à-vis of FY 2014-15 (Rs. Crore)

Particulars	FY 2014-15	FY 2015-16	%age change
Number of employees	453	424	(6.4%)
Officer/Managerial Cadre-Technical	170	157	(7.65%)
Staff cadre (Technical)	235	220	(6.38%)
Other employees	48	47	4.44%
Employee Expenses			
Salary, wages & other expenses	68.74	68.13	(0.9%)
Bonus/Ex-Gratia Payments	13.78	11.36	(17.5%)
Interim Relief / Wage Revision	3.82	3.26	(14.6%)
Staff welfare expenses	12.86	10.99	(14.5%)
Commission to Directors	1.13	0.70	(37.9%)
Terminal Benefits	10.89	9.70	(10.9%)
Less: Expenses Capitalised	-22.03	-21.49	(2.4%)
Net Employee Expenses	89.18	82.65	(7.3%)

3.2.4 The above table shows that number of employees has reduced by 6.40% vis-à-vis that is FY 2014-15 which has also resulted in reduction in Employee Expenses. The major categories being Officer/Managerial Cadre-Technical (7.65% reduction) and Staff Cadre-Technical (6.38% reduction).

3.2.5 The Commission notes that the various components of employee expenses have reduced by 7.3% in FY 2015-16 compared to FY 2014-15. The major components where there is reduction are dearness allowance, leave travel allowance, earned leave encashment (which are components of salary & wages), bonus (-17.5%), interim relief/wage revision (-14.6%), staff welfare expenses (-14.5%), commission to directors (-37.9%), terminal benefits (-10.9%) etc.

3.2.6 In view of the above, the actual employee expenses approved by the Commission are shown in the Table below.

Table 5: Employee Expenses for FY 2015-16, as approved by the Commission (Rs. Crore)

Particular	MTR Petition	Approved in this Order
Employee Expenses	82.65	82.65

The Commission approves actual Employee Expenses of Rs. 82.65 Crore for FY 2015-16 as submitted by TPC-T.

Administrative and General (A&G) Expenditure

TPC-T's Submission

3.2.7 Net A&G expenses for FY 2015-16 are Rs.52.38 Crore (Rs. 50.60 Crore A&G expenses and Rs.1.78 Crore brand equity expenses) against Rs. 42.05 Crore for FY 2014-15. The A&G expenses for FY 2015-16 are higher primarily on account of cost of services procured and uncontrollable expenses like rent, rates and taxes due to increase in way leave charges and lease rent & insurance.

3.2.8 With respect to the Brand Equity, the Commission in its earlier Order had directed TPC-T to compute the Brand Equity based on the revenue earned in the previous year. O&M Expenses of Rs. 158.69 Crore is adjusted to the extent of difference between the actual Brand Equity as per TPC-T and Brand Equity calculated as per the methodology of the Commission. Expenditure towards CSR is not included in O&M Expense as per previous Orders issued by the Commission.

3.2.9 Further, Brand Equity has been claimed by TPC-T and the computation of the same as per the methodology of the Commission is provided in the Table below.

Table 6: Calculation of Brand Equity as per the Commission's methodology (Rs. Crore)

Particulars	Basis	Amount
Revenue from Mumbai License Area Business based on allocation statement	A	602.40
Add: Cash Discount pertaining to Mumbai License Area	B	0.00
Add: Income in respect of services rendered pertaining to Mumbai License Area	C	0.80
Add: Delayed Payment Charges pertaining to Mumbai License Area	D	0.09
Total Revenue to be considered for Mumbai License Area	E=sum (A: D)	603.29
Contribution to Tata Brand Equity	F=0.25%*E	1.51
Service Tax -14% + 4% VAT	G=F* (Service Tax+ VAT)	0.27
Total contribution to Brand Equity including service tax	H=F+G	1.78

Commission's Analysis and Ruling

3.2.10 TPC-T has mentioned A&G expense as Rs. 52.46 Crore in the Petition including actual brand equity of Rs. 1.86 Crore. However, in spreadsheet formats submitted with the Petition, TPC-T has submitted A&G expense as Rs. 52.38 Crore after adjusting brand equity as per methodology of the Commission.

3.2.11 Actual AG expenses include rent, rates & taxes, professional, consultancy, technical fee, 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.

Table 7: Comparison of A&G Expenses of FY 2015-16 vis-à-vis of FY 2014-15 (Rs. Crore)

Sr. No	Particular	FY 2014-15	FY 2015-16	%age change
1	Rent Rates & Taxes	13.67	17.31	26.61%
2	Insurance	1.43	4.41	208.07%
3	Legal charges & Audit fee	2.79	2.99	7.21%
4	Professional, Consultancy, Technical fee	2.51	3.16	26.22%
5	Conveyance & Travel	3.09	2.53	(17.99%)
6	Cost of services procured	6.91	10.80	56.34%
7	V-sat, Internet and related charges	3.37	3.68	9.23%
8	Tata Brand Equity	1.70	1.86	9.20%
9	Total Others A&G	6.84	5.72	(16.46%)
10	Add: Adjustment for Brand Equity	(0.26)	(0.08)	(70.50%)
11	**Net A&G Expenses**	**42.05**	**52.38**	**24.58%**

3.2.12 The Commission observes that the Rent, Rates and Taxes have increased by Rs. 3.64 Crore i.e. 26.61% as compared to that in FY 2014-15. Response was sought from TPC-T for an increase of 26.61% in these expenses compared to FY 2014-15. TPC-T responded that there was rate revision in the Way Leave Charges by MbPT in FY 2015-16 which has led to increase by around Rs. 2.00 Crore in FY 2015-16. Increase in Lease Rent Charges by around Rs. 1.64 Crore was due to revision in the rates of Property Tax. The Commission observes that notification for revised property tax rate was notified by MCGM on 1 April, 2015. Considering the statutory nature of the expense same has been considered for approval.

3.2.13 It was observed that Insurance expenses increased to Rs. 4.41 Crore in FY 2015-16 from Rs. 1.43 Crore in FY 2014-15. This increase is on account of increase in transmission assets of TPC-T which are covered under Industrial All Risk (IAR) Policy. The premium rate for IAR policies have increased in FY 2015-16 compared to FY 2014-15. Therefore, there was an increase in total insurance premium for the transmission assets. Accordingly, the Commission has considered the increased insurance expense.

3.2.14 Further, the Commission asked TPC-T for justification with regards to increase in Cost of Service Procured by Rs. 3.89 Crore in FY 2015-16 as compared to that of in FY 2014-15. TPC-T provided the detailed break up of expenditure under Cost of Service procured for FY 2015-16 compared to FY 2014-15. TPC-T specified that increase is primarily due to increase in Security and Housekeeping expenses on account of addition of 3 new Receiving Stations at Bhokarpada, Sahar and Powai and also due to overall increase in the security charges by 18% during FY 2015-16. TPC-T also provided history of guard board rates for justifying the increase in wages and allowances of security guard, supervisor and officer. The Commission notes that vide notification of Security Guard Board for Brihan Mumbai & Thane District dated 15 October, 2015, wages and allowances of Security personnel have been revised w.e.f. from 1 April, 2015. Accordingly, the Commission considers the increased Cost of Services Procured.

3.2.15 With respect to the Brand Equity, the ATE in the 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.*"

3.2.16 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.

3.2.17 In view of the above, the Commission has considered an amount of Rs. 50.60 Crore towards A&G expenses for Truing up purpose. The A&G expenses claimed by TPC-T against that as approved by the Commission is shown in the Table below:

Table 8: A&G Expenses for FY 2015-16, as approved by the Commission (Rs. Crore)

Particulars	MTR Petition	Approved in this Order
A&G expenses	52.38*	50.60

** Including brand equity as per methodology of the Commission*

3.2.18 **The Commission approves actual A&G Expenses of Rs. 50.60 Crore for FY 2015-16 against Rs. 52.38 Crore submitted by TPC-T.**

Repair and Maintenance (R&M) Expenses

TPC-T's Submission

3.2.19 TPC-T has incurred Rs. 23.59 Crore towards R&M expenses for FY 2015-16 vis-à-vis Rs. 18.73 Crore for FY 2014-15. The breakup of R&M expenses in the various components are provided in the Table below.

Table 9: Actual R&M Expenses for FY 2015-16, submitted by TPC-T (Rs. Crore)

Particulars	FY 2014-15	FY 2015-16
Building & Civil Works	8.18	7.44
Machinery & Hydraulic Works	9.38	8.40
Other R&M / Furniture, Vehicles, Etc.	0.74	4.64
Stores, oil consumed	0.42	3.11
Gross R&M Expenses	**18.73**	**23.59**
Less: Expenses Capitalised	-	-
Net R&M Expenses	**18.73**	**23.59**

Commission's Analysis and Ruling

3.2.20 The Commission sought reasons from TPC-T for increase in R&M expense to Rs. 23.59 Crore in FY 2015-16 from Rs. 18.73 Crore in FY 2014-15, i.e. increase of about 26% in R&M expenses. TPC-T clarified that there is substantial increase in expense towards "Stores, oil consumed". This increase was due to the painting job for Transmission tower and structures which varies year to year depending on the condition of the Transmission towers and structures. The Commission notes that majority of the TPC-T Transmission lines are more than 25 years old and are facing rusting problems due to saline weather conditions around Mumbai License Area. Hence, to maintain R&M activities such as painting of the rusted towers and strengthening of the towers is justified. The Commission observes that this activity was not required to be undertaken in FY 2016-17 and hence R&M expenses for FY 2016-17 are lower compared to FY 2015-16.

3.2.21 Further, certain expenses were booked under Building/Civil Works and Machinery/Hydraulic Works in earlier financial years. From FY 2015-16, these expenses have been re-categorized under 'other R&M/Furniture/Vehicles' instead of 'Building/Civil Works' and 'Machinery/Hydraulic Works'. Accordingly, there is reduction in R&M Expenses towards 'Building/Civil Works' and 'Machinery/Hydraulic Works' and increase in R&M Expense towards 'other R&M/Furniture/Vehicles'. It can be seen that all the three expense sub-heads put together the expense incurred increased to Rs. 20.48 Crore in FY 2015-16 from Rs. 18.30 Crore in FY 2014-15. The increase seems to be around 11.91% and these expenses vary depending on the condition of the equipments, assets, etc.

3.2.22 Further, the increase in R&M expenses was also due to overhauling and repair works carried out at Ambernath, Saki, Chembur, Mahalaxmi, Carnac, Parel and Borivali receiving stations. The Commission notes that these Receiving Stations had been commissioned more than 25 years ago. The EHV sub-stations equipments such as circuit breakers, isolators, current Transformers and protection systems need major R&M after specific period to maintain to avoid the failure of equipments and interruption of supply. Hence, the work carried out by TPC-T is reasonable and the Commission considers the same for approval.

3.2.23 In view of the above, the Commission has considered Rs. 23.59 Crore towards R&M expenses for Truing up purpose. The R&M expenses claimed by TPC-T and that approved by the Commission is shown in the Table below:

Table 10: R&M Expenses for FY 2015-16, as approved by the Commission (Rs. Crore)

Particulars	MTR Petition	Approved in this Order
R&M expenses	23.59	23.59

3.2.24 **The Commission approves actual R&M expenses of Rs. 23.59 Crore for FY 2015-16 as submitted by TPC-T.**

Impact of Head Office Support Services (HOSS)

TPC-T's Submission

3.2.25 There are certain departments under the head "Head Office and Support Service" (HOSS) that require allocation between the various Businesses including the Business of Mumbai License Area (Generation, Transmission and Distribution Business pertaining to Mumbai Area). Such departments and the costs of HOSS have been divided into two parts viz., (i) cost centres that are dedicated to the Mumbai License Area called "LA

Services" and (ii) cost centres ("HO Support Services") that are being used by both Mumbai License Area and Other Businesses of Tata Power.

Commission's Analysis and Ruling

3.2.26 The Commission notes that TPC-T has included the expenses towards centenary celebrations in actual A&G expenses. As regards the clarification of the same, TPC-T submitted that these expenses are incurred towards celebration of 100 years of Tata Power in order to pay tribute to all those who contributed to the history of Tata Power and spread awareness, celebrations in the form of organising functions, knowledge fairs, display banner, etc. The Commission is of the view that expenses incurred towards Centenary Celebrations should not be recovered from the consumers. In the past, the Commission has disallowed similar expenses towards Corporate Social Responsibility. In view of this, the Commission has disallowed the expenses of Rs. 0.75 Crore towards Centenary Celebrations for FY 2015-16.

Total O&M Expenditure

TPC-T's Submission

3.2.27 The total actual O&M expenditure for FY 2015-16 was Rs. 158.69 Crore. The summary of the O&M expenditure is tabulated below:

Table 11: O&M Expenses for FY 2015-16, as submitted by TPC-T (Rs. Crore)

Particulars	MYT Order	MTR Petition
Employee Expenses	197.87	82.65
A&G Expenses		52.46
R&M Expenses		23.59
Total		**158.69**

Commission's Analysis and Ruling

3.2.28 TPC-T has claimed actual O&M expense of Rs. 158.69 Crore in the Petition including actual brand equity of Rs. 1.86 Crore. However, in spreadsheet formats submitted with the Petition, TPC-T has submitted actual O&M expense as Rs. 158.62 Crore after adjusting for brand equity as per methodology of the Commission. The Commission has already analyzed and approved the components of O&M expense for FY 2015-16 in the above section which are summarized in table below.

Table 12: O&M Expenses for FY 2015-16, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Employee Expenses	197.87	82.65	82.65
A&G Expenses		52.38	50.60
R&M Expenses		23.59	23.59
Less: Expense towards centenary celebration			-0.75
Total		**158.62**	**156.09**

3.2.29 **The Commission approves actual O&M expenses of Rs. 156.09 Crore for FY 2015-16 against Rs. 158.62 Crore submitted by TPC-T.**

3.3 Capital Expenditure and Capitalisation

TPC-T's Submission

3.3.1 Capitalisation of Rs. 238.58 Crore was approved in the Order in Case No. 22 of 2016 considering only those schemes which were approved in-principle. In the present Petition a Capitalisation of Rs. 266.96 Crore is claimed based on actual capitalization during the year. The break-up of the capitalisation is as shown in the following table:

Table 13: Break up of Capitalisation for FY 2015-16, as submitted by TPC-T (Rs. Crore)

Particulars	Basis	Capitalisation claimed by TPC-T
DPR Schemes	A	227.87
DPR submitted to MERC	B	0.31
Total- DPR schemes	C=A+B	**228.18**
Non-DPR schemes	D	36.11
HO & SS Allocation	E	2.67
Sub-total: Non-DPR Schemes	F=D+E	**38.78**
Total	**G=C+F**	**266.96**

3.3.2 Out of total capitalisation of Rs. 266.96 Crore, capitalisation on account of DPR schemes is Rs. 228.18 Crore. Capitalisation towards non-DPR schemes is Rs. 38.78 Crore which is 16.99% of capitalisation of FY 2015-16.

Commission's Analysis and Ruling

3.3.3 TPC-T has claimed Rs. 227.87 Crore against DPR schemes and rest Rs. 0.31 Crore against DPR schemes submitted to the Commission, which is approved by the

Commission vide letter dated 3 August, 2018. Accordingly, total capitalisation against 65 DPR schemes has increased to Rs. 228.18 Crore.

3.3.4 Considering that execution of these 65 capex schemes phased across multiple years of the Control Period, the Commission has analyzed the capital expenditure and capitalisation details submitted for all years from FY 2015-16 to FY 2019-20 in this Section and discussed its approach for approval of the capitalisation across these years.

3.3.5 TPC-T submitted that the main reasons for delay in project execution were RoW issues, Court cases, requirement of Forest clearances in some schemes, delay in land acquisition, availability of outages, etc. These issues are not peculiar or unique to TPC-T but are common to most Transmission projects. The performance shows that TPC-T failed to consider them adequately at the planning stage and while estimating time-lines and work sequences. In MYT Order in Case No. 22 of 2016 dated 30 June, 2016; the Commission had observed as follows:

"Considering the time over-run in some of the capex schemes, the Commission has not considered their cost over-run since detailed justification for the time over-run has not been provided. This is in respect of schemes whose cumulative capitalisation till the end of the 2nd Control Period has exceeded the approved DPR cost. The Commission has accepted the capitalisation of such schemes till FY 2014-15, but has not considered any capitalisation beyond the approved project cost. The Commission shall consider capitalisation of such schemes at the time of True-up for those years after prudence check, at which time TPC-T shall furnish the detailed reasons for time and cost over-runs and the scheme-wise IDC."

3.3.6 In accordance with the above, TPC-T has provided detailed reasons for time overrun & cost overrun of 39 DPR schemes. These justifications and reasons which include permissions from various authorities such as MCGM, Forest, Environmental clearances, Airport authorities, etc. and RoW issues have been analyzed while approving/disapproving capitalisation in subsequent paragraphs.

3.3.7 While approving the capitalisation for DPR schemes, the Commission has considered the schemes submitted by TPC-T on actuals for FY 2015-16 and FY 2016-17 and projections for FY 2017-18 to FY 2019-20, in respect of which in-principle approval has been granted or whose DPRs have been submitted for in-principle approval. The DPR schemes approved 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.

3.3.8 Some of these schemes are still work in progress and capitalisation is claimed based on assets put to use in respective years. The Commission has scrutinized the details of assets put to use for each of these schemes and allowed capitalisation against them based on the respective year of capitalisation. Summary of the capitalisation schemes considered by the Commission in this Order is as shown in table below.

Table 14: Summary of Capitalisation, submitted by TPC-T and approved by the Commission (Rs. Crore)

Particulars	No of schemes	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Capitalisation Claimed by TPC-T						
DPR		228.18	156.56	216.75	297.15	432.67
Non- DPR		38.78	30.97	28.70	37.26	23.97
Total		266.96	187.53	245.45	334.40	456.64
Approved by the Commission						
DPR	65	225.47	141.79	134.36	334.21	280.24
Non- DPR	-	38.78	28.36	26.87	37.26	23.97
Total		264.24	170.15	161.23	371.47	304.21
DPR Capitalization Disallowed/Deferred	12	2.72	14.77	82.39	(37.07)*	152.43

** Higher approval of Rs. 37.07 Crore capitalisation for FY 2018-19 is majorly on account of deferment of previous years' capitalisation which is considered in capitalisation for FY 2018-19.*

3.3.9 The analysis of major capex schemes is categorized as below:

a) Capitalisation of schemes allowed at depreciated cost
b) Schemes with cost overrun against approved DPR cost
c) Deferred capitalisation as asset not commissioned as proposed
d) Capitalisation of DPR schemes submitted to the Commission and approval is awaited
e) Non-DPR schemes

a) Schemes with cost overrun exceeding DPR cost

3.3.10 There are 4 DPR schemes with cost over-run over and above the in-principle approval of the Commission which are as provided in table below. Out of these 4 DPR schemes,

- 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 observed 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.

- With regards '220 kV GIS at Sahar airport', the Commission notes that TPC-T has submitted revised DPR to the STU with revised scope of work and same will be submitted to the Commission for in-principle approval. Therefore, the Commission considered the capitalisation of the approved cost as per in-principle DPR approval.
- With regards to scheme of 'SAP Implementation', the Commission has analyzed the reasons provided by TPC-T for cost overrun and observed that reasons provided by TPC-T were controllable in nature. Therefore, cost overrun has not been considered for capitalisation.

3.3.11 In view of the above, the summary of disallowance due to cost overrun is summarized in table below.

Table 15: Schemes in which capitalisation disallowed due to cost overrun (Rs. Crore)

Sr. No.	Name of scheme	In-principle Approved cost	Cumulative capitalisation claimed	Total disallowed capitalisation	Year of disallowance*
1	145 kV GIS at BKC	280.20	284.51	4.31	Year-wise disallowance is provided in Appendix-4
2	Installation of 220/33 kV GIS and ICT at Mahalaxmi	132.76	160.76	28.00	
3	220kV GIS at Sahar Airport	167.30	174.00	6.70	
4	SAP Allocation	10.71	18.27	7.57	

b) Capitalisation of schemes allowed at depreciated cost

3.3.12 The Commission observed that there is substantial time and cost overrun in the schemes, viz. substation at Ixora, Panvel, 145 kV GIS at Versova, Construction of line bays at Trombay, 145 kV GIS at Mankhurd. In these schemes, assets are constructed which are benefiting neither the consumers nor the transmission system. However, TPC-T claims the capitalisation stating that the asset is ready to use. The Commission is of the opinion that TPC-T is not committed to put assets to use expeditiously and continues to claim capitalisation and O&M expenses by constructing assets that remain idle for considerable time. Useful life of such assets is not fully utilized for benefit of the consumers because assets remain idle. Even during the time asset is idle, TPC-T is claiming IDC and which burdens the consumer further. Therefore, the Commission observes that there is no real dis-incentive to TPC-T to not expeditiously execute and put the assets created under these schemes to use. This is corroborated by the fact that TPC-

T has been claiming capitalisation along with IDC against such assets. Hence, the Commission is of the view that prima facie this is a fit case to create some dis-incentive that will induce discipline in the TPC-T to undertake proper planning, execution and commissioning of capital expenditure projects.

3.3.13 In view of above, the Commission has first identified the year of actual put to use of assets based on submission by TPC-T. Further, for such schemes, the Commission has computed the year-wise depreciation, from the year of disallowance (as per previous and this Order) upto the year in which assets were put to use considering the depreciation rates approved for the respective years. The total depreciation computed from the year of initial disallowance (disallowed in MYT Order) upto the year of assets put to use/ expected to be put to use is deducted from original capitalisation claim (disallowed in MYT order) amount to derive the net capitalisation (depreciated cost) against these schemes. Further, the claim of additional IDC from year of initial disallowance (disallowed in MYT Order) to year of capitalisation approved in this Order has not been accepted. Therefore, the net capitalisation is considered for approval in the respective year of put to use. The details of such schemes are as below.

3.3.14 There are 4 schemes in which TPC-T has claimed capitalisation in past, but asset is not 'put to use' benefitting the consumers. Hence, the Commission has allowed capitalisation against these schemes at depreciated cost till year in which it is actually put to use. The summary is given in table below.

Table 16: Capitalisation allowed at depreciated cost (Rs. Crore)

Sr. No.	Scheme Name	Approved project cost	Disallowed capitalisation in MYT Order (Rs. Crore)	Capitalisation claimed	Allowed capitalisation after depreciation	Disallowance in this Order
1	110/33KV S/S at Ixora,Panvel	34.30	31.40	36.76	29.99	6.77
2	145 kV GIS at Mankhurd	77.46	10.29	11.74	9.45	2.29
3	Const. of line bays at Trombay	31.39	20.23	9.37	7.43	1.94
4	145 kV GIS at Versova	101.83	1.51	1.51	1.32	0.19

110/33KV S/S at Ixora, Panvel

3.3.15 DPR scheme of '110/33 kV Sub-station at Panvel (Ixora)' was approved by the Commission on 16 March, 2012 with approved DPR cost of Rs. 34.30 Crore. However, TPC-T claimed capitalisation of Rs. 36.76 Crore against this DPR scheme (Rs. 31.40 Crore till FY 2014-15, Rs. 2.72 Crore in FY 2015-16, Rs. 1.20 Crore in FY 2016-17, Rs. 1.44 Crore in FY 2017-18) as the project was erected in FY 2013-14. It is submitted that cost over-run is due to additional cost of fire hydrants and civil works and time over-run is due to delay in possession of land required for substation.

3.3.16 However, the Commission notes that the assets were not put to use as there was no power evacuation from the Sub-station. The 110 kV IXORA Sub-station was constructed to supply the power exclusively to the deemed Distribution Licensee Nidar Utilities Panvel LLP (NUPLLP) (earlier IXORA Construction Co. Ltd.). TPC-T has erected the sub-station; however, there was no demand from the NUPLLP in FY 2015-16. Hence, the basic purpose of the construction of a new Sub-station has been defeated due to lack of coordination for asset utilization. No assets were in service to the consumer till FY 2017-18.

3.3.17 As per approval of the Commission, scheme was expected to be completed in FY 2012-13. The Commission, as per Petition filed by NUPLLP on 25 July 2017, has now approved the PPA of NUPLLP vide Order dated 3 August, 2018 in Case No. 117 of 2017. Also, the STU has granted the grid connectivity to NUPLLP. Therefore, the scheme is likely to be 'put to use' in FY 2018-19. Accordingly, all capitalisation claimed by TPC-T till date against this DPR is deferred and depreciated cost of Rs. 29.99 Crore is taken as net capitalisation in FY 2018-19 against claim of Rs. 36.66 Crore.

145 kV GIS at Mankhurd

3.3.18 DPR scheme of '145 kV GIS at Mankhurd' was approved by the Commission on 26 November, 2010 with approved DPR cost of Rs. 77.46 Crore. As per approval of the Commission, scheme was expected to be completed in FY 2012-13. However, the Commission observed that scheme is not completed till date and the last phase of capitalisation is proposed in FY 2018-19. The Commission had disallowed capitalisation of Rs. 10.15 Crore in FY 2014-15 and Rs. 0.14 Crore in FY 2015-16 as assets were not put to use. Thus, total Rs. 10.29 Crore were disallowed in MYT Order. TPC-T has claimed higher capitalisation of Rs. 11.74 Crore in FY 2016-17 against this disallowance of Rs. 10.29 Crore. As the Commission has disallowed capitalisation in MYT Order, TPC-T has claimed IDC on that capitalisation from year of capitalisation till the year of revised claim. These amounts are Rs. 0.77 Crore in FY 2014-15 and Rs. 0.82 Crore in FY 2015-16. In a response to a query seeking status of the project, TPC-T stated that the project is taken in service during March, 2017.

3.3.19 Accordingly, capitalisation of Rs. 9.45 Crore is allowed against this DPR scheme vis-à-vis earlier disallowed capitalisation in MYT Order of Rs. 10.29 Crore after deducting IDC of 2 years as claimed above and depreciation of Rs. 0.84 Crore. As cumulative capitalisation including Rs. 9.45 Crore calculated above is less than approved cost of DPR scheme.

Construction of 3 new 220 kV Line Bays at Trombay for Trombay-Dharavi-Salsette-Saki Lines

3.3.20 Similarly, for the DPR scheme – Construction of 3 new 220 kV Line Bays at Trombay for Trombay-Dharavi-Salsette-Saki Lines, approved project cost is Rs. 31.39 Crore as per DPR approved on 9 November, 2010. As per the Commission's approval, scheme was expected to be completed in March, 2012. TPC-T has claimed final capitalisation in FY 2015-16. The Commission had disallowed capitalisation of Rs. 20.23 Crore in FY 2014-15 and FY 2015-16 as the assets were not put to use. Now, TPC-T in the year FY 2016-17 has claimed capitalisation of Rs. 9.37 Crore for 2 bays out of total 5 bays. TPC-T has claimed capitalisation for 2 bays of Rs. 8.10 Crore calculated based on average cost disallowed per bay (Rs. 20.23 Crore for 5 bays). As the Commission has disallowed capitalisation in MYT Order, TPC-T has claimed IDC on that capitalisation from year of capitalisation till the year of revised claim amounting to Rs. 1.27 Crore. The Commission has approved the capitalisation of Rs. 7.43 Crore in FY 2016-17 after deducting IDC claimed by TPC-T and depreciation of Rs. 0.66 Crore on Rs. 8.09 Crore capitalisation claimed by TPC-T.

145 kV GIS Sub-station at Versova

3.3.21 DPR scheme of '145 kV GIS at Versova' was approved by the Commission on 17 January, 2008 with approved DPR cost of Rs. 101.83 Crore. As per approval of the Commission, scheme was expected to be completed in FY 2011-12. TPC-T has commissioned this project in March 2018 and assets have been put to use. TPC-T has claimed Rs. 66.06 Crore and Rs. 26.55 Crore in FY 2017-18. In MYT Order, the Commission had disallowed Rs. 1.51 Crore for FY 2014-15 on account of preliminary and miscellaneous expenses incurred without assets being created and put to use. Considering this, deduction of Rs. 0.91 Crore depreciation is done from capitalisation of Rs. 66.06 Crore in FY 2017-18 and no deduction of depreciation is done against cost of land. Accordingly, the Commission is approving capitalisation of Rs. 92.42 Crore against this scheme.

c) Deferred capitalisation as asset is not commissioned

3.3.22 There are 4 schemes viz. '220 KV Receiving Station at Antop Hill Wadala', 'Replacement of 22kV Switchgear at Borivli', '220 kV GIS at Versova, 'Replacement of Transformer 1 & 2 at Saki' in which capitalisation proposed by TPC-T is deferred in subsequent years as work is not completed as proposed by TPC-T and the projects are expected to be commissioned in future based on the justifications submitted by TPC-T. Details of deferred capitalisation are given in Appendix-4.

3.3.23 The Commission directs TPC-T to expedite the execution of these 4 schemes, so that schemes will be completed and asset will be put to use.

d) DPR schemes submitted to the Commission

3.3.24 Merged DPR for 'Replacement and Installation of Protective Equipment in Transmission' was submitted on 16 May, 2018. This merged DPR is approved by the Commission on 3 August, 2018 with approved DPR cost of Rs. 20.15 Crore. Accordingly, the Commission has approved the capitalisation against this scheme (Rs. 0.31 Crore in FY 2015-16, Rs. 0.43 Crore in FY 2016-17, Rs. 4.37 Crore in FY 2017-18, Rs. 10.90 Crore in FY 2018-19, Rs. 2.34 Crore in FY 2019-20).

e) Non-DPR schemes

3.3.25 The non-DPR capitalisation for each year from FY 2015-16 to FY 2019-20 is considered as submitted by TPC-T, subject to a cap of 20% of the DPR capitalisation approved in this Order in accordance with MYT Regulations.

3.3.26 Accordingly, non-DPR capitalisation approved for FY 2016-17 and FY 2017-18 is lower than claimed by TPC-T as shown in table below.

Table 17: Non-DPR capitalisation, submitted by TPC-T and approved by the Commission (Rs. Crore)

Particulars	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Capitalisation Claimed by TPC-T					
DPR Capitalization	228.18	156.56	216.75	297.15	432.67
Non- DPR Capitalization	38.78	30.97	28.70	37.26	23.97
Approved by the Commission					
DPR Capitalization	225.47	141.79	134.36	334.21	280.24
Non- DPR Capitalization	38.78	28.36	26.87	37.26	23.97

3.3.27 **The list of capex schemes against which capitalisation is claimed by TPC-T (for the period from FY 2015-16 to FY 2019-20) and is considered by the Commission for analysis and approval is at Appendix – 3.**

3.3.28 The capitalisation for FY 2015-16 approved by the Commission after prudence check is given in the Table below:

Table 18: Capitalisation for FY 2015-16, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
DPR Schemes	198.81	227.87	225.47
DPR schemes submitted to the Commission		0.31	
Non-DPR Schemes and HOSS	39.76	38.78	38.78
Total	**238.58**	**266.96**	**264.24**

3.3.29 **The Commission approves a Capitalisation of Rs. 264.24 Crore for FY 2015-16 as against Rs. 266.96 Crore claimed by TPC-T.**

3.4 Depreciation

TPC-T's Submission

3.4.1 Depreciation has been computed by applying the rates specified under the MYT Regulations, 2011. TPC-T has claimed Rs. 118.56 Crore as Depreciation for FY 2015-16. Rate of depreciation as a percentage of the Opening GFA (Rs. 2,753.94 Crore) works out to be 4.13%.

Commission's Analysis and Ruling

3.4.2 The Commission has allowed capitalisation of Rs. 21.74 Crore towards the scheme of 145 kV GIS at BKC in the Review Order dated 19 July 2017 in Case No. 110 of 2016. Accordingly, the closing balance of the GFA for FY 2014-15 has been revised to Rs. 2753.94 Crore and same has been considered as opening balance of GFA for FY 2015-16.

3.4.3 TPC-T has considered retirement of assets during FY 2015-16 as Rs. 34.37 Crore. In reply to query of the Commission regarding details of assets being retired, it was submitted that Rs. 0.04 Crore of assets are transferred to TPC-T from other businesses of Tata Power. These assets include transformer, cable, 33 kV GIS, 145 kV GIS, etc. Such asset transfer would amount to the amendment in its License. The License amendment requires a process to be followed as stipulated in MERC (Transmission License Conditions) Regulations, 2004. Also, the justification of such transfer and its impact on consumers needs to be ascertained. Hence, the Commission has not considered the asset retirement claimed by TPC-T on account of asset transfer. Accordingly, value of retirement of assets for FY 2015-16 is changed after adjusting for assets transferred.

Closing GFA and average GFA for FY 2015-16 are adjusted accordingly. Further, based on the capitalisation approved of Rs. 264.24 Crore and retirement of assets for FY 2015-16 the closing balance of GFA of FY 2015-16 is arrived at Rs. 2983.78 Crore.

3.4.4 Regulation 31.2 of the MYT Regulations, 2011 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. For Truing up of FY 2015-16, the Commission has calculated depreciation rate for FY 2015-16 as per the actual depreciation rate on average of asset class-wise GFA for the year provided by TPC-T.

3.4.5 The above depreciation rate is applied on the average of GFA for FY 2015-16 approved by the Commission to arrive at the depreciation expenses for FY 2015-16. The depreciation expense claimed by TPC-T and that approved by the Commission is provided in the Table below.

Table 19: Depreciation for FY 2015-16, as approved by the Commission (Rs. Crore)

DPR Schemes	MYT Order	MTR Petition	Approved in this Order
Opening GFA	2732.20	2,753.94	2,753.94
Addition in GFA	238.58	266.96	264.24
Retirement of GFA	-	-34.41	-34.41
Transfer of GFA	-	0.04	-
Closing GFA	2,970.77	2,986.53	2,983.78
Average GFA	2,851.49	2,870.23	2,868.86
Depreciation	**115.21**	**118.56**	**118.50**
Avg. depreciation rate	**4.22%**	**4.13%**	**4.13%**

3.4.6 **The Commission approves Depreciation of Rs. 118.50 Crore for FY 2015-16, as against Rs. 118.56 Crore claimed by TPC-T.**

3.5 Interest Expense on Long Term Loan

TPC-T's Submission

3.5.1 TPC-T has availed fresh loans in FY 2015-16 from HDFC Bank (Rs. 250 Crore) and IDFC Bank (Rs 250 Crore). In addition, TPC-T has drawn amounts from the previous sanctioned loan from Kotak Mahindra Bank (Sanctioned amount – Rs. 250 Crore, Amount drawn – Rs. 221.24 Crore)

3.5.2 The details of the fresh loan taken in FY 2015-16 from HDFC Bank and IDFC Bank are as shown in Table below:

Table 20: Details of fresh loans for FY 2015-16, as submitted by TPC-T

Particulars	Remarks
HDFC Loan	
Amount	Rs. 250 Crore
Repayment schedule	2 years moratorium, quarterly repayment of 6.5% of drawal amount per annum for the first ten years and 35% in the last year
Interest rate	10.30% p.a. linked to Base Rate
IDFC Loan	
Amount	Rs. 250 Crore
Repayment schedule	2 years moratorium, with quarterly repayment of 6.5% of drawal amount per annum for the first 10 years and 35% in the last year
Interest rate	10.30% p.a. linked to Base Rate

3.5.3 Loans drawn from various banks have been allocated to different Business Areas (Generation, Transmission and Distribution) based on the ratio of capitalisation of these Business Areas in FY 2015-16 and the balance loan is assumed to be financed through normative loan. The allocation of loan for various Businesses is as shown in Table below:

Table 21: Allocation of loan to various businesses, as submitted by TPC-T (Rs. Crore)

Particulars	Generation (G)	Transmission (T)	Distribution (D)	Total GTD
Capitalisation	218.87	266.96	264.37	750.20
Debt	153.21	186.87	185.06	525.14
%	29.17%	35.59%	35.24%	100%
Kotak - Rs. 250 Crore	64.55	78.73	77.96	221.24
IDFC - Rs. 250 Crore	20.42	24.91	24.67	70.00
HDFC - Rs. 250 Crore	20.42	24.91	24.67	70.00
Total actual loan drawl	**105.39**	**128.55**	**127.30**	**361.24**
Normative loan	**47.82**	**58.32**	**57.76**	**163.90**

3.5.4 TPC-T has computed the interest expenses for FY 2015-16 as Rs. 103.67 Crore after considering the above loan drawals, repayment equal to depreciation claimed and weighted average interest rate of 10.69%.

Commission's Analysis and Ruling

3.5.5 The Commission has revised the closing balance of loan of FY 2014-15 due to loan addition on account of additional capitalisation approved in the Review Order. Same has been considered as the opening balance of loan for FY 2015-16. Loan addition (Rs. 184.97 Crore) is considered as 70% of the capitalization approved during FY 2015-16 and loan repayment has been considered (Rs. 118.50 Crore) equal to the depreciation allowed during FY 2015-16 in this Order in accordance with Regulation 33.3 of the MYT Regulations, 2011 to arrive at the closing balance of loan for FY 2015-16.

3.5.6 Regulation 33.5 of the MYT Regulations, 2011 stipulates that the rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of the year for TPC-T.

3.5.7 The Commission sought the documentary evidence for verifying computation of weighted average interest rate on loan. In response, TPC-T submitted the detailed computations of weighted average interest rate based on the actual loan drawals and letters from banks indicating the loan drawals and interest rates.

3.5.8 After scrutiny of documentary evidence submitted for confirming the interest rate of Long Term Loan Capital, the following were observed by the Commission:

a. Interest rate of three HDFC Loans availed after FY 2013-14 was erroneously taken as 10.25% instead of 10.45%.

b. Interest rate of loan 'Kotak new 250 Crore' was erroneously taken as 10.30% instead of 9.68%.

3.5.9 The Commission rectified the interest rates for the respective loans as per the above observations. Accordingly, the weighted average interest rate is revised to 10.75% by the Commission compared to 10.69% submitted by TPC-T. Following Table summarizes calculation of weighted average interest rate of loan capital for FY 2015-16.

Table 22: Computation of Weighted Average Interest Rate for FY 2015-16

Source of Loan	Opening balance (Rs. Crore)	Interest Rate at opening of FY 2015-16 (%)
Loans availed in FY 2015-16		
Kotak_250	0.00	9.68%
HDFC_250	0.00	10.95%
IDFC_250	0.00	10.95%

Source of Loan	Opening balance (Rs. Crore)	Interest Rate at opening of FY 2015-16 (%)
Loans availed in FY 2014-15		
Kotak new 250cr	11.67	9.68%
HDFC New	141.98	10.45%
BNP Paribas	18.04	10.10%
Kotak	40.97	10.50%
HDFC Bank Capitalisation Loan 2 (Availed in FY 2014-15)	40.97	10.45%
Loans availed in FY 2013-14		
BNP Paribus Loan	3.28	10.10%
J P Morgan Loan	61.83	10.00%
Kotak Loan	61.52	10.50%
HDFC Loan Capitalisation-2 (Availed in FY 2013-14)	61.52	10.45%
Loans availed in FY 2012-13		
Kotak-88	2.75	11.00%
Loans availed in FY 2011-12		
IDFC Loan-3 Rs. 800 Crore	306.62	10.95%
Loans availed in FY 2010-11		
HDFC Refinancing of earlier loans	58.78	11.38%
HDFC capitalisation loan-1	44.17	11.38%
IDFC-2 150 Crore	40.81	11.00%
IDBI-2 Loan refinanced	94.85	11.00%
Loan Drawn prior to FY2009-10	21.96	11.16%
Total	1011.72	
Weighted average interest rate (%)		**10.75%**

3.5.10 The Commission has computed Interest expenses on Long Term Loan Capital on the normative average loan of the year by applying the above weighted average rate of interest of 10.75% as computed in Table above.

3.5.11 Further, TPC-T has not considered reduction in loan for the assets retired during FY 2015-16. The Commission noted from the TPC-T's submissions on retired assets that most of the assets retired were capitalised more than 15 years ago and has not reduced any loan corresponding to the above from the loan balance of FY 2015-16.

3.5.12 The summary of the Interest expense on Long Term Loan as submitted by TPC-T and as approved by the Commission after Truing up for FY 2015-16 is shown in the Table below:

Table 23: Interest Expense on Long Term Loans for FY 2015-16, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Opening balance of loan	920.15	935.36	935.36
Addition of loan	167.00	186.87	184.97
Repayment of loan	115.21	118.56	118.50
Closing balance of loan	971.94	1,003.67	1,001.83
Weighted average interest rate at the beginning of year	10.69%	10.69%*	10.75%
Interest Expense	**101.16**	**103.67**	**104.12**

** Error in computation of rate of interest by TPC-T. Refer para. 3.5.8*

3.5.13 **The Commission approves Interest expenses of Rs. 104.12 Crore for FY 2015-16, as against Rs. 103.67 Crore claimed by TPC-T.**

3.6 Other Finance Charges

TPC-T's Submission

3.6.1 Actual expense towards other Finance Charges as Rs. 0.03 Crore.

Commission's Analysis and Ruling

3.6.2 The Commission sought information regarding usage of Rs. 0.03 Crore as Finance Charges. TPC-T submitted that Other Finance Charges are incurred towards charges for Demand Draft & RTGS.

3.6.3 TPC-T has maintained cash credit and overdraft accounts for day-to-day business transactions. Account maintenance charges need to be paid to banks for maintaining such accounts.

3.6.4 Non-fund credit facilities like bank guarantee, letter of credit are required for various business transactions. Availability of such non-fund facility reduces need of free cash and helps in managing cash flows better. For example, purchase of electrical equipments, like transformers, control & relay panels, is typically done using letter of credit. Banks provide facility of letter of credit on payment of fees/charges.

3.6.5 Taking into consideration scale of capitalisation approved for TPC-T (Rs. 264.24 Crore for FY 2015-16) and allocation of loan drawal during FY 2015-16 to TPC-T (Rs. 128.55 Crore), other finance charges of Rs. 0.03 Crore seem reasonable.

3.6.6 **The Commission approves actual expense towards Other Finance Charges of Rs. 0.03 Crore for FY 2015-16.**

3.7 Interest on Working Capital

TPC-T's Submission

3.7.1 IoWC for FY 2015-16 was computed at an interest rate of 14.75%, equivalent to the SBAR of SBI prevailing during FY 2015-16. Total interest on working capital for FY 2015-16 works out to Rs.11.81 Crore.

Commission's Analysis and Ruling

3.7.2 The Commission has assessed the working capital requirement based on the Regulation 35.2 of MYT Regulations, 2011. The Commission sought details from TPC-T for estimation of 'sum of book value of stores, materials and supplies at end of each month' used for calculation of Total Working Capital for FY 2015-16. TPC-T has provided the monthly balance of book value of Stores and materials maintained. Accordingly, the Commission scrutinized the above details and has considered Rs. 11.17 Crore in the working capital requirement for FY 2015-16.

3.7.3 One-twelfth (1/12) of the amount of O&M Expenses (Rs. 16.44 Crore) are considered on normative O&M Expenses approved in this Order. However, TPC-T has claimed 1/12th of actual O&M expenses (Rs. 13.22 Crore). Hence, the amount approved is higher than claimed by TPC-T.

3.7.4 Regulation 35.2 of the MYT Regulations, 2011 specifies that the rate of IoWC shall be considered on normative basis and be equal to State Bank Advance Rate (SBAR) of State Bank of India as on the date of application for determination of Tariff. The Commission has considered the weighted average interest rate on the date of application of Tariff determination for computing IoWC for FY 2015-16. The summary of the IoWC as submitted by TPC-T and as approved by the Commission after Truing up for FY 2015-16 is shown in the Table below.

Table 24: Interest on Working Capital for FY 2015-16, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Operations and Maintenance Expenses for one month	13.30	13.22	16.44
One-twelfth of the sum of book value of stores, materials and supplies at end of each month	11.00	11.17	11.17
One and a half months of the expected revenue from transmission charges at the prevailing tariffs	55.64	55.65	55.65
Total Working Capital Requirement	79.94	80.04	83.26
Interest Rate (%) - State Bank Advance Rate	14.75%	14.75%	14.75%
Interest on Working Capital	**11.79**	**11.81**	**12.28**

3.7.5 **The Commission approves Normative Interest on Working Capital of Rs. 12.28 Crore for FY 2015-16, as against Rs. 11.81 Crore claimed by TPC-T.**

3.8 Return on Equity

TPC-T's Submission

3.8.1 TPC-T has considered debt: equity ratio of 70:30, capitalisation during the year, and rate of RoE of 15.5% as per MYT Regulations, 2011. Further, TPC-T has computed RoE on the basis of opening equity, and 50% of the equity portion of the capitalisation during the year and reduction in equity on account of de-capitalisation of certain assets. Accordingly, TPC-T has computed RoE as Rs. 148.13 Crore for FY 2015-16.

Commission's Analysis and Ruling

3.8.2 The Commission has computed RoE at the rate of 15.5%, in accordance with Regulation 32.2.1 of the MYT Regulations, 2011 on the opening equity of the year and on 50% of the equity portion of capitalisation approved for FY 2015-16 in this Order.

3.8.3 The Commission has revised the closing balance of equity of FY 2014-15 due to equity on account of additional capitalisation approved in the Review Order in Case No. 110 of 2016. Same has been considered as the opening balance of equity for FY 2015-16. The Commission has considered reduction in equity at 30% of asset value of retired/de-capitalised assets. TPC-T had submitted assets retired of Rs. 34.37 Crore after adjusting for assets transferred to TPC-T of Rs. 0.04 Crore. However, as explained in paragraph 3.4, the Commission does not approve transfer of assets between TPC-T and any other entity without prior approval and amendment in the license. Accordingly, the closing balance of equity is arrived by adding the equity addition corresponding to the capitalisation approved by the Commission for FY 2015-16 in this Order and reduction in equity due to retirement (asset retirement of Rs. 34.41 Crore instead of Rs. 34.37 Crore submitted by TPC-T) to the opening balance of equity.

3.8.4 Based on the above, the RoE has been computed. The RoE as claimed by TPC-T and as approved by the Commission for FY 2015-16 after Truing up is summarized in the following Table:

Table 25: RoE for FY 2015-16, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Regulatory equity at the beginning of the year	909.09	915.61	915.61
Less: Equity Portion of Asset De-capitalised / retired During the Year	0.00	(10.31)	(10.32)
Capital Expenditure Capitalised during the Year	238.58	266.96	264.24
Equity portion of capital expenditure Capitalised during the year	71.57	80.09	79.27
Regulatory equity at the end of the year	980.67	985.39	984.56
Return on Regulatory Equity @15.5% at the beginning of the year	140.91	141.92	141.92
Return on Regulatory Equity @ 50% of capitalisation during the year	5.55	6.21	5.34
Return on regulatory equity	**146.46**	**148.13**	**147.26**

3.8.5 **The Commission approves RoE of Rs. 147.26 Crore for FY 2015-16, as against Rs. 148.13 Crore claimed by TPC-T.**

3.9 Contribution to Contingency Reserves

TPC-T's Submission

3.9.1 The contribution to Contingency Reserves for FY 2015-16 was Rs. 6.88 Crore, computed at 0.25% of opening GFA as per MYT Regulations, 2011.

Commission's Analysis and Ruling

3.9.2 The Commission has verified that the accumulated Contingency Reserves at the end FY 2014-15 during the proceedings of MYT Order and had found that it does not exceed 5% of the original cost of fixed assets as stipulated in the Regulation 36.1 of MYT Regulations, 2011. Therefore, the Commission in line with the above stated Regulation computed the Contingency Reserves for FY 2015-16 equivalent to 0.25% of opening GFA of FY 2015-16. Further, the approved contingence reserves for FY 2015-16 is added to the above mentioned closing balance of Contingency Reserves for FY 2014-15 for arriving at the cumulative of Contingency Reserves. The Commission observed that the same has not exceeded 5% of the original cost of fixed assets for FY 2015-16.

3.9.3 Further, the Commission sought the details of date of investment, amount of investment, interest earned per financial year for all authorized securities in which contribution to contingency reserve is invested. In response to this, TPC-T submitted the details as shown in the following Table which shows the balance of total contingency reserve fund investment as on 31th March, during FY 2015-16 along with Investment Statement of the depository Bank.

Table 26: Contingency Reserve Fund Investments at the end of FY 2015-16, as submitted by TPC-T (Rs. Crore)

Particulars	FY 2015-16
Non-current Investment	96.34
Current Investment	0.19
Total	**96.53**

3.9.4 As per Regulation 36.1 of MYT Regulations 2011, contribution towards contingency reserves shall be invested in securities authorized under the Indian Trusts Act, 1882 within a period of six months of the close of the financial year. As shown in Table below, the investment made for FY 2015-16 are done in March, 2017 and are thus delayed by around 6 months. Therefore, the Commission has considered the holding cost in ARR for FY 2016-17 for delay in investment of contingency reserves in paragraph 4.9 of this Order.

Table 27: Contingency Reserve Fund Investments for FY 2015-16

Bond Name	Date of Investment	Amount (Rs. Crore)
6.79% Govt. of India 26/12/2029	15 March, 2017	10.00
6.84% Govt. of India 19/12/2022	31 March, 2017	0.66

3.9.5 Based on the above, the Commission approves the Contribution to Contingency Reserve. The computation of Contingency Reserves as claimed by TPC-T and as approved by the Commission for FY 2015-16 is provided in the Table below.

Table 28: Contribution to Contingency Reserves for FY 2015-16, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Opening Balance of Contingency Reserves	67.36	67.37	67.36
Opening Gross Fixed Assets	2,732.20	2,753.94	2,753.94
Opening Balance of Contingency Reserves as % of Opening GFA	2.47%	2.45%	2.45%
0.25% of opening GFA	6.83	6.88	6.88
Closing Balance of Contingency Reserves	74.19	74.25	74.25
Closing Balance of Contingency Reserves as % of Opening GFA	2.72%	2.70%	2.70%
Contribution to Contingency Reserves	**6.83**	**6.88**	**6.88**

3.9.6 **The Commission approves Contribution to Contingency Reserves of Rs. 6.88 Crore for FY 2015-16.**

3.10 Income Tax

TPC-T's Submission

3.10.1 For arriving at the Income Tax payable for the Regulated business, TPC-T has computed the Income Tax based on Regulatory Profit Before Tax for Transmission Business. As per Income Tax Rules, the higher of Corporate Tax / MAT would be payable for each Business Unit. TPC-T requested the Commission to consider Rs. 34.04 Crore towards Income Tax for FY 2015-16.

3.10.2 TPC-T further submitted that the claim under Section 80 IA of the Income Tax Act has been made to the Income Tax Authority and it is still under process. TPC-T requested the Commission to consider the impact of the same once the claim materializes.

3.10.3 TPC-T has filed an Appeal in the ATE (Appeal No. 246 of 2015) where it has proposed to consider the gap and surplus amount approved during the Truing up for that year, as it will reflect the actual tax liability on the consumers. The appeal was not granted. Hence, TPC-T has approached the Supreme Court in Appeal Nos. 1356-1358 of 2017 and the matter is sub-judice.

Commission's Analysis and Ruling

3.10.4 The Commission sought the basis and computation for arriving at amount of tax depreciation for FY 2015-16. TPC-T stated that, company is following written down method of depreciation as prescribed U/s 32(1)(ii) of the Income Tax Act. In the case of any new machinery or plant which is used in the business of generation of power, the company is availing additional 20% depreciation as prescribed U/s 32(1) (ii a) of the Income Tax Act. For the purpose of written down depreciation rate, the company is following New Appendix I, as prescribed under Rule 5. For the purpose of straight line rate, the company is following Appendix IA, as prescribed under rule 5.

3.10.5 The Commission sought information about impact of benefit under Income Tax Act section 80-IA for FY 2015-16 along with quantification of the same. TPC-T submitted that claiming 80-IA benefits towards Transmission and Distribution businesses was started from FY 2013-14. TPC-T had claimed 80-IA benefit of Rs. 140.48 Crore towards its Transmission Business. The assessment of FY 2013-14 was completed in the month of December, 2017 and Income Tax authorities have denied the claim of 80-IA benefits towards Transmission and Distribution businesses vide its Order dated 29 December, 2017. TPC-T has filed an application before Dispute Resolution Panel (DRP) against this disallowance. The assessment for 80IA benefits for FY 2014-15 to FY 2016-17 is still in progress. Hence, TPC-T has not considered any 80IA benefits for Income Tax computation in MTR Petition.

3.10.6 The Commission has computed Income Tax in accordance with Regulation 34.1 of MYT Regulations, 2011 and as specified in ATE Judgment dated 2 December 2013 in Case No. 138 and 139 of 2012.

3.10.7 As specified in the Regulations and ATE Judgment, the Commission has arrived at Income Tax paid based on Regulatory Profit Before Tax (PBT) considering the normative cost allowed by the Commission. The ratio with regard to tax liability is calculated on the regulatory income and cost within the MYT regime considering the applicable tax depreciation for computation of the Income Tax. Accordingly the calculation of Income tax provides the tax payable for the Regulatory business whereby all the items of ARR and Revenue are considered on normative basis for tariff purpose. Also in line with MYT Regulations, 2011 no efficiency gains and incentive earned are considered for computation of Tax on PBT basis.

3.10.8 The summary of the Income Tax for FY 2015-16 claimed by TPC-T and as approved by the Commission is shown in the Table below:

Table 29: Income Tax for FY 2015-16, as approved by the Commission (Rs. Crore)

Particulars		MYT Order	MTR Petition	Approved in this Order
Revenue from transmission charges			445.19	445.19
Non-tariff income			108.20	112.21
Less: Incentive			-	6.81
Less: Aggregate gain/(loss) shared			-	27.43
Total Revenue less Efficiency Gain and incentive			**553.39**	***523.16***
O&M expenses			158.62	197.23
Depreciation Expenses			118.56	118.50
Interest on Long-term Loan Capital			103.67	104.12
Other Finance Charges			0.03	0.03
Interest on Working Capital			11.81	12.28
Contribution to Contingency reserves			-	6.88
Total expenses			**392.68**	**439.04**
Total Revenue less Efficiency Gain and incentive	A		553.39	523.16
Total expenses	B		392.68	439.04
Profit Before Tax	**C=A-B**		**160.71**	**84.12**
Tax Adjustment				
Add				
Depreciation considered in expenses	D		118.56	118.56
Other disallowance while computing IT	E		6.44	6.44
Total Tax Disallowances	**F=D+E**		**125.00**	**125.00**
Less				
Tax Depreciation	G		183.85	183.85
Other expenses allowed for computing Income Tax	H		8.29	8.29
Deduction - U/s 80 IA	I		0.00	0.00
Other deduction under IT	J		0.00	0.00
Exempt income under IT	K		0.00	0.00
Total Tax Allowances	**L=G to K**		**192.15**	**192.15**
Total Taxable Income	**M=C+F-L**		**93.57**	**16.97**

Particulars		MYT Order	MTR Petition	Approved in this Order
Tax payable at normal rate (Corporate Tax Rate)	**N= M x Tax Rate**		**32.38**	**5.87**
MAT Computation				
Profit Before Tax	**O=C**		160.71	84.12
Add: Disallowances under Income Tax (U/s 14 A, provision for doubtful debt)	P		-1.20	-0.66
Less: Deductions under Income Tax	**Q**		0.00	0.00
Interest under Income tax Act				-0.54
Book Profit	**R=O+P-Q**		159.51	123.20
Tax Payable under MAT Rate	**S**		**34.04**	**17.70**
Tax Applicable	**T=MAX(N,S)**		**34.04**	**17.70**
Tax Paid	**U**		0.00	0.00
Less: Mat credit of previous year			0.00	0.00
Tax Paid to Tax Provision	V=U/T		0.00	0.00
Tax to be recovered through ARR	**W = V X U**	**66.74**	**34.04**	**17.70**

3.10.9 **The Commission approves Income Tax as Rs. 17.70 Crore for FY 2015-16, as against Rs. 34.04 Crore claimed by TPC-T.**

3.11 Non-Tariff Income

TPC-T's Submission

3.11.1 The actual Non-Tariff Income for FY 2015-16 was Rs. 108.20 Crore out of which delayed payment charges account for Rs. 89.05 Crore.

Commission's Analysis and Ruling

3.11.2 TPC-T has submitted the details of Non-Tariff Income 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 TPC-T has considered Rs. 89.05 Crore as income from delayed payment charges (DPC) in the Form F8 of the Petition formats and Rs 22.36 Crore as "interest on delayed payments" in the Table 5-22 of the Petition. However, vide letter dated 17 August, 2018 made additional submission specifying that Rs 22.36 Crore against DPC as above was a provisional amount. TPC-T claimed that the DPC amount should be passed on in the year in which it has been received from the STU pool. Considering the philosophy of passing the DPC amount in the year in which it is received, TPC-T has not considered the amount of Rs. 22.36 Crore factored in the non-Tariff income of FY 2015-16 as there was no DPC was received during FY 2015-16 by TPC-T from STU pool.

3.11.4 The Commission in the above respect in the MYT Order held as below:-

"5.9.2 In the MTR Order dated 26 June, 2015, the Commission had considered Delayed Payment Charges (DPC) under Non-Tariff Income as follows:

> *"6.9.5 Since the Commission has not waived DPC which is payable under the Regulations, it has considered DPC income pertaining to TPC-T in FY 2015-16. The Commission has obtained the latest information on the DPC outstanding from the STU for TPC-T in the month of March, 2015, which amounts to Rs. 69.37 Crore. Accordingly, the Commission has considered DPC income of Rs.69.37 Crore pertaining in the Non-Tariff Income of FY 2015-16."*

5.9.3 In the MTR Order, the Commission approved Rs 87.61 Crore as Non-Tariff Income considering DPC of 69.37 Crore. Non-Tariff Income was taken as actual Non-Tariff Income of FY 2013-14 as submitted by TPC-T.

5.9.4 Accordingly, the Commission is considering DPC as Non-Tariff Income. ***The Commission has taken the actual DPC receivable by TPC-T as on 31 March, 2016 as per the State Transmission Utility (STU) Pool account, which was Rs. 93.06 Crore****. This has been considered as Non-Tariff Income for FY 2015-16." {****Emphasis added****}*

3.11.5 In addition, the treatment of DPC as a non-Tariff income has been upheld by APTEL in a recent Judgment issued in the matter of JPTL (Appeal No. 250 of 2015).

3.11.6 Therefore, the position held above by the Commission in the MYT Order is already settled and the Commission has adopted the same approach in the present Order. Therefore, the actual DPC receivable of Rs 93.06 Crore as per the data received from STU is approved instead of TPC-T's claim of not including the same as actual DPC was not received.

3.11.7 For Truing up, the Commission has considered the actual Non-Tariff Income submitted under various other heads by TPC-T apart from the DPC amount approved in the above paragraphs. The summary of the Non-Tariff Income as submitted by TPC-T and as approved by the Commission after Truing up is shown in the Table below.

Table 30: Non-Tariff Income for FY 2015-16, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Income from rent of land or buildings	2.63	3.14	3.14
Income from sale of scrap	3.69	7.46	7.46
Other/Miscellaneous receipts	0.25	-0.93	-0.93
Interest on Contingency Reserve Investments	4.33	4.36	4.36
Interest on staff loans & Advances	0.11	0.09	0.09
Income on Services rendered	2.47	0.15	0.15
Liquidated Damages	1.27	3.26	3.26
VAT Refund	3.49	1.63	1.63
DPC Income	93.06	89.05	93.06
Total	**111.30**	**108.20**	**112.21**

3.11.8 **The Commission approves Non-Tariff Income of Rs. 112.21 Crore for FY 2015-16, against Rs. 108.20 Crore as claimed by TPC-T.**

3.12 Truing up of Revenue from Transmission Charges

TPC-T's Submission

3.12.1 The revenue for FY 2015-16 was derived from the Intra-State Transmission Tariff Order dated 14 August, 2014 in Case No. 123 of 2014 applicable for April, 2015 to May, 2015 and Intra-State Transmission Tariff Order dated 26 June, 2015 in Case No. 57 of 2015 from June, 2015 to March, 2016. Accordingly, the total revenue earned for FY 2015-16 works out to Rs. 445.19 Crore.

Commission's Analysis and Ruling

3.12.2 Revenue from Transmission Charges as per the InSTS Tariff Order in Case No. 123 of 2014 from April, 2015 to May, 2015 and InSTS Tariff Order in Case No. 57 of 2015 from June, 2015 to March, 2016 is computed as shown in table below.

Table 31: Revenue from Transmission Charges for FY 2015-16, as approved by the Commission

Order No.	Annual approved revenue (Rs. Crore)	Applicability of Order	Number of months	Revenue in FY 2015-16 (Rs. Crore)
Case No. 123 of 2014	921.25	April-May, 2015	2	153.54
Case No. 57 of 2015	349.97	June 2015 to March 2016	10	291.65

Order No.	Annual approved revenue (Rs. Crore)	Applicability of Order	Number of months	Revenue in FY 2015-16 (Rs. Crore)
			Total	**445.19**

3.12.3 **The Commission approves actual revenue from Transmission Charges of Rs. 445.19 Crore considering the applicability of the InSTS Tariff Orders mentioned above.**

3.13 Incentive on Transmission Availability

TPC-T's Submission

3.13.1 In accordance with Regulation 60.2 of the MYT Regulations, 2011, TPC-T is entitled to an incentive of Rs. 6.88 Crore on achieving annual Availability of 99.45% as certified by the MSLDC which is beyond the target Availability as per Regulations.

Commission's Analysis and Ruling

3.13.2 The Commission has analyzed the submission of TPC-T and also verified the Transmission System availability of 99.45% based on the certification provided by MSLDC. In line with the Regulation 60 of MYT Regulations, 2011, the Commission has computed the incentive for achieving Transmission Availability more than 98%. Further, for computing the incentive, the Annual Transmission charges are taken excluding Income Tax as per Regulations 54.10 of MYT Regulations, 2011.

3.13.3 Accordingly, the computation for incentive on Transmission System Availability for FY 2015-16 as claimed by TPC-T and as approved by the Commission is provided in the Table below.

Table 32: Incentive on Transmission System Availability for FY 2015-16, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Aggregate Revenue Requirement from Transmission Tariff	**0.00**	499.27	478.08
Less: Other Finance Charges		-0.03	
Less: Income Tax		-34.04	-17.70
Annual Transmission Charges		465.20	460.38
Annual Availability achieved		99.45%	99.45%
Target Availability		98.00%	98.00%
Incentive		**6.88**	**6.81**

3.13.4 **The Commission approves Incentive of Rs. 6.81 Crore for FY 2015-16 for higher Transmission Availability, as against the submission of Rs. 6.88 Crore by TPC-T.**

3.14 Sharing of Gains/ (Losses) for FY 2015-16

TPC-T's Submission

3.14.1 TPC-T has categorized various heads of expenditure as controllable and uncontrollable, and computed the Efficiency Gains/Losses for the controllable expenditure and shared the same with the Distribution Licensees.

3.14.2 TPC-T has considered the actual O&M expenses as Rs. 158.62 Crore as compared to the approved normative expenditure of Rs. 197.23 Crore, and has proposed to share 1/3rd i.e. Rs. 12.87 Crore with the Distribution Licensees.

3.14.3 The normative O&M expenses based on the MYT Regulations, 2011 works out to be Rs.197.23 Crore. TPC-T submitted the details of the Bays and circuit kilometers of Transmission Lines for FY 2015-16 as shown in Table below:

Table 33: Details of Bays and Circuit Kilometer of Transmission Lines for FY 2015-16, as submitted by TPC-T

Particulars	No. of Bays
Bays (Between 66kV and 400 kV)	
Opening	331.00
Additions	9.00
Closing	340.00
Average	335.50
Bays (< 66kV)	
Opening	806
Additions	44
Closing	850
Average	828
Lines	**Circuit Kilometer**
Ckt. km (Between 66kV and 400 kV)	
Opening	1,174.44
Additions	13.74
Closing	1,188.18
Average	1,181.31

3.14.4 TPC-T submitted that while computing the normative O&M expenses it has considered only those Transmission Lines and Bays which have been capitalised and 'put to use' in

FY 2015-16. TPC-T has mentioned that this submission is without prejudice to their submission made in appeal against the issue of 'put to use'.

Commission's Analysis and Ruling

3.14.5 Regulation 61.5.1 of the MYT Regulations, 2011 specifies the norms for O&M expenses on voltage basis, considering length of the Transmission Lines in circuit kilometers and number of Bays in the Sub-stations of the Transmission Licensee.

3.14.6 The Commission obtained the network parameters in terms of Transmission Lines in Circuit Kilometers 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 expenses as computed by the Commission is provided in the Table below:

Table 34: Normative O&M expenses for FY 2015-16, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Length in Ckt Km (above 66 kV and less than 400 kV)	1185.34	1181.31	1181.31
Applicable O&M cost Norm for Transmission Lines (Rs Lakh / Ckt Km)	1.37	1.37	1.37
Normative O&M expenses for Transmission Lines (Rs. Crore)	16.24	16.18	16.18
Number of 220 KV bays	336.00	335.50	335.50
Number of 33 KV bays	833.50	828.00	828.00
Applicable O&M Cost Norm for 220 KV Bays (Rs. Lakh / Bay)	35.60	35.60	35.60
Applicable O&M Cost Norm for 33 KV Bays (Rs. Lakh / Bay)	7.44	7.44	7.44
Normative O&M Expenses for Bays (Rs. Crore)	181.63	181.04	181.04
Total Normative O&M expenses	**197.87**	**197.23**	**197.23**

3.14.7 Based on the normative O&M expenses computed above, and the approved Trued up actual expenditure as provided in the earlier sections of this Order, the Efficiency Gains/Losses due to variation in O&M expenses have been computed as follows:

Table 35: Net Entitlement of O&M Expenditure, as approved by the Commission for FY 2015-16 (Rs. Crore)

Particulars	MTR Petition	Approved in this Order
O&M expenditure as per norms of MYT Regulations	197.23	197.23
Actual O&M expenditure	158.62	156.09
Gain/(Loss) to be included in ARR	25.74	27.43
Net entitlement	**184.36**	**183.51**

3.14.8 **The Commission approves net entitlement of O&M Expenditure of Rs. 183.51 Crore for FY 2015-16 inclusive of sharing of Efficiency Gains/Losses.**

3.15 Summary of Truing up

TPC-T's Submission

3.15.1 The break-up of expenses for FY 2015-16 along with the adjustments on account of sharing of Efficiency Gains/Losses as submitted by TPC-T is given in the following Table.

Table 36: Summary of Truing up including sharing of Efficiency Gains/Losses for FY 2015-16, as submitted by TPC-T (Rs. Crore)

Particulars	MYT Order	Actual	Efficiency Gains / (Loss)	Net entitlement after sharing of Gain/(Loss)
Operation & Maintenance Expenses	197.87	197.23	12.87	184.36
Depreciation Expenses	115.21	118.56		118.56
Interest on Long-term Loan Capital	101.16	103.67		103.67
Other Finance Charges	0.00	0.03		0.03
Interest on Working Capital and on security deposits	11.79	11.81		11.81
Income Tax	66.74	34.04		34.04
Contribution to Contingency reserves	6.83	6.88		6.88
Total Revenue Expenditure	499.60	472.21		459.34
Return on Equity Capital	146.46	148.13		148.13
Aggregate Revenue Requirement	**646.05**	**620.34**		**607.47**
Less: Non-Tariff Income	111.30	108.20		108.20

Particulars	MYT Order	Actual	Efficiency Gains / (Loss)	Net entitlement after sharing of Gain/(Loss)
Less: Income from Other Business				
Aggregate Revenue Requirement from Transmission Tariff	**534.76**	**512.14**		**499.27**
Incentive	-	6.88		6.88
Past recoveries till FY 2013-14				
Revenue from transmission tariff	445.14	445.19		445.19
Revenue Gap/(Surplus)	89.62			60.97
Past recoveries till FY 2013-14 including carrying/(holding) cost upto 2015-16	-7.23			
Revenue Gap/(Surplus)	**82.39**	**73.84**		

Commission's Analysis and Ruling

3.15.2 As per the MTR Order of TPC-T in Case No. 5 of 2015 dated 26 June 2015, amount to be recovered in FY 2015-16 including Provisional surplus for FY 2014-15 is Rs. 165.43 Crore. This includes standalone provisional surplus for FY 2014-15 of Rs. 158.20 Crore. Therefore, past recoveries/refund till FY 2013-14 including Carrying/Holding Cost till FY 2015-16 is a surplus of Rs. 7.23 Crore. Same is adjusted in ARR of FY 2015-16.

3.15.3 The summary of the net ARR including Efficiency Gains/Losses as approved by the Commission for FY 2015-16 is given in the following Table:

Table 37: Summary of Truing up, including net entitlement after sharing of Efficiency Gain/Loss for FY 2015-16, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Operation & Maintenance Expenses	197.87	184.36	183.51
Depreciation Expenses	115.21	118.56	118.50
Interest on Long-term Loan Capital	101.16	103.67	104.12
Other Finance Charges	0.00	0.03	0.03
Interest on Working Capital	11.79	11.81	12.28
Income Tax	66.74	34.04	17.70
Contribution to Contingency reserves	6.83	6.88	6.88
Total Revenue Expenditure	**499.60**	**459.34**	**443.03**

Particulars	MYT Order	MTR Petition	Approved in this Order
Return on Equity Capital	146.46	148.13	147.26
Aggregate Revenue Requirement	**646.06**	**607.47**	**590.29**
Less: Non-Tariff Income	111.30	108.20	112.21
Less: Income from Other Business	-	-	
Aggregate Revenue Requirement from Transmission Tariff	**534.76**	**499.27**	**478.08**
Incentive	-	6.88	6.81
Revenue from Transmission Tariff	**445.14**	**445.19**	**445.19**
Standalone Revenue Gap/(Surplus)	**89.62**	**60.97**	**39.71**
Past recoveries till FY 2013-14 including Carrying/(Holding) cost	-7.23*	-	-7.23
Revenue Gap/(Surplus) along with past recoveries	**82.39**	**60.97**	**32.48**

* *'Past Recoveries' to be passed on in FY 2015-16 approved in MYT Order*

3.15.4 The detailed analysis underlying the Commission's approval of individual ARR elements on Truing up of ARR for FY 2015-16 is already set out above, however, the variation in the ARR sought by the TPC-T and that approved by the Commission in this Order is mainly on account of reduction in Income Tax and the past surplus till FY 2013-14 included in ARR of FY 2015-16 as per MYT Order. Additionally, Delayed Payment Charges on account of delay in receiving transmission charges for FY 2015-16 has been considered as part of non-tariff income as per recent ATE Judgment in Appeal No. 250 of 2015, which has led to further reduction in the approved ARR for TPC-T for FY 2015-16.

3.15.5 **The Commission approves the Revenue Gap of Rs. 32.48 Crore for FY 2015-16 after final True up, as against Revenue Gap of Rs. 60.97 Crore claimed by TPC-T.**

4 TRUING UP OF ARR FOR FY 2016-17

4.1 Truing up of ARR for FY 2016-17

4.1.1 TPC-T has sought approval of Truing up of ARR for FY 2016-17 as per MYT Regulations, 2015. The Commission in MYT Order dated 30 June, 2016 in Case No. 22 of 2016 had approved the ARR for FY 2016-17.

4.1.2 The Commission has undertaken the Truing up after prudence check of the actual expenditure and revenue for FY 2016-17. The Commission has also approved the sharing of Efficiency Gains and Losses on account of controllable factors, in accordance with Regulation 11 of the MYT Regulations, 2015.

4.2 Operation and Maintenance Expenses

TPC-T's Submission

4.2.1 O&M expenditure comprises of Employee Expenses, Administrative and General (A&G) expenses, and Repair and Maintenance (R&M) expenses.

Table 38: Summary of O&M Expense for FY 2016-17, as submitted by TPC-T (Rs. Crore)

Particular	Amount
Employee Expenses	88.43
A&G Expenses (including Brand Equity)	59.60
R&M Expenses	19.67
Total	**167.70**
Less	
Actual Tata Brand Equity	(1.82)
Add	
Allocation of Brand Equity Expenses to TPC-T as per MERC methodology	1.65
Total	**167.52**

Employee Cost

TPC-T's Submission

4.2.2 The actual employee expenses for FY 2016-17 were Rs. 88.43 Crore. TPC-T submitted that the Employee Expense for FY 2016-17 is higher vis-à-vis that for FY 2015-16 on account of the higher contribution towards Dearness Allowance, Conveyance allowance, Other allowance, Bonus/Ex-Gratia Payments, and Gratuity Payment, partly offset by Payments towards Pension expenses and interim Relief / Wage Revision etc.

Commission's Analysis and Ruling

4.2.3 The Commission observed that the actual employee expenses have increased to Rs. 88.43 Crore in FY 2016-17 against that Rs. 82.65 Crore in FY 2015-16. A comparison of major component wise actual Employee Expenses claimed by TPC-T in FY 2016-17 against FY 2015-16 is shown in the Table below:

Table 39: Comparison of Employee Expenses of FY 2016-17 vis-à-vis of FY 2015-16 (Rs. Crore)

Particulars	FY 2015-16	FY 2016-17	%age change
Number of employees	424	394	(7.08%)
Officer/Managerial Cadre-Technical	157	149	(5.10%)
Staff cadre (Technical)	220	200	(9.09%)
Other employees	47	45	(4.26%)
Employee Expenses			
Salary, wages & other expenses	68.13	80.65	18.4%
Bonus/Ex-Gratia Payments	11.36	12.87	13.3%
Interim Relief / Wage Revision	3.26	(8.96)	(374.7%)
Staff welfare expenses	10.99	11.20	1.9%
Commission to Directors	0.70	1.02	45.6%
Terminal Benefits	9.70	10.13	4.4%
Less: Expenses Capitalised	(21.49)	(18.47)	(14.0%)
Net Employee Expenses	82.65	88.43	7.0%

4.2.4 The above table shows that number of employees has reduced by 7.08% vis-à-vis that in FY 2015-16. The major categories where the employees reduced are Officer/Managerial Cadre-Technical (5.10% reduction) and Staff Cadre-Technical (9.09% reduction).

4.2.5 However, Employee Expenses have increased by 7.00%. This increase in Employee Expenses relating to the Dearness Allowance (DA) and other allowance of salary and wages. From the detailed break-up of employee expenses submitted by TPC-T in Form No. 2.3 of spreadsheet, DA has increased from Rs. 7.96 Crore to Rs. 10.70 Crore and other allowances have increased from Rs. 20.99 Crore to Rs. 26.04 Crore. Further, it was observed that the Interim Relief/ Wage Revision has reduced and claimed as a negative entry in the Employee Expense. This has happened due to reversal of provision against wage revision.

4.2.6 In view of the above, the actual Employee Expenses approved by the Commission is shown in the Table below.

Table 40: Employee Expenses for FY 2016-17, as approved by the Commission (Rs. Crore)

Particular	MTR Petition	Approved in this Order
Employee Expenses	**88.43**	**88.43**

Administrative and General (A&G) Expenditure

TPC-T's Submission

4.2.7 Net A&G expenses for FY 2016-17 are Rs. 59.60 Crore (without adjusting for difference in brand equity as per MERC methodology and actual brand equity) against Rs. 52.46 Crore for FY 2015-16. Net A&G expense of Rs. 59.60 Crore consists of actual brand equity of Rs. 1.82 Crore and other A&G expenses of Rs. 57.78 Crore.

4.2.8 With respect to Brand Equity, the Commission had directed TPC-T to compute the Brand Equity based on the revenue earned in the previous year. O&M Expenses of Rs. 167.70 Crore is adjusted to the extent of difference between the actual Brand Equity as per TPC-T and Brand Equity calculated as per the methodology of the Commission. Expenditure towards CSR is not included in O&M Expense as per previous Orders issued by the Commission.

4.2.9 Further, Brand Equity has been claimed by TPC-T and the computation of the same as per the methodology of the Commission is provided in the Table below.

Table 41: Calculation of Brand Equity as per the Commission's methodology (Rs. Crore)

Particulars	Basis	Amount
Revenue from Mumbai License Area Business based on allocation statement	A	555.65
Add: Cash Discount pertaining to Mumbai License Area	B	0.00
Add: Income in respect of services rendered pertaining to Mumbai License Area	C	0.15
Add: Delayed Payment Charges pertaining to Mumbai License Area	D	0.00
Total Revenue to be considered for Mumbai License Area	E=sum (A:D)	555.80
Contribution to Tata Brand Equity	F=0.25%*E	1.39
Service Tax -14% + 4% VAT	G=F* (Service Tax+ VAT)	0.26
Total contribution to Brand Equity including service tax	H=F+G	1.65

Commission's Analysis and Ruling

4.2.10 Actual A&G expenses include rent, rates & taxes, professional, consultancy, technical fee, 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. A comparison of major component wise actual A&G Expenses claimed by TPC-T in FY 2016-17 against FY 2015-16 is shown in the Table below:

Table 42: Comparison of A&G Expenses of FY 2016-17 vis-à-vis of FY 2015-16 (Rs. Crore)

Sr. No	Particular	FY 2015-16	FY 2016-17	%age Change
1	Rent Rates & Taxes	17.31	17.64	1.92%
2	Insurance	4.41	3.73	(15.43%)
3	Legal charges & Audit fee	2.99	3.17	6.00%
4	Professional, Consultancy, Technical fee	3.16	2.55	(19.47%)
5	Conveyance & Travel	2.53	3.47	37.08%
6	Cost of services procured	10.80	13.73	27.05%
7	V-sat, Internet and related charges	3.68	4.01	9.08%
8	Tata Brand Equity	1.86	1.82	(2.00%)
9	Provision for DD	0.58	4.63	700%
10	Others	5.41	4.85	(5.66%)
11	Add: Adjustment for Brand Equity	(0.08)	(0.17)	125.18%
12	**Net A&G Expenses**	**52.38**	**59.43**	**13.45%**

4.2.11 The Commission observes that there is a 27.05% increase in Cost of Services of Rs. 13.73 Crore in FY 2016-17 from Rs. 10.80 Crore in FY 2015-16. TPC-T submitted the details of Cost of Services. It was observed that increase in Cost of Services is primarily due to increase in AMC Services, Housekeeping Services, Allocation Costs and cost of other services (canteen services).

4.2.12 Further, Provision of Doubtful Debts has increased significantly to Rs. 4.63 Crore in FY 2016-17 from Rs. 0.58 Crore in FY 2015-16. Upon query raised by the Commission, TPC-T responded that this provision has been made towards security deposits paid to local bodies like MCGM on account of Re-instatement charges. The deposit towards RI charges are statutory in nature and required to be undertaken for execution of Transmission projects, which are adjusted upon completion of works. Hence, the Commission considers approval of these expenses.

4.2.13 The A&G expenses of Rs. 59.60 Crore were claimed by TPC-T in the Petition inclusive of the actual Brand Equity as per the Audited Allocation Statement. However, in the

Form F2 of the formats, TPC-T has claimed the A&G expense considering the Brand Equity computed as per the methodology adopted by the Commission in the earlier Orders.

4.2.14 As mentioned in Section 3.2, the Commission would decide on the pass through of Brand Equity Expenses as part of the O&M expenses at a later stage after TPC-T quantifies the benefits that are available against the claim of these expenses. The approved A&G expenses as per the above is shown in the Table below:

Table 43: A&G Expenses for FY 2016-17, as approved by the Commission (Rs. Crore)

Particulars	MTR Petition	Approved in this Order
Net A&G expenses	59.43*	57.78

** Actual A&G Expense is submitted as Rs. 59.60 Crore in the Petition i.e. including actual brand equity, while in the spreadsheet model A&G Expenses is submitted as Rs. 59.43 Crore including brand equity as per the methodology of the Commission*

Repair and Maintenance (R&M) Expenses

TPC-T's Submission

4.2.15 TPC-T has claimed the actual R&M expenses of Rs. 19.67 Crore for FY 2016-17. The breakup of component wise R&M expenses is provided in the Table below.

Table 44: Actual R&M Expenses for FY 2016-17, as submitted by TPC-T (Rs. Crore)

Particulars	FY 2015-16	FY 2016-17
Building & Civil Works	7.44	9.00
Machinery & Hydraulic Works	8.40	7.98
Other R&M / Furniture, Vehicles, Etc.	4.64	2.30
Stores, oil consumed	3.11	0.38
Gross R&M Expenses	**23.59**	**19.67**
Less: Expenses Capitalised	-	-
Net R&M Expenses	**23.59**	**19.67**

Commission's Analysis and Ruling

4.2.16 R&M expenses include expenses incurred on machine and hydraulic works, building and civil works, furniture and fixtures, stores, oil consumed, etc.

4.2.17 R&M Expenses have decreased from Rs. 23.59 Crore in FY 2015-16 to Rs. 19.67 Crore in FY 2016-17. R&M Expense on 'Machinery & Hydraulic Works', 'Other R&M /

Furniture, Vehicles' and 'Stores, oil consumed' has decreased as compared to that in FY 2015-16.

4.2.18 As mentioned in the earlier sections in this Order, R&M Expense had increased in FY 2015-16 due to painting work of transmission towers and structures which varies from year to year depending on the condition of the transmission towers and structures. However, no such major work was carried out in FY 2016-17. Accordingly, R&M Expense on 'Stores, oil consumed' has decreased significantly.

4.2.19 In view of the above, the Commission approves the R&M expenses for Truing up of FY 2016-17 as shown in Table below:

Table 45: R&M Expenses for FY 2016-17, as approved by the Commission (Rs. Crore)

Particulars	MTR Petition	Approved in this Order
R&M expenses	19.67	19.67

Total O&M Expenses

TPC-T's Submission

4.2.20 Summary of total O&M Expenses for FY 2016-17 is submitted as shown in Table below.

Table 46: Summary of O&M Expense for FY 2016-17, as submitted by TPC-T (Rs. Crore)

Particulars	MYT Order	MTR Petition
Employee Expenses	179.18	88.43
A&G Expenses inclusive of Brand Equity		59.43[1]
R&M Expenses		19.67
Total		**167.52**

Commission's Analysis and Ruling

4.2.21 As already discussed in Section 3.2 for O&M Expenses for FY 2015-16, TPC-T has submitted in response to query of the Commission that Rs. 0.11 Crore was booked in FY 2016-17 for TPC-T towards celebration of completion of 100 years of Tata Group. The Commission is of view that the end consumer should not be burdened with costs associated with such celebrations. Accordingly, Rs. 0.11 Crore is deducted from overall O&M expenses for FY 2016-17 as shown in the Table below:

[1] Including brand equity as per 'allocation methodology directed by MERC'

Table 47: O&M Expenses for FY 2016-17, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Employee Expenses	179.18	88.43	88.43
A&G Expenses inclusive of Brand Equity		59.43[2]	57.78
R&M Expenses		19.67	19.67
Less: Expense towards centenary celebration			-0.11
Total		**167.52**	**165.77**

4.2.22 **The Commission approves actual O&M expenses for FY 2016-17 of Rs. 165.77 Crore against Rs. 167.52 Crore submitted by TPC-T.**

4.3 Capital Expenditure and Capitalisation

TPC-T's Submission

4.3.1 The actual capital expenditure for FY 2016-17 was Rs. 204.49 Crore, and actual capitalisation along with Interest During Construction (IDC) capitalised was Rs. 187.53 Crore. The capitalisation as per TPC-T's submission includes DPR schemes of Rs 156.56 Crore. Moreover, the capitalisation towards the non-DPR schemes is Rs. 30.97 Crore which is about 19.78% of the capitalisation of the DPR schemes, which is within the limit of 20% set by the Commission.

4.3.2 A summarized form of scheme-wise capitalisation claimed in FY 2016-17 by TPC-T as submitted in Form 3.2 of the formats is provided in the Table below.

Table 48: Capitalisation for FY 2016-17, as submitted by TPC-T (Rs. Crore)

Particulars	Basis	Capitalisation claimed by TPC-T
DPR Schemes		
Carry Forward Schemes	A	141.55
New Schemes	B	15.01
Sub-total: DPR Schemes	C=A+B	**156.56**
Non-DPR schemes		
Total Carry Forward Schemes	D	20.15
New Schemes	E	7.69
HO & SS Allocation	F	3.13
Sub-total: Non-DPR Schemes	G=D+E+F	**30.97**
Total	**C+G**	**187.53**

[2] Including brand equity as per 'allocation methodology directed by MERC'

Commission's Analysis and Ruling

4.3.3 The Commission has elaborated the analysis underlying its approval of the capitalisation for FY 2015-16 to FY 2019-20 in the paragraph 3.3 of this Order.

4.3.4 The summary of disallowed capitalisation in FY 2016-17 for DPR schemes by the Commission is as follows:

Table 49: Disallowed capitalisation in FY 2016-17 (Rs. Crore)

Particulars	Amount	Remark
Capitalisation under In-principle approved DPR	156.13	Claimed by TPC-T
DPR submitted to MERC	0.43	Approved by the Commission on 3 August, 2018
Capitalisation sought by TPC-T [A]	156.56	
Disallowance		
Installation of 220 kV GIS Mahalaxmi	3.89	Cost overrun over and above approved by the Commission
220kV GIS at Sahar Airport	1.51	Cost over-run over and above approved by the Commission
110/33KV S/S at Ixora, Panvel	1.20	Asset not put to use. Capitalisation deferred to FY 2018-19.
Replacement of Transformer 1 & 2 at Saki	0.39	Capitalisation in FY 2016-17 deferred to FY 2018-19 as asset not 'put to use'
220 kV GIS at Versova	1.02	Capitalisation in FY 2016-17 deferred to FY 2019-20 as asset not 'put to use'
SAP DPR Allocation	2.53	Cost overrun
Total disallowance [B]	**10.55**	
Earlier disallowed capitalisation now claimed to be put to use		
145 kV GIS at Mankhurd	2.29	Allowed at depreciated cost as explained in paragraph 3.3
Const. of line bays at Trombay	1.94	Allowed at depreciated cost as explained in paragraph 3.3
Total disallowance [C]	**4.22**	
Approved capitalisation under DPR scheme [A]-[B]-[C]	141.79	

4.3.5 TPC-T has considered capitalisation towards HOSS allocation of Rs. 3.13 Crore in FY 2016-17. This capitalisation has been considered as a part of non-DPR capitalization in line with the approach adopted by the Commission in its earlier Orders. As explained in paragraph 3.3.25, non-DPR capitalisation is capped to 20% of the DPR capitalisation approved in this Order in accordance with MYT Regulations.

4.3.6 The summary of capitalisation as claimed by TPC-T and as approved by the Commission shown in the Table below:

Table 50: Capitalisation for FY 2016-17, as approved by the Commission (Rs. Crore)

<table>
<tr><th>Particulars</th><th>MYT Order</th><th>MTR Petition</th><th>Approved in this Order</th></tr>
<tr><td>DPR Schemes</td><td>121.13</td><td>156.13</td><td rowspan="2">141.79</td></tr>
<tr><td>DPR submitted to MERC</td><td>-</td><td>0.43</td></tr>
<tr><td>Non-DPR Schemes including HOSS</td><td>24.23</td><td>30.97</td><td>28.36</td></tr>
<tr><td>Total</td><td>145.36</td><td>187.53</td><td>170.15</td></tr>
</table>

4.3.7 **The Commission approves Capitalisation of Rs. 170.15 Crore for FY 2016-17 as against Rs. 187.53 Crore claimed by TPC-T.**

4.4 Depreciation

TPC-T's Submission

4.4.1 Depreciation has been computed by applying the rates specified under the MYT Regulations, 2015 and claimed at Rs. 131.06 Crore for FY 2016-17. TPC-T submitted that the rate of depreciation as a percentage of the average GFA (Rs. 3,075.07 Crore) works out to 4.26%.

Commission's Analysis and Ruling

4.4.2 Closing GFA of FY 2015-16 approved in this Order is considered as opening GFA of FY 2016-17 and capitalisation approved during FY 2016-17 is added to arrive at closing GFA of FY 2016-17.

4.4.3 TPC-T has considered retirement of assets during FY 2016-17 as Rs. 10.45 Crore. In reply to query of the Commission regarding details of assets being retired, it was submitted that about Rs. 3.09 Crore of assets are de-capitalised on account of transfer from TPC-T to other businesses of Tata Power. As discussed in Section 3.4 of this Order, the Commission disallows such transfer of assets without prior consent of the Commission, because it would amount to the amendment in its License. Value of retirement of assets for FY 2016-17 is changed to Rs. 7.36 Crore after adjusting for assets transferred of Rs. 3.09 Crore. Closing GFA and average GFA for FY 2016-17 are adjusted accordingly.

4.4.4 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.

4.4.5 For Truing up of FY 2016-17, the Commission has calculated depreciation rate for FY 2016-17 as per the actual depreciation rate on average of asset class-wise GFA for the year provided by TPC-T.

4.4.6 The above depreciation rate is applied on the average balance of GFA for FY 2016-17 approved by the Commission to arrive at the depreciation expenses for FY 2016-17. The depreciation expense claimed by TPC-T and that approved by the Commission is provided in the Table below.

Table 51: Depreciation for FY 2016-17, as approved by the Commission (Rs. Crore)

DPR Schemes	MYT Order	MTR Petition	Approved in this Order
Opening GFA	2,970.77	2,986.53	2,983.78
Addition in GFA	145.36	187.53	170.15
Retirement of GFA	-	-7.36	-7.36
Transfer of GFA	-	-3.10	-
Closing GFA	3,116.13	3,163.60	3,146.56
Average GFA	3,043.45	3,075.07	3,065.17
Depreciation	**117.59**	**131.06**	**130.64**
Average depreciation rate	**3.96%**	**4.26%**	**4.26%**

4.4.7 **The Commission approves Depreciation of Rs. 130.64 Crore for FY 2016-17, as against Rs. 131.06 Crore claimed by TPC-T.**

4.5 Interest Expense on Long Term Loan

TPC-T's Submission

4.5.1 TPC-T has availed fresh loans in FY 2016-17 from State Bank of India with a drawl amount of Rs. 741.93 Crore. As per Table 6-12 in the MTR Petition, Rs. 27.60 Crore is utilized towards the three licensed businesses of Mumbai License Area out of total loan drawn during FY 2016-17. However, paragraph 177 of the MTR Petition mentions that Rs. 24.69 Crore is utilized towards three licensed businesses of Mumbai License Area. Rest of the loan was used for repayment of earlier loans.

4.5.2 In addition, TPC-T has drawn amounts from the previous sanctioned loan from IDFC Bank with drawl amount of Rs. 180.00 Crore and HDFC Bank with drawl amount of Rs. 180.00 Crore. Both these loans are utilized for the three business area of Mumbai License Area.

4.5.3 The details of the fresh loan taken in FY 2016-17 from the State Bank of India (SBI) is as shown in Table below:

Table 52: Details of fresh loans for FY 2016-17, as submitted by TPC-T

Particulars	Remarks
SBI Loan	
Amount	Rs. 741.93 Crore
Repayment schedule	1 year moratorium, Quarterly repayment of 6.5% of drawl amount per annum for the first six years, 12.5% in the eight year and 25% each in the last two years
Interest rate	9.50% p.a. linked to Base Rate

4.5.4 TPC-T submitted that the loans drawn from various banks have been allocated to different Business Areas (Generation, Transmission and Distribution) based on the ratio of capitalisation of these Business Areas in FY 2016-17 and the balance loan is assumed to be financed through normative loan. The allocation of loan for various businesses is as shown in Table below:

Table 53: Allocation of loan to various businesses, as submitted by TPC-T (Rs. Crore)

Particulars	Generation	Transmission	Distribution	Total GTD
Capitalisation	104.08	187.53	262.11	553.72
Debt	72.86	131.27	183.47	387.60
%	18.80%	33.87%	47.34%	100%
IDFC - Rs. 250 Crore	33.84	60.96	85.20	180.00
HDFC - Rs. 250 Crore	33.84	60.96	85.20	180.00
SBI CAG	5.19	9.35	13.07	27.60
Total actual loan drawl	**72.86**	**131.27**	**183.47**	**387.60**
Normative loan	0.00	0.00	0.00	0.00

4.5.5 TPC-T has computed the interest expenses for FY 2016-17 as Rs. 112.68 Crore after considering the above loan drawals, repayment equal to depreciation claimed and weighted average interest rate of 10.44%. Following is the calculation of interest on long term capital as shown by TPC-T.

Table 54: Interest on long term capital for FY 2016-17, as submitted by TPC-T (Rs. Crore)

Particulars	MYT Order	TPC-T submission
Opening balance of loan	956.10	1,003.67
Addition of loan	177.41	131.27
Repayment of loan	127.89	131.06
Closing balance of loan	1,005.63	1,003.88
Weighted average interest rate at the beginning of year	10.69%	10.44%
Interest Expense	104.88	104.75

Commission's Analysis and Ruling

4.5.6 The Commission has considered the closing loan balance for FY 2015-16 approved in this Order as the opening loan balance of FY 2016-17. Further, loan addition (Rs. 119.10 Crore) is considered as 70% of the capitalization approved during FY 2016-17 and loan repayment has been considered equal to the depreciation allowed during FY 2016-17 (Rs. 130.64 Crore) in this Order in accordance with Regulation 29 of the MYT Regulations, 2015 to arrive at the closing balance of loan for FY 2016-17.

4.5.7 Regulation 29.5 of the MYT Regulations, 2015 stipulates as follows:

"Provided that at the time of Truing-up, the weighted average rate of interest computed on the basis of the actual loan portfolio during the concerned year shall be considered as the rate of interest"

4.5.8 The Commission sought documentary evidence for weighted average interest on loan considered by TPC-T for computation of Interest Expense. It was specified that the documentary evidence needs to contain the interest rate, principal loan opening & outstanding, repayments, etc. In response this query, TPC-T provided the details of interest rates along with documentary evidence in the form letters of respective Banks stating the interest rates. However, there was no documentary evidence for the opening loan & outstanding loan, repayments, interest paid, etc. Therefore, TPC-T could not substantiate the actual interest paid for Long Term Loan capital in FY 2016-17 with satisfactory documentary evidence. Hence, for calculation of weighted average interest rate on loan for FY 2016-17, the Commission has considered actual interest expense on loans, i.e., Rs. 116.77 Crore as given in Note 18 (a) of Audited Account of FY 2016-17. As the purpose of referring to this value is calculation of average interest rate and not actual interest incurred, interest amount is considered including capitalised interest. Interest obtained as per the above methodology is divided by actual average loan balance of the year as submitted by TPC-T. Opening & closing loan balance figures are taken from Note 11 of Audited statement for FY 2016-17 (including current as well as non-current liabilities of loan). The computation of the interest as per the above methodology is provided in the Table below:

Table 55: Weighted average interest rate for FY 2016-17, as computed by the Commission (Rs Crore)

Particulars	Amount
Actual opening balance	1,197.20
Actual closing balance	1,268.41
Average actual loan balance during the year	1,232.81
Actual interest on loan capital	116.77
Weighted average interest rate (%)	**9.47%**

4.5.9 The Commission has computed Interest expenses on Long Term Loan Capital on the normative average loan of the year by applying the above weighted average rate of interest of 9.47%.

4.5.10 Further, TPC-T has not considered reduction in loan for the assets retired during FY 2016-17. The Commission noted from the TPC-T's submissions on retired assets that most of the assets retired were capitalised more than 15 years ago and has not reduced any loan corresponding to the above from the loan balance of FY 2016-17.

4.5.11 The summary of the Interest expense on Long Term Loan as submitted by TPC-T and as approved by the Commission after Truing up for FY 2016-17 is shown in the Table below:

Table 56: Interest Expense on Long Term Loans for FY 2016-17, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Opening balance of loan	971.94	1,003.67	1001.83
Addition of loan	101.75	131.27	119.10
Repayment of loan	117.59	131.06	130.64
Closing balance of loan	956.10	1,003.88	990.29
Weighted average interest rate at the beginning of year	10.69%	10.44%	9.47%
Interest Expense	**103.08**	**104.75**	**94.35**

4.5.12 **The Commission approves Interest expenses of Rs. 94.35 Crore for FY 2016-17, as against Rs. 104.75 Crore claimed by TPC-T.**

4.6 Other Finance Charges

TPC-T's Submission

4.6.1 Actual expense towards other Finance Charges is Rs. 0.03 Crore.

Commission's Analysis and Ruling

4.6.2 The Commission sought information regarding usage of Rs. 0.03 Crore as Finance Charges. TPC-T submitted that Other Finance Charges are incurred towards charges for DD & RTGS, charges towards cash credit/overdraft, charges for bank guarantee/letter of credit, account maintenance charges and other charges.

4.6.3 Detailed justification for various finance charges mentioned above is already done in paragraph 3.6 above. The Commission concludes that other finance charges of Rs. 0.03 Crore are reasonable considering capitalisation of Rs. 170.15 Crore.

4.6.4 **The Commission approves actual expense towards Other Finance Charges of Rs. 0.03 Crore for FY 2016-17, as submitted by TPC-T.**

4.7 Interest on Working Capital

TPC-T's Submission

4.7.1 IoWC for FY 2016-17 was computed at an interest rate of 10.31%, equivalent to the SBAR of SBI prevailing during FY 2016-17. TPC-T further stated that total interest on working capital for FY 2016-17 works out to Rs.11.08 Crore.

Commission's Analysis and Ruling

4.7.2 The Commission has assessed the working capital requirement based on Regulation 31.2 of MYT Regulations, 2015. The Commission observes that TPC-T has claimed normative IoWC without any sharing of Efficiency Gains/Losses.

4.7.3 For computing the normative working capital requirement, the Commission has considered One-twelfth (1/12) of the amount of O&M Expenses (Rs. 14.67 Crore) based on the normative O&M Expenses of FY 2016-17 approved in this Order as against 1/12th of actual O&M expenses (Rs. 13.96 Crore) considered by TPC-T. One and half months of revenue received is also considered as approved in the InSTS Tariff Order applicable for the respective period.

4.7.4 Further, maintenance spares of one per cent of the opening balance of GFA for FY 2016-17 as approved on final True up of FY 2016-17 in this Order is considered.

4.7.5 Regulation 35.1(f) of MYT Regulations 2015 stipulates that the rate of interest should be on normative basis and shall be equal to the Base Rate as on the date on which the petition for determination of Tariff is filed, plus 150 basis points. Provided further for Truing up of any year, interest on working capital shall be allowed at a rate equal to the weighted average Base Rate prevailing during the concerned year plus 150 basis points.

4.7.6 Hence, the Commission has considered the interest rate based on the Base Rate methodology instead of MCLR based methodology claimed by TPC-T. Accordingly, the Commission has computed interest rate of IoWC by calculating the weighted average of SBI Base Rate of 9.30% for 275 days (from 01 April, 2016 to 31 December, 2016) and of 9.25% for 90 days (from 01 January, 2017 to 31 March, 2017). The interest rate of 10.79% is considered for FY 2016-17 as per the above mentioned computation methodology.

4.7.7 The summary of the IoWC as submitted by TPC-T and as approved by the Commission after Truing up for FY 2016-17 is shown in the Table below:

Table 57: Normative Interest on Working Capital for FY 2016-17, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Operations and Maintenance Expenses for one month	14.93	13.96	14.67
Maintenance spares at 1% of opening GFA	29.71	29.87	29.84
One and a half months of the expected revenue from Transmission Charges at the prevailing Tariffs	70.26	63.63	63.63
Total Working Capital Requirement	114.90	107.46	108.14
Interest Rate (%)	10.80%	10.31%*	10.79%
Interest on Working Capital	**12.41**	**11.08**	**11.67**

** TPC-T calculated rate of IoWC based on SBI MCLR*

4.7.8 **The Commission approves Normative Interest on Working Capital of Rs. 11.67 Crore for FY 2016-17, as against Rs. 11.08 Crore claimed by TPC-T.**

4.8 Return on Equity

TPC-T's Submission

4.8.1 TPC-T has considered debt: equity ratio of 70:30, capitalisation during the year, and rate of RoE of 15.5% as per MYT Regulations, 2015. Further, TPC-T has computed

RoE on the basis of opening equity, and 50% of the equity portion of the capitalisation during the year and reduction in equity on account of de-capitalisation of certain assets. Accordingly, TPC-T has computed RoE as Rs. 157.10 Crore for FY 2016-17.

Commission's Analysis and Ruling

4.8.2 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 2016-17 in this Order in accordance with Regulation 28.3 of the MYT Regulations, 2015.

4.8.3 The closing equity for FY 2015-16 approved in this Order is considered as the opening equity for FY 2016-17. The Commission has considered reduction in equity at 30% of asset value of retired/de-capitalised assets as detailed in paragraph 3.8. Accordingly, the closing balance of equity is arrived by adding the equity addition corresponding to the capitalisation approved by the Commission for FY 2016-17 in this Order and reduction in equity equivalent to 30% of the book value of the asset retired to the opening balance of equity.

4.8.4 Based on the above, the RoE has been computed. The RoE as claimed by TPC-T and as approved by the Commission for FY 2016-17 after Truing up is summarized in the following Table.

Table 58: RoE for FY 2016-17, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Regulatory equity at the beginning of the year	980.67	985.39	984.56
Capital Expenditure Capitalised during the Year	145.36	187.53	170.15
Equity portion of capital expenditure Capitalised during the year	43.61	56.26	51.04
Less: Equity Portion of Asset De-capitalised / retired During the Year	0.00	-3.14	-2.21
Regulatory equity at the end of the year	1,024.27	1,038.51	1033.40
Return on Regulatory Equity @15.5% at the beginning of the year	152.00	152.74	152.61
Return on Regulatory Equity @ 50% of capitalisation during the year	3.38	4.36	3.78
Return on regulatory equity	**155.38**	**157.10**	**156.39**

4.8.5 **The Commission approves RoE of Rs. 156.39 Crore for FY 2016-17, as against Rs. 157.10 Crore claimed by TPC-T.**

4.9 Contribution to Contingency Reserves

TPC-T's Submission

4.9.1 The contribution to Contingency Reserve for FY 2016-17 as claimed by TPC-T is Rs. 7.47 Crore, computed at 0.25% of opening GFA as per MYT Regulations, 2015.

Commission's Analysis and Ruling

4.9.2 The Commission in line with Regulation 34.1 of MYT Regulations, 2015 computed the Contingency Reserves for FY 2016-17 to be equivalent to 0.25% of opening GFA of FY 2016-17. Further, the approved contingence reserves for FY 2016-17 is added to the above mentioned closing balance of Contingency Reserves for FY 2015-16 for arriving at the cumulative balance of Contingency Reserves. The Commission observed that the closing balance has not exceeded 5% of the original cost of fixed assets for FY 2016-17.

4.9.3 Further, the Commission sought the details of date of investment, amount of investment, interest earned per financial year for all authorized securities in which contribution to contingency reserve is invested. In response to this, TPC-T submitted the details as shown in the following Table which shows the balance of total contingency reserve fund investment as on 31 March, 2017 during FY 2016-17 along with Investment Statement of the depository Bank.

Table 59: Contingency Reserve Fund Investments at the end of FY 2016-17, as submitted by TPC-T (Rs. Crore)

Particulars	FY 2016-17
Non-current Investment	90.75
Current Investment	15.85
Total	**106.60**

4.9.4 As per Regulation 34.1 of MYT Regulations 2015, contribution towards contingency reserves shall be invested in securities authorized under the Indian Trusts Act, 1882 within a period of six months of the close of the financial year. As shown in Table below, the investment made for FY 2016-17 are done in July, 2017 and September, 2017, i.e., within six months of the close of the financial year.

Table 60: Contingency Reserve Fund Investments for FY 2016-17

Bond Name	Date of Investment	Amount (Rs. Crore)
6.35% Govt. of India 02/01/2020	19 July, 2017	75.00
6.17% Govt. of India 12/06/2023	29 September, 2017	14.60

4.9.5 The Commission has noted that investment of contribution to contingency reserves is done within six months of the close of the financial year for FY 2016-17. However, for FY 2015-16, it was delayed by six months as it is evident in Section 3.9 of this Order for 'Contribution to Contingency Reserves' for FY 2015-16. Therefore, the Commission has included holding cost for six months delay on contribution to contingency reserve for FY 2015-16. Such holding cost is considered in ARR of FY 2016-17, i.e. year in which such investment should have been done. Order in Case No. 208 of 2014 dated 26 June, 2015 of the Commission mentions as follows in relation to delay in investment of contingency reserve by another licensee:

"4.14.8 Considering the above, the Commission is of the view that any delay in investment of the funds available under the contingency reserve approved under the Transmission Tariff for JPTL beyond the time-frame permitted under the Regulations needs to be compensated by JPTL. This is necessary to ensure that JPTL is appropriately compensated for the delay in recovery of ARR only once. Allowing the benefit of retaining the approved funds beyond the permitted time and also compensating JPTL for the delay in recovery of ARR through the carrying cost would mean that double benefit is being passed on to JPTL.

4.14.9 Accordingly, the Commission has charged a holding cost for the period beyond the permitted timelines for investment as per the MYT Regulations. The holding cost is computed as simple interest on the amount not invested using the weighted average SBAR rates prevailing during the relevant period."

4.9.6 Accordingly, the holding cost for FY 2015-16 is calculated as below and included in ARR of FY 2016-17.

Table 61: Holding cost for delay in investment of contribution to contingency reserves for FY 2015-16, approved by the Commission (Rs. Crore)

Particulars	Amount
Investment in contingency reserves for FY 2015-16	6.88
Delay in years	0.5
Interest rate for holding cost (%)	10.79%
Holding cost (Rs. Crore)	**-0.37**

4.9.7 **The Commission approves Holding Cost for delay in investment of contribution to contingency reserves of Rs. 0.37 Crore.**

4.9.8 In view of the above, the Commission approves the Contribution to Contingency Reserve. The computation of Contingency Reserves as claimed by TPC-T and as approved by the Commission for FY 2016-17 is provided in the Table below.

Table 62: Contribution to Contingency Reserves for FY 2016-17, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Opening Balance of Contingency Reserves		74.25	74.25
Opening Gross Fixed Assets		2,986.53	2,983.78
Opening Balance of Contingency Reserves as % of Opening GFA		2.49%	2.49%
0.25% of opening GFA		7.47	7.46
Closing Balance of Contingency Reserves		81.72	81.71
Closing Balance of Contingency Reserves as % of Opening GFA		2.74%	2.74%
Contribution to Contingency Reserves	**7.43**	**7.47**	**7.46**

4.9.9 **The Commission approves Contribution to Contingency Reserves of Rs. 7.46 Crore for FY 2016-17, as against Rs. 7.47 Crore claimed by TPC-T.**

4.10 Income Tax

TPC-T's Submission

4.10.1 For arriving at the Income Tax payable for the regulated business, TPC-T has computed the Income Tax based on Regulatory Profit Before Tax for Transmission Business. As per Income Tax Rules, the higher of Corporate Tax / MAT would be payable for each Business Unit. TPC-T requested the Commission to consider Rs. 23.67 Crore towards Income Tax for FY 2016-17.

4.10.2 TPC-T further submitted that the claim under 80 IA has been made to the Income Tax Authority and it is still under process. TPC-T requested the Commission to consider the impact of the same once the claim materializes.

4.10.3 TPC-T has filed an Appeal in the ATE (Appeal No. 246 of 2015) where it has proposed to consider the gap and surplus amount approved during the Truing up for that year, as it will reflect the actual tax liability on the consumers. The appeal was not granted. Hence, TPC-T has approached the Supreme Court in Appeal Nos. 1356-1358 of 2017 and the matter is sub-judice.

Commission's Analysis and Ruling

4.10.4 The Commission sought the basis and computation for arriving at amount of tax depreciation for FY 2016-17. Response of TPC-T to this query is already explained in the section of 'Income Tax' in Truing up of FY 2015-16 in the earlier sections of this Order.

4.10.5 The Commission has computed Income Tax in accordance with Regulation 33.1 of MYT Regulations, 2015 and as specified in ATE Judgment dated 2 December 2013 in Case No. 138 and 139 of 2012.

4.10.6 As specified in the Regulations and ATE Judgment, the Commission has arrived at Income Tax paid based on Regulatory Profit Before Tax (PBT) considering the normative cost allowed by the Commission. The ratio with regard to tax liability is calculated on the regulatory income and cost within the MYT regime considering the applicable tax depreciation for computation of the Income Tax. Accordingly the calculation of Income tax provides the tax payable for the Regulatory business whereby all the items of ARR and Revenue are considered on normative basis for tariff purpose. Also in line with MYT Regulations, 2015 no efficiency gains and incentive earned are considered for computation of Tax on PBT basis.

4.10.7 The summary of the Income Tax for FY 2016-17 claimed by TPC-T and as approved by the Commission is shown in the Table below:

Table 63: Income Tax for FY 2016-17, as approved by the Commission (Rs. Crore)

Particulars	Basis	MYT Order	MTR Petition	Approved in this Order
Revenue from transmission charges			509.07	509.07
Non-tariff income			16.89	16.89
Less: Incentive			-	3.60
Less: Aggregate gain/(loss) shared			-	7.32
Total Revenue less Efficiency Gain and incentive				**515.05**
O&M expenses			167.52	176.05
Depreciation Expenses			131.06	130.64
Interest on Long-term Loan Capital			104.75	94.35
Other Finance Charges			0.03	0.03
Interest on Working Capital			16.38	11.67
Contribution to Contingency reserves			-	7.46

Particulars	Basis	MYT Order	MTR Petition	Approved in this Order
Total expenses				**420.19**
Total Revenue less Efficiency Gain and incentive	A		525.97	515.05
Total expenses	B		419.71	420.19
Profit Before Tax	**C=A-B**		**106.26**	**94.85**
Tax Adjustment				
Add				
Depreciation considered in expenses	D		131.06	131.06
Other disallowance while computing IT	E		(18.95)	(18.95)
Total Tax Disallowances	**F=D+E**		**112.11**	**112.11**
Less				
Tax Depreciation	G		204.89	204.89
Other expenses allowed for computing Income Tax	H		6.62	6.62
Deduction - U/s 80 IA	I		0.00	0.00
Other deduction under IT	J		0.00	0.00
Exempt income under IT	K		0.00	0.00
Total Tax Allowances	**L=sum(G:K)**		**211.51**	**211.51**
Total Taxable Income	**M=C+F-L**		**6.86**	**-4.55**
Tax payable at normal rate (Corporate Tax Rate)	**N=M x Tax Rate**		**2.37**	**-**
MAT Computation				
Profit Before Tax	**O=C**		**106.26**	**94.85**
Add: Disallowances under Income Tax (U/s 14 A, provision for doubtful debt)	P		4.6	4.64
Less: Deductions under Income Tax	**Q**		0.00	0.00
Book Profit	**R=O+P-Q**		**110.90**	**99.49**
Tax Payable under MAT Rate	**S**		**23.67**	**21.23**
Tax Applicable	**T=max(N,S)**		**23.67**	**21.23**
Tax Paid	**U**		0.00	0.00
Less: Mat credit of previous year			0.00	0.00
Tax Paid to Tax Provision	V=U/T		0.00	0.00
Tax to be recovered through ARR	**W = V X U**	**66.74**	**23.67**	**21.23**

4.10.8 **The Commission approves Income Tax as Rs. 21.23 Crore for FY 2016-17, as against Rs. 23.67 Crore claimed by TPC-T.**

4.11 Non-Tariff Income

TPC-T's Submission

4.11.1 The actual Non-Tariff Income for FY 2016-17 was Rs. 16.89 Crore out of which recurring items account for Rs. 10.57 Crore and non-recurring items account for balance Rs. 6.32 Crore.

Commission's Analysis and Ruling

4.11.2 TPC-T has submitted the details of Non-Tariff Income 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.

4.11.3 Non-Tariff Income is computed in accordance with Regulation 59.2 of MYT Regulations, 2015. The summary of the Non-Tariff Income as submitted by TPC-T and as approved by the Commission after Truing up is shown in the Table below:

Table 64: Non-Tariff Income for FY 2016-17, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Income from rent of land or buildings	2.43	4.28	4.28
Income from sale of scrap	3.41	3.41	3.41
Other/Miscellaneous receipts	0.23	0.93	0.93
Interest on Contingency Reserve Investments	4.00	4.95	4.95
Interest on staff loans & Advances	0.10	0.08	0.08
Income on Services rendered	2.28	1.34	1.34
Liquidated Damages	1.17	0.97	0.97
VAT Refund	3.22	0.92	0.92
DPC Income	0.00	0.00	0.00
Total	**16.83**	**16.89**	**16.89**

4.11.4 **The Commission approves Non-Tariff Income of Rs. 16.89 Crore for FY 2016-17, as submitted by TPC-T.**

4.12 Truing up of Revenue from Transmission Charges

TPC-T's Submission

4.12.1 The revenue for FY 2016-17 was derived from the Intra-State Transmission Tariff Order dated 26 June, 2015 in Case No. 57 of 2015 applicable from April, 2016 to June, 2016 and Intra-State Transmission Tariff Order dated 22 July, 2016 in Case No. 91 of 2016 for July, 2016 to March, 2017. Accordingly, the total revenue earned for FY 2016-17 works out to Rs. 509.07 Crore.

Commission's Analysis and Ruling

4.12.2 Revenue from Transmission Charges as per InSTS Tariff Order in Case No. 57 of 2015 from April, 2016 to June, 2016 and InSTS Tariff Order in Case No. 91 of 2016 from July, 2016 to March, 2017.is computed as shown in table below.

Table 65: Computation of Revenue from Transmission Charges for FY 2016-17

Order No.	Annual approved revenue (Rs. Crore)	Applicability of Order	Number of months	Revenue in FY 2015-16 (Rs. Crore)
Case No. 57 of 2015	349.97	April, 2016 to June, 2016	3	87.49
Case No. 91 of 2016	562.11	July, 2016 to March, 2017	9	421.58
			Total	**509.07**

4.12.3 Summary of revenue from transmission charges approved by the Commission is as shown in table below.

Table 66: Revenue from Transmission Charges for FY 2016-17, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Revenue from Transmission Charges	**562.11**	**509.07**	**509.07**

4.12.4 **The Commission approves revenue from Transmission Charges of Rs. 509.07 Crore as submitted by TPC-T.**

4.13 Incentive on Transmission Availability

TPC-T's Submission

4.13.1 In accordance with Regulation 57.2 of the MYT Regulations, 2015, TPC-T is entitled to an incentive of Rs. 3.61 Crore on achieving annual Availability of 99.63% as certified by the MSLDC which is beyond the target Availability as per Regulations.

Commission's Analysis and Ruling

4.13.2 The Commission has analyzed the submission of TPC-T and also verified the Transmission System availability of 99.63% based on the certification provided by MSLDC. In line with the Regulation 57.1 (b) of 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 Regulations 54.10 of MYT Regulations, 2015.

4.13.3 Accordingly, the computation for incentive on Transmission System Availability for FY 2016-17 as claimed by TPC-T and as approved by the Commission is provided in the Table below.

Table 67: Incentive for FY 2016-17, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Annual Transmission Charges		590.83	
Less: Other Finance Charges		0.03	566.29
Less: Income Tax		23.67	
Annual Transmission Charges	-	567.14	566.29
Annual Availability achieved		99.63%	99.63%
Target Availability		99.00%	99.00%
Incentive		**3.61**	**3.60**

4.13.4 **The Commission approves Incentive of Rs. 3.60 Crore for FY 2016-17 on higher Transmission Availability, as against Rs. 3.61 Crore claimed by TPC-T.**

4.14 Sharing of Gains/ (Losses) on O&M expenses for FY 2016-17

TPC-T's Submission

4.14.1 TPC-T has categorized various heads of expenditure as controllable and uncontrollable, and computed the Efficiency Gains/Losses for the controllable expenditure and shared the same with the Distribution Licensees.

4.14.2 TPC-T has considered the actual O&M expenses as Rs. 167.52 Crore as compared to the approved expenditure of Rs. 177.38 Crore, and has considered a net Efficiency Gain of Rs. 3.29 Crore in O&M expenses.

4.14.3 The normative O&M expenses based on the MYT Regulations, 2015 works out to be Rs.177.38 Crore. TPC-T submitted the details of the Bays and Circuit Kilometers of Transmission Lines for FY 2016-17 as shown in Table below:

Table 68: Details of Bays and Circuit Kilometer of Transmission Lines for FY 2016-17, as submitted by TPC-T

Particulars	No. of Bays
Bays (Between 66kV and 400 kV)	
Opening	340
Additions	2
Closing	342
Average	341
Bays (< 66kV)	
Opening	850
Additions	55
Closing	905
Average	877.50
Lines	**Circuit Kilometer**
Circuit km (Between 66kV and 400 kV)	
Opening	1188.18
Additions	0.00
Closing	1188.18
Average	**1188.18**

4.14.4 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 2016-17. TPC-T has also provided the details in the following paragraphs, the additional bays which were capitalized earlier or commission during the year and put to use during FY 2016-17.

4.14.5 2 numbers of 220 kV bays at Trombay Sub-station were capitalised earlier but are put to use during FY 2016-17.

4.14.6 13 number of 33 kV Bays at Mahalaxmi RSS were commissioned as well as 'put to use' in FY 2016-17.

4.14.7 Following are the 33 kV bays which were capitalised earlier but 'put to use' in FY 2016-17:

Table 69: Details of 33 kV bays capitalised earlier, but 'put to use' in FY 2016-17

Location	Distribution Licensee for the bays	No. of bays
BKC	TPC-D	8
BKC	RInfra-D	6
Mahalaxmi	BEST	5
Saki	TPC-D	5
Saki	RInfra-D	2
Saki	Future use by STU	3
Powai	TPC-D	3
Parel	TPC-D	6
Parel	BEST	2
Carnac	BEST	2
Total		**42**

4.14.8 TPC-T has mentioned that above submission is without prejudice to their submission made in the Appeal against the issue of 'put to use'.

Commission's Analysis and Ruling

4.14.9 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 Circuit Kilometers and number of Bays in the Sub-stations of the Transmission Licensee.

4.14.10 The Commission queried TPC-T if all the bays claimed to be 'put to use' are in service and actually put to use benefitting the consumers. In reply, TPC-T submitted that there are some bays which are allocated by STU to the distribution licensees but actually not put to use. Considering 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 70: Bays considered as put to use due to allocation to Distribution Licensees

Type of bay	Actual put to use	Bays allocated to distribution licensee and yet to be put to use	Total
Between 66 kV and 400 kV	2	0	2
66 kV and below	14	41	55

4.14.11 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'.

4.14.12 The Commission obtained the network parameters in terms of Transmission Lines in Circuit Kilometers and number of Bays in Sub-stations and verified them based on the capitalisation approved in this Order. Based on this approved bays and circuit km, the normative O&M expense as computed by the Commission is provided in the Table below.

Table 71: Normative O&M expenses for FY 2016-17, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Length in Ckt Km (above 66 kV and less than 400 kV)	1196.24	1188.18	1188.18
Applicable O&M cost Norm for Transmission Lines (Rs Lakh / Ckt Km)	1.19	1.19	1.19
Normative O&M expenses for Transmission Lines (Rs. Crore)	**14.24**	**14.14**	**14.14**
Number of 220 KV bays	347.00	341.00	341.00
Number of 33 KV bays	875.00	877.50	857.00
Applicable O&M Cost Norm for 220 KV Bays (Rs. Lakh / Bay)	31.12	31.12	31.12
Applicable O&M Cost Norm for 33 KV Bays (Rs. Lakh / Bay)	6.51	6.51	6.51
Normative O&M Expenses for Bays (Rs. Crore)	**164.95**	**163.24**	**161.91**
Total Normative O&M expenses	**179.18**	**177.38**	**176.05**

4.14.13 Based on the normative O&M expenditure after inclusion of the impact of additional assets corresponding to the approved capitalization for FY 2016-17, the Efficiency Gains/Losses due to variation in O&M expenses have been computed as follows:

Table 72: Net Entitlement of O&M Expenditure, as approved by the Commission for FY 2016-17 (Rs. Crore)

Particulars	MTR Petition	Approved in this Order
O&M expenditure as per norms of MYT Regulations	177.38	176.05
Actual O&M expenditure	167.52	165.77
Increase in O&M expenditure on account of uncontrollable expenditure	0.00	0.00
Actual with uncontrollable expenditure	167.52	165.77
Amount passed on in ARR	3.29	3.43
Net entitlement	**170.81**	**169.19**

4.14.14 **The Commission approves net entitlement of O&M Expenditure of Rs. 169.19 Crore for FY 2016-17 including sharing of Efficiency Gains/Losses, as against Rs. 170.81 Crore claimed by TPC-T.**

4.15 Sharing of Gains/ (Losses) on Interest on Working Capital (IoWC) for FY 2016-17

TPC-T's Submission

4.15.1 TPC-T has calculated IoWC on normative basis as Rs. 11.08 Crore and claimed that actual IoWC is Rs. 16.38 Crore on working capital requirement of Rs. 158.83 Crore at rate on interest on working capital of 10.31%.

4.15.2 One-third of this loss of Rs. 1.76 Crore is claimed in ARR.

Commission's Analysis and Ruling

4.15.3 The Commission observed that TPC-T has claimed sharing of Efficiency Gains/Losses between actual and normative interest on working capital for FY 2016-17. In line with the Regulation 31.6 of MYT Regulations, 2015, the Commission sought documentary evidence to substantiate the claim of actual interest on working capital.

4.15.4 In response, TPC-G stated that has utilized the facility of Commercial Papers for funding its working capital requirement during FY 2016-17. Further, these Commercial papers were issued at company level, i.e., for Tata Power Company as a whole and not separately issued for regulated business in Mumbai for Generation, Transmission and Distribution Business. Accordingly, based on the audited financial statements, for Tata Power Standalone, as published in the Company's Annual Report for FY 2015-16 & FY 2016-17, the effective rate of interest on Commercial papers works out to be 9.25% for FY 2016-17. The computation of the same has been provided below along with the reference in TPC's Annual Report:

Table 73: Actual Interest on Working Capital borne by Tata Power Company as a whole

Particulars		Amount (Rs. Crore)	Reference Documents	Remarks
Total outstanding of Commercial Papers as on 31 March, 2016	a	988.1	Schedule 26- Current Borrowings	Page 326 of the Annual Report of FY2016-17
Total outstanding of Commercial Papers as on 31 March, 2017	b	1982.66		
Average Commercial Paper Balance	c = Average of a, b	1485.38		
Total interest paid for Commercial Papers during FY 2016-17	d	137.41	Part of the total finance cost of Rs. 553.75 Crore for FY 2016-17. (Schedule 31-Finance Costs)	Page 329 of the Annual Report of FY 2016-17
Total interest paid for Commercial Papers during FY 2016-18	e = d/c	9.25%		

4.15.5 The CA Certificate certifying the payments of Rs. 137.41 Crore in terms of interest Cost towards Commercial Paper and relevant pages of the Annual Report for FY 2016-17 is attached.

4.15.6 Further, based on the Audited Financial Statements submitted, TPC-T computed and revised the actual working capital to Rs. 105.78 Crore from Rs. 158.83 Crore as was claimed in the Petition. The computation of revised IoWC as submitted by TPC-T is shown in the Table below:

Table 74: Revised IoWC of TPC-T computed from Financial Statements (Rs. Crore)

Particulars	FY 2016-17	FY 2015-16
Current Assets		
Inventories	11.75	11.77
Trade Receivables	143.74	122.76
Security Deposits	3.68	6.92
VAT/Sales Tax Receivable	5.14	6.25
Prepaid Expenses & others	1.61	3.47
Others	1.33	1.01
Other Current Asset	11.76	17.65
Total Current Assets	167.25	152.18
Current Liabilities		

Particulars	FY 2016-17	FY 2015-16
Security Deposits From Customers	3.43	3.20
Provisions	18.21	17.62
Trade Payables	34.44	31.52
Provisions	1.37	2.61
Other Current Liabilities	4.02	1.75
Total Current Liabilities	61.47	56.70
Net Working Capital	**105.78**	**95.48**
Average Net Working Capital	100.63	
Actual Rate of Working Capital	9.25%	
Working Capital Interest	**9.91**	

4.15.7 The Commission evaluated the above submissions made by TPC-T against the claim of the actual interest on working capital for FY 2016-17. It is observed that TPC-T has not specified any actual interest on working capital on standalone Regulated business basis and has only substantiated the commercial paper borrowings specified to be documentary evidence for interest on working capital for the Tata Power Company as whole. Even the Chartered Accountant certification has only certified the actual interest on working capital for the Tata Power Company as a whole. Nowhere could it substantiate the actual working capital borrowal from banks for the Regulated Business of Transmission, i.e., TPC-T.

4.15.8 Further, methodology of TPC-T for the computation of working capital requirement from the Audited Financial Statement and application of the interest rate of the Commercial Papers of the Tata Power Company as whole to arrive at the actual interest on working capital, is a mere calculation. This calculation doesn't satisfy the requirements of Regulation 31.6 of MYT Regulations, 2015 for substantiation by documentary evidence. The relevant extract is provided below for ready reference.

"31.6 For the purpose of Truing-up for each year, the variation between the normative interest on working capital computed at the time of Truing-up and ***the actual interest on working capital incurred by the*** *Generating Company or* ***Licensee*** *or MSLDC,* ***substantiated by documentary evidence, shall be considered as an efficiency gain or efficiency loss****, as the case may be, on account of controllable factors, and shared between it and the respective Beneficiary or consumer as the case may be, in accordance with Regulation 11 :"{****Emphasis added****}*

4.15.9 Therefore, the Commission has considered the actual interest on working capital as nil against the normative interest on working capital for computation of sharing of Efficiency Gains/Losses for FY 2016-17. The Commission has determined the normative IoWC expenses in the earlier sections of this Order as per methodology specified in the MYT Regulations 2015. Considering the normative and the approved actual IoWC expenses, the Efficiency Gains and Losses due to the variation have been computed as below:

Table 75: Sharing of Efficiency Gain/ (Loss) on IoWC for FY 2016-17 (Rs. Crore)

Particulars		MTR Petition	Approved in this Order
Actual IoWC	A	16.38	0
Normative IoWC	B	11.08	11.67
Difference	C=A-B	5.29	(11.67)
1/3rd Efficiency Gain above actual		1.76	(3.89)
IoWC after sharing of Efficiency Gain/(Loss)		12.85	3.89

4.15.10 **The Commission approves net entitlement of IoWC, after sharing of Efficiency Gains as Rs. 3.89 Crore, on Truing up of FY 2016-17.**

4.16 Impact of Review Order dated 19 July, 2017

TPC-T's Submission

4.16.1 A summary of the issues raised in the above mentioned Review Petition is provided below:

a. Disallowance of Interest During Construction (IDC) of Rs. 21.74 Crore for a period of FY 2008-09 to FY 2011-12 for the Transmission Project of 145 kV GIS at Bandra Kurla Complex (BKC);
b. Disallowance of Capitalisation of Rs. 26.54 Crore for IXORA Receiving Station;
c. Disallowance of Capitalisation of Rs. 1.83 Crore for 8 numbers AIS Bays of 33 kV at Parel Receiving Station;
d. Disallowance of O&M expenses of Rs. 10.66 Crore on unutilised bays for FY 2014-15;
e. Not considering the number of Bays commissioned at IXORA Receiving Station in Panvel, while computing the normative O&M expenses applicable for FY 2014-15. Further, a total of 35 bays (8 Bays between 66 kV & 400 kV & 27 bays of <66 kV) were deducted from the opening balance of the number of bays for FY 2014-15 instead of deducting the same from addition during FY 2014-15.

4.16.2 The Commission had issued the Order in this matter on 19 July, 2017. In this Order after due consideration, the Commission has reconsidered (i) the Capitalisation of IDC of Rs. 21.74 Crore for 145 kV GIS Sub-Station at BKC and (ii) an additional amount of Rs. 1.53

Crore to TPC-T as the net Efficiency Gain entitlement on account of the revised normative O&M expenses.

4.16.3 The summary of the total recovery for FY 2014-15 in line with the Order of the Commission in Case No. 110 of 2016 has been presented in the Table below:

Table 76: Summary of total recovery for FY 2014-15, as claimed by TPC-T (Rs. Crore)

Particular	Approved in the review Order
Impact of Additional Capitalisation	
Interest on Loan	0.83
Return on Equity	0.60
Sub-total	**1.43**
Impact of O&M Net Entitlement	
Additional O & M Entitlement	1.53
Total Impact	**2.96**

4.16.4 Considering the above submission, TPC-T requests the Commission to consider the impact of the Order in Case 110 of 2016 as presented in Table above in this petition for Mid Term Review.

Commission's Analysis and Ruling

4.16.5 As explained in paragraph 2.2.6, the impact of Review Order on account of change in RoE, interest on loan capital and change in O&M entitlement is elaborated below.

Additional RoE for FY 2014-15

4.16.6 On account of the additional capitalisation of Rs. 21.74 Crore as approved above, equity equivalent to 30% of this capitalisation would be included in the equity addition for FY 2014-15. Due to this the corresponding RoE for FY 2014-15 needs to be allowed. Accordingly, the revised Return on Equity (RoE) for FY 2014-15 works out as shown in the Table below:

Table 77: Additional ROE for FY 2014-15, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Regulatory Equity at the Beginning of the year	786.60	786.60	786.60
Capitalisation	412.37	434.11	434.11
Equity portion of the Net assets capitalised during the year	123.71	130.23	130.23
Reduction in Equity Capital on account of	(1.22)	(1.22)	(1.22)

Particulars	MYT Order	MTR Petition	Approved in this Order
retirement/replacement of assets			
Regulatory Equity at the end of the year	909.09	915.61	915.61
Return on Regulatory Equity at the beginning of the year	121.92	121.92	121.92
Return on 50% of Equity portion of asset value capitalised during the year	9.49	10.09	10.09
Total Return on Equity	**131.42**	**132.02**	**132.02**
Additional RoE for FY 2014-15		**0.60**	**0.60**

Additional Depreciation for FY 2014-15

4.16.7 As the additional capitalisation approved is towards capitalisation of land, no depreciation is applicable for the same. Hence, there would be no additional Depreciation on account of the additional capitalisation of Rs. 21.74 Crore approved by the Commission. TPC-T has also not claimed any depreciation.

Additional Interest on Loan for FY 2014-15

4.16.8 On account of the additional capitalisation of Rs. 21.74 Crore as approved above, loan equivalent to 70% of this capitalisation would be included in the loan addition for FY 2014-15. Due to this the corresponding interest expense for FY 2014-15 needs to be allowed. Accordingly, the revised interest on loan for FY 2014-15 works out as shown in the Table below.

Table 78: Revised interest on Loan for FY 2014-15, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Average Interest rate (%)	10.86%	10.86%	10.86%
Opening balance of loan	728.50	728.50	728.50
Capitalisation	412.37	434.11	434.11
Drawal during the year	288.66	303.88	303.88
Repayment	97.01	97.01	97.01
Closing balance of loan	920.15	935.36	935.36
Interest on Loan	89.52	90.35	90.35
Additional Interest on Loan for FY 2014-15		**0.83**	**0.83**

Net Impact of Additional Capitalisation for FY 2014-15

4.16.9 The net impact in FY 2014-15 due to the additional capitalisation approved as an impact of the Review Order is summarized in the Table below:

Table 79: Net Impact of additional Capitalisation for FY 2014-15, as approved by the Commission (Rs. Crore)

Particular	MTR Petition	Approved in this Order
Interest on Loan	0.83	0.83
Return on Equity	0.51*	0.60
Total Impact	**1.33**	**1.43**

*TPC-T has inadvertently taken Rs. 0.51 Crore towards RoE.

4.16.10 Further, the Commission in its Order in Case No. 110 of 2016 has also revised the net entitlement of O&M Expenditure for FY 2014-15 and accordingly had approved an additional amount of Rs. 1.53 Crore to TPC-T as the net Efficiency Gain entitlement on account of the revised normative O&M expenses.

Summary of the total recovery due to impact of Review Order

4.16.11 Considering the above, the Commission approves the total impact of Rs. 2.96 Crore (inclusive of impact of additional Capitalisation (Rs. 1.43 Crore) & impact of O&M net entitlement (Rs. 1.53 Crore) in this Oder. The Carrying cost associated has been presented in subsequent section.

4.17 Summary of Truing up

TPC-T's Submission

4.17.1 The break-up of expenses for FY 2016-17 along with the adjustments on account of sharing of Efficiency Gains/Losses as submitted by TPC-T is given in the following Table.

Table 80: Summary of Truing up including sharing of Efficiency Gains for FY 2016-17, as submitted by TPC-T (Rs. Crore)

Particulars	MYT Order	Actual	Efficiency Gains / (Loss)	Net Entitlement after sharing of Gains/(Losses)
Operation & Maintenance expenses	179.18	177.38	6.57	170.81
Depreciation expenses	117.59	131.06		131.06

Particulars	MYT Order	Actual	Efficiency Gains / (Loss)	Net Entitlement after sharing of Gains/(Losses)
Interest on long-term loan capital	103.08	104.75		104.75
Other finance charges	0.00	0.03		0.03
Interest on working capital	12.41	16.38	(1.76)	12.85
Income tax	66.74	23.67		23.67
Contribution to contingency reserves	7.43	7.47		7.47
Total revenue expenditure	**486.44**	**467.95**		**450.63**
Return on equity capital	155.38	157.10		157.10
Aggregate Revenue Requirement	641.82	621.44		607.73
Less: Non-Tariff Income	16.83	16.89		16.89
Less: Income from other business	-	-		-
Aggregate Revenue Requirement from Transmission Tariff	**624.99**	**604.55**		**590.83**
Incentive	-	3.61		3.61
Revenue from Transmission Tariff	**-**	**509.07**		**509.07**
Revenue Gap/(Surplus)				**85.37**

Commission's Analysis and Ruling

4.17.2 Rs. 114.33 Crore surplus due to FY 2014-15, along with holding cost of Rs. 30.94 Crore is included in ARR of FY 2016-17 as approved in MYT Order. Further, impact of Review Order in Case No. 110 of 2016 of Rs. 2.95 Crore, along with carrying cost of Rs. 0.80 Crore is adjusted in ARR of FY 2016-17.

4.17.3 Holding cost for revenue surplus of FY 2014-15 being adjusted in ARR of FY 2016-17 is approved as shown in table below:

Table 81: Calculation of Holding Cost as approved in MYT Order (Rs. Crore)

Particulars	FY 2014-15	FY 2015-16	FY 2016-17
Opening Balance	-	-114.33	-114.33
Addition during the year	-114.33		
Less recovery			-114.33
Closing Balance	-114.33	-114.33	-
Interest rate (%)	14.75%	14.29%	10.79%
Holding Cost	**-8.43**	**-16.34**	**-6.17**
		Total	**-30.94**

4.17.4 The Commission had allowed past recovery of Rs. 62.88 Crore surplus in ARR of FY 2016-17. Break-up of this past recovery is as follows:

Table 82: Past recovery allowed in MYT Order for FY 2016-17 (Rs. Crore)

Particulars		MYT Order	Approved in this Order
Gap/(surplus) of FY 2015-16	A	89.62	39.71
Revenue gap of FY 2013-14 recovered in FY 2015-16, along with carrying/(holding) cost	B	-7.23	-7.23
Total	C=A+B	82.39	Nil*
Gap / (Surplus) for FY 2014-15	D	-114.33	-114.33
Holding cost for Gap/(Surplus) for FY 2014-15	E	-30.94	-30.94
Total past recovery in FY 2016-17		**-62.88**	**-145.27**

** Revenue gap of FY 2015-16 is recovered in FY 2018-19 in this Order, because FY 2016-17 and FY 2017-18 are already over at time of issuing this Order*

4.17.5 The summary of the net ARR including sharing of Efficiency Gains/Losses as approved by the Commission for FY 2016-17 is given in the following Table:

Table 83: Summary of Truing up, including net entitlement after sharing of Efficiency Gain/ (Loss) for FY 2016-17, as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	MYT Order	MTR Petition	Approved in this Order
1	Operation & Maintenance Expenses	179.18	170.81	169.19
2	Depreciation Expenses	117.59	131.06	130.64
3	Interest on Long-Term Loan Capital	103.08	104.75	94.35
4	Other Finance Charges	0.00	0.03	0.03
5	Interest on Working Capital	12.41	12.85	3.89
6	Income Tax	66.74	23.67	21.23
7	Contribution to Contingency Reserves	7.43	7.47	7.46
8	**Total Revenue Expenditure**	**486.44**	**450.63**	**426.79**
9	Return on Equity Capital	155.38	157.10	156.39
10	**Aggregate Revenue Requirement**	**641.82**	**607.73**	**583.19**
11	Less: Non-Tariff Income	16.83	16.89	16.89
12	**Aggregate Revenue Requirement from Transmission Tariff**	**624.99**	**590.83**	**566.29**
13	Incentive		3.61	3.60
14	**Revenue from Transmission Tariff**	**562.11**	**509.07**	**509.07**
15	Past Recoveries (Addition of 15-A to 15-C below)	-62.88*	-	-145.27

Sr. No.	Particulars	MYT Order	MTR Petition	Approved in this Order
15-A	- Gap / (Surplus) for FY 2014-15	-114.33	-	-114.33
15-B	- Holding cost for Surplus for FY 2014-15	-30.94	-	-30.94
15-C	- Revenue gap of FY 2015-16	82.39		-^
	Impact of Review Order			2.96
	Holding cost for Impact of Review Order			0.80
	Add: Carrying Cost / (Holding Cost) for contingency reserves			-0.37
	Standalone Revenue Gap/(Surplus)	**-**	**85.37**	**-81.06**

** Rs. 62.88 Crore is cumulative past recovery till FY 2015-16 as per MYT Order*

^ Revenue gap of FY 2015-16 is recovered in FY 2018-19 in this Order, because FY 2016-17 and FY 2017-18 are already over at time of issuing this Order

4.17.6 The detailed analysis underlying the Commission's approval of individual ARR elements on Truing up of ARR for FY 2016-17 is already set out above, however, the variation in the ARR sought by the TPC-T and that approved by the Commission in this Order is mainly on account of past recovery of surplus for FY 2014-15 along with holding cost. Past recovery of FY 2014-15 including carrying/ (holding) cost is as per the MYT Order and impact of Review Order is as per Case No. 110 of 2016 dated 19 July 2017.

4.17.7 **The Commission approves the Revenue Surplus of Rs. 81.06 Crore for FY 2016-17 after final True up, as against Revenue Gap of Rs. 85.37 Crore claimed by TPC-T.**

5 PROVISIONAL TRUING UP OF ARR FOR FY 2017-18

5.1 Provisional Truing up of ARR for FY 2017-18

5.1.1 Regulation 5.1 (b) (iii) of the MYT Regulations, 2015, specifies that MTR Petition to be submitted by the Petitioner should comprise provisional Truing up of ARR for FY 2017-18 to be carried out under MYT Regulations, 2015. The extract of the relevant Regulation is reproduced as under.

"5.1 The Petitions to be filed in the Control Period under these Regulations are as under:—

...

(b) Mid-Term Review Petition shall be filed by November 30, 2017, comprising:—

(iii) Provisional Truing-up for FY 2017-18 to be carried out under the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2015 ;"

5.1.2 Accordingly, TPC-T in the present MTR Petition for the 3rd Control Period has petitioned for provisional Truing up for FY 2017-18 against the projection approved under MYT Order. Based on the details provided by TPC-T and additional information sought by the Commission during the proceedings, the Commission has carried out the provisional True up for FY 2017-18.

5.2 Transfer of assets from Generation Business of TPC to its Transmission Business

TPC-T's Submission

5.2.1 Tata Power is an integrated Utility having the Businesses of Generation, Transmission and Distribution. Consequent to the enactment of the Electricity Act, 2003, the Generation (TPC-G), Transmission (TPC-T) and Distribution Businesses (TPC-D) of Tata Power have been operating as separate regulated entities.

5.2.2 TPC-G has Thermal Generating Stations at Trombay and Hydro Generating Stations at Bhira, Bhivpuri and Khopoli. TPC is proposing transfer of certain assets from the Trombay Generating Station to the Transmission Business as described in detail as below.

5.2.3 The Trombay Generating Station was established in 1956 and originally had 3 generating Units viz. Unit 1, Unit 2, and Unit 3. In the year 1965, Unit 4 was commissioned at Trombay. All these Units were connected to the Intra-State Transmission System of Maharashtra through 110 kV switchyard and its associated equipment at Trombay.

5.2.4 The 110 kV switchyard at Trombay is connected to many of the critical Transmission Receiving Stations like Carnac, Dharavi, Parel, Chembur etc. and is one of the tie points with the MSETCL Transmission Network.

5.2.5 Further, there is a 22 kV switchyard at Trombay which gets the power through 4 nos. of three winding 110 kV / 22 kV / 3.3 kV Distribution Transformers. The outlets from this switchyard are primarily used to provide power supply to consumers. The tertiary winding at 3.3 kV is further step down to 415 V and is used to meet all the auxiliary consumption of the 110 kV switchyard along with associated equipment. In the 1980s and 1990s additional Units 5, 6 and 7 were added at Trombay and a separate 220 kV switchyard was constructed to transmit the power generated to the load centers. Subsequently, Unit 8 which was commissioned in 2010, was also connected to the 220 kV switchyard. The 220 kV switchyard was connected to the 110 kV switchyard through 2 Interconnecting Transformers (ICTs).

5.2.6 The Unit 1, Unit 2 and Unit 3 were decommissioned in the years 1994, 1993 and 1992 respectively after they had served their useful life. Subsequently, Unit 4 was decommissioned in FY 2016-17.

5.2.7 However, the 110 kV switchyard continues to remain connected to the Receiving Stations in Mumbai and MSETCL as mentioned above. With the decommissioning of the Generating Units 1, 2, 3 and 4 the 110 kV switchyard and all the associated equipment now serve as a Transmission Receiving Station. In view of this, it is proposed to transfer these assets to the Transmission Business of TPC-T which is a Transmission Licensee.

5.2.8 In this regard, it is submitted that the Electricity Act, 2003 defines the Transmission Lines and Transmission Licensee as follows:

"*2 (72) " transmission lines" means all high pressure cables and overhead lines (not being an essential part of the distribution system of a licensee) transmitting electricity from a generating station to another generating station or a sub-station, together with any step-up and step-down transformers, switch-gear and other works necessary to and used for the control of such cables or overhead lines, and such buildings or part thereof as may be required to accommodate such transformers, switchgear and other works;"*

5.2.9 Considering the above, the 110 kV switchyard, 22 kV switchyard and the associated equipment squarely falls under the definition *".... together with any step-up and stepdown transformers, switch-gear and other works necessary to and used for the control of such cables or overhead lines, and such buildings or part thereof as may be* *required to accommodate such transformers, switchgear and other works*; Further, TPC-T has been granted a Transmission License (Transmission License No. 1 of 2014). Hence, it is authorized to operate the above mentioned Transmission system.

5.2.10 In view of this, the Commission is requested to approve the transfer of assets from TPC-G to TPC-T. The list of Assets to be transferred has been enclosed as annexure to the Petition.

5.2.11 The transfer is considered to be taken into effect from 1 April, 2017. Accordingly, with this proposed transfer of assets, GFA of Rs. 53.94 Crore (pertaining to 110 kV switchyard, 22 kV switchyard, 3.3 kV and 415 V equipment and all other associated equipment) will get added to asset base of TPC-T and the same amount of assets will get reduced from TPC-G with the following exclusions

- 3 nos. of 110 kV bays feeding direct consumers (HPCL: 2 nos., and BPCL: 1 no.) are part of TPC-D assets
- 2 nos. of 110 kV bays feeding direct consumers (BARC: 2 nos.) are to be transferred to TPC-D assets

5.2.12 Accordingly, the opening GFA of FY 2017-18 for TPC-T would be the closing GFA of FY 2016-17 plus the GFA of the assets to be transferred from TPC-G to TPC-T.

5.2.13 The ARR for FY 2017-18 has been arrived at considering the revised GFA, Equity and Loan on account of transfer of assets. Further, the impact on the O&M expenditure on account of addition of assets has also been considered. The addition in TPC-T ARR will get deducted from the ARR of TPC-G.

Commission's Analysis and Ruling

5.2.14 The Commission notes that the Transmission License granted to TPC is an asset specific License which includes the list of existing Transmission Lines and existing Transmission Bays. Apart from this, the License includes the list of Transmission Lines and Transmission Bays proposed to be added in the future. The proposed transfer of existing assets of TPC-G to TPC-T would lead to addition of assets over and above the assets listed in the TPC-T's License. This would, therefore, amount to an amendment of its existing Transmission License in accordance with MERC (Transmission License Conditions) Regulations, 2004 and subsequent amendments to it.

5.2.15 The Commission further notes that the scope of the present proceedings is to undertake Mid-Term Review of the financial and operational performance of TPC-T vis-à-vis the ARR approved in the MYT Order dated 22 June, 2016. Therefore, approval of the asset transfer from Generation Business of TPC to its Transmission Business, which essentially an amendment of License is beyond the scope of the present proceedings.

5.2.16 As regards the recovery of ARR components sought by TPC-T on account of the proposed transfer of assets, the Commission notes that a similar issue had been raised in Case No. 36 of 2015 for "Approval of Capital Cost and ARR from FY 2014-15 to FY 2015-16 for Vidarbha Pvt. Ltd – Transmission". The Commission in this Order held as below:-

"2.2.21 VIPL has claimed the ARR from 1 April, 2014, i.e. the COD of its Generation Station. However, the Transmission License was granted to VIPL on 5 January, 2015. Regulation 3 of the MYT Regulations sets out the scope and extent of application of the Regulations, and states that the Commission shall determine Tariff, including terms and conditions thereof, for all matters for which it has jurisdiction under the EA, 2003, including inter alia Intra-State Transmission of electricity. Thus, ***the Commission has jurisdiction to determine the Transmission Tariff only after a valid Transmission License is issued to an entity****.*

…………………..

…………………..

2.2.28 Considering the foregoing, while the Commission in the present Order has approved the ARR for the entire FY 2014-15, ***its recovery from the Transmission Tariff shall be allowed proportionately only for that part of the ARR pertaining to the period from the date of grant of Transmission License to VIPL, i.e. 5 January, 2015, to the end of FY 2014-15, i.e. 31 March, 2015 …" {Emphasis added}***

5.2.17 In view of the aforementioned, the impact on ARR on account of transfer of assets from TPC-G to TPC-T is not considered in the present proceedings.

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.

5.3 Operation and Maintenance Expenses

TPC-T's Submission

5.3.1 The summary of impact of the proposed asset transfer on the opening asset position is given in the following Table:

Table 84: Impact of assets transfer from TPC-G to TPC-T (Rs. Crore)

Particulars	Closing balance of FY 2016-17	Impact of asset transfer	Opening balance of FY 2017-18
GFA (Rs. Crore)	3,163.60	53.94	3,217.55
66-400 kV Bays (nos.)	342	29	371
Less than 66 kV Bays (nos.)	905	47	952
Ckt. Km Transmission Line (km)	1,188.18	2.00	1,190.18

5.3.2 TPC-T has estimated the revised O&M expenditure for FY 2017-18 by considering the revision in number of Transmission Bays and in Circuit Kilometers of Transmission Lines vis-à-vis that approved in the MYT Order and applying the norms in accordance to the MYT Regulations, 2015. Against the O&M expenses of Rs. 193.79 Crore for FY 2017-18 approved by the Commission in the MYT Order, the revised O&M expenses for FY 2017-18 are submitted as Rs. 204.84 Crore.

Commission's Analysis and Ruling

5.3.3 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, O&M expense is allowed as per normative basis under the aforesaid Regulations. Item-wise scrutiny of O&M Expenses shall be carried out based on audited accounts made available at the time of truing up of FY 2017-18. Hence, no scrutiny for individual items under O&M expense has been carried out as part of the provisional truing up exercise.

5.3.4 TPC-T has added number of Bays and Circuit Km of Transmission Line from TPC-G to TPC-T. However, the Commission has not taken into consideration the impact of asset transfer from TPC-G to TPC-T as explained in the earlier sections of this Order.

5.3.5 TPC-T had earlier submitted that number 5 bays having voltage level below 66 kV were commissioned at Versova in FY 2017-18. By end of FY 2017-18, as per revised submission by TPC-T, 4 additional numbers of Bays were commissioned at Versova. Accordingly, total number of Bays with voltage level less than 66 kV commissioned at Versova is revised to 9.

5.3.6 The Commission queried TPC-T if all the bays claimed to be 'put to use' by TPC-T are in service and taking load. TPC-T submitted that many of the bays it has submitted to be 'put to use' are considered as 'put to use' due to its allocation to distribution licensees. Following are the details of such bays out of total bays submitted as put to use by TPC-T.

Table 85: Bays considered as put to use due to allocation to Distribution Licensees

Type of bay	Bays at Ixora Panvel substation which is not considered 'put to use' in FY 2017-18	Bays allocated to distribution licensee and yet to be put to use	Total
Between 66 kV and 400 kV	8	9	17
66 kV and below	15	12	27

5.3.7 8 Bays with voltage level above 66 kV and 15 Bays with voltage level less than 66 kV correspond to Sub-station at Ixora Panvel. This Sub-station was not put to use in FY 2017-18. Therefore, these bays are deducted while calculating normative O&M expense for FY 2017-18 and are dealt with separately in O&M Expense computation of FY 2018-19.

5.3.8 The Commission has not considered 9 nos. of bays between 66 kV and 400 kV and 12 nos. of 66 kV and below as 'put to use' as TPC-T has considered them as put to use only due to allocation to Distribution Licensees as already mentioned in Section 4.14.11 of this Order. Further, the Commission also observes that there are 9 bays between 66-400 kV which are allocated to distribution licensee and yet to put to use. This appears to be error in submission of TPC-T.

5.3.9 As explained in para. Following are the details of Bays added during FY 2017-18:

Table 86: Bays considered for determination of O&M expenses for FY 2017-18

Name of receiving station	Number of bays	
	MTR Petition	Approved in this Order
Above 66 kV and less than 400 kV		
Total	17	-
66 kV and below		
Total	27	-

5.3.10 The additions in Bays and Transmission Line length submitted by TPC-T and as approved by the Commission for FY 2017-18 are as shown in the Tables below:

Table 87: Estimated Line Lengths for FY 2017-18, as approved by the Commission

Line Length Circuit km (between 66kV and 400kV)	MYT Order	MTR Petition	Approved in this Order
Opening		1,190.18	1,188.18
Additions		0.00	0.00
Closing		1,190.18	1,188.18
Average	1201.49	1,190.18	1,188.18

Table 88: Estimated Number of Transmission Bays for FY 2017-18, as approved by the Commission

Number of Bays	MYT Order	MTR Petition	Approved in this Order
Bays (Between 66kV and 400kV)			
Opening		371	342
Additions		17	0
Closing		388	342
Average	**358**	**379.5**	**342**
Bays (<66kV)			
Opening		952	864
Additions		27	0
Closing		979	864
Average	**905**	**965.5**	**864**

5.3.11 Based on the above, the normative O&M expenses submitted by TPC-T and as approved by the Commission is shown in the Table below:

Table 89: Normative O&M Expenditure for FY 2017-18, as approved by the Commission

O&M Expenses	Unit	MYT Order	MTR Petition	Provisionally Approved in this Order
Transmission Lines				
Length of Transmission line	Ckt.km	1201.49	1,190.18	1,188.18
Norms as per Regulations	Rs lakh/ ckt-km	1.25	1.25	1.25
Bays (Between 66kV and 400kV)				
No of Bays	No.	**358**	**379.5**	**342.0**
Norms as per Regulations	Rs lakh/Bay	32.68	32.68	32.68
Bays (<66kV)				
No of Bays	No.	**905**	**965.5**	**864.0**
Norms as per Regulations	Rs lakh/Bay	6.83	6.83	6.83
O&M Expenses	**Rs Crore**	**193.79**	**204.84**	**185.63**

5.3.12 **The Commission approves O&M expenditure of Rs. 185.63 Crore for FY 2017-18, as against Rs. 204.84 Crore claimed by TPC-T, based on the number of Bays and Transmission Lines in ckt. km.**

5.4 Capitalisation

TPC-T's Submission

5.4.1 The Commission in the MYT Order has approved the capitalisation of Rs. 253.45 Crore for FY 2017-18. Out of the total revised estimate of capitalisation of Rs. 245.45 Crore in FY 2017-18 by TPC-T, Rs. 216.75 Crore is on account of DPR schemes which have been approved by the Commission. The capitalisation on account of Non-DPR schemes is Rs. 28.70 Crore and is about 13% of the DPR capitalisation for FY 2017-18.

5.4.2 A summarized form of scheme-wise capitalisation claimed in FY 2017-18 by TPC-T as submitted in Form 3.2 of the formats is provided in the Table below.

Table 90: Capitalisation for FY 2017-18, as submitted by TPC-T (Rs. Crore)

Particulars	Basis	Capitalisation claimed by TPC-T
DPR Schemes		
Carry Forward Schemes	a	214.97
New Schemes	B	1.78
Sub-total: DPR Schemes	[A]=a+b	**216.75**
Non-DPR schemes		
Total Carry Forward Schemes	D	21.11
New Schemes	E	4.46
HO & SS Allocation	F	3.13
Sub-total: Non-DPR Schemes	[B]=d+e+f	**28.70**
Total	**[A]+[B]**	**245.45**

Commission's Analysis and Ruling

5.4.3 The Commission has elaborated the analysis underlying its approval of the capitalisation for FY 2015-16 to FY 2019-20 in the paragraph 3.3 of this Order.

5.4.4 The summary of disallowances by the Commission in capitalisation for FY 2017-18 on basis as elaborated at paragraph 3.3 above is provided in the Table below:

Table 91: Disallowed capitalisation in FY 2017-18, approved by the Commission (Rs. Crore)

Particulars	Amount	Remark
Capitalisation under schemes already received In-principle approval	212.38	Claimed by TPC-T
DPR submitted to MERC	4.37	Approval is accorded to this DPR on 3 August, 2018.
Total DPR schemes submitted [A]	216.75	
Disallowance		
110/33KV S/S at Ixora, Panvel	1.44	• Actual capitalisation during FY 2017-18. • The project is commissioned; however, assets are not put to use in FY 2017-18 • Capitalisation for this scheme allowed in FY 2018-19
	24.68	• Cumulative capitalisation disallowed in MYT Order. • Assets not put to use in FY 2017-18

Particulars	Amount	Remark
		• Capitalisation for this scheme allowed in FY 2018-19
145 kV GIS at BKC	4.31	• The cost overrun above the revised approved DPR cost is disallowed. • Scheme is completed however, the final closure report and capitalisation is pending.
Installation of 220 kV GIS Mahalaxmi	11.12	• The cost overrun above the revised approved cost is disallowed. • Scheme is completed however the capitalisation is pending
220kV GIS at Sahar Airport	5.19	• The cost overrun above the approved DPR cost is disallowed. • For additional scope of work, TPC-T has submitted revised DPR to STU and STU approval is pending. After STU approval, the revised DPR will be submitted for revised in-principle approval of the Commission. • Scheme is completed however, the capitalisation is pending.
Replacement of Transformer 1 & 2 at Saki	19.67	Capitalisation in FY 2017-18 is provisionally considered in FY 2018-19 as the assets are presently not 'put to use'
SAP Implementation	5.05	Cost over-run & exceeding in-principle approval cost of the Commission
220 kV GIS at Versova	10.75	• Capitalisation is deferred to FY 2019-20 as presently there is negligible progress.
Total disallowance [B]	82.20	
Earlier disallowed capitalisation of Rs. 1.51 Crore for DPR Scheme '145 kV GIS Versova' [C]	0.19	Disallowance equal to depreciation over FY 2014-15 to FY 2017-18
Approved capitalisation under DPR scheme [A]-[B]-[C]	134.36	

Non-DPR schemes

5.4.5 TPC-T has considered capitalisation towards HOSS allocation of Rs. 3.13 Crore in FY 2017-18. This capitalisation has been considered as a part of non-DPR capitalization in line with the MYT Regulations.

5.4.6 TPC-T has submitted capitalisation under the Non-DPR schemes of Rs 28.70 Crore in FY 2017-18 inclusive of HOSS allocation. It was observed that capitalisation for Non-DPR schemes claimed as above is more than 20% of the capitalisation approved for DPR scheme in this Order. Hence, the Commission in line with the methodology adopted in the earlier Orders, approves the capitalisation for Non-DPR schemes of Rs 26.87 Crore equivalent to 20% of the approved capitalisation of DPR schemes.

5.4.7 The capitalisation submitted by TPC-T and approved by the Commission is summarized in Table below:

Table 92: Capitalisation for FY 2017-18, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
DPR approved in principle	213.92	212.38	129.99
DPR submitted but not approved, DPR to be submitted (Approved on 3 August, 2018)	-	4.37	4.37
Total DPR	**-**	**216.75**	**134.36**
Non-DPR and HOSS	39.53	28.70	26.87
Total	**253.45**	**245.45**	**161.23**

5.4.8 **The Commission approves Capitalisation of Rs. 161.23 Crore for FY 2017-18, as against Rs. 245.45 Crore claimed by TPC-T.**

5.5 Depreciation

TPC-T's Submission

5.5.1 TPC-T has worked out revised depreciation considering the estimated capitalisation and depreciation rates as per the provisions of Regulation 27 of MYT Regulations, 2015. Depreciation is calculated after including GFA of assets transferred from TPC-G to TPC-T. The depreciation worked out or FY 2017-18 is Rs. 142.37 Crore.

Commission's Analysis and Ruling

5.5.2 As detailed in Section above related to 'Transfer of assets from Generation Business to Transmission Business', the Commission has not considered the impact of transfer of assets from Generation Business to Transmission Business in this Order.

5.5.3 Accordingly, the closing GFA of FY 2016-17 approved in this Order is considered as opening GFA of FY 2017-18 and capitalisation approved during FY 2017-18 is added to arrive at closing GFA of FY 2017-18.

5.5.4 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.

5.5.5 For provisional Truing up of FY 2017-18, the Commission has calculated depreciation rate for FY 2017-18 as per the actual depreciation rate on average of asset class-wise GFA for the year provided by TPC-T.

5.5.6 The above depreciation rate is applied on the average of GFA for FY 2017-18 approved by the Commission to arrive at the depreciation expenses for FY 2017-18. The depreciation expense claimed by TPC-T and that approved by the Commission is provided in the Table below.

Table 93: Depreciation for FY 2017-18, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Opening GFA	3116.13	3217.55	3,146.56
Closing GFA		3462.99	3,307.79
Average GFA		3340.27	3,227.17
Depreciation	**127.89**	**142.37**	**137.55**
Average depreciation rate	4.10%	4.26%	4.26%

5.5.7 **The Commission approves Depreciation of Rs. 137.55 Crore for FY 2017-18, as against Rs. 142.37 Crore claimed by TPC-T.**

5.6 Interest on Long Term Loan

TPC-T's Submission

5.6.1 Based on the closing balance of loan for FY 2016-17, additional capitalisation during FY 2017-18, considering the interest rate equivalent to that computed for FY 2016-17 and repayment equal to depreciation, the Interest on Long Term Loan for FY 2017-18 works out to be Rs. 108.35 Crore. TPC-T has added loan capital on account of transfer of assets from TPC-G to TPC-T in closing loan balance of FY 2016-17 to arrive at opening loan balance of FY 2017-18.

Commission's Analysis and Ruling

5.6.2 As detailed in Section above related to 'Transfer of assets from Generation Business to Transmission Business', the Commission has not considered the impact of transfer of assets from Generation Business to Transmission Business in this Order.

5.6.3 The Commission has considered the closing loan balance for FY 2016-17 approved in this Order as the opening loan balance of FY 2017-18. Further, loan repayment has been considered equal to the depreciation approved for FY 2017-18 in this Order in accordance with Regulation 29 of the MYT Regulations, 2015 to arrive at the closing balance of loan for FY 2017-18.

5.6.4 The Commission has considered weighted average interest rate for FY 2016-17, as calculated in earlier section of this Order, as interest rate of Loan Capital for FY 2017-18. Interest on Loan Capital is calculated by applying this interest rate on average normative loan balance. Any change in Interest on Loan Capital due to change in weighted average interest rate will be considered at the time of final Truing up of FY 2017-18.

5.6.5 The summary of the Interest on Long Term Loans as submitted by TPC-T and as approved by the Commission for FY 2017-18 is shown in the Table below:

Table 94: Interest on Loan Capital for FY 2017-18, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Opening balance of Loan	956.10	1023.55	990.29
Addition of Loan	177.41	171.81	112.86
Repayment of Loan	127.89	142.37	137.55
Closing balance of Loan	1005.63	1052.99	965.60
Weighted average interest rate at the beginning of year	10.69%	10.44%	9.47%
Interest expense	**104.88**	**108.35**	**92.63**

5.6.6 **The Commission approves Interest on Loan Capital of Rs. 92.63 Crore for FY 2017-18, as against Rs. 108.35 Crore claimed by TPC-T.**

5.7 Interest on Working Capital

TPC-T's Submission

5.7.1 The IoWC is computed as per the MYT Regulations, 2015. TPC-T has considered an interest rate in accordance with Regulation 31.2 (b) of the MYT Regulations, 2015 and the First Amendment to the MYT Regulations 2015.

Commission's Analysis and Ruling

5.7.2 The Commission has assessed the working capital requirement based on Regulation 31.2 of MYT Regulations, 2015. The Commission observes that TPC-T has claimed normative IoWC.

5.7.3 One-twelfth (1/12) of the amount of O&M Expenses is considered on normative O&M Expenses approved in this Order. One and half months of revenue received is considered as approved in the Intra State Transmission System Tariff Order.

5.7.4 Maintenance spares at one per cent is considered based on opening GFA for FY 2017-18 as approved on provisional True up of FY 2017-18 in this Order.

5.7.5 Interest rate for IoWC is to be calculated as per Regulation 31.2 (b) which specifies as below as follows:

"Provided that for the purpose of Truing up for any year, interest on working capital shall be allowed at a rate equal to the weighted average Base Rate prevailing during the concerned Year plus 150 basis points"

5.7.6 Further, the Base Rate has to be considered as one year MCLR from 29 November, 2017 as per the MYT (Amendment) Regulations, 2017. As FY 2017-18 is already over, the Commission has calculated rate of IoWC referring to Regulation above as follows:

Table 95: Computation of normative Interest Rate on Working Capital, by the Commission

From	To	No. of days	Rate Type	Rate %
01-04-2017	30-06-2017	91	Base Rate	9.10%
01-07-2017	30-09-2017	92	Base Rate	9.00%
01-10-2017	28-11-2017	59	Base Rate	8.95%
29-11-2017	31-01-2018	64	MCLR	7.95%
01-02-2018	31-03-2018	59	MCLR	8.15%
			Weighted average Base Rate [A]	**8.70%**
			Rate of IoWC = [A] + 1.50%	**10.20%**

5.7.7 TPC-T has considered an interest rate of 9.49% to compute the IoWC against which the Commission has approved an Interest Rate of 10.20% for IoWC computation. The IoWC claimed by TPC-T and as approved by the Commission is provided in the Table below:

Table 96: Interest on Working Capital for FY 2017-18, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Operations and Maintenance Expenses for one month		17.07	15.47
Maintenance spares at one per cent of the opening Gross Fixed Assets for the Year		32.18	31.47
One and a half month of the expected revenue from transmission charges at the prevailing tariffs		82.71	82.71
Total Working Capital Requirement		131.96	129.64
Rate of Interest (% p.a.)		9.49%	10.20%
Interest on Working Capital	**14.04**	**12.52**	**13.22**

5.7.8 **The Commission approves Interest on Working Capital for FY 2017-18 of Rs. 13.22 Crore, as against Rs. 12.52 Crore claimed by TPC-T.**

5.8 Return on Equity

TPC-T's Submission

5.8.1 Based on the capitalised expenditure and Debt: Equity ratio of 70:30, the Return on Equity works out to be Rs. 169.18 Crore.

Commission's Analysis and Ruling

5.8.2 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 2016-17 in this Order in accordance with Regulation 28.3 of the MYT Regulations, 2015.

5.8.3 The closing equity for FY 2016-17 approved in this Order is considered as the opening equity for FY 2017-18. TPC-T has not submitted information about retirement of assets during FY 2017-18, 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 2017-18 in this Order to the opening balance of equity.

5.8.4 The RoE as claimed by TPC-T and as approved by the Commission for FY 2016-17 after Truing up is summarized in the following Table.

Table 97: Return on Equity for FY 2017-18, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Regulatory equity at the beginning of the year	1024.27	1054.70	1033.40
Capitalisation during the year	253.45	245.45	161.23
Equity portion of assets capitalised during the year	76.04	73.63	48.37
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	1100.31	1128.33	1081.77
Return on regulatory equity at the beginning of the year	158.76	163.48	160.18
Return on 50% of the equity portion of asset value capitalised during the year	5.89	5.71	3.75
Total Return on regulatory equity	**164.66**	**169.18**	**163.93**

5.8.5 **The Commission approves Return on Equity of Rs. 163.93 Crore for FY 2017-18, as against Rs. 169.18 Crore claimed by TPC-T.**

5.9 Contribution to Contingency Reserves

TPC-T's Submission

5.9.1 Contribution to Contingency Reserves as per Regulation 34 of the MYT Regulations, 2015 works out to be Rs. 8.04 Crore.

Commission's Analysis and Ruling

5.9.2 The Commission in line with Regulation 34.1 of MYT Regulations, 2015 computed the Contingency Reserves for FY 2017-18 equivalent to 0.25% of opening balance of GFA of FY 2017-18. Further, the approved contingence reserves for FY 2017-18 is added to the above mentioned closing balance of Contingency Reserves for FY 2016-17 for arriving at the cumulative balance of Contingency Reserves. The Commission observed that the closing balance has not exceeded 5% of the original cost of fixed assets for FY 2017-18.

5.9.3 The computation of Contingency Reserves as claimed by TPC-T and as approved by the Commission for FY 2017-18 is provided in the Table below.

Table 98: Contribution to Contingency Reserves for FY 2017-18, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Opening Balance of Contingency Reserves		81.72	81.71
Opening Gross Fixed Assets		3217.55	3146.56
Opening Balance of Contingency Reserves as % of Opening GFA		2.54%	2.60%
Contribution to Contingency Reserves	**7.79**	**8.04**	**7.87**

5.9.4 **The Commission approves contribution to Contingency Reserves of Rs. 7.87 Crore for FY 2017-18, as against Rs. 8.04 Crore claimed by TPC-T.**

5.10 Non-Tariff Income

TPC-T's Submission

5.10.1 The Non-Tariff Income for FY 2017-18 is Rs. 18.11 Crore which is same as that approved by the Commission in the MYT Order.

Commission's Analysis and Ruling

5.10.2 The Commission has considered the Non-Tariff Income for FY 2017-18 in this Order same as that approved in the MYT Order. Any difference between the actual Non-Tariff Income and approved in this Order would be considered at the time of final Truing up. The summary of Non-Tariff Income as submitted by TPC-T and as approved by the Commission is shown in the Table below:

Table 99: Non-Tariff Income for FY 2017-18, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Non-Tariff Income	18.11	18.11	18.11

5.10.3 **The Commission approves Non-Tariff Income of Rs. 18.11 Crore for FY 2017-18, as claimed by TPC-T.**

5.11 Income Tax

TPC-T's Submission

5.11.1 As per the MYT Regulations, 2015, 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. In view of this, Income Tax for FY 2017-18 has been considered according to the latest Income Tax allowed by the Commission, i.e., FY 2016-17which is Rs. 23.67 Crore.

Commission's Analysis and Ruling

5.11.2 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 2016-17, has worked out the Income Tax payable considering Trued-up amounts and Efficiency Gains.

5.11.3 While approving the Income Tax for FY 2016-17, Income Tax payable was worked out considering the Truing up amounts as per the audited accounts. Therefore, in accordance with Regulations 33.1, the Commission approves the Income Tax for FY 2017-18 as equivalent to that approved in this Order for FY 2016-17.

5.11.4 The Income Tax as submitted by TPC-T and as approved by the Commission for FY 2017-18 is as summarized in the Table below:

Table 100: Income Tax for FY 2017-18, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Income Tax	**66.74**	**23.67**	**21.23**

5.11.5 **The Commission approves Income Tax of Rs. 21.23 Crore for FY 2017-18, as against Rs. 23.67 Crore claimed by TPC-T.**

5.12 Revenue from Transmission Charges

TPC-T's Submission

5.12.1 TPC-T has considered revenue from Transmission charges as Rs. 661.68 Crore based on Order dated 22 July, 2016 in Case No. 91 of 2016.

5.12.2 TPC-T has not considered any income accruing to them from open access charges.

Commission's Analysis and Ruling

5.12.3 The Commission observed that the Transmission charges submitted in the Petition is in line with the InSTS Order in Case No. 91 of 2016 applicable for FY 2017-18.

5.12.4 The following Table shows the revenue from Transmission charges approved by the Commission for FY 2017-18.

Table 101: Revenue from Transmission Charges for FY 2017-18, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Provisionally Approved in this Order
Revenue from Transmission charges	**661.68**	**661.68**	**661.68**

5.13 Provisional Truing up of FY 2017-18

TPC-T's Submission

5.13.1 There is Surplus for FY 2017-18 as Rs. 10.82 Crore on provisional Truing up.

Table 102: Provisional Truing up for FY 2017-18, as submitted by TPC-T (Rs. Crore)

Particulars	MYT Order	MTR Petition
Operation & Maintenance Expenses	193.79	204.84
Depreciation Expenses	127.89	142.37
Interest on Loan Capital	104.88	108.35
Other Finance Charges	-	0.00
Interest on Working Capital	14.04	12.52
Income Tax	66.74	23.67
Contribution to contingency reserves	7.79	8.04
Total Revenue Expenditure	**515.13**	**499.79**
Add: Return on Equity Capital	164.66	169.18
Aggregate Revenue Requirement	**679.79**	**668.97**
Less: Non-Tariff Income	18.11	18.11
Aggregate Revenue Requirement from Transmission	**661.68**	**650.86**

Commission's Analysis and Ruling

5.13.2 The provisional Revenue Surplus as approved by the Commission for FY 2017-18 is as summarized in the Table below:

Table 103: Provisional Truing up for FY 2017-18, as approved by the Commission (Rs. Crore)

Particulars	MYT Order	MTR Petition	Approved in this Order
Operation & Maintenance expenses	193.79	204.84	185.63
Depreciation expenses	127.89	142.37	137.55
Interest on long-term loan capital	104.88	108.35	92.63
Other finance charges	-	-	-
Interest on working capital	14.04	12.52	13.22
Income tax	66.74	23.67	21.23
Contribution to contingency reserves	7.79	8.04	7.87
Total Revenue Expenditure	**515.13**	**499.79**	**458.12**
Return on equity capital	164.66	169.18	163.93
Aggregate Revenue Requirement	**679.79**	**668.97**	**622.05**
Less: Non-Tariff Income	18.11	18.11	18.11
Aggregate Revenue Requirement from Transmission Tariff	**661.68**	**650.86**	**603.94**
Revenue from Transmission Tariff	**661.68**	**661.68**	661.68
Revenue Gap/(Surplus)	**-**	**-10.82**	**-57.74**

5.13.3 The detailed analysis underlying the Commission's approval of individual ARR elements on provisional Truing up of FY 2017-18 is already set out above; however, the variation in the ARR sought by the TPC-T and that approved by the Commission in this Order is mainly on account of reduction in O&M expenses, Depreciation and Interest on Long Term Loan Capital. Reduction in these ARR elements is on account of the transfer of assets from TPC-G to TPC-T not considered in the present Order.

5.13.4 **The Commission approves a provisional stand-alone Surplus of Rs. 57.74 Crore for FY 2017-18, as against Rs. 10.82 Crore surplus claimed by TPC-T.**

6 REVISED ESTIMATES OF ARR FOR FY 2018-19 TO FY 2019-20

6.1 Background

6.1.1 TPC-T has submitted revised estimates of ARR for FY 2018-19 to FY 2019-20 under various heads, viz., O&M expenses, depreciation, Interest on Long Term Loans, Interest on Working Capital, etc., as per the MYT Regulations, 2015. The Commission has discussed its approval in this Section.

6.2 O&M Expenses

TPC-T's Submission

6.2.1 TPC-T has estimated the O&M expenses based on the Transmission Line length in Circuit Kilometers and number of Bays expected to be in operation from FY 2018-19 to FY 2019-20.

6.2.2 The Transmission Line length in Circuit Kilometers and number of Bays as projected by TPC-T in its Petition are shown in the Tables below:

Table 104: Projection of Transmission Line Lengths (ckt. km) for FY 2018-19 and FY 2019-20, as submitted by TPC-T

Line Length Circuit km (between 66kV and 400kV)	FY 2018-19		FY 2019-20	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Opening	1206.74	1190.18	1215.74	1252.18
Additions	9.00	62.00	0.00	19.00
Closing	1215.74	1252.18	1215.74	1271.18
Average	1211.24	1221.18	1215.74	1261.68

Table 105: Projection of Transmission Bays for FY 2018-19 and FY 2019-20, as submitted by TPC-T

	FY 2018-19		FY 2019-20	
Bays	**MYT Order**	**MTR Petition**	**MYT Order**	**MTR Petition**
Bays (Between 66kV and 400kV)				
Opening	363	388	388	403
Additions	25	15	0	21
Closing	388	403	388	424
Average	375.5	396	388	414
Bays (<66kV)				

	FY 2018-19		FY 2019-20	
Bays	**MYT Order**	**MTR Petition**	**MYT Order**	**MTR Petition**
Opening	920	979	1005	1014
Additions	85	35	0	59
Closing	1005	1014	1005	1073
Average	962.50	997	1005	1044

6.2.3 Based on the above projections, the normative O&M expenses is computed as shown in Table below:

Table 106: O&M Expenses for FY 2018-19 and FY 2019-20, as submitted by TPC-T

	FY 2018-19		FY 2019-20	
Bays	**MYT Order**	**TPC-T submission**	**MYT Order**	**TPC-T submission**
Norm- Bays (Rs. Lakh/Bay)				
Bays (Between 66kV and 400kV)	34.31	34.31	36.03	36.03
Bays (<66kV)	7.18	7.18	7.53	7.53
Norm- Transmission Lines (Rs. Lakh/ckt. km)				
Between 66kV and 400kV	1.32	1.32	1.38	1.38
O&M Expenses (Rs Crore)				
O&M Expenses	213.93	223.36	232.25	244.97

Commission's Analysis and Ruling

6.2.4 In the present Petition, TPC-T has considered 8 bays "between 66 kV and 400 kV" and 15 bays of "less than 66 kV" in FY 2017-18 for Ixora, Panvel receiving station. As mentioned earlier, the Commission has not considered these bays towards O&M expense in FY 2017-18 due to asset not being put to use. As these bays are likely to be put to use in FY 2018-19, the Commission has considered all 8 bays "between 66 kV and 400 kV" in computation of O&M expense of FY 2018-19. The Commission has considered 11 bays of less than 66 kV in O&M expense of FY 2018-19 out of 15 considered by TPC-T in FY 2017-18. Four bays being spare, are not considered due to the reasons of assent not put to use.

6.2.5 TPC-T has included 9 nos. of 'above 66 kV bays' and 34 nos. of '66 kV and below' bays from Antop Hill substation in FY 2019-20. However, as per approved DPR Scheme for '220 kV GIS at Antop Hill Wadala', this substation will be commissioned in FY 2020-21. Therefore, bays of this substation are expected to be put to use in FY 2020-21. In response to query by the Commission regarding capitalisation of this substation, TPC-T has acknowledged that this scheme will be commissioned during FY 2020-21. Accordingly, the Commission has reduced addition in bays of FY 2019-20 by 9 nos. of 'above 66 kV bays' and 34 nos. of '66 kV and below' bays for FY 2019-20.

6.2.6 The O&M expenses for FY 2018-19 to FY 2019-20, after taking into account the years under consideration for the present MTR Order along with the respective Transmission network parameters and the applicable norms, are summarized in the following Table. O&M expenses for Transmission Line (Ckt. Km) and Bays have been computed by considering only such schemes for which capitalisation is approved.

Table 107: O&M Expenses for FY 2018-19 and FY 2019-20, as approved by the Commission

		FY 2018-19			FY 2019-20		
O&M Expenses	**Unit**	**MYT Order**	**MTR Petition**	**Approved in this Order**	**MYT Order**	**MTR Petition**	**Approved in this Order**
For Line							
Distance of Line (Average)	**ckt. km**						
Between 66kV and 400kV		1,211.24	1,221.18	1,219.18	1,215.74	1,261.68	1,259.68
O&M expenditure for Lines (A)	**Rs. Crore**	**15.99**	**16.12**	**16.09**	**16.78**	**17.41**	**17.38**
For Bays							
Number of Bays (Average)	**No.**						
Between 66kV and 400kV		375.50	395.50	353.50	388	413.50	371.00
Bays (<66kV)		962.50	996.50	887.00	1005	1043.50	922.50
O&M expenditure for Bays (B)	**Rs. Crore**	**197.94**	**207.24**	**184.97**	**215.47**	**227.56**	**203.14**
Total O&M expenditure (A+B)	**Rs. Crore**	**213.93**	**223.36**	**201.07**	**232.25**	**244.97**	**220.52**

6.2.7 The Commission approves normative O&M Expenses of Rs. 201.07 Crore for FY 2018-19 and Rs. 220.52 Crore for FY 2019-20.

6.3 Capital Expenditure and Capitalisation

TPC-T's Submission

6.3.1 TPC-T, in its MTR Petition, submitted details of capitalisation for FY 2018-19 to FY 2019-20 as shown in the Table below:

Table 108: Capitalisation for FY 2018-19 and FY 2019-20, as submitted by TPC-T (Rs. Crore)

	FY 2018-19		FY 2019-20	
Category	**MYT Order**	**TPC-T submission**	**MYT Order**	**TPC-T submission**
DPR approved	229.40	286.25	137.92	430.33
DPR submitted/ yet to be submitted	-	10.90	-	2.34
DPR total	**229.40**	**297.15**	**137.92**	**432.67**
Non-DPR including HOSS*	20.13	37.26	11.71	23.97
Total	**249.53**	**334.40**	**149.63**	**456.64**

** HOSS of Rs. 6.18 Crore annually considered*

Commission's Analysis and Ruling

6.3.2 The Commission has elaborated the analysis underlying its approval of the capitalisation for FY 2015-16 to FY 2019-20 in the paragraph 3.3 of this Order.

6.3.3 As regards to the scheme of '220 kV Antop Hill substation', the Commission had approved DPR cost of Rs. 195.83 Crore vide letter dated 20 April, 2018. The Commission observed that TPC-T has claimed Rs. 164.33 Crore towards '220 kV GIS at Antop Hill Wadala'. As per approval, the scheme was proposed to be commissioned in FY 2020-21. However, TPC-T has claimed the capitalisation in FY 2019-20. Hence, the Commission sought the clarification in this regard. The Commission noted submission of TPC-T in response to this query that capitalisation of Rs. 164.33 Crore was inadvertently shown in FY 2019-20 instead of FY 2020-21. Accordingly, this capitalisation of Rs. 164.33 Crore in FY 2019-20 is not allowed in this control period.

6.3.4 The capitalisation as claimed by TPC-T and as approved by the Commission for FY 2018-19 and FY 2019-20 is provided in the Table below:

Table 109: Capitalisation for FY 2018-19 and FY 2019-20, as approved by the Commission (Rs. Crore)

Category	FY 2018-19			FY 2019-20		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
DPR	229.40	297.15	334.21	137.92	432.67	280.24
Non-DPR including HOSS*	20.14	37.26	37.26	11.71	23.97	23.97
Total	**249.53**	**334.40**	**371.47**	**149.63**	**456.64**	**304.21**

* Including HOSS expense

6.3.5 **The Commission approves Capitalisation of Rs. 371.47 Crore for FY 2018-19 and Rs. 304.21 Crore for FY 2019-20.**

Deemed Cancelled DPR Schemes

6.3.6 The Commission observed that there are certain schemes against which TPC-T has neither incurred any cost in the past nor TPC-T has planned to incur any cost in future. Such schemes are being treated as deemed cancelled as submitted by TPC-T. TPC-T may submit fresh DPRs for these schemes, in case it intends to implement these schemes in future. Details of these schemes is provided in Table below:

Table 110: Deemed cancelled DPR schemes

S. No.	Project Title	MERC Approval Date	Approved Date of Completion	Actual Capitalisation till FY 2017-18	Proposed Capitalisation till FY 2019-20
1	Add. Outlets & GIS building at Vikhroli	25-Nov-10	2011-12	0.61	0.00
2	Const. of 220 kV KLW SAL # 5 Line	12-Apr-12	2013-14	0.00	0.00
3	400kV Nagothane-Dehrand Line	27-Jul-11	2012-13	0.20	0.00
4	145 kV GIS with Building at Dharavi R/S	01-Apr-14	2015-16	0.00	0.00
5	Installation of 400/220/33kV GIS at Marve	05-Feb-14		0.00	0.00
6	245 kV R/S at Chunabhatti	18-Nov-14	2017-18	0.00	0.00
7	145 kV GIS at Wadala	20-Oct-15	2012-13	0.00	0.00

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

6.3.7 Further, there are certain schemes where in the past, TPC-T has incurred capital expenditure and capitalised the same, however, in future years it has not proposed any capitalisation. TPC-T is required to submit project completion report for such schemes. Details of these schemes are provided in Table below:

Table 111: DPR schemes for which Completion Report to be submitted

S. N.	Project Title	MERC Approval Date	Approved Date of Completion	Actual Date of Completion	Actual Capitalisation till FY 2017-18	Proposed Capitalisation till FY 2019-20
DPRs completed by TPC-T on which completion reports to be submitted						
1	Replacement of SERCK RTUs at Borivali	18-May-11	2012-13	2013-14	3.71	0
2	220 kV Interconnection with MSETCL at Bo	4-Jul-07	2009-10	2014-15	25.99	0
3	RTUs for SCADA (Kalyan)	18-May-11	2012-13	2013-14	4.32	0
4	Procurement of Unified SCADA System	25-Nov-10	2012-13	2013-14	14.69	0
5	Additional 33 KV outlet from Borivali, Malad, Backbay	21-Dec-12	2014-15	2014-15	4.69	0
6	Augmentation of 33KV outlets at Backbay	21-Dec-12	2014-15	2015-16	7.75	0
7	BackBay Ring system	7-Aug-08	2012-13	2015-16	196.86	0
8	145 kV and 33 kV GIS at Powai	10-Jun-08	2010-11	2015-16	121.46	0
9	Enhancing Security system at Transmission	16-Nov-10	2012-13	2013-14	14.09	0

S. N.	Project Title	MERC Approval Date	Approved Date of Completion	Actual Date of Completion	Actual Capitalisation till FY 2017-18	Proposed Capitalisation till FY 2019-20
10	Replacement of 250 MVA ICT#3 at Salsette	7-Apr-11	-	Completed	10.83	0
11	22 kV GIS Replacement of 22 kV BS I to V	16-Mar-12	2014-15	2016-17	11.56	0
12	Replacement of 250 MVA ICT#7 at Dharavi	27-Sep-13	2013-14	2014-15	16.91	0
13	Replacement of OPGW on 110 kV Tr - Prl lines	8-Nov-10	2011-12	2013-14	2.53	0
14	Additional Power Transformers at Borivali	25-Nov-10	2012-13	2014-15	14.58	0
15	Construction of New 220kV bays (3 nos.)	9-Nov-10	2011-12	2015-16	30.59	0
16	Replacement of 22kV BS 1 &2 with 33kV	8-Nov-10	2011-12	2017-18	11.60	0
17	Additional 22Kv Outlets at Malad	21-Dec-12	2014-15	2017-18	6.90	0

6.4 Depreciation

TPC-T's Submission

6.4.1 Depreciation expenses for FY 2018-19 to FY 2019-20 are projected by applying the depreciation rate as arrived at for FY 2016-17. The depreciation from FY 2018-19 to FY 2019-20 as submitted by TPC-T is as shown in Table below:

Table 112: Depreciation for FY 2018-19 and FY 2019-20, as submitted by TPC-T (Rs. Crore)

Particulars	FY 2018-19		FY 2019-20	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Opening GFA	3369.58	3462.99	3668.07	3797.40

Particulars	FY 2018-19		FY 2019-20	
Depreciation	140.61	154.72	148.10	171.58
Average depreciation rate (%)	4.17%	4.26%	4.04%	4.26%

Commission's Analysis and Ruling

6.4.2 For computing Depreciation for FY 2018-19 and FY 2019-20 of the Control Period, the Commission has considered closing GFA for FY 2017-18 as provisionally Trued up earlier in this Order as opening balance of GFA for FY 2018-19 and assets added during the year, subject to the capitalisation approved for the Control Period in this Order. The closing balance of GFA for FY 2018-19 is arrived by adding the asset addition during the year less the asset retired from the opening balance if any. In line with the same methodology the Commission has computed the opening and closing GFA for FY 2019-20.

6.4.3 The depreciation for FY 2018-19 and FY 2019-20 as claimed by TPC-T and as approved by the Commission is shown in Table below:

Table 113: Depreciation for FY 2018-19 and FY 2019-20, as approved by the Commission (Rs. Crore)

	FY 2018-19			FY 2019-20		
Particulars	**MYT Order**	**MTR Petition**	**Approved in this Order**	**MYT Order**	**MTR Petition**	**Approved in this Order**
Opening GFA		3,462.99	3,307.79		3,797.40	3,679.26
Addition in GFA		334.40	371.47		456.64	304.21
Closing GFA		3,797.40	3,679.26		4,254.04	3,983.47
Average GFA	140.61	3,630.19	3,493.52	148.10	4,025.72	3,831.36
Depreciation		**154.72**	**148.90**		**171.58**	**163.30**
Average depreciation rate (%)		**4.26%**	**4.26%**		**4.26%**	**4.26%**

6.4.4 The Commission approves Depreciation of Rs. 148.90 Crore for FY 2018-19 and Rs. 163.30 Crore for FY 2019-20.

6.5 Interest on Long Term Loan

TPC-T's Submission

6.5.1 TPC-T submitted that it has been availing Loans from time to time for financing its capital expenditure and would continue to tie up loans during the 3rd Control Period depending on the capital expenditure requirements, phasing and for refinancing. TPC-T submitted that it may be difficult to predict the interest rates for FY 2018-19 and FY 2019-20 at the time of submission of MTR Petition. Hence, the actual loans have been considered till FY 2017-18 to the extent already availed and normative loans have been considered for capitalisation in FY 2018-19 and FY 2019-20. Such normative loans have been assumed to be financed at an effective interest rate arrived based on the weighted average rate of interest of actual loans, i.e., interest rate considered for FY 2017-18.

6.5.2 TPC-T submitted that Interest on Long Term Loan has been worked out by considering the closing balance of loan for FY 2017-18 and the capitalisation proposed in FY 2018-19 and FY 2019-20. Further, as per the MYT Regulations, 2015 the repayment is considered on a normative basis equal to depreciation allowed for FY 2018-19 and FY 2019-20. Considering the same, the interest expenses submitted by TPC-T are shown in the following Table:

Table 114: Interest on Long Term Loan for FY 2018-19 and FY 2019-20, as submitted by TPC-T (Rs. Crore)

Particulars	FY 2018-19		FY 2019-20	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Opening balance of loan	1,005.63	1,052.99	1,039.69	1,132.35
Addition of loan	174.67	234.08	104.74	319.65
Repayment of loan	140.61	154.72	148.10	171.58
Closing balance of loan	1,039.69	1,132.35	996.33	1,280.42
Weighted average interest rate at the beginning of year	10.69%	10.44%	10.69%	10.44%
Interest expense	**109.35**	**114.03**	**108.85**	**125.89**

Commission's Analysis and Ruling

6.5.3 For the interest expenses, the Commission has considered the approved closing balance of loan for FY 2017-18 considered in this Order as the opening balance of FY 2018-19. The loan repayment has been considered equal to the Depreciation allowed during the respective years of the 3rd Control Period in this Order, in accordance with Regulation 29.3 of MYT Regulations, 2015. The loan addition during the year has been considered at 70% of the capitalisation approved in this Order, based on the debt: equity ratio of 70:30. Thus the closing balance of loan is arrived for FY 2018-19. The above methodology is adopted for obtaining the opening balance and closing balance of loan for FY 2019-20.

6.5.4 With regards to rate of interest, Regulation 29.5 of MYT Regulations, 2015 specifies as follows:

"The rate of interest shall be the weighted average rate of interest computed on the basis of the actual loan portfolio at the beginning of each year:

…Provided also that if the Generating Company or the Licensee or the MSLDC, as the case may be, does not have actual loan even in the past, the weighted average rate of interest of its other Businesses regulated by the Commission shall be considered…"

6.5.5 Actual loan portfolio at the beginning of the year is not available for FY 2018-19 to FY 2019-20. Therefore, rate of interest rate as approved by the Commission in earlier section of this Order for FY 2016-17 is considered for FY 2018-19 and FY 2019-20. The Interest on Long Term Loan has been calculated on the normative average loan of each year by applying the rate of interest as considered above.

6.5.6 The Interest expenses on Long Term Loan as claimed by TPC-T and as approved by the Commission for FY 2018-19 to FY 2019-20, is summarized in the Table below:

Table 115: Interest on Long Term Loan for FY 2018-19 and FY 2019-20, as approved by the Commission (Rs. Crore)

Particulars	FY 2018-19			FY 2019-20		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Opening balance of loan	1,005.63	1,052.99	965.60	1,039.69	1,132.35	1,076.74
Addition of loan	174.67	234.08	260.03	104.74	319.65	212.95
Repayment of loan	140.61	154.72	148.90	148.1	171.58	163.30
Closing balance of loan	1,039.69	1,132.35	1,076.74	996.33	1,280.42	1,126.39
Weighted average interest rate at the beginning of year	10.69%	10.44%	9.47%	10.69%	10.44%	9.47%
Interest expense	**109.35**	**114.03**	**96.72**	**108.85**	**125.89**	**104.34**

6.5.7 The Commission approves Interest on Long Term Loans of Rs. 96.72 Crore for FY 2018-19 and Rs. 104.34 Crore for FY 2019-20.

6.6 Interest on Working Capital

TPC-T's Submission

6.6.1 The working capital requirement has been computed on a normative basis in accordance with the MYT Regulations, 2015, which specifies the components of working capital of the Transmission business. The interest rate considered for computing the Interest on Working Capital has been considered as 9.49%. The Interest on Working Capital as submitted by TPC-T is shown in Table below:

Table 116: Interest on Working Capital for FY 2018-19 & FY 2019-20, as submitted by TPC-T (Rs. Crore)

Particulars	FY 2018-19		FY 2019-20	
	MYT Order	TPC-T submission	MYT Order	TPC-T submission
Operations and Maintenance Expenses for one month	17.83	18.61	19.35	20.41
Maintenance spares at one per cent of the opening Gross Fixed Assets for the Year	33.70	34.63	36.68	37.97
One and a half month of the expected revenue from transmission charges at the prevailing tariffs	88.89	104.96	93.24	96.30
Total Working Capital Requirement	**140.41**	**158.20**	**149.27**	**154.68**
Rate of Interest (% p.a.) - Base Rate plus 150 basis points	10.80%	9.49%	10.80%	9.49%
Interest on Working Capital	**15.16**	**15.01**	**16.12**	**14.68**

Commission's Analysis and Ruling

6.6.2 Further, as per the Regulations, the Commission has considered the interest rate of 9.45% which is computed considering one year MCLR as on date of the Petition (7.95% in December 2017) plus 150 basis in accordance with the MYT Regulations, 2015 and MYT (First Amendment) Regulations, 2017.

6.6.3 Accordingly, the interest on working capital claimed by TPC-T and as approved by the Commission is summarized in the Table below:

Table 117: Interest on Working Capital for FY 2018-19 and FY 2019-20, as approved by the Commission (Rs. Crore)

Particulars	FY 2018-19			FY 2019-20		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Operations and Maintenance Expenses for one month	17.83	18.61	16.76	19.35	20.41	18.38
Maintenance spares at one per cent of the opening Gross Fixed Assets for the Year	33.70	34.63	33.08	36.68	37.97	36.79
One and a half month of the expected revenue from transmission charges at the prevailing tariffs	88.89	104.96	66.11	93.24	96.30	87.89
Total Working Capital Requirement	**140.41**	**158.20**	**115.94**	**149.27**	**154.68**	**143.06**
Rate of Interest (% p.a.) -	0.11	9.49%	9.45%	0.11	9.49%	9.45%
Interest on Working Capital	**15.16**	**15.01**	**10.96**	**16.12**	**14.68**	**13.52**

6.6.4 The Commission approves Interest on Working Capital of Rs. 10.96 Crore for FY 2018-19 and Rs. 13.52 Crore for FY 2019-20.

6.7 Return on Equity

TPC-T's Submission

6.7.1 TPC-T has projected the RoE in accordance with the Regulation 28.2 of the MYT Regulations, 2015 which stipulates a 15.5% return on equity per annum based on the capitalisation and normative debt: equity ratio of 70:30. Accordingly, RoE as projected by TPC-T is shown in the Table below.

Table 118: Return on Equity for FY 2018-19 & FY 2019-20 submitted by TPC-T (Rs. Crore)

Particulars	FY 2018-19		FY 2019-20	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Regulatory equity at the beginning of the year	1,100.31	1,128.33	1,175.17	1,228.65
Capitalisation	249.53	334.40	149.63	456.64
Equity portion of assets capitalised during the year	74.86	100.32	44.89	136.99
Reduction in equity capital on account of retirement/ replacement of assets	-	-	-	-
Regulatory equity at the end of the year	1,175.17	1,228.65	1,220.06	1,365.64
Return on regulatory equity at the beginning of the year	170.55	174.89	182.15	190.44
Return on 50% of the equity portion of asset value capitalised during the year	5.80	7.77	3.48	10.62
Total Return on regulatory equity	**176.35**	**182.67**	**185.63**	**201.06**

Commission's Analysis and Ruling

6.7.2 The Commission has computed RoE at the rate of 15.50% as per Regulation 28 of the MYT Regulations, 2015, on the opening equity of the year. Further, the Commission has considered RoE on 50 per cent of the equity capital portion of the allowable capital cost for the investments put to use in during the year respective of the Control Period.

6.7.3 For arriving at the regulatory equity at the beginning of the year for FY 2018-19, the Commission has considered the closing equity at the end of the FY 2017-18 as provisionally approved by the Commission earlier in this Order. Further, addition in equity is considered as 30% of the capitalization for FY 2018-19 approved by the Commission. The closing equity at end of FY 2018-19 has obtained by adding the equity addition during the concerned year to the opening equity of FY 2018-19. In line with the same methodology, the equity balances for FY 2019-20 has also been worked out.

6.7.4 The Return on Equity as approved by the Commission from FY 2018-19 to FY 2019-20 is as shown in Table below:

Table 119: Return on Equity for FY 2018-19 and FY 2019-20, as approved by the Commission (Rs. Crore)

Particulars	FY 2018-19			FY 2019-20		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Regulatory equity at the beginning of the year	1100.31	1128.33	1081.77	1175.17	1228.65	1193.21
Capitalisation	249.53	334.40	371.47	149.63	456.64	304.21
Equity portion of assets capitalised during the year	74.86	100.32	111.44	44.89	136.99	91.26
Reduction in equity capital on account of retirement/ replacement of assets	-	-	-	-	-	-
Regulatory equity at the end of the year	1175.17	1228.65	1193.21	1220.06	1365.64	1284.47
Return on regulatory equity at the beginning of the year	170.55	174.89	167.67	182.15	190.44	184.95
Return on 50% of the equity portion of asset value capitalised during the year	5.8	7.77	8.64	3.48	10.62	7.07
Total Return on regulatory equity	**176.35**	**182.67**	**176.31**	**185.63**	**201.06**	**192.02**

6.7.5 **The Commission approves Return on Equity of Rs. 176.31 Crore for FY 2018-19, Rs. 192.02 Crore for FY 2019-20.**

6.8 Contribution to Contingency Reserves

TPC-T's Submission

6.8.1 TPC-T has projected the Contribution to Contingency Reserves as 0.25% of the opening GFA, for FY 2018-19 and FY 2019-20 in accordance with Regulation 34 of the MYT Regulations, 2015 as shown in the Table below:

Table 120: Contribution to Contingency Reserves for FY 2018-19 and FY 2019-20, as submitted by TPC-T (Rs. Crore)

Particulars	FY 2018-19		FY 2019-20	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Contribution to Contingency Reserves	8.42	8.66	9.17	9.49

Commission's Analysis and Ruling

6.8.2 The Commission has computed the Contribution to Contingency Reserves at 0.25 % of the opening GFA in accordance with the Regulation 34.1 of MYT Regulations, 2015. Further, the approved contingence reserves for FY 2018-19 is added to the closing balance of Contingency Reserves for FY 2017-18 as mentioned earlier in this Order for arriving at the cumulative balance of Contingency Reserves. The Commission observed that the closing balance has not exceeded 5% of the original cost of fixed assets for FY 2018-19. In line with the same methodology, the Contingency Reserve for FY 2019-20 has also been worked out and approved.

6.8.3 The computation of Contingency Reserves as claimed by TPC-T and as approved by the Commission for FY 2018-19 & FY 2019-20 is provided in the Table below:

Table 121: Contribution to Contingency Reserves for FY 2018-19 and FY 2019-20, as approved by the Commission (Rs. Crore)

Particulars	**FY 2018-19**			**FY 2019-20**		
	MYT Order	**MTR Petition**	**Approved in this Order**	**MYT Order**	**MTR Petition**	**Approved in this Order**
Opening Balance of Contingency Reserves	89.41		89.57	97.83		97.84
Opening Gross Fixed Assets	3369.58		3307.79	3668.07		3679.26
Opening Balance of Contingency Reserves as % of Opening GFA			2.71%			2.66%
Contribution to Contingency Reserves during the year	**8.42**	**8.66**	**8.27**	**9.17**	**9.49**	**9.20**
Closing Balance of Contingency Reserves	97.83		97.84	107.00		107.04
Closing Balance of Contingency Reserves as % of Opening GFA	2.90%		2.96%	2.92%		2.91%

6.8.4 The Commission approves Contribution to Contingency Reserves of Rs. 8.27 Crore for FY 2018-19 and Rs. 9.20 Crore for FY 2019-20.

6.9 Non-Tariff Income

TPC-T's Submission

6.9.1 TPC-T submitted that the Non-Tariff Income for FY 2018-19 to FY 2019-20 is considered same as that approved in MYT Order. The summary is as shown below:

Table 122: Non-Tariff Income for FY 2018-19 and FY 2019-20, as submitted by TPC-T (Rs. Crore)

Particulars	FY 2018-19		FY 2019-20	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Total	19.49	19.49	20.97	20.97

Commission's Analysis and Rulings

6.9.2 The Commission has considered the Non-Tariff Income for FY 2018-19 and FY 2019-20 in this Order same as that approved in the MYT Order. Any difference between actual and approved Non-Tariff Income will be reconciled at the time of Truing up for these years. The summary is as shown below:

Table 123: Non-Tariff Income for FY 2018-19 and FY 2019-20, as approved by the Commission (Rs. Crore)

Particulars	FY 2018-19			FY 2019-20		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Total	19.49	19.49	19.49	20.97	20.97	20.97

6.9.3 The Commission approves Non-Tariff Income of Rs. 19.49 Crore for FY 2018-19 and Rs. 20.97 Crore for FY 2019-20.

6.10 Incentive

TPC-T's Submission

6.10.1 TPC-T has not considered Incentive for computations of FY 2018-19 and FY 2019-20.

Commission's Analysis and Ruling

6.10.2 Incentive for FY 2018-19 and FY 2019-20 will be considered while undertaking Truing up for respective years.

6.11 Income Tax

TPC-T's Submission

6.11.1 According to MYT Regulations, 2015; the Income Tax for the future period 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 2018-19 and FY 2019-20 has been considered same as Income Tax for FY 2016-17 which is the latest year for which audited accounts are available. Accordingly, TPC-T submitted the Income Tax as follows:

Table 124: Income Tax for FY 2018-19 and FY 2019-20, as submitted by TPC-T (Rs. Crore)

Particulars	FY 2018-19		FY 2019-20	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Income Tax	**66.74**	**23.67**	**66.74**	**23.67**

Commission's Analysis and Ruling

6.11.2 MYT Regulations, 2015 specify that the Income Tax payable for each year of the 3rd Control Period shall be based on the actual Income Tax paid by the Licensee as per latest available Audited Accounts, subject to prudence check. The relevant extract of the MYT Regulations is reproduced below:

"33.1 The Commission, in its MYT Order, shall provisionally approve Income Tax payable for each year of the Control Period based on the actual Income Tax paid by the Generating Company or Licensee or MSLDC, in case the Generating Company or Licensee or MSLDC has not engaged in any other regulated or unregulated Business or Other Business, as allowed by the Commission relating to the electricity Business regulated by the Commission, as per latest available Audited Accounts, subject to prudence check :

Provided that in case the Generating Company or Licensee or MSLDC has engaged in any other regulated or unregulated Business or Other Business, and the actual Income Tax paid by the Generating Company or Licensee or MSLDC has to be allocated to the different Businesses, then the Income Tax shall be provisionally allowed based on the Income Tax on the regulatory Profit Before Tax, as allowed by the Commission relating to the electricity Business regulated by the Commission, subject to prudence check :"

6.11.3 The Commission, while approving the Income Tax for FY 2016-17 in earlier Sections of this Order, worked out Income Tax payable considering Trued-up amounts and efficiency gains. As assessment of Income Tax for FY 2018-19 and FY 2019-20 would be carried out by similar methodology based on assessment of Efficiency Gain/Losses, the Commission has considered the Income Tax for these years equivalent to the Income Tax as approved by the Commission for FY 2016-17 after prudence check in this Order. The Income Tax approved by the Commission for FY 2018-19 and FY 2019-20 is shown in Table below:

Table 125: Income Tax for FY 2018-19 and FY 2019-20, as approved by the Commission (Rs. Crore)

Particulars	FY 2018-19			FY 2019-20		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Income Tax	**66.74**	**23.67**	**21.23**	**66.74**	**23.67**	**21.23**

6.11.4 The Commission approves Income Tax of Rs. 21.23 Crore for both FY 2018-19 and FY 2019-20.

6.12 Past Recoveries

TPC-T's Submission

6.12.1 TPC-T submitted that the Commission in MYT Order had approved an amount of Rs. 62.88 Crore as surplus at end of FY 2015-16 along with carrying/holding cost and past recovery. Therefore, TPC-T has calculated past recovery as Rs. 30.94 Crore surplus by assuming that Rs. 31.94 Crore is standalone surplus for FY 2015-16 which is to be deducted from Rs. 62.88 Crore surplus at end of FY 2015-16.

6.12.2 Standalone gap for years from FY 2015-16 to FY 2017-18 are considered as per submission of TPC-T in the Petition. Impact of Review Petition of MYT Order is considered as Rs. 2.86 Crore.

6.12.3 TPC-T further has included Holding Cost for FY 2014-15 to FY 2017-18 as approved by the Commission in MYT Order for recovery in FY 2018-19. In addition to Holding Cost approved by the Commission, TPC-T has computed Carrying Cost for FY 2014-15 to FY 2017-18. For FY 2014-15 and FY 2015-16, rates as approved by the Commission in MYT Order are used. Carrying cost for FY 2018-19 and FY 2019-20 are calculated by considering rate of interest as 10.31% and 9.49% respectively. The past recoveries as submitted by TPC-T is shown in Table below:

Table 126: Total recovery in FY 2018-19, as submitted by TPC-T (Rs. Crore)

Particulars			As per MYT Order	MTR Petition
Total past recovery allowed along with carrying cost up to 2015-16	A		-7.23	
Gap / (Surplus) for FY 2014-15	B		-114.33	
Total amount to be passed on in FY 2015-16	C=A+B		-121.56	-30.94
Provisional ARR for FY 2015-16	D		646.05	
ARR allowed including past recovery	**E=C+D**		**524.50**	
Additional recovery on account of capitalisation considered for FY 2013-14	F		0.00	
Revenue for FY 2015-16	G=H+I		556.44	
-Revenue from Transmission Charges	H		445.14	
-Revenue from Non-Tariff Income	I		111.30	
Gap / (Surplus) for FY 2015-16	**J= E+F-G**		**-31.94**	**60.97**
Carrying cost for recovery in FY 2014-15	K	14.75%	-8.43	
Carrying cost for recovery in FY 2015-16	L	14.29%	-16.34	
Carrying cost for recovery in FY 2016-17	M	10.80%	-6.17	
Total with carrying cost in FY 2016-17	**N=sum (J:M)**		**-62.88**	**30.02**
Impact of Review Petition				2.86
Gap / (Surplus) for FY 2016-17				85.37
Gap / (Surplus) for FY 2017-18				-10.82
Holding Cost for in FY 2014-15				0.21
Holding Cost for in FY 2015-16				4.76
Holding Cost for in FY 2016-17				10.98
Holding Cost for in FY 2017-18				13.64
Total amount to be passed on in FY 2018-19				**137.04**

Commission's Analysis and Ruling

6.12.4 As it can be seen from the Table above, past recovery to be passed on in FY 2016-17 to TPC-T is actually surplus of Rs. 114.33 Crore and its holding cost of Rs. 30.94 Crore. TPC-T has considered past recovery as Rs. 30.94 Crore Surplus inadvertently by deducting Surplus of Rs. 31.94 Crore from the Surplus of Rs. 62.88 Crore. Amount obtained by doing so is not the past recovery, but holding cost on revenue surplus of FY 2014-15 adjusted in ARR of FY 2016-17.

6.12.5 Therefore, surplus of Rs. 7.23 Crore due to gap/(surplus) until FY 2013-14 along with carrying/(holding) cost is adjusted in ARR of FY 2015-16, as mentioned in the last MTR Order in Case No. 5 of 2015. Rs. 114.33 Crore surplus due to FY 2014-15, along with holding cost of Rs. 30.94 Crore is included in ARR of FY 2016-17 as approved in MYT Order. Further, impact of Review Order in Case No. 110 of 2016 of Rs. 2.96 Crore, along with carrying cost of Rs. 0.80 Crore is adjusted in ARR of FY 2016-17.

6.12.6 At the time of MYT Order, FY 2015-16 was being provisionally Trued-up. Therefore, the Commission had not given carrying/ (holding) cost for FY 2015-16. As final True-up of FY 2015-16 is being carried out in this Order, (holding)/carrying cost for FY 2015-16 is considered in this Order. The ATE in its Judgment vide Appeal No. 244 of 2015 and Appeal No. 246 of 2015 has decided against the appellants challenging disallowance of carrying cost as determined by the Commission. Accordingly, (Holding)/Carrying Cost is not considered by the Commission on incentives. Considering that final Truing up of FY 2015-16 and FY 2016-17 is being done in this MTR Order and the ATE Judgment referred above, (Holding)/Carrying Cost is calculated as follows:

Table 127: Calculation of Carrying/ (Holding) Cost (Rs. Crore)

Particulars	FY 2015-16	FY 2016-17	FY 2017-18	FY 2017-18
Opening Balance of cumulative gap/(surplus)	-	25.66	-59.00	-59.00
Revenue gap/(surplus) during the year (excluding Incentive)	25.66	-84.67		59.00
Closing Balance of cumulative gap/(surplus)	25.66	-59.00	-59.00	-
Interest rate (%)	14.29%	10.79%	10.20%	9.45%
Carrying/(Holding) Cost	1.83	-1.80	-6.02	-2.79
Total Carrying/(Holding) Cost				**-8.77**

6.12.7 Carrying/ (Holding) Cost on Revenue Gap/ (Surplus) due to provisional Truing up of FY 2017-18 is not considered in this Order. It will be considered after Audited Accounts for FY 2017-18 are available for final Truing up and will be adjusted at the end of the third Control Period in final Truing up of FY 2017-18.

6.12.8 Recovery of past revenue gap/(surplus) including incentives is as shown in Table below:

Table 128: Recovery of past revenue gap in FY 2018-19 (Rs. Crore)

Particulars	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Opening Balance of cumulative gap/(surplus)	-	32.48	-48.59	-106.33
Addition during the year	32.48	-81.06	-57.74	106.33

Particulars	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Closing Balance of cumulative gap/(surplus)	32.48	-48.59	-106.33	-

6.12.9 Accordingly, the Commission approves Rs. 8.77 Crore towards Holding Cost and a Surplus of Rs. 106.33 Crore towards past period is adjusted in ARR of FY 2018-19 as shown in Tables above. Therefore, the total past recovery to be adjusted in FY 2018-19 is a Surplus of Rs. 115.10 Crore inclusive of holding cost.

6.12.10 The Commission approves the past recoveries including (holding)/carrying cost as a Surplus of Rs. 115.10 Crore to be recovered in the FY 2018-19, as against a Gap of Rs. 137.04 Crore submitted by TPC-T.

6.13 Aggregate Revenue Requirement including Past Recoveries

TPC-T's Submission

6.13.1 The ARR projected by TPC-T for FY 2018-19 and FY 2019-20 is summarized in the following Table:

Table 129: Aggregate Revenue Requirement for FY 2018-19 and FY 2019-20, as submitted by TPC-T (Rs. Crore)

Particulars	FY 2018-19		FY 2019-20	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Operation & Maintenance Expenses	213.93	223.36	232.25	244.97
Depreciation Expenses	140.61	154.72	148.10	171.58
Interest on loan capital	109.35	114.03	108.85	125.89
Other finance charges	-	0.00	-	0.00
Interest on working capital and on consumer security deposits	15.16	15.01	16.12	14.68
Income tax	66.74	23.67	66.74	23.67
Contribution to contingency reserves	8.42	8.66	9.17	9.49
Total Revenue Expenditure	**554.23**	**539.44**	**581.24**	**590.28**
Add: Return on equity capital	176.35	182.67	185.63	201.06
Aggregate Revenue Requirement	**730.57**	**722.11**	**766.87**	**791.34**
Incentive	-	0.00	-	0.00
Less: Non-Tariff Income	19.49	19.49	20.97	20.97
Less: Income from other business	-	0.00	-	0.00
Less: Income from Open Access charges	-	0.00	-	0.00

	FY 2018-19		FY 2019-20	
Particulars	**MYT Order**	**MTR Petition**	**MYT Order**	**MTR Petition**
Past recoveries	-	137.04	-	0.00
Aggregate Revenue Requirement from Transmission	**711.09**	**839.66**	**745.89**	**770.37**

Commission's Analysis and Ruling

6.13.2 Based on the analysis detailed in the previous paragraphs, the Commission has approved the ARR for TPC-T for FY 2018-19 to FY 2019-20 as shown in the Table below:

Table 130: Aggregate Revenue Requirement for FY 2018-19 and FY 2019-20, as approved by the Commission (Rs. Crore)

Particulars	**FY 2018-19**			**FY 2019-20**		
	MYT Order	**MTR Petition**	**Approved in this Order**	**MYT Order**	**MTR Petition**	**Approved in this Order**
Operation & Maintenance expenses	213.93	223.36	201.07	232.25	244.97	220.52
Depreciation expenses	140.61	154.72	148.90	148.1	171.58	163.30
Interest on loan capital	109.35	114.03	96.72	108.85	125.89	104.34
Other finance charges	-	0.00	-	-	0.00	-
Interest on working capital	15.16	15.01	10.96	16.12	14.68	13.52
Income tax	66.74	23.67	21.23	66.74	23.67	21.23
Contribution to contingency reserves	8.42	8.66	8.27	9.17	9.49	9.20
Total Revenue Expenditure	554.23	539.44	487.15	581.24	590.28	532.11
Add: Return on equity capital	176.35	182.67	176.31	185.63	201.06	192.02
Aggregate Revenue Requirement	730.57	722.11	663.46	766.87	791.34	724.13
Less: Non-Tariff Income	19.49	19.49	19.49	20.97	20.97	20.97
Past recoveries	-	137.04	(115.10)	-	0.00	
Aggregate Revenue Requirement from Transmission	711.09	839.66	528.87	745.89	770.37	703.15

6.13.3 The detailed analysis underlying the Commission's approval of individual ARR elements on revised ARR of FY 2018-19 and FY 2019-20 is already set out above. The variation in the ARR of FY 2018-19 and FY 2019-20 sought by the TPC-T and that approved by the Commission in this Order is mainly on account of non-consideration of incorrect capitalization of Rs. 164.33 Crore claimed by TPC-T in FY 2019-20. reduction in O&M Expenses, Interest on Long Term Loan Capital, Depreciation and Return on Equity due to lower Gross Fixed Assets approved in this Order than those considered by TPC-T, which included assets due to transfer from TPC-G to TPC-T. Reduction in ARR of FY 2018-19 is also due to TPC-T considering past recovery of FY 2014-15 in FY 2018-19 instead of considering in FY 2016-17 as approved in MYT Order.

6.13.4 The Commission approves revised estimates of ARR of Rs. 528.87 Crore for FY 2018-19 and Rs. 703.15 Crore for FY 2019-20 for TPC-T. The same is to be recovered through Transmission Tariff of respective years.

7 SUMMARY OF DIRECTIVES UNDER MYT ORDER AND TPC-T's REPLIES AND COMPLIANCE

7.1 DIRECTIVES

7.1.1 In its MYT Order dated 30 June, 2016 in Case No. 22 of 2016 for TPC-T, the Commission had given several directives to be complied with by TPC-T while filing its MTR Petition for the third Control Period. In its Petition, TPC-T has submitted the compliance status. This Section summarizes the directives of the Commission and responses submitted by TPC-T. Wherever necessary, the Commission has given its rulings on these responses.

7.2 Cost & time overrun of '145 kV GIS Sub-station at BKC'

Directive

7.2.1 The cost of land of Rs 116.18 Crore (base land cost: Rs. 95 Crore + IDC: Rs. 21.18) is approved for FY 2014-15, as against TPC-T's claim of Rs. 137.92 Crore (considering a higher IDC of Rs. 42.92 Crore). The cost of the scheme pertaining to assets/equipment, including the corresponding IDC, for FY 2014-15 has been approved as Rs 110.75 Crore, as claimed by TPCT. Thus, the Commission approves capitalization of Rs 226.93 (116.18 + 110.75) Crore for FY 2014-15 against this scheme. TPC-T shall submit a revised DPR for approval with reasons for the cost and time over-runs.

Response

7.2.2 TPC-T has submitted the revised DPR for its "In principle" clearance for "145 kV GIS Sub-station at Bandra Kurla Complex (BKC) Receiving Station" vide its letter CREG/MUM/MERC/2016/294 dated 7 November, 2016 with a scheme value of Rs. 285.95 Crore.

Commission's Observations/Ruling

7.2.3 The Commission notes the submission of TPC-T. The Commission has approved revised DPR with project cost of Rs. 280.20 Crore on 12 October, 2017. In the present petition, TPC-T has included this scheme in accordance with the revised approval. The Commission has allowed capitalisation up to approved cost of the revised DPR. Accordingly, there is disallowance of Rs. 4.31 Crore in FY 2017-18.

7.3 Time Over-run in Execution of Capex Schemes

Directive

7.3.1 TPC-T does not seem to have taken a holistic approach towards system augmentation, and there appears to be much scope for improvement in the manner in which it plans and executes such projects. The Commission needs to be convinced that the time over-run is on account of factors which are not within TPC-T's reasonable control in order to consider the capitalisation proposed by it. For this purpose, TPC-T should submit supporting material to show that the time and cost over-runs were not controllable in respect of each scheme in which significant time over-run has been reported (TPC-T has clubbed these schemes during the present proceedings), along with the scheme-wise IDC, at the time of True up of FY 2015-16.

Response

7.3.2 The scheme-wise detailed reasons for cost over-run and delay in execution of capital expenditure schemes with supporting documents is submitted along with responses to petition.

Commission's Observations/Ruling

7.3.3 The Commission has taken into consideration, reasons provided by TPC-T for cost and time overrun. After analyzing submissions of TPC-T, the Commission has allowed/disallowed capitalisation on case-to-case basis. Detailed analysis has been incorporated in respective sections of the Tariff Order.

7.4 Revised DPR for 245 kV GIS at Saki Receiving Sub-station

Directive

7.4.1 TPC-T should approach the Commission with a revised DPR for the scheme 'of 220 kV GIS at Saki and uprating of Transmission Lines' along with detailed reasons and break-up of the cost over-run for approval.

Response

7.4.2 As per the directive, TPC-T had submitted the revised DPR for 'In principle' approval to the Commission the DPR scheme on 19 January, 2017 with a scheme value of Rs. 252.92 Crore. The Commission has accorded "In-principle" clearance approval to this scheme vide its letter MERC/Capex/TPCT-T/2017-18/4354 dated 12 October, 2017 for Rs. 244.70 Crore. In the present petition, TPC-T has included this scheme with the revised approval to present its current status.

Commission's Observations/Ruling

7.4.3 The Commission notes the submission of TPC-T. The Commission has approved revised DPR with project cost of Rs. 244.70 Crore on 12 October, 2017. In the present petition, TPC-T has included this scheme in accordance with the revised approval. The Commission has allowed capitalisation as submitted by TPC-T on provisional basis. The same may be revisited in future after the third party asset verification.

7.5 Payment security mechanism and its implementation

Directive

7.5.1 TPC-T and TPC-D are not adhering to the prescribed modalities of Transmission Charges payments and receipts. Although TPC-T and TPC-D may be constituents of a single corporate entity, they are distinct and separate as Licensees under the Electricity Act, 2003 and the relevant Regulations. They are obliged to adhere to their respective obligations as Licensees with respect to the payment security mechanism, which is also stipulated in the Intra-State Transmission Tariff Orders, and the modalities prescribed for payment of the Transmission Charges. TPC-T is directed to provide to the Commission the details of the payment security mechanism and its implementation in FY 2015-16 and in the current financial year so far, within a month of this Order.

Response

7.5.2 TPC-T has submitted the details of the payment security mechanism and its implementation in FY 2015-16 to the Commission vide letter reference CREG/MUM/MERC/2016/234 on 01 September, 2016.

Commission's Observations/Ruling

7.5.3 The Commission has noted response of TPC-T and this issue is dealt with in Order in relation to in Case No. 162 of 2016 dated 20 March, 2018.

7.6 245 kV GIS at Mahalaxmi Receiving Sub-station

Directive

7.6.1 TPC-T should submit a revised DPR for In-principle approval of the Commission to scheme "Installation of 220 KV GIS at Mahalaxmi and addition of ICT no. 5 and 33 kV GIS at Mahalaxmi Sub Station" with the additional scope of work and the reasons for revision for the Commission's approval.

Response

7.6.2 As per the directives, TPC-T has submitted the revised DPR for vide its letter CREG/MUM/MERC/2017/066 on 12 April, 2017 with a scheme value of Rs. 160.76 Crore. The Commission has accorded In-principle approval to this scheme with scheme value of Rs. 132.76 Crore vide its letter MERC/Capex/TPC-T/2017-18/4704 dated 15 November, 2017. In the present petition, TPC-T has included this scheme with the revised approval to present its current status

Commission's Observations/Ruling

7.6.3 The Commission notes the submission of TPC-T. The Commission has approved revised DPR with project cost of Rs. 132.76 Crore on 15 November, 2017. In the present petition, TPC-T has included this scheme in accordance with the revised approval. The Commission has allowed capitalisation up to approved cost of the revised DPR scheme. There is disallowance of Rs. 28.00 Crore across FY 2016-17 to FY 2018-19. TPC-T may approach the Commission after completion of the scheme.

7.7 Cancellation of Capex Schemes

Directive

7.7.1 The Commission has considered as cancelled 3 DPR schemes approved in or before FY 2012-13 on which no capitalisation has been shown till FY 2015-16 or no capitalisation is proposed in the 3rd Control Period. TPC-T may submit revised DPRs for fresh approval of such schemes.

Response

7.7.2 TPC-T submits that 3 cancelled schemes, viz. 'Land for New Receiving Sub-stations', '400 kV Deherand - Vikhroli Line' and 'Establishment of power System Main Control Centre at Vikhroli' are on hold due to various external uncontrollable reasons. TPC-T will approach the Commission for its revised approval after it gets clarity in its execution.

Commission's Observations/Ruling

7.7.3 The Commission has noted response of TPC-T.

7.8 Time Overrun of Capital Expenditure Schemes

Directive

7.8.1 The Commission directs TPC-T to provide a clear break-up of the capitalisation into hard cost and IDC for each entire scheme. This break-up should also contain year-wise as well as cumulative details till the period of claim. TPC-T should also provide supporting documents, e.g. follow-up letters to authorities in respect of delayed approval, delay in land allocation, etc.

Response

7.8.2 TPC-T has reviewed all its DPR schemes in which there is cost over-run as well as time delay of more than 2 years vis-à-vis approved timeline. Accordingly, TPC-T has submitted scheme-wise detailed reasons for cost over-run and delay in execution with supporting documents as Annexure-I to the Petition.

Commission's Observations/Ruling

7.8.3 In above response, TPC-T has not addressed issue of break-up into IDC and hard cost. However, the Commission notes that TPC-T has submitted break-up of capitalisation as required while submitting capitalisation details in the present Petition. Further, in replies to data gaps of the Commission; TPC-T has also submitted calculation of IDC for each scheme.

7.9 Construction of 220 kV Trombay-Dharavi-Salsette' Transmission Line

Directive

7.9.1 TPC-T was directed to submit the revised DPR for 'Construction of 220 kV Trombay-Dharavi-Salsette Transmission Line' for In-principle approval of the Commission within two months from the date of MYT Order.

Response

7.9.2 TPC-T submitted the revised DPR for In-principle approval to DPR scheme of "Construction of 220 kV Trombay-Dharavi-Salsette" on 6 September, 2016 with DPR cost of Rs. 241.37 Crore. The Commission has accorded "In-principle" approval to this scheme with approved DPR cost of Rs. 241.37 Crore on 18 October, 2017. TPC-T has included this scheme with the revised approval to reflect present status.

Commission's Observations/Ruling

7.9.3 The Commission notes the submission of TPC-T. The Commission has approved revised DPR with project cost of Rs. 241.37 Crore on 18 October, 2017. In the present petition, TPC-T has included this scheme in accordance with the revised approval. The Commission has allowed capitalisation as submitted by TPC-T on provisional basis. The same may be revisited in future after the third party asset verification.

7.10 Amendment of Transmission License

Directive

7.10.1 TPC-T is directed to submit, within 3 months, an Application for amendment of its License accordingly, with details of the revised assets vis-à-vis those in the existing License.

Response

7.10.2 TPC-T submitted the Petition for amendment of Transmission License on 10 October, 2016. The petition is sub-judice and the Public Hearing of the petition is likely to be scheduled shortly.

Commission's Observations/Ruling

7.10.3 The Commission has passed the Order in matter on 01 August, 2018.

7.11 Capex Scheme Closure Report

Directive

7.11.1 TPC-T should submit review or closure reports of 14 schemes in which no capital expenditure is proposed during the third Control Period. The Commission also directs TPC-T for proper planning and execution for schemes approved by the Commission to avoid scheme withdrawal, cancellation in future. TPC-T shall submit closure report within 3 months of completion of the schemes.

Response

7.11.2 TPC-T has submitted the scheme closure report for 3 DPR schemes on 07 November, 2017. Remaining 11 DPR schemes are in the final stage of completion and TPC-T will submit the completion report for these schemes after they are fully commissioned and capitalized.

Commission's Observations/Ruling

7.11.3 TPC-T has submitted closure reports for DPR schemes '145/33 kV GIS at Hiranandani, Powai', 'Augmentation of 33KV outlets at Backbay', 'Additional 33 KV Outlets from Borivali'.

7.11.4 TPC-T has submitted expected project completion dates for DPR schemes as follows:

Table 131: Expected Project Completion of DPR schemes, as submitted by TPC-T

DPR Scheme	Expected month of project completion
Installation of 245 kV GIS at Sahar Airport	January, 2018
Installation of 1 no. of 75 MVA, 110/33 kV transformer and 33 kV GIS at Parel Receiving Station	February, 2018
Replacement of 22 kV BS 1 &2 with 33kV GIS at Saki Naka Andheri	January, 2018
145 kV GIS at Mankhurd	February, 2018
110/33KV S/S at IXORA, Panvel	March, 2018
Replacement of 33 kV bus section 1 and 2 at Carnac	February, 2018
Stringing of second 110 kV Line in the existing 110 kV Transmission Line between Khopoli & Bhivpuri generating stations	January, 2018
Additional 22 kV Outlets at Malad	January, 2018

7.12 Deemed closure of DPR scheme '400 kV Receiving station at Vikhroli'

7.12.1 As regards, 400 kV Receiving station at Vikhroli, the Commission notes that TPC-T had submitted its DPR for commissioning of 400 kV Receiving Station at Vikhroli and the Commission has approved the same on 2 June, 2011 with capital cost of Rs. 846.19 Cr. In the DPR, TPC-T had submitted that the work shall be completed in March, 2015.

7.12.2 During Mid Term Review Petition of second control period (i.e. FY 2012-13 to FY 2015-16), TPC-T had stated that the approvals required are at various stages and include clearances from MoEF, Forest authorities and Airport Authority of India. The land required for the Receiving/Switching station and bays is in the final stages of possession. The major contracts have either been placed or are in advanced stage of finalization. The work will be initiated after all relevant approvals. TPC-T had not projected any capitalization for the scheme. TPC-T had proposed revised timelines for the scheme completion as FY 2017/ FY 2018.

7.12.3 During MYT Petition for the third control period ((i.e. FY 2015-16 to FY 2019-20), TPC-T claimed preliminary expenses of Rs. 6.15 Cr. for the scheme, however, TPC-T failed to provide any time-frame for the completion of the scheme. The Commission directed TPC-T to submit closure/review report for this scheme.

7.12.4 The Commission notes that TPC-T, in present position has not submitted review/ closure report for the scheme stating that statutory approvals are in progress. TPC-T has stated Commencement Certificate has been received for Vikhroli building. Allocation of 511 Sq. Mtr. has been approved by Municipal Commissioner and awaiting improvement committee approval. Work will be taken up after receiving all the statutory approval for GIS building at Ghatkopar and depending upon progress of work in 400 kV Kharghar-Vikhroli transmission line which will be taken up after obtaining permission for working in mangrove area from High Court. TPC-T also stated that the commissioning of 400 kV receiving station will have to be aligned with completion of 400 kV Kharghar Vikhroli Transmission line, for readiness of source. Further there were various mandatory statutory permissions which were required to be obtained before initiating the actual work in 400 kV Kharghar-Vikhroli Transmission Line. Currently the Stage II Forest Clearance and Aviation Approval for balance two towers for 400 kV Kharghar-Vikhroli lines are pending which are being actively pursued.

7.12.5 As regards the 400 kV Kharghar Vikhroli line, the Commission notes that initial DPR had been approved by the Commission in October, 2011 with target date of completion as March, 2015. Also, thereafter TPC-T had submitted the revised DPR twice and the Commission had given its approval in September, 2013 (target completion date as March, 2017) and March, 2015 (target completion date as March, 2019). As per recent submissions of TPC-T, it is seen that TPC-T has now revised completion date as March, 2022 for both these scheme.

7.12.6 Also, the Commission notes that while providing its comments in Case No. 176 of 2017 (BEST's Petition regarding power procurement under competitive bidding) STU had stated that to meet 'N-1' and 'N-2' contingencies, system requires support of embedded 500 MW thermal unit at Trombay on bar till commissioning of 400 kV receiving station at Vikhroli. STU highlighted the scheme of 400 kV Receiving station at Vikhroli as an essential scheme which requires implementation for strengthening of Mumbai Corridor. STU had made its observation that this scheme is getting inordinately delayed and suggested to take up this scheme under Tariff Based Competitive Bidding (TBCB) route.

7.12.7 The Commission observed even after substantial period of time, there is absolutely no progress on the scheme and TPC-T has been repeatedly citing the reasons of pending statutory permissions. The proposed 400 kV Receiving station at Vikhroli would be the first 400 kV receiving Station within Mumbai and if commissioned, would help in resolving the transmission constraints of bringing the power to Mumbai from outside of the Mumbai.

7.12.8 Based on TPC-T's submissions in the present Petition, the Commission further notes, TPC-T had envisaged imminent load requirement and exponential increase in the power requirement due to large scale development in residential and commercial properties (especially in Godrej area) at Vikhroli and around area. In actual, the predicted load growth has not come up in the area.

7.12.9 Considering above, the Commission noted that STU has observed 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.

8 RECOVERY OF TRANSMISSION CHARGES

8.1 In accordance with the Transmission Pricing Framework specified under the MYT Regulations, 2015 the approved ARR of a Transmission Licensee for a particular financial year of the MYT 3rd Control Period should be considered for recovery through the TTSC of that year.

8.2 As TPC-T forms a part of the InSTS, its approved revised ARR for FY 2018-19 and FY 2019-20 shall be allowed to be recovered through the InSTS Transmission Tariff Orders of the Commission for the respective years.

9 APPLICABILITY OF THE ORDER

9.1 This Order shall come into effect from 1 September, 2018

The Petition of The Tata Power Co. Ltd. (Transmission Business)'s in Case No. 204 of 2017 stands disposed of accordingly.

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

(Abhijit Deshpande)
Secretary

Appendix-1

List of individuals who attended the discussion held on 16 February, 2018

Sr. No.	Name	Company / Institution
1.	Swati Mehendale	TPC-T
2.	Manoj Kapse	TPC-T
3.	Arvind Singh	TPC-T
4.	K. K. Rao	TPC-T
5.	Sachin Mujumdar	TPC-T
6.	Vikrant Ambole	TPC-T
7.	Mr. A Khan	TPC-T
8.	Shittal Khairya	TPC-T
9.	Vishwas Surange	TPC-T
10.	Chakshu Mittal	TPC-T
11.	Tushar Dhande	TPC-T

Appendix-2

List of individuals who attended the Public Hearing held on 24 July, 2018

S. No.	Name	Company/Institution
1.	Mr. Manoj T. Kapse	TPC-T
2.	Mr. Bhaskar Sarkar	TPC-T
3.	Mr. Sanjeev Gupta	TPC-T
4.	Mr. K. K. Rao	TPC-T
5.	Mr. Tushar M. Dhande	TPC-T
6.	Soumya R. Mishra	TPC-T
7.	Ms. Vaidehi Kumbhare	TPC-T
8.	Swati Mehendale	TPC-T

Appendix-3: Allowed capitalisation for in-principle approved DPR schemes (Rs. Crore)

		Allowed capitalisation (Rs. Crore)	FY	FY	FY	FY	FY
	Project Code	**Scheme Name**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
1	T.0810714	Construction of 220 kV Trombay - Dharavi - Salsatte.	3.78	1.17	0	0	49.1
2	T.0880806	245KV GIS at Saki	44.43	7.22	-	-	-
3	T.0920818	BackBay Ring system	3.58	0.28	-	-	-
4	T.0940813	145 kV GIS at BKC	16.73	12.2	7.15	-	-
5	T.0980806	145 kV and 33 kV GIS at Powai	3.17	0.92	-	-	-
6	T.0910802	145 kV GIS at Versova	-	0	92.42	12.74	-
7	T.0960902	Installation of 220 kV GIS Mahalaxmi, installation of additional ICT No.5 and 33 kV GIS at Mahalaxmi substation	70.21	53.33	-	-	-
8	T.0880904	220kV GIS at Sahar Airport	0.05	0.55	-	-	-
9	T.0810906	Replacement of OPGW on 110 kV Tr - Prl lines	0.03	0.05	-	-	-
10	G.07209I7	Construction of New 220kV bays (3 nos.)	3.26	7.43	0	-	-
11	T.0911005	Additional Power Transformers at Borivli	0.07	-	-	-	-
12	T.0811046	PROVIDING OPGW ON110 kV BHIRA-KHO LINE 1	0.53	0.07	1.58	0.1	-
13	T.0881004	Replacement of 22kV BS 1 &2 with 33kV	1.76	4.13	0.56	-	-
14	T.0941016	Enhancing Security system at Transmission	0.1	-	0.16	-	-
15	T.0911106	Replacement of 22kV Switchgear at Borivli	-	-	-	-	6.14
16	T.0961106	75 MVA, 110/33 kV transformer and 33 kV GIS at Parel Receiving Station	2.41	0.33	0.75	-	-
17	T.0991101	145 kV GIS at Mankhurd	0.14	15.51	1.89	-	-
18	T.0941110	Power Supply to HDIL Kurla	-	-	-	160.44	12.63
19	T.0971104	Replacement of 250 MVA ICT#3 at Salsette	0.07	0	-	-	-
20	T.0941204	33 kV GIS for replacing AIS at Dharavi	15.94	5.17	0.96	-	6.12

		Allowed capitalisation (Rs. Crore)	**FY**	**FY**	**FY**	**FY**	**FY**
	Project Code	**Scheme Name**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
21	T.0951201	RTUs for SCADA (Kalyan)	0.01	0.01	-	-	-
22	T.0911201	Replacement of SERCK RTUs at Borivli	0	0.04	0.24	-	-
23	T.0811208	110/33KV S/S at Ixora, Panvel.	-	-	-	29.99	-
24	T.0811210	Replacement of Cond. on Kalwa-Salset3&4	18.69	0.21	-	-	-
25	T.0941206	Replacement of Power Transfer at Dharavi	2.67	1.12	0.16	-	30
26	T.0921202	Replacement of 33KV swgear by 33KV GIS	7.71	1	0.26	-	-
27	T.0921201	Augmentation of 33KV outlets at Backbay	0.21	0	0.02	-	-
28	T.0971201	LIFE ENHANCEMENT OF 245 AND 145 KV GIS	8.08	0.19	4.71	10	10.68
29	T.0811215	Khopoli-Bhivpuri Tie line	6.18	0.73	0	-	-
30	T.0921206	Replacement of 22KV Bus Section # 1 & 3	-	0.09	0.42	5.42	4
31	T.0911301	Replacement of 110KV Breakers	0.19	-	0.51	0.3	-
32	T.0961301	Replacement of 22 kV Breakers	1.77	-	0.08	-	-
33	T.0931302	Replacement of relays for transmission	2.17	1.85	2.89	1	1.49
34	T.0941304	Replacement of 250 MVA ICT#7 at Dharavi	0.32	0	0.07	-	-
35	T.0911304	220 kV GIS at Versova	-	-	-	-	86.14
36	T.0941306	22 kV GIS Replacement of 22 kV BS I to V	3.13	7.98	0.45	-	-
37	T.0941308	Check metering system with remote data	0.21	1.62	3.05	2.51	-
38	T.0911305	Replacement of 22 Kv Bus sections at Mal	-	-	-	-	6.8
39	T.0911303	Additional 22Kv Outlets at Malad	5.99	0.61	0.31	-	-
40	T.14012115002	Replacement of Transformer 1 & 2 at Saki	-	-	-	20.06	-
41	T.14010115003	Replacement of NGTs in Transmission	-	-	-	3.65	-
42	T.14010215003	Replacement of Transformers at Mahalaxmi	-	-	-	10	15.27
43	T.14010115001	Procurement of recommended safety equipments	0.31	0.43	0.59	2	-

		Allowed capitalisation (Rs. Crore)	FY	FY	FY	FY	FY
	Project Code	**Scheme Name**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
44	T.14012315001	Protection System Refurbishment in Transmission	-	-	1.7	-	-
45	T.14012316002	Refurbishment of Transmission protection System	-	-	-	5	10.68
46	T.14010216003	Additional 33kV Bus Section at Mahalaxmi and Replacement of 33 kV BS 1 and 2 at Versova	-	7.49	11.12	0.82	-
47	T.14012216008	Provision of HVWS for DT#6 at Salsette	-	-	0.23	-	-
48	T.14010216002	Replacement of 22kV AIS by 33kV GIS at Mahalaxmi	-	7.52	-	1.09	-
49	T.14011216001	Replacement of 110 kV Breakers at Dharavi	-	-	0.3	-	-
50	T14012217004	Salsette HVWS system NGT 1, 2, 3 & ICT deluge valv	-	-	-	-	0.46
51	T14011217005	Refurbishment for emulsifier system Dharavi	-	-	-	-	0.97
52	T14011217006	Installation of hydrant system to the office build	-	-	-	-	0.97
53	T14011217007	Installation of Fire alarm system at BKC	-	-	-	0.13	-
54	T14012217003	Procurement of Testing Equipments in Transmission	-	-	0.6	2.03	1
55	T14012317009	Replacement of Capacitor Bank 1 at Borivali	-	-	-	0.45	-
56	T14013117003	Replacement of 110kV bkrs at Kalyan Node-08 nos	-	-	0.4	0.6	-
57	T14013117005	Replacement of 22kV Polycrete CT at Kalyan	-	-	0.27	-	-
58	T14010217001	Replacement of Station Batteries, Chargers in Trans	-	-	-	0.51	-
59	T14011217010	220kV&110kV PT and CT Replacement in Transmission	-	-	0.5	0.82	1.34
60	T14010217005	33 Kv Capacitor Bank at Mahalaxmi	-	-	-	1.12	-
61	T14011317001	22 Kv AND 110 Kv RTU replacement at Chembur	-	-	0	3.38	-
62	T.14012118001	110 kV GIS at Saki	-	-	-	40	24.63
63	T140102180031	Installation of Fire Protection System in Transmission	-	-	-	9.07	11.83
64	T14010218005	Replacement of Transformer#3 at Mahalaxmi	-	-	-	11	-
65	0	SAP DPR Allocation	1.57	2.52	-	-	-

Appendix-4: Disallowed/Deferred capitalisation for in-principle approved DPR schemes (Rs. Crore)

Sr. No.	Scheme No.	Scheme Name	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Status (Disallowed)
1	T.0940813	145 kv GIS at BKC	-	-	4.31	-	-	Disallowed
2	T.0910802	145 kV GIS at Versova	-	-	0.19	-	-	Disallowed
3	T.0960902	Installation of 220 kV GIS Mahalaxmi, installation of additional ICT No.5 and 33 kV GIS at Mahalaxmi substation	-	3.89	11.12	12.98	-	Disallowed
4	T.0880904	220kV GIS at Sahar Airport	-	1.51	5.19	-	-	Disallowed
5	T.0991101	145 kV GIS at Mankhurd	-	2.29	-	-	-	Disallowed
6	T.0811208	110/33KV S/S at Ixora,Panvel.	2.72	1.20	26.12	-29.99	-	Deferred & Disallowed
7	0	SAP DPR Allocation	-	2.53	5.05	-	-	Disallowed
8	G.07209I7	Construction of New 220kV bays (3 nos.)		1.94				Disallowed
9	T.0941107	220 KV Rec Stn at Antop Hill Wadala	-	-	-	-	164.33	Deferred
10	T.0911106	Replacement of 22kV Switchgear at Borivli	-	-	-	-	-0.14	Deferred
11	T.0911304	220 Kv GIS at Versova	-	1.02	10.75	-	-11.77	Deferred
12	T.14012115002	Replacement of Transformer 1 & 2 at Saki	-	0.39	19.67	-20.06	-	Deferred