#### **GUJARAT ELECTRICITY REGULATORY COMMISSION**



#### **Tariff Order**

Truing up for FY 2020-21

and

Determination of ARR and Tariff for FY 2022-23

For

# Gujarat Energy Transmission Corporation Limited (GETCO)

Case No. 2026 of 2021 30<sup>th</sup> March, 2022

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# GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)

#### **GANDHINAGAR**

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#### **ABBREVIATIONS**

ABT	Availability Based Tariff		
A&G	Administration and General		
ARR	Aggregate Revenue Requirement		
ATC	Annual Transmission Charges payable by Long-Term user or		
7110	Medium-Term user of the transmission system		
CAPEX	Capital Expenditure		
CC	Capacity Contracted in MW		
CEA	Central Electricity Authority		
CERC	Central Electricity Regulatory Commission		
Ckt-Km	Circuit Kilometre		
CoD	Commercial Operation Date		
СОН	Capital Overhauling		
DISCOMs	Distribution Companies		
EA 2003	Electricity Act, 2003		
FY	Financial Year		
GEB	Gujarat Electricity Board		
GERC	Gujarat Electricity Regulatory Commission		
GETCO	Gujarat Energy Transmission Corporation Limited		
GFA	Gross Fixed Assets		
GoG	Government of Gujarat		
Gol	Government of India		
GSECL	Gujarat State Electricity Corporation Limited		
GUVNL	Gujarat Urja Vikas Nigam Limited		
HVDC	High Voltage Direct Current		
IPP	Independent Power Producer		
kV	kilo Volt		
kVAh	kilo Volt Ampere Hour		
kWh	kilo Watt Hour		
MCLR	Marginal Cost of Funds based Lending Rate		
MVA	Mega Volt Ampere		
MW	Mega Watt		
MYT	Multi-Year Tariff		
O&M	Operations & Maintenance		
OEM	Original Equipment Manufacturer		
PPA	Power Purchase Agreement		



R&M	Repair & Maintenance
RE	Renewable Energy
RoE	Return on Equity
SCC	Sum of Capacities contracted in MW by all Long-Term users and Medium-Term Users of the Transmission System
SLDC	State Load Despatch Centre
TBCB	Tariff Based Competitive Bidding
TC (Rs. /MW/Day)	Transmission Charges payable by the Short-Term user of the Transmission System
TC (Rs. /kWh)	Transmission Charges payable in the case of Short-Term collective transactions through Power Exchanges
TPL	Torrent Power Limited
Wt. Avg.	Weighted Average





# Before the Gujarat Electricity Regulatory Commission at Gandhinagar

Case No. 2026 of 2021

Date of the Order: 30th March, 2022

#### **CORAM**

Shri Anil Mukim, Chairman Shri Mehul M. Gandhi, Member Shri S.R. Pandey, Member

#### **ORDER**



#### 1 Background and Brief History

#### 1.1 Gujarat Energy Transmission Corporation Limited (GETCO)

Government of Gujarat unbundled and restructured the Gujarat Electricity Board with effect from 1<sup>st</sup> April, 2005. The Generation, Transmission and Distribution businesses of the erstwhile Gujarat Electricity Board were transferred to seven successor companies as listed below:

- Gujarat State Electricity Corporation Limited (GSECL) A Generation Company;
- Gujarat Energy Transmission Corporation Limited (GETCO) A Transmission Company;

Four Distribution Companies, namely:

- Dakshin Gujarat Vij Company Limited (DGVCL);
- Madhya Gujarat Vij Company Limited (MGVCL);
- Paschim Gujarat Vij Company Limited (PGVCL);
- Uttar Gujarat Vij Company Limited (UGVCL); and
- Gujarat Urja Vikas Nigam Limited (GUVNL) A Holding Company of above named six subsidiary Companies, responsible for bulk purchase of electricity from various sources and bulk supply to Distribution Companies.

The Government of Gujarat vide Notification dated 3<sup>rd</sup> October, 2006 notified the final opening Balance Sheets of the transferee Companies as on 1<sup>st</sup> April, 2005, containing the value of assets and liabilities, which stand transferred from the erstwhile Gujarat Electricity Board to the transferee companies, including GETCO.

The transmission assets of the erstwhile Gujarat Electricity Board, including the assets related to the State Load Despatch Centre (SLDC), were transferred to the newly created entity, GETCO. However, Government of India, Ministry of Power, has initiated steps to de-link the National and Regional / State Load Despatch Centre from the Central Transmission Utility (CTU) / State Transmission Utility (STU).



# 1.2 Commission's Order for approval of True up of FY 2018-19 and Determination of tariff for FY 2020-21

The Commission vide its Order dated 26<sup>th</sup> March, 2020 in Case No. 1837 of 2019 has approved the Truing up for FY 2018-19 and determined the Tariff for FY 2020-21.

# 1.3 Commission's Order for approval of True up of FY 2019-20 and Determination of tariff for FY 2021-22

The Commission vide its Order dated 30<sup>th</sup> March, 2020 in Case No. 1909 of 2020 has approved the Truing up for FY 2019-20 and determined the Tariff for FY 2021-22.

#### 1.4 Background of the present Petition

Gujarat Energy Transmission Corporation Limited (hereinafter referred to as "GETCO" or the "Petitioner") has filed the present Petition on 29<sup>th</sup> November, 2021 for the Truing up for FY 2020-21 under Section 62 of the Electricity Act, 2003, (hereinafter referred to as "EA 2003") read with Gujarat Electricity Regulatory Commission (Multi-Year Tariff) Regulations, 2016 (hereinafter referred to as "GERC (MYT) Regulations, 2016").

Gujarat Electricity Regulatory Commission (hereinafter referred to as 'GERC' or the 'Commission') notified the GERC (MYT) Regulations, 2016 on 29<sup>th</sup> March, 2016, which is applicable for determination of tariff in all cases covered under the Regulations from 1<sup>st</sup> April, 2016 until 31<sup>st</sup> March, 2021. Subsequently, the Commission vide its Suo-Motu Order No. 7 of 2020 dated 22<sup>nd</sup> December, 2020 deferred the notification of the Regulations by one year and directed the Licensees / utilities to file the tariff application for the FY 2021-22 based on the principles and methodologies as provided in the GERC (MYT) Regulations, 2016. Similarly, the Commission vide its Order in Suo-Motu Petition No. 1995 of 2021 dated 24<sup>th</sup> September, 2021 directed generating companies, licensees and utilities to file their tariff applications for approval of true-up for FY 2020- 21 and for determination of ARR and Tariff for FY 2022-23 on or before 30<sup>th</sup> November, 2021 based on the principles and methodologies as provided in the GERC (MYT) Regulations, 2016.

Thus, Regulation 17.2 (b) of the GERC (MYT) Regulations, 2016 provides for submission of Petition comprising of Truing up for FY 2020-21, Aggregate Revenue Requirement (ARR) for FY 2022-23, revenue from the sale of power at existing tariffs and charges for FY 2022-23, and Revenue Gap or Revenue Surplus for FY 2022-23.



#### 1.5 Registration of the current Petition and Public Hearing Process

GETCO has filed the current Petition for Truing up for FY 2020-21 and Determination of ARR and Tariff for FY 2022-23 on 29<sup>th</sup> November, 2021. After Technical Validation of the Petition, it was registered on 3<sup>rd</sup> December, 2021, as Case No. 2026 of 2021. As provided under Regulation 29.1 of the GERC (MYT) Regulations, 2016, the Commission has proceeded with this Tariff Order.

In accordance with Section 64 of the Electricity Act, 2003, GETCO was directed to publish its application in an abridged form in the newspapers to ensure due public participation.

The Public Notice, inviting objections / suggestions from the stakeholders on the Truing up and Tariff Determination Petition filed by GETCO, was published in the following newspapers:

Table 1-1: List of Newspapers in which Public Notice was published by the Petitioner

Sr. No.	Name of Newspaper	Language	Date of Publication
1	The Indian Express	English	10/12/2021
2	Divya Bhaskar	Gujarati	10/12/2021

The Petitioner also placed the Public Notice and the Petition on its website (<a href="www.getcogujarat.com">www.getcogujarat.com</a>), for inviting objections and suggestions. The interested parties / stakeholders were asked to file their objections / suggestions on the Petition on or before 9<sup>th</sup> January, 2022.

The Commission also placed the Petition and additional details received subsequently from the Petitioner on its website (<a href="www.gercin.org">www.gercin.org</a>) for information and study of all the stakeholders.

The Commission also issued a notice for Public Hearing in the following newspapers in order to solicit wider participation by the stakeholders:

**Table 1-2: List of Newspapers** 

Sr. No.	Name of Newspaper	Language	Date of Publication
1	The Time of India	English	06/02/2022
2	Sandesh	Gujarati	06/02/2022
3	Gujarat Samachar	Gujarati	06/02/2022



The Commission received objections / suggestions from consumers / consumer organizations as shown in the Table below. The Commission examined the objections / suggestions received from the stakeholders and fixed the date for e-Public Hearing through video conferencing for the Petition on 16<sup>th</sup> February, 2022 at 3.00 PM.

The status of stakeholders who submitted their written suggestion / objections, those who participated in the Public Hearing, and those who made oral submissions are given in the Table below:

Participated in Written Sr. Oral the Public Name of Newspaper **Submission** No. **Submission** hearing Federation of Kutch Industries 1 Yes Yes Yes Association (FOKIA) **Torrent Power Limited** 2 Yes Yes Yes Utility Users' Welfare Association 3 Yes Yes Yes (UUWA) 4 Shri Rajeshbhai Patel No No Yes Gujarat Krushi Vij Grahak Suraksha 5 No No Yes Sangha 6 Shri Himanshu Umrajwala No Yes No

Table 1-3: List of Stakeholders

A short note on the main issues raised by the Objectors in the submissions in respect of the Petition, along with the response of GETCO and the Commission's views on the response, are briefly given in Chapter 3.

#### 1.6 Contents of this Order

The Order is divided into Seven Chapters as under: -

- (a) The **First Chapter** provides the background of the Petitioner, the Petition and details of the Public Hearing process and the approach adopted for this Order;
- (b) The **Second Chapter** outlines the summary of GETCO's Petition;
- (c) The **Third Chapter** provides a brief account of the Public Hearing process, including the objections raised by various stakeholders, GETCO's response and the Commission's views on the response;
- (d) The Fourth Chapter deals with the Truing up for FY 2020-21;
- (e) The **Fifth Chapter** deals with the Aggregate Revenue Requirement (ARR) for FY 2022-23;



- (f) The **Sixth Chapter** deals with the determination of Tariff for FY 2022-23;
- (g) The **Seventh Chapter** deals with the compliance of directives.

#### 1.7 Approach of this Order

The GERC (MYT) Regulations, 2016, provide for "Truing up" of the previous year and determination of tariff for the ensuing year. The Commission has approved ARR for five years of the Control Period of FY 2016-17 to FY 2020-21 in the MYT Order dated 31<sup>st</sup> March, 2017.

The Commission vide its Suo-Motu Order No. 7 of 2020 dated 22<sup>nd</sup> December, 2020 deferred the notification of the Regulations by one year and directed the Licensees / utilities to file the tariff application for the FY 2021-22 based on the principles and methodologies as provided in the GERC (MYT) Regulations, 2016. Similarly, the Commission vide its Order in Suo Motu Petition No. 1995 of 2021 dated 24<sup>th</sup> September, 2021 directed generating companies, licensees and utilities to file their tariff applications for approval of true-up for FY 2020- 21 and for determination of ARR and Tariff for FY 2022-23 on or before 30<sup>th</sup> November, 2021 based on the principles and methodologies as provided in the GERC (MYT) Regulations, 2016.

Accordingly, GETCO has approached the Commission with the present Petition for Truing up for FY 2020-21 and determination of ARR and tariff for FY 2022-23.

The Commission has undertaken Truing up for FY 2020-21, based on the submissions of the Petitioner. The Commission has undertaken the computation of Gains and Losses for FY 2020-21, based on the audited annual accounts and prudence check.

While truing up for FY 2020-21, the Commission has been primarily guided by the following principles:

- Controllable parameters have been considered at the level approved as per the MYT Order, unless the Commission considers that there are valid reasons for revision of the same.
- Uncontrollable parameters have been revised based on the actual performance observed.
- The Truing up for FY 2020-21 has been considered, based on the GERC (MYT) Regulations, 2016.

The Commission has determined ARR and Tariff for FY 2022-23 as per the GERC (MYT) Regulations, 2016 and its amendments thereof as the base. Truing up of FY



2022-23 shall be carried out based on the principles and methodology adopted in GERC (MYT) Regulations, 2016.



#### 2 Summary of GETCO's Petition

#### 2.1 Summary of GETCO's Petition

This Chapter highlights the summary of the Petition for True-Up of FY 2020-21 and Determination of ARR and Tariff for FY 2022-23.

#### 2.2 True-Up of FY 2020-21

GETCO submitted the Petition on 29<sup>th</sup> November, 2021 seeking approval of Truing up of ARR for FY 2020-21. GETCO has computed its ARR for FY 2020-21 as a part of the True-up of FY 2020-21. GETCO has presented the actual cost components based on audited Annual Accounts for FY 2020-21. A summary of the proposed ARR for Truing up for FY 20020-21 compared with the approved final ARR for FY 2020-21 in the MYT Order dated 31<sup>st</sup> March, 2017 is presented in the Table below:

Table 2-1: Summary of Truing up for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed	Deviation
1	Operation & Maintenance Expenses	1,882.18	1,451.84	430.34
2	Depreciation	1,355.67	1,189.71	165.96
3	Interest & Finance Charges	618.80	506.10	112.70
4	Interest on Working Capital	93.39	72.76	20.63
5	Return on Equity	1,013.02	996.05	16.97
6	Total Fixed Costs	4,963.06	4,216.46	746.60
7	Add: Provision for Tax	64.62	329.88	(265.26)
8	Total Transmission Charges	5,027.68	4,546.35	481.33
9	Less: Expenses Capitalized	194.13	213.84	(19.71)
10	Less: Non-Tariff Income	331.37	70.31	261.06
11	Add: Incentive for Target Availability	-	43.03	(43.03)
12	Aggregate Revenue Requirement	4,502.18	4,305.22	196.96

Summary of the Gain/(Loss) due to allocation to Controllable & Uncontrollable factors are outlined in the Table below:



Table 2-2: Summary of Controllable & Uncontrollable Factors submitted by GETCO (Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Operation & Maintenance Expenses	1,882.18	1,451.84	511.70	(81.36)
2	Depreciation	1,355.67	1,189.71		165.96
3	Interest & Finance Charges	618.80	506.10		112.70
4	Interest on Working Capital	93.39	72.76		20.63
5	Return on Equity	1,013.02	996.05		16.97
6	ARR (1 to 5)	4,963.06	4,216.46	511.70	234.89
7	Add: Provision for Tax	64.62	329.88		(265.26)
8	Less: Non-Tariff Income	331.37	70.31		261.06
9	Add: Incentive for Target Availability	-	43.03		(43.03)
10	Less: Expenses Capitalized	194.13	213.84		(19.71)
11	Total ARR	4,502.18	4,305.22	511.70	(314.74)
12	Net Gain / (Loss) on account of Controllable / Uncontrollable Factors			511.70	(314.74)
13	Gain on account of Controllable Factors to be passed on to Consumer (1/3 x Sr. No. 12)			170.57	
14	Losses on account of Uncontrollable Factors to be passed on to Consumer				(314.74)

Based on the above sharing of Gain and Loss, the Petitioner has claimed the following Gap for FY 2020-21.

Table 2-3: Gap for FY 2020-21, as submitted by GETCO (Rs. Crore)

Sr. No.	Particulars	Amount
1	Gain / (Loss) on account of Uncontrollable factor to be passed on to Beneficiaries for FY 2020-21	(314.74)
2	Gain / (Loss) on account of Controllable factor to be passed on to Beneficiaries (1/3 <sup>rd</sup> of Total Gain / (Loss) for FY 2020-21	170.57
3	Total Gain/ (Loss) of the true up to be addressed in the determination of tariff for FY 2022-23	(144.18)



#### 2.3 ARR and Tariff for FY 2022-23

In accordance with provisions of the GERC (MYT) Regulations, 2016, ARR for FY 2022-23 has been computed by GETCO as follows:

Table 2-4: ARR for FY 2022-23, as submitted by GETCO (Rs. Crore)

Sr. No.	Particulars	FY 2022-23
1	Operation & Maintenance Expenses	2,156.84
2	Depreciation	1,381.91
3	Interest & Finance Charges	507.86
4	Interest on Working Capital	87.06
5	Return on Equity	1,155.66
6	Total Fixed Costs	5,289.33
7	Less: Expenses Capitalized	239.00
8	Add: Provision for Tax	329.88
9	Total Transmission Charges	5,380.21
10	Less: Non-Tariff Income	494.48
11	Aggregate Revenue Requirement	4,885.73

GETCO has calculated the Transmission Tariff for FY 2022-23 after considering the Gap of FY 2020-21 as follows:

Table 2-5: Transmission Tariff for FY 2022-23 as submitted by GETCO (Rs. Crore)

Sr. No.	Particulars	FY 2022-23
1	Aggregate Revenue Requirement for FY 2022-23	4,885,73
2	Add / (Less): Revenue Gap / (Surplus) for FY 2020-21	144.18
3	ARR after considering Gap of true-up for FY 2020-21 (1 + 2)	5,029.90
4	Total MW allocation	33,329.97
5	Transmission tariff (Rs/MW/day)	4,135

Further, GETCO has proposed to allow recovery of transmission charges at 41.00 Paise/kWh for all types of Short-Term transactions.

Also, GETCO requested to continue the same rate of Reactive Energy Charges for all renewable sources, i.e., Wind, Solar, Biomass, Bagasse, Mini Hydro, MSW, etc., as approved in the Order in Case No. 1909 of 2020 dated 30<sup>th</sup> March, 2021, as shown in the Table below:



Table 2-6: Reactive Energy Charges as submitted by GETCO

Sr. No.	Particulars	FY 2022-23
1	For the drawal of reactive energy at 10% or less of the net energy exported	10 paisa/kVARh
2	For the drawal of reactive energy at more than 10% of the net energy exported	50 paisa/kVARh

#### 2.4 Prayers made by GETCO

In the present Petition, GETCO made the following prayers:

- (a) To admit this Petition seeking True up of FY 2020-21, Aggregate Revenue Requirement for FY 2022-23 and Tariff Proposal for FY 2022-23.
- (b) To approve the True up for FY 2020-21 and allow sharing of gains/ (losses) with the Consumers as per sharing mechanism prescribed in the GERC (MYT) Regulations, 2016.
- (c) To allow recovery of Revenue (Gap) / Surplus of FY 2020-21 as part of Tariff determination for FY 2022-23.
- (d) To approve Aggregate Revenue Requirement for FY 2022-23 as submitted by the Petitioner.
- (e) Pass suitable orders for implementation of Tariff Proposal for FY 2022-23 for making it applicable from 1<sup>st</sup> April, 2022 onwards.



# 3 Brief outline of objections raised, response from GETCO and Commission's View

#### 3.1 Public Response to the Petition

In response to the Public Notice inviting objections/suggestions from the stakeholders on the Petition filed by GETCO for Truing up for FY 2020-21 and determination of ARR and Tariff for FY 2022-23 under the GERC (MYT) Regulations, 2016, some consumers /consumer organizations filed their objections/suggestions in writing, and also participated in the Public Hearing.

The Commission has considered the objections/suggestions relevant to the present Petition and the response of GETCO on the same.

The objections/suggestions by the consumers/consumer organizations, the response from the Petitioner and the views of the Commission are dealt with hereunder:

#### 3.2 Issue-wise Submissions and Replies

#### Issue No. 01: Shortfall in Network Capacity

The Objector submitted that the Petition as submitted by GETCO needs to be in compliance / accordance with the provisions of EA 2003, National Electricity Policy (NEP) and the notifications whereby Section 39 specifies function and Section 40 specifies duties of the transmission licensee. Further, it submitted that transmission utility is required to comply the directives issued by SLDC and has to ensure the grid operations, for achieving the maximum economy and efficiency in the operation of the Power System.

However, looking to the progress of the expansion of the network with huge capital expenditure and more particularly the actions like over delayed in creating of required network to control loading elements within specified designed capacity, it seems that this prime function to create needed network capacity is neglected.

#### **GETCO's Reply**

The Petitioner submitted that it has commissioned the following assets during FY 2016-17 to FY 2020-21:



Voltage Class (kV)	Substation (Nos.)	Transmission Line (Ckm)
400 kV	5	489.70
220 kV	14	2537.55
132 kV	5	398.23
Total	24	3426.18

Further, GETCO has undertaken the analysis of the commissioned system and found that, with the commissioning of the above said network, Transmission Grid is further strengthened, especially in central and southern part of Gujarat, Tribal belt and Saurashtra Region. This is also substantiated from the fact that the renewables of the capacity of 3200 MW have been added in the network during MYT control period. The increase in network has been facilitating high RE integration and ensuring 100% evacuation of RE integration in GETCO system. The addition of such network has also improved the voltage profile and short circuit level at major locations. Further, with regards to expansion of network, GETCO is providing sustainable and reliable power, redundancy in the form of N-1 contingency to be achieved as per CEA Regulations. Moreover, overloading of the transmission elements has not been observed in last year.

#### Commission's View

The Commission noted the expansion of network of GETCO as outlined above.

#### Issue No. 02: Audit Observations under Annual Report for FY 2020-21

The Objector submitted that GETCO should be directed to furnish the compliance of the Audit remarks and the necessary corrections to be made in ARR. It is observed in Audit Report that, during FY 2020-21, GETCO has wrongly reversed revenue of transmission charges of Rs. 126.29 Crore for revenue surplus determined in Tariff Order dated 26<sup>th</sup> March, 2020. For correcting the said error, it has wrongly credited the same amount during FY 2020-21, instead of crediting retained earnings under other equity as on 1<sup>st</sup> April, 2020. Hence, the profit for FY 2020-21 is overstated and the Retained Earnings is understated to that extent.

Further, Auditor has disclosed following matters under the head "Emphasis of Matters", which needs to be complied by GETCO:

a. it is also observed that GETCO has allowed COVID rebate of Rs. 238.67 Crore in FY 2020-21 to its customer from April, 2020 to June, 2020, which is equivalent to Return on Equity approved by the Commission for FY 2020-21.



b. In addition to this, it is also observed that, reconciliation of the assets between the grants / consumer contribution received and individual assets created from such grants / consumer contribution has not been done. Also, customer wise details of consumer contribution towards capital assets of Rs. 2105.83 Crore as on 31<sup>st</sup> March, 2021 is not maintained by GETCO.

Further, Objector submitted that Petitioner has not provided the cost records prescribed by the Central Government under Section 209(1)(d) of the Companies Act, 1956 along with Cost Audit Reports as contemplated in the MYT Regulations, 2011 and 2016. Further, it is added that, being a Government owned company, the Petitioner is mandated for CAG Audit. The Petitioner should be directed to provide the above said information.

#### **GETCO's Reply**

The Petitioner submitted that preparation of annual accounts and filing of Petition is separate and distinct activity. The preparation of accounts is done as per provisions of Accounting Standards and the Companies Act, 2013 and filing of the Petition and activity related to True-up and ARR is done under the provisions of Electricity Act, 2003 and as per norms of GERC (MYT) Regulations, 2016. The observation of the Auditor is in respect of the provisions of Ind AS to be complied by GETCO in accounting revenue.

Further, it has submitted that, the surplus for FY 2018-19 was recognised in Tariff Order before finalisation of annual accounts for FY 2020-21. As per prudent practice, surplus was accounted for and necessary credit adjustment was given in FY 2020-21. This is akin to the regular accounting practice for accrual of liability or unbilled revenue where they are recognised based on accrual concept and reversed in the subsequent period when actually billed and accounted so as to ensure no duplication. The same is also shown in Note 53 of Annual Accounts for FY 2020-21.

GETCO submitted that Statutory Auditor through Emphasis of Matter has highlighted the facts which has already been disclosed by GETCO in its Annual Financial Statements and Notes to the Accounts. As per the Accounting practice, whenever Statutory Auditor would like to draw the attention of readers to the particular facts and circumstances, they are empowered to emphasis the matter once again, even though the Company has disclosed the same in its Notes to the Accounts. Accordingly, in the aforesaid two nos. of emphasis, Statutory Auditor has drawn attention to the Readers of Annual Accounts to the Notes/Policies (No. 61 and 65) mentioned in the Annual Accounts of GETCO.



As regards cost records, GETCO has provided all the necessary and relevant details as required by GERC for the purpose of ARR/True Up and documents/details as per the requirement of MYT regulations. Further, no comments are received by the Office of C&AG on the audit of Annual Accounts of FY 2020-21. The same in provided by GETCO to Commission with the copy of Annual Accounts of FY 2020-21.

#### Commission's View

For the purpose of Truing up, the Commission relied on the revenue approved in the tariff Order as issued in past for the respective year. Further, revenue in annual accounts is accounted as per Ind AS. The Commission notes the observation made by Statutory Auditor in this regard.

With respect to COVID rebate of Rs. 238.67 Crore as highlighted in the annual accounts of FY 2020-21, the Commission has observed that GETCO has not claimed the same in the True-up and hence there is no impact of the same on ARR of FY 2020-21.

However, with respect to identification of Grants / Consumer contribution with individual assets, it has been observed that the Assets register is maintained by GETCO whereby depreciation is charged as per GERC (MYT) Regulations, 2016 and the impact of consumer contribution has been considered while calculation of funding and deferred revenue which is as per the past adopted practise and in line with the Tariff Regulations. Since the preparation of accounts is done as per provisions of Accounting Standards and the Companies Act, 2013 and filing of the Petition, True-up and ARR is done under the provisions of Electricity Act, 2003 and as per norms of GERC (MYT) Regulations, 2016.

#### Issue No. 03: Comparison of Capital Expenses

The Objector submitted that no expenses have been incurred as against approved expenses for 765 kV substations and lines. Further, against the approved capital expenses for 400 kV S/S and lines of Rs. 431 Crore and Rs. 517 Crore respectively, only capital expenses of Rs. 258.97 Crore and Rs. 129.16 Crore were incurred. Similarly, for 220 kV substation and lines, the actual expenses incurred is Rs. 261.57 Crore and Rs. 118.38 Crore as against approved expenses of Rs. 413 Crore and Rs. 299 Crore. Also, capital expenses incurred for 66 kV Substation and lines and R&M schemes are lower as against the approved capital expenses. Such lower capital expenses shall be analysed by the Commission.



This situation results into continuation of operation of some of the transmission elements beyond their design capacity, which will also increase the system losses and sacrifices the security margin of the system. Such non utilisation of funds shows that there is inordinate delay in execution of planned network. The Commission is requested to undertake the due diligence of the same.

Also, the details regarding the transmission elements to be commissioned during FY 2020-21 with present status and updated commissioning schedules were sought.

#### **GETCO's Reply**

The Petitioner submitted the details of Transmission network planned to be commissioned during FY 2020-21 with present status and updated commissioning schedule along with reason for the deviation.

#### Commission's View

The Commission has noted the data submitted by GETCO regarding the capitalisation made during FY 2020-21.

#### Issue No. 04: Transmission Losses

The Objector submitted that the transmission losses projected by GETCO for FY 2022-23 is 3.72%, which is very high in comparison with losses of FY 2020-21 as 3.41%. The justification for such increase in losses shall be submitted and increase in projected losses should not be approved.

#### **GETCO's Reply**

The Petitioner submitted that the following has impacted the transmission losses:

- (a) Due to COVID-19 pandemic situation, Gujarat Catered (total demand) was reduced. Wherein in the major part i.e., consumption of Industrial load was decreased compared to previous year.
- (b) The overall load of the State was decreased in FY 2020-21, affecting the I<sup>2</sup>R loss which is less compared to previous year.
- (c) The Wind generation is decreased with compared to past year, which has directly affected the Transmission loss.
- (d) The wind generation injection nodes in the Gujarat network are far from load centres.

  During the period of less wind generation injection, it was observed that, the



conventional generation and Solar generation has contributed to the corresponding months and has impact on yearly Transmission losses. Also, the solar generation has increased compared to previous year due to addition of Solar capacity in the system.

(e) There has been lot of Distributed solar integration in the grid. In such cases, the Solar generation is connected and evacuated in the local load pockets, which has impacted the overall transmission loss.

Further, absolute value of transmission loss cannot be predicted or fixed as Transmission loss is purely a technical loss. It is inevitable and vary according to power flow profile in reference to transmission system operation with respect to energy demand and energy supply. Transmission loss is variable in nature and depends upon many factors, like voltage level, type of load, seasonal variation, current situation as COVID-19 pandemic, etc. Accordingly, GETCO has projected the Losses of 3.72% for FY 2022-23, based on average losses of last five years.

#### **Commission's View**

The Commission has noted the submission of GETCO on the projected transmission losses for FY 2022-23 which are 3.72%. This is going to be again checked at the time of true-up exercise.

#### Issue No. 05: Additional Loading of Transmission System and lines

The Objector submitted that with respect to table related to anticipated loading of GETCO at the end of FY 2022-23, it was observed that full capacity of machines of Gandhinagar TPS Unit No. 3 & 4, Ukai TPS Unit No. 3, 4 & 5 and Wanakbori TPS Unit No. 1,2,3,4,5 and 6 have completed more than 25/40 years and full capacity generation may not be possible and correction in capacity needs to be considered.

Also, GETCO carry out regular studies to decide schemes to be planned and executed to meet the system requirements so that the system can be operated as per Grid Code. Similarly, SLDC is also monitoring system operation and informing transmission elements operating near to design criteria so that the system can be planned executed timely to ensure that all the elements are operating within the design margins.

However, it was observed that data uploaded on GETCO website for large number of elements have recorded sustained load much higher than capacity and the time date as



well as system condition is not mentioned. Hence it could not be ascertained whether the sustained load is attributed to any system outage of transmission network and / or generation planned / forced outages. It is observed that large numbers of lines and substations are indicated as running with load more than the design criteria.

Further, it is clear that sustained loading during peak of quarter above design loading is allowed by GETCO for much longer period and thermal loading of the lines are not specified by GETCO in MVA or Amperes.

Also, some of the lines e.g., 220 kV Ukai-Mota D/C, GPEC-Haldarva D/C and Jhanor-Haldarva D/C are loaded much above design capacity continuously for months and years. Other lines are also found loaded beyond design capacity for several days, which leads to doubts about design capacity states by GETCO. The loading of lines above design capacity indicates that the transmission system was not able to handle even long-term transactions.

#### **GETCO's Reply**

The Petitioner submitted that the generation capacity of the said plants is considered on the basis of the data submitted by GUVNL as per the PPA signed between GSECL and GUVNL. However, the retirement and de-rated capacity of the any generation station is decided by power Generating company and the procurer company, and in present case also the capacity has been mentioned as given by the GUVNL.

With regards to the loading of the transmission lines, as per data uploaded on GETCO website regarding sustain demand / peak load, it is pertinent to note that the thermal loading limit is same as design capacity limit for 132 kV and 220 kV transmission lines and the designed thermal capacity of 400 kV Twin - Moose conductor is 900 MW. However, its rated capacity is fixed at 615 MW to keep safety margin for operational flexibilities.

Further, the thermal loading limit of a transmission line conductor is determined by design parameters based on ambient temperature, solar radiation, wind speed, seasonal changes etc and accordingly, the loading capacity of transmission line may vary from time to time.

In addition, the above 220 kV and 132 kV lines are quite short lines, less than 50 KM in length which can be loaded continuously on its thermal rating and even on higher rating for a short duration. Also, this will not impact on system stability, reliability and will not result in voltage drop.



Also, the maximum loading recorded on above lines is not continuous loading and may have resulted due to an outage on associated elements, during peak agriculture loading/season etc.

GETCO submitted that the quarterly peak load data on the website for this transmission element doesn't mean that this loading remains continuous for days, weeks or months.

GETCO has also submitted the status of elements alongwith measures taken by GETCO.

With regards data published in MW or MVA, GETCO has submitted that as per Para no. 43 of GERC (Terms and Conditions of Intra-State Open Access) Regulations, 2011, the transmission system segment capacity is considered as 'MW' and for substation capacity considered as 'MVA' therefore the data is published as MW and MVA rather than Ampere.

#### Commission's View

The Commission has noted the details of loading submitted by GETCO along with this Petition. The transmission line / system operation and loading are based on many factors as outlined above and system security has to be adhered to.

#### Issue No. 06: Impact of Tariff proposals

The Objector submitted that transmission charges proposed have increased from Rs. 0.36/kWh to Rs. 0.41/kWh, however, there is no commensurate increase in transmission network capacity/services made available. The increase in capex is for meeting O&M expenses. Hence, there is need for proper justification for revision in transmission charges and due diligence by Commission before revising the transmission tariff.

Further, the Objector submitted that the tariff proposed by the Petitioner for FY 2022-23 is Rs. 4,135/MW/day which is quite higher than the last tariff. The Petitioner has not given any statement like the transmission lines were created for the specific generators and as per terms and conditions of PPA, generators are not paying transmission charges to the Petitioner.

#### **GETCO's Reply**

The Petitioner submitted that it has proposed the Long/Medium term transmission charges as Rs. 4135.00/MW/Day, whereas the transmission charges for short term open access is 41.00 Ps/kWh. Transmission charges approved by Commission for FY 2021-



22 was Rs. 4252.00/MW/Day. From this it is clear that, the Transmission charges proposed for the Long/Medium term are lesser than the prevision year's approved charges.

It is further submitted that, more than 95% of ARR received is through the Long/Medium term transmission charges and are much higher than the Short-term open access. Hence, it is denied that GETCO has proposed higher transmission charges as compared to prevision year.

#### **Commission's View**

The Commission has determined the transmission charges for FY 2022-23 based on the approved ARR for FY 2022-23 and projected demand as per the MYT Regulations.

#### Issue No. 07: Diversion of Funds

The Objector submitted that diversion of funds to augmentation of 66 kV network without commensurate growth in the system load leads to over capacities at 66 kV level and sub optimal capacities at 400 kV and 220 kV level. This will lead to unsecure operation and further increase in cost to consumers. In view of the above, the Commission is requested to not approve diversion of capex from 400 kV and 220 kV to 66 kV without proper justification.

Also, large amount of approved funds meant for 400 kV and 220 kV line and / or substations projects seems to have been diverted to other projects and the Commission is requested to carry out prudence checks so as to ascertain whether diversion of funds is justified in view of improper planning by GETCO.

#### **GETCO's Reply**

The Petitioner submitted the detailed of voltage wise increase in scheme vis-à-vis approved amount along with detailed justification. Some of the key features as provided in the details are as follows:

- 765 kV substation and transmission lines was dropped as additional generation capacity at Gandhinagar and Dhuvaran Power Plant could not be materialised;
- Decrease in CAPEX under 400 kV substation was due to drop of the project related to coastal based power plant;
- Certain cost was delayed due to delay in land allotment, RoW issues, Contractual



issues, change in priority due to other time bound projects, delay in approval of Kisan Suryodaya Yojana (KSY) etc

Due to such reasons, higher CAPEX may be seen on 66 kV class elements whereas lower in case of 220 kV and 400 kV.

#### Commission's View

The Commission has noted the details submitted by GETCO related to CAPEX and capitalisation along with this Petition. The detailed analysis is at the relevant portion of the Order.

#### Issue No. 08: Addition of unrequired assets

The Objector submitted that it is important to review how 66 kV is utilised as it has been observed that 600 number of 66 kV substations are having maximum loading less than 25% of installed capacity. Out of which 150 numbers of substations are even loaded more than 10% of installed capacity. It is a practice of GETCO to plan 66 kV substations based on the requirement of Discoms. However, prudence check by GETCO is also required to be exercised.

Further it is suggested that DISCOMS may be asked to develop the load on the existing substation by laying 11 kV feeders unless nearby 66 kV substation have not crossed 60% of loading. The addition of unrequired assets leads to avoidable increase in transmission charges.

#### **GETCO's Reply**

GETCO submitted that it is Revenue neutral organization. The assets that are created by GETCO and also its sub transmission network i.e. 66 kV system, is only on the request and requirement of DISCOMs. Procedure for the creation of 66 kV substation was discussed in length during review meeting of the performance of distribution companies and GETCO whereby it was decided that DISCOMs have to decide judiciously on the demand of creation of new 66 kV substations and submit the proposal to GETCO. Further, proposal for creation of new 66 kV substations should be approved from the Managing Director of DISCOM before sending the proposal to GETCO along with the details of which substation needs to be done on priority alongwith the reasons. Based on the proposal received from DISCOM, GETCO applies for the land to the Revenue department and as per the availability of land, GETCO creates new 66 kV



substations. Apart from that, every year, GETCO circulates the list of the upcoming new 66 kV substations to all DISCOMs and requests them to complete the downstream network so that load can be taken as soon as substations are commissioned.

#### Commission's View

The Petitioner is also the State Transmission Utility (STU) and is mandated with planning the Transmission Network in the State of Gujarat. While doing so, STU will be considering the appropriate voltages, keeping all technical considerations for system operation.

#### Issue No. 09: Voltage wise Transmission Charges and Losses

The Objector submitted that total cost of transmission network is considered for arriving at per MW per day transmission charges. At different voltages, different quantum of energy is handled and hence to arrive at system voltage wise transmission cost, it is necessary to have system voltage wise energy handled. Further, it is necessary to have voltage wise information in order to look into the performance of the system.

The Objector, M/s Torrent Power Limited (TPL), has filed the objection in its capacity as a Distribution Licensee in the State of Gujarat and is required to pay the transmission charges & losses for availing open access on GETCO Network.

The Objector submitted that the capital expenditure incurred by GETCO to create the intra-State network includes the cost of 400 kV, 220 kV, 132 kV, and 66 kV network including substation and associated network to make power available to the State Distribution Licensees at 11 kV. The cost is being recovered by GETCO through transmission charges and losses from all beneficiaries in Gujarat whereby intra-state transmission charges are calculated considering ARR for all respective voltage levels.

TPL-D sources power at 220 kV voltage level from GETCO periphery, and thereafter, TPL-D has its own network at lower voltage level to supply electricity to its consumers and the same is part of its capital expenditure. However, TPL-D and in turn, its consumers are required to bear the transmission charges and losses of GETCO for availing open access for all voltage levels including 400 kV, 220 kV, 132 kV, and 66 kV/11 kV without even utilising the network.

Ideally, consumption at a particular voltage level requires network at that voltage level and all higher voltage levels. Thus, consumption at the lower voltages should contribute



to the higher voltage level, i.e., 220 kV, it would not be utilising the services of the lower voltage level below 220 kV and hence, should not be required to contribute towards the cost recovery of lower voltage network. Hence, TPL-D and its consumers should be required to bear the transmission charges and losses at voltage levels up to 220 KV only. Even in case a generating station is connected at lower voltage level and supplies power to upstream network, the cost of evacuation of power from such generating station is to be borne by the generator or its beneficiary, and TPL-D cannot be asked to bear the cost of such generators.

Wheeling Charges of all Distribution Licensees in the State are being determined separately for 11 kV and above voltages and LT consumers at 400 Volts and below. Same principle is required to be followed in case of GETCO as well, else it will lead to duplication of cost and amounts to cross-subsidisation because of TPL-D bearing the cost of network meant for the Government Distribution Licensees.

The Objector requested the Commission to direct GETCO to furnish the necessary details for determination of transmission charges for the Distribution Licensee sourcing power at 220 kV and above voltage level and other users of the GETCO network. The ratio of Gross Fixed Assets (GFA) of upstream network up to 220 kV substation and balance network can be used to segregate GETCO ARR into ARR pertaining to upstream network and balance ARR. The ARR pertaining to upstream network is being used utilised by all consumers and therefore this portion of ARR is to be further segregated in the ratio of Contract Demand at 220 kV voltage level and Total demand so as to identify the ARR pertaining to consumers connected at upstream network up to 220 kV and balance is to be considered towards the consumers connected at lower voltage level. This identified ARRs are to be divided by respective demand to arrive at the per MW transmission charges.

The Objector requested the Commission to determine the Transmission Charge and Losses of GETCO network for 220 kV and above voltage level and below voltage level for FY 2022-23, so as to avoid additional burden on TPL-D consumers. TPL-D submitted that determination of voltage-wise transmission charges and losses is in accordance with the provisions of the EA 2003.

Further, the Objector submitted that, at present, consumers are required to bear transmission charges and losses of GETCO for all voltage levels including entire GETCO network cost i.e., EHV lines of all voltage levels including substation costs



without utilising such network. This results into cross subsidisation owing to TPL-D consumers bearing the cost of network meant for Gujarat State Owned Discoms. Further, this approach is in contradict with the proviso of Regulation 21(2)(i) of the GERC (Terms and Conditions of Intra-State Open Access) Regulations, 2011, as amended from time to time.

The Objector also submitted that as per the provisions of OA Regulations, all distribution companies including Private and State Discoms are open access customers of GETCO. Based on the proviso to Regulation 21(2)(i) of the GERC (Terms and Conditions of Intra-State Open Access) Regulations,2011, it provides that Discom for which specific transmission system is created, has to bear the charges of such dedicated transmission system. It is important to note that last mile connectivity created by GETCO are covered within the purview of above referred provisions of the Regulation:

".....

Provided that where a dedicated transmission system used for open access has been constructed for exclusive use of an open access customer, the transmission charges for such dedicated system shall be worked out by transmission licensees for their respective systems and got approved by the Commission and shall be borne entirely by such open access customer till such time the surplus capacity is allotted and used by other persons or purposes."

However, the provision related to dedicated transmission systems is not implemented and the cost is socialised whereby all have to bear such cost in intra-state system. Therefore, necessary changes in accordance with the provisions of the Regulations read with the provisions of the ACT is required to be implemented.

Further, the reference was made to RE projects during hearing held on 16<sup>th</sup> February, 2022. In case RE project is connected at lower voltage and supplies power to upstream network, cost of evacuation of power from such RE projects is to be borne by specific generator including TPL. However, consumers of TPL should not be asked to bear this cost of such generators.

The Commission is following postage stamp method for distribution licensees wherein wheeling charges are separately determined for open access consumers at 11 kV and above voltage level and at LT voltage level. Same principle is required to be followed in case of GETCO as well, wherein the Commission may direct GETCO to furnish necessary details for determination of transmission charges in accordance with



provisions of GERC (Terms and Conditions of Intra-State Open Access) Regulations, 2011 read with GERC (MYT) Regulations, 2016.

Further, the Objector submitted that there is no bar in the existing regulatory framework for the Commission to determine voltage wise transmission charges and losses. The Objector requested the Commission to determine the Transmission Charge and Losses of GETCO network for 220 kV and above voltage level and below voltage level for FY 2022-23

## **Response of GETCO**

The Petitioner submitted that public notice was issued on 10<sup>th</sup> December, 2021, with provision of last date for objections / suggestion being 9<sup>th</sup> January, 2022 and objection filed by Torrent Power Limited was on 10<sup>th</sup> January, 2022 (through Mail) and hence not maintainable.

The Petitioner submitted that the power system network in the State as well as at national level is operated as an integrated power network. The power flow in the integrated power network depends upon factors like locations of load and power generation, line impedance of network element, etc. Therefore, when the entity is drawing power at particular voltage level, the power flow in the network not only involves network element of that particular voltage level or higher voltage level but also involves network element of lower voltage level. Whenever entity is drawing power at 220 kV voltage level, the power flow in the network also involves network element of voltage level less than 220 kV. Therefore, it would not be appropriate to say that as TPL is drawing power at 220 kV, it is not utilizing transmission network of lower voltage level, i.e., lower than 220 kV voltage level. All the entities concerned are required to bear the network charges and losses determined on the basis of network as a whole, involving transmission elements of all voltage levels. Considering the above peculiarity of integrated power network, even in case of PGCIL, the transmission charges and losses are not differentiated on the basis of voltage level connectivity.

In case of Inter-State Transmission lines, during the old regime, calculation was based on Postage Stamp method, and the applicable transmission charges were uniform irrespective of voltage level at which the user of transmission line is connected. The present regime of Point of Connection (PoC) charges mechanism for Inter State Transmission line is usage based, which captures the direction and distance of power flow. Only when similar mechanism of capturing distance and direction of power is introduced for Intra-State transmission network as well, such concerns can be



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addressed. Therefore, till such mechanism is introduced at Intra-State level, the existing mechanism of uniform charges should be continued.

Therefore, GETCO transmission network being operated on integrated basis, will not be able to apply voltage-wise transmission charges and losses.

#### Commission's View

The Commission has noted the response submitted by the Petitioner. The PoC mechanism implemented at inter-State level is yet to be introduced at intra-State level, and the present postage-stamp method will continue till such time the PoC mechanism is implemented at intra-State level.

The Petitioner is tasked with creating the necessary transmission infrastructure for transmitting power to the inter-connection points of the Distribution Licensees. The cost of such transmission infrastructure is socialised and recovered at the same rate from all the Distribution Licensees. Hence, GETCO transmission charges and losses shall continue to be recovered uniformly till Intra-State POC mechanism is developed and implemented.

## Issue No. 10: Compliance of Directives

The Objector submitted that in compliance of directive No. 1, GETCO submitted details of transformer loading, maximum loading and average loading registered during QII of FY 2020-21. It is also observed that there are more than 600 Nos. of substations having maximum loading registered less than 25% of installed capacity and about 150 nos. of substations are having maximum loading even less than 10% of installed capacity. This indicates that planning of 66 kV substations is not decided appropriately to meet requirement. Such additional losses and O&M expenses can be avoided.

## **GETCO's Reply**

The Petitioner submitted that new sub-station capacities are planned considering N-1 criteria to have redundancy of sub-station for quality power supply to the consumers and also as per CEA Regulations. Moreover, considering future load growth, the capacity of sub-stations is planned in such way that no augmentation of s/s capacity is required to be done within short span. Also, it is to clarify that only after the construction of new substation the area around it starts developing. Therefore, the load growth takes some time in newly commissioned sub-stations. Timely not transfer of load to new sub-station



from nearby sub-station by DISCOM may also affect the loading of s/s having load less than 25% or 10%. Also, the concept of distributed solar generation where in the Solar RE integration is carried out at 11kV and low voltage level which is also directly affecting the underloading of transformer. With the above facts, the maximum loading of sub-station may remain less than 25% or less than 10% of installed capacity

#### Commission's View

The Commission has noted the details submitted by GETCO.

## Issue No. 11: Audit Report & Accounting Statement

The Objector submitted that the Accounting Statement is not indicating the Quantitative Information regarding the transmission of energy transmitted, and charges collected accordingly for reconciliation of the revenue. In this respect the petition is lacking in the information and necessary data and therefore is not admissible till the compliance of the same.

Further, Objector submitted that there is no mention in either Annual Report or in the truing up or in ARR petition about such outstanding amount from such consumers. The Commission is requested to deduct such amount from its ARR as other embedded consumers are not to be burdened with high tariff for which GETCO / SLDC / DISCOMS / GUVNL administration is responsible.

## **GETCO's Reply**

The Petitioner submitted that Accounting Statements/ Annual Accounts are prepared as per the provisions of Ind-As (Indianize version of IFRS) and the Companies Act, 2013. The necessary details as required are mentioned in the Annual Accounts and same is also verified by Internal Auditor, Statutory Auditor and Office of C&AG. Further, all the necessary and relevant details as required by GERC for the purpose of ARR/True Up is submitted by GETCO to GERC.

Further, the Petitioner submitted that the Outstanding amount is shown by the Petitioner in its Annual Accounts under the head "Trade Receivables". Further Petition for ARR & True Up is filed as per provisions of MYT regulations and all the necessary and relevant details as required by the Commission for the purpose of ARR/True Up is submitted by the Petitioner. Further, the Petitioner in the True up for FY 2017-18 and FY 2018-19 has also sought the amount written off of M/s Essar Steel, the amount of which is yet not



passed by the Commission.

### Commission's View

The Commission has noted the details submitted by GETCO. Further, the Commission has undertaken truing up for FY 2020-21 as per provisions of GERC (MYT) Regulations, 2016.

## Issue No. 12: Revenue from Operations

The Objector submitted that there is no mention of revenue received by the Petitioner in the petition in truing up for FY 2020-21 along with disputed amount. There is no mention in the truing up chapter as to what is the amount or which dispute is going on in the concerned court. The Petitioner is to be directed to give the revenue details from whom they received the amount i.e., from Open Access Consumers, from Discoms, from Pvt. Distribution Licensees, from IPPs, from wind generators, from Solar generators, etc. with quantum and charges.

## **GETCO's Reply**

The Petitioner submitted that the details of revenue is shown in its Annual Accounts under the head "Revenue from Operations" and "Other Income". Further all the necessary and relevant details as required by the Commission for the purpose of ARR/True Up is submitted by GETCO to the Commission.

#### Commission's View

The Commission has undertaken truing up for FY 2020-21 based on approved ARR as per the prevailing MYT Regulations.

## Issue No. 13: Availability certificate

The Objector submitted that the Petitioner has not submitted the certificate of availability on the letter head of SLDC in the format shown at Appendix-I in the MYT Regulations. In absence of such certificate from SLDC on its letter head, the petition is not complete and is required to be kept in abeyance till compliance of the certificate.

### **GETCO's Reply**

The Petitioner submitted that has already submitted the Copy of Availability certificate for actual transmission system availability, as certified by SLDC as an Annexure-B of



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the tariff petition.

## **Commission's View**

The Commission has noted the Petitioner's submission.



## 4 Truing up for FY 2020-21

## 4.1 Introduction

This Chapter deals with the Truing up for FY 2020-21.

While doing 'Truing up' of various components of ARR for FY 2020-21, the actuals for FY 2020-21 are compared with the approved ARR as per the MYT Order issued on 31 st March, 2017.

The Commission has analysed each of the components of the ARR in the following sections:

## 4.2 Capital Expenditure and Capitalisation

#### **Petitioner's Submission**

GETCO has submitted that in order to ensure unrestricted power flow across the State of Gujarat and maintain an efficient transmission system, GETCO had spent significant amount of capital expenditure for construction of transmission lines and sub-stations during FY 2020-21.

GETCO has submitted the actual capital expenditure at Rs. 2,195.50 Crore for FY 2020-21, as against Rs. 2,984.49 Crore approved for FY 2020-21 in the MYT Order dated 31<sup>st</sup> March, 2017. The actual Capitalisation for FY 2020-21 is submitted as Rs. 1,830.93 Crore. GETCO has incurred this expenditure in construction of new substation and transmission lines required for strengthening of the transmission network of GETCO.

Further, GETCO submitted that the Commission in its Tariff Order in Case No. 1837 of 2019 dated 30<sup>th</sup> March, 2020 has disallowed capitalization of Rs. 34.05 Crore as part of True-up of FY 2019-20. The relevant part of the same is reproduced here below:

## "4.2 Capital Expenditure and Capitalization

. . . . .

## Commission's Analysis

. . . . .

GETCO submitted the work-wise details of actual capitalisation vis-à-vis approved capitalisation, date of first power flow, date on which maximum and minimum load achieved, etc. The Commission has analysed the work-wise details. The Commission observed that some of the schemes claimed as



capitalised in FY 2019-20, have been kept on "Soak Charge" on account of pending work at consumer-end/source-end, and have not actually been put to use. Further, some of the schemes have already been claimed and allowed as capitalised in FY 2018-19, based on data submitted in the true up of FY 2018-19. The Commission has hence, not considered the capitalisation for the works kept on soak charge as well as assets already considered as capitalised in FY 2018-19, while allowing the capitalisation for FY 2019-20, as these assets are not actually put to use in FY 2019-20. The Commission notes that GETCO has not provided actual cost of many of the Assets put to use. The Commission has hence, considered approved cost of the Assets to compute the disallowed asset cost. Further, the approved cost of augmentation works' has been computed on pro-rata basis from the total approved cost. The details of such works and capitalisation disallowed against such works in the truing up for FY 2019-20, are given in the Table below:

...."

While truing up of FY 2019-20, the Commission has not considered the capitalization for the works kept on soak charge as well as already considered as capitalized in FY 2018-19. Out of disallowed amount of Rs. 14.75 Crore due to soak charges, GETCO has claimed capitalization for the assets amounting to Rs. 4.71 Crore which are now put to use and remaining capitalization will be claimed as and when assets will be put to use. In present Petition, GETCO has claimed disallowed capitalization of Rs. 4.71 Crore out of Rs. 34.05 Crore over and above capitalization for FY 2020-21.

As per annual accounts of FY 2020-21, GETCO has capitalised assets of Rs. 1,830.93 Crore as outlined in the following Table:

Sr. NoParticularsAmount1.As per Annual Accounts1,829.962.Add: Past disallowed capitalisation claimed in FY 2020-214.713.Less: SLDC Capitalisation3.744.Total Capitalisation claimed for GETCO1,830.93

Table 4-1: Capitalisation claimed by GETCO (Rs. Crore)

GETCO has submitted that the Capitalisation incurred during FY 2020-21 has been funded through grants, equity and debt, as detailed in the Table below:



Table 4-2: Capital Expenditure and Capitalisation as submitted by GETCO (Rs. Crore)

Sr. No	Particulars	Approved in the MYT Order	Actual Claimed
1	Capex	2,984.49	2,195.50
2	Capitalisation	2,387.59	1,830.93
	Funding of Capitalisation		
3	Consumer Contributions / Grants	318.74	432.12
4	Debt	1,448.19	979.17
5	Equity	620.66	419.64

Based on the capitalisation, the addition of number of substations and transmission lines during FY 2020-21, as submitted by GETCO, is shown in the following Table:

Table 4-3: Network Addition as submitted by GETCO

Sr. No	Particulars	Substations (Nos.)	Transmission Line (Ckt-km)
1	400 kV	1	-
2	220 kV	3	189.64
3	132 kV	-	55.54
4	66 kV	84	1,019.23
	Total	88	1,264.41

## **Commission's Analysis**

The Commission notes that GETCO has submitted the actual capitalisation of Rs. 1,830.93 Crore as against the approved amount of Rs. 2,387.59 Crore. The Commission also notes that GETCO has submitted the details of date of charging and load of substations and lines capitalised during FY 2020-21, along with the Petition.

GETCO submitted the work-wise details of actual capitalisation vis-à-vis approved capitalisation, date of first power flow, date on which maximum and minimum load achieved, etc. The Commission has analysed the work-wise details.

The Commission in its Order dated 26<sup>th</sup> March, 2020 in Case No. 1837 of 2019 and 30<sup>th</sup> March, 2021 in Case No. 1909 of 2020, has held the following while undertaking the truing up for FY 2019-20:

"...

The Commission notes that Regulation 34 of the GERC (MYT) Regulations, 2016 specifies that assets, which have been part of the project but have not been put



to use, will not be considered for capitalisation. The Commission in earlier Orders has relied on the Certificate of Chief Electrical Inspector (CEI). The Commission understands that CEI Certificate provides for safety norms. Moreover, it is clear that assets cannot be put to use before certification of CEI. Hence, Certificate of CEI is considered as one of the milestones for asset to be put to use. Further, in some cases, it is observed that after issuance of Certificate of CEI, the respective transmission assets are not being charged on account of delay in connectivity from lower voltages, etc. However, it is expected that transmission works are to be in co-ordination with Distribution Licensee or Beneficiaries, so that there would be optimum utilisation of assets. In light of the foregoing analysis, the Commission, while undertaking prudence check, has considered the actual capitalisation based on CEI certification as well as actual power flow.

..."

Similar approach has been adopted by the Commission in the present Order for approving the capitalisation for FY 2020-21. The Commission sought the relevant details from GETCO. The prudence check undertaken by the Commission is discussed in subsequent paragraphs.

The Commission notes that, while undertaking truing up for FY 2019-20, it has disallowed the capitalisation of Rs. 34.05 Crore towards "Soak Charge" on account of pending work at consumer-end/source-end, and have not actually been *put to use*. In the present Petition, GETCO has claimed the capitalisation of Rs. 4.71 Crore towards these schemes. This capitalisation is towards the following schemes:

Table 4-4: Details of Work-wise capitalisation disallowed by the Commission in FY 2019-20 & claimed in FY 2020-21 (Rs. Crore)

Sr. No	Particulars	Amount capitalised in FY 2020-21
	Substations	
1	66 kV Rozva - J K Cement line	0.04
2	220 kV Ranasan	2.18
3	66 kV Wadhwan S/s	1.09
4	66 kV Bunder (Bandar Rd)	1.09
	Transmission Lines	
5	66 kV Rozva - J K Cement line	0.31
6	Grand Total	4.71



The Commission sought the details of CEI certificates and details of power flow for the above said assets. From the perusal of documents and after due prudence check, the Commission has approved the capitalisation of Rs. 4.71 Crore in FY 2020-21, which was disallowed in FY 2019-20.

Further, GETCO submitted the work-wise details of actual capitalisation vis-à-vis approved capitalisation, date of first power flow, date on which maximum and minimum load achieved, etc for balance capitalisation. The Commission has analysed the work-wise details. The Commission observed that some of the schemes claimed as capitalised in FY 2020-21, have been kept on "Soak Charge" on account of pending work at consumer-end/source-end, and have not actually been *put to use*. The Commission notes that, in some cases, asset is not put to use or put to use during FY 2021-22. Also, it was observed that in certain cases the substation, bay or line is ready, but the transmission element is not yet charged and power flow is not yet initiated.

The Commission has hence, not considered the capitalisation for the works kept on soak charge, while allowing the capitalisation for FY 2020-21, as these assets are not actually *put to use* in FY 2020-21. The Commission notes that GETCO has not provided actual cost of many of the Assets put to use and has submitted that the cost of such assets which are not put to use has not been claimed. The details of such works and capitalisation disallowed against such works in the truing up for FY 2020-21, are given in the Table below:

Table 4-5: Details of Capitalisation disallowed in FY 2020-21 (Rs. Crore)

Sr. No	Particulars	Date of the CEI Certificate	Date of Actual First Power Flow	Max. Load (Date & Time)- MVA/MW	Min. Load (Date & Time) – MVA/MW	Approved Cost
	Substations					
1.	220 kV Virpore	24.12.2020	Not yet	Soak charge	Soak charge	Cost not claimed
2.	400 kV Pachcham S/S	10.03.2021	Not yet	Soak charge	Soak charge	Cost not claimed
	Feeder Bay					
3.	66 kV Kocharva s/s	21.12.2020	Not yet	Soak charge	Soak charge	Cost not claimed
4.	66 kV Madhi s/s (R&M)	13.07.2020	Not yet	Soak charge	Soak charge	Cost not claimed
5.	66 kV Borakhdi s/s (R&M)	13.07.2020	Not yet	Soak charge	Soak charge	Cost not claimed
6.	66 kV Dharampur s/s (KSY)	25.02.2021	Not yet	Soak charge	Soak charge	Cost not claimed
7.	66 kV Valod s/s (KSY)	03.04.2021	Not yet	Soak charge	Soak charge	Cost not claimed



## Gujarat Energy Transmission Corporation Limited Truing Up for FY 2020-21 and Determination of ARR and Tariff for FY 2022-23

Sr. No	Particulars	Date of the CEI Certificate	Date of Actual First Power Flow	Max. Load (Date & Time)- MVA/MW	Min. Load (Date & Time) – MVA/MW	Approved Cost
8.	66 kV Ranjitnagar	31.03.2021	Not yet	Soak charge	Soak charge	Cost not claimed
9.	132 kV Paliyad SS	06.01.2021	Not yet	Soak charge	Soak charge	Cost not claimed
10.	Panvi	25.11.2019	Not yet	Soak charge	Soak charge	Cost not claimed
11.	66 kV Dhrangda Ss	21.10.2019	Not yet	Soak charge	Soak charge	Cost not claimed
	Augmentation R&M			J	9	
12.	66 kV Karath s/s	18.03.2021	Not yet	Soak charge	Soak charge	Cost not claimed
13.	220 kV Bhilad s/s	02.03.2021	Not yet	Soak charge	Soak charge	Cost not claimed
14.	220 kV Ranasan	16.03.2020	Not yet	Soak charge	Soak charge	Cost not claimed
	Lines					
15.	66 kV Didhiya Vartol line	13.03.2020	18.8.2021	3.93 MW 13.2.2021 18.00 hrs	1.42 28.1.202 1 24.00	2.39
16.	66 kV LILO Chela U/G line	09.09.2020	Not provided			0.60
17.	220 kV Ukai-Achhaliya Line No. 2 LILO at 220 kV Virpore s/s	08.02.2021	Not yet	Soak charge	Soak charge	Cost not claimed
18.	66 kV S/C line form 66 kV Borakhadi s/s to 66 kV Lotarva s/s	07.01.2021	Not yet	Soak charge	Soak charge	Cost not claimed
19.	66 kV S/C line form 66 kV Kocharva s/s to 66 kV Ambach s/s U/G line	21.12.2020	Not yet	Soak charge	Soak charge	Cost not claimed
20.	66 kV Kukarmunda- Nimbhora line LILO at 66 kV Hingani s/s	02.11.2020	Not yet	Soak charge	Soak charge	Cost not claimed
21.	66 kV Kukarmunda- Nimbhora line LILO at 66 kV Hathoda s/s	02.11.2020	Not yet	Soak charge	Soak charge	Cost not claimed
22.	66 kV Kukarmunda- Bhogvad line LILO at 66 kV Borikuva s/s	02.11.2020	Not yet	Soak charge	Soak charge	Cost not claimed
23.	66 kV Virpur-Jamkhadi line LILO at 66kv Vadpada P. Umarda s/s	14.08.2020	Not yet	Soak charge	Soak charge	Cost not claimed
24.	66 kV LILO Rupal line from existing 66KV Vadgam-Gidasan line	24.02.2021	Not yet	Soak charge	Soak charge	Cost not claimed
25.	66 kV LILO Godha line from existing 66 kV Rampura (Dama) - Motakapra line	20.03.2021	Not yet	Soak charge	Soak charge	Cost not claimed
26.	66 kV D/C Ramnagar line, LILO from Existing S/C 66 kV Kerala – Kesardi line on	09.07.2020	Not yet	Soak charge	Soak charge	Cost not claimed



## Gujarat Energy Transmission Corporation Limited Truing Up for FY 2020-21 and Determination of ARR and Tariff for FY 2022-23

Sr. No	Particulars	Date of the CEI Certificate	Date of Actual First Power Flow	Max. Load (Date & Time)- MVA/MW	Min. Load (Date & Time) – MVA/MW	Approved Cost
	D/C Panther tower with					
	ACSR Panther Conductor.					
	(Total Length: 2.082 RKm) 66 kV Alina - Morambli line			Soak	Soak	Cost not
27.	charged from Alina SS up to gentry of Morambli SS with ACSR Panther conductor	13.07.2020	Not yet	charge	charge	claimed
28.	66 kV D/C Chandisar line, LILO from one Ckt of existing D/C 66 kV Salejada - Bhat ACSR Panther conductor line on M/C & D/C Panther tower with ACSR Panther Conductor. (Total Length: 4.128 km)	17.08.2020	Not yet	Soak charge	Soak charge	Cost not claimed
29.	66 kV D/C LILO line on panther tower with ACSR panther conductor to proposed 66 kV Taiyabpura S/S from existing 66 kV Kapadwanj (220 kV Kapadwanj)- Reliya line. (3.76 Km)	27.10.2020	Not yet	Soak charge	Soak charge	Cost not claimed
30.	LILO to proposed 66 kV Bavka SS from existing 66 kV Dahod-Vajelav line on D/C Tower with ACSR Dog Conductor having route length of 0.63 Kms	26.03.2021	Not yet	Soak charge	Soak charge	Cost not claimed
31.	LILO to proposed 66 kV Khandiya S/s from existing 66 kV S/C Jafrabad – Padardi Line on D/C panther Tower with ACSR Dog conductor having route length of 0.610Kms.	23.03.2021	Not yet	Soak charge	Soak charge	Cost not claimed
32.	66 kV Ranjitnagar to M/s GFL	31.03.2021	Not yet	Soak charge	Soak charge	Cost not claimed
33.	66 kV D/C LILO Panther tower line TO 66 kV SekhPipariya (Harsurpur Devaliya) S/S from 66 kV Lathi - Jarakhiya Line with Dog Conductor	10.03.2021	Not yet	Soak charge	Soak charge	Cost not claimed
34.	66 kV D/C LILO Tower Line TO 66 kV Bhoringda S/S from 66KV Gundaran- Virdi Line with Dog Conductor	26.03.2021	Not yet	Soak charge	Soak charge	Cost not claimed
35.	66 kV line from 220 kV	28.06.2019	Not yet	Soak	Soak	Cost not



Sr. No	Particulars	Date of the CEI Certificate	Date of Actual First Power Flow	Max. Load (Date & Time)- MVA/MW	Min. Load (Date & Time) – MVA/MW	Approved Cost
	Virpur SS to 66 kV Galkuva SS - (2nd Source)			charge	charge	claimed
36.	220 kV Bhilad - Sarigam line	23.03.2020	Not yet	Soak charge	Soak charge	Cost not claimed
	Total					2.98

It was observed that GETCO has not claimed for any of the work which is yet to put to use except for 66 kV Didhiya Vartol line and 66 kV LILO Chela U/G line. However, these assets are capitalised and GETCO has claimed O&M for the soak charge transmission elements, since these elements are ready and for which, Operation and maintenance is being carried out for safety aspects as the same are energised.

Accordingly, the Commission has disallowed the capitalisation of such transmission elements resulting in disallowance of Rs. 2.98 Crore towards such works and also the respective bays and lines has been disallowed for calculation of O&M expenses, the details of which has been provided in the respective chapter.

The Commission has reduced the finding of disallowed capitalisation in proportion to normative debt equity ratio of 70:30.

In view of the above, the actual capitalisation allowed by the Commission for FY 2020-21, and the funding considered by the Commission, are shown in the following Table:

Table 4-6: Capitalisation approved for FY 2020-21 (Rs. Crore)

Sr. No	Particulars	Approved
1	Actual Capitalisation in accounts	1,829.96
2	Add: past disallowed capitalisation	4.71
3	Less: Capitalisation for SLDC	3.74
4	Less: Capitalisation Disallowed	2.98
5	Capitalisation Approved	1,827.95

The funding of capitalization approved for FY 2020-21 is shown in the following Table:

Table 4-7: Funding of Capitalisation approved for FY 2020-21 (Rs. Crore)

Sr. No	Particulars	Approved
1	Grant	432.12
2	Debt	977.08



Sr. No	Particulars	Approved
3	Equity	418.75
4	Capitalisation Approved	1,827.95

## 4.3 O&M Expenses

### **Petitioner's Submission**

The normative O&M Expenses are to be computed based on the norms specified in Regulation 68.2.1 of the GERC (MYT) Regulations, 2016, based on the number of bays and transmission line length. GETCO has computed the normative O&M expenses of Rs. 1,893.94 Crore in the truing up for FY 2020-21, as against Rs. 1,882.18 Crore approved in the MYT Order dated 31<sup>st</sup> March, 2017.

The O&M Expenses approved for FY 2020-21 by the Commission in the MYT Order dated 31<sup>st</sup> March, 2017 and computed by GETCO in the truing up for FY 2020-21 are given in the Table below:

Table 4-8: Normative O&M Expenses Claimed for FY 2020-21 (Rs. Crore)

Sr. No	Particulars	Unit	Approved in the MYT Order	Actual Claimed
1	Based on Number of Bays			
	Average No. of Bays during the Year	Nos.	14,311	14,666
	O&M Expenses per Bay	Rs. Lakh	9.50	9.50
	O&M Expenses based on Number of Bays (A)	Rs. Crore	1,359.55	1,393.22
2	Based on Transmission Line Length (ckt. km)			
	Average Line Length during the Year	ckt. km	64,523	61,817
	O&M Expenses per ckt. km	Rs. Lakh	0.81	0.81
	O&M Expenses based on Transmission Line Length (B)	Rs. Crore	522.64	500.72
3	Total O&M Expenses (normative) (A + B)	Rs. Crore	1,882.18	1,893.94

GETCO has considered the actual O&M Expenses by considering the actual Employee Expenses, Repair & Maintenance (R&M) Expenses, and Administrative & General (A&G) Expenses, based on the audited annual accounts for FY 2020-21 for computing the Gain/(Loss). The O&M Expenses (excluding SLDC's) claimed by GETCO as per the audited annual accounts are as shown in the Table below:



Table 4-9: Actual O&M Expenses claimed for FY 2020-21 (Rs. Crore)

Sr. No	Particulars	Actual Claimed
1	Employees Expenses	954.68
2	R&M Expenses	367.25
3	A&G Expenses	129.90
4	Total O&M Expenses	1,451.84

GETCO submitted the following details regarding the actual O&M expenses:

**Employee Cost**: In past True-up Orders, the Commission had ruled that the impact in Employee Expenses due to revision in salary shall be considered by the Commission after prudence check as an uncontrollable factor. Employee cost claimed by GETCO as per annual accounts is Rs. 954.68 Crore (Rs. 991.29 Crore of employee cost **minus** Rs. 53.49 Crore of provisions of 7<sup>th</sup> Pay Commission **plus** Rs. 16.88 Crore of Other Comprehensive Income). GETCO has worked out impact of Rs. 69.60 Crore due to implementation of 7<sup>th</sup> Pay Commission and claimed as uncontrollable employee expense.

**R&M Expenses:** The actual R&M expenses for FY 2020-21 were Rs. 367.25 Crore. As per the provisions of the GERC (MYT) Regulations, 2016, A&G expenses are categorised as controllable expenses.

**A&G Expenses:** The actual A&G expenses for FY 2020-21 were Rs. 129.90 Crore. As per the provisions of the GERC (MYT) Regulations, 2016, A&G expenses are categorised as controllable expenses.

The Petitioner has submitted that O&M Expenses are controllable in nature, under Regulations 22 of the GERC (MYT) Regulations, 2016. However, as per the methodology adopted by the Commission, the variance in the O&M Expenses as approved in the MYT Order and the normative O&M Expenses as per actual performance during the year is considered as uncontrollable, and variation in the normative O&M Expenses and actual as per the audited accounts is considered as controllable.

The O&M Expenses and Gain/(Loss) claimed by GETCO in the Truing up for FY 2020-21 are summarized in the Table below:



Table 4-10: Gains/ (Loss) Claimed from O&M Expenses for FY 2020-21 (Rs. Crore)

Particulars	Approved in the MYT Order	Normative Claimed	Actual as per Audited Accounts	Deviation +/(-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	2	3	4	5=2-4	6=3-4+7 <sup>th</sup> pay	7=2-3-6
O&M Expenses	1,882.18	1,893.94	1,451.84	430.34	511.70	(81.36)

Note: The Uncontrollable loss comprises of difference of Approved and Revised Normative O&M expenses i.e. (Rs. 1882.18 Crore – Rs. 1893.94 Crore = Rs. (11.76) Crore plus 7th pay impact of Rs. (69.60) Crore.

## **Commission's Analysis**

As stated earlier while approving the Capitalisation for FY 2020-21, the Commission has adopted the approach decided in earlier Tariff Orders and disallowed the capitalisation and network addition therein towards the assets which are not put to use during FY 2020-21. Even though, GETCO has claimed the O&M for the soak charge transmission elements as these elements are ready and for which, Operation and maintenance is being carried out for safety aspects as the same are energised, the Commission feels that since the assets are not put in use and is not allowed for capitalisation purpose, any O&M cost for the same cannot be allowed as a revenue expenses. Accordingly, certain Bays and Transmission Lines, considered under Soak Charges by GETCO, have been disallowed in FY 2020-21. The list of bays and transmission lines which are not considered in FY 2020-21 is provided in Table 4-5.

Hence, these Bays and Lines have not been considered as added in FY 2020-21. Accordingly, the addition of number of bays and transmission line length considered for the purpose of allowing O&M expenses for 2020-21, is shown in the following Table:

Table 4-11: Addition of Network parameters approved for FY 2020-21

Sr. No	Particulars	Claimed	Less: Assets Disallowed	Approved in Truing up
Α	Number of Bays			
1	S/S Bays	574.00	52.00	522.00
2	Feeder Bays	60.00	12.00	48.00
3	For Augmentation	85.00	5.00	80.00
4	Grand Total	719.00	69.00	650.00
В	Transmission Line length (ckt. km)	1,264.41	144.49	1,119.42



The Commission has, therefore, considered addition of 650 number of bays and 1,119.42 ckt. km of transmission lines during FY 2020-21. Accordingly, the Commission has computed the normative O&M Expenses as detailed in the Table below:

Table 4-12: Normative O&M Expenses approved for FY 2020-21 (Rs. Crore)

	Claimed			Approved			
Particulars	Lines	Bays	Total	Lines	Bays	Total	
	(ckt. km)	(Nos.)		(ckt. km)	(Nos.)		
At the beginning of the Year	61,185.00	14,306.00		61,184.53	14,306.00		
Addition during the Year	1,264.41	719.00		1,119.92	650.00		
At the end of the Year	62,449.41	15,025.00		62,304.45	14,956.00		
Average	61,817.21	14,665.50		61,744.49	14,631.00		
Rate (Rs. Lakh)	0.81	9.50		0.81	9.50		
O&M Expenses	500.72	1,393.22	1,893.94	500.13	1,389.95	1,890.08	

The Commission approves the normative O&M Expenses at Rs. 1,890.08 Crore in the Truing up for FY 2020-21.

#### **Actual Cost**

As regards Employee cost, the Commission notes that GETCO has claimed amount of Rs. 16.88 Crore towards Re-measurement of the defined benefit plans. In response to the query of the Commission regarding the rationale of the expenses, GETCO submitted that, in January, 2015, Ministry of Corporate Affairs ('MCA') issued the road map for implementation of Indian Accounting Standards ('Ind AS') for certain specified class of companies. As per the road map, Ind AS are applicable in a phased manner on a mandatory basis for the accounting periods beginning on or after 1st April, 2016, with comparatives for the periods ending 31st March, 2016. Accordingly, Ind AS as notified by MCA on 16th February, 2015 was applicable to GETCO and Annual Accounts of FY 2016-17 was prepared as per Ind AS. As per the Provisions of Ind AS, Re-measurement arising from gains or losses related to both defined benefit obligations and the fair value of plan assets due to asset ceiling and changes in actuarial assumptions are charged or credited to Other Comprehensive Income in the period in which they arise. The remeasurement effect are non-re-classifiable components, which mean the balance in the re-measurement reserves will not go to the profit and loss even when the employee benefit expenses are paid off. The re-measurement effects of post-employment benefit



obligations which are recognized in the Other Comprehensive Income are changes due to actuarial assumptions, changes due to return of plan assets and changes due to effect of asset ceiling. It is to highlight in the regime of Pre Ind-AS i.e., Indian GAAP, Remeasurement arising from gains or losses related to defined benefit obligations was included in the Employee Benefit Expense. So, GETCO has shown /disclosed Remeasurement arising from gains or losses related to defined benefit obligations in OCI to comply with the requirement of Ind AS. The amount of Comprehensive income of Rs. 16.88 Crore has been accounted under the head 'Other Comprehensive Income' in the Profit & Loss account.

The Commission accepts the submission GETCO and allowed the expenses towards Other comprehensive income.

Further, the Commission observes that, as per Note no. 65 of the Annual audited accounts, provision of Rs. 2.75 Crore have been made for 11 employees in FY 2020-21 who has died due to COVID-19. In response to query of the Commission, GETCO clarified that provision for Compensation to Deceased Employees on account of Death due to COVID-19 for FY 2020-21 is made of Rs. 2.75 Crore. The family members of deceased employees will be paid the said compensation, if the criteria/terms and conditions as per GUVNL Circular is fulfilled. In view of the above, since there is no payment made during FY 2020-21, the Commission has not considered this cost as per principle adopted in past tariff Order. Moreover, the Commission shall consider these expenses based on actual payment made during the subsequent years, based on the submission of GSECL.

As regards impact of 7<sup>th</sup> Pay Commission, GETCO clarified that, O&M norms approved by the Commission for FY 2020-21 were based on expenses incurred during period of 6<sup>th</sup> pay commission. Since, the Commission in its past Tariff Orders has stated that additional payment on account of 7<sup>th</sup> pay commission will be considered as uncontrollable, therefore hence GETCO has segregated the employee cost booked in Annual accounts into 6<sup>th</sup> Pay and 7<sup>th</sup> Pay whereby Rs. 69.90 Crore in the employee expenses is paid due to implementation of 7<sup>th</sup> pay commission and is treated as uncontrollable.

GETCO has confirmed that there is no payment made against pending arrear in relation to 7<sup>th</sup> Pay Commission. Further it has submitted, that the amount paid in FY 2017-18 related to period April 2017 to May 2017 related to 7<sup>th</sup> Pay commission has a consequential impact and the same has been differential in FY 2020-21 so as to consider



as uncontrollable expense. The Commission noted the submission made by GETCO and has reviewed the calculation provided bifurcating the employee expenses into 6<sup>th</sup> Pay and additional payment due to implementation of 7<sup>th</sup> Pay. Accordingly, the Commission approves the payment of Rs. 69.90 Crore made by GETCO, against the implementation of 7<sup>th</sup> Pay Commission.

# Accordingly, the Commission approves Employee cost of Rs. 951.93 Crore for FY 2020-21 after truing up.

As regards A&G expenses, the Commission sought details of details of A&G expenses. It includes the expenses of Rs. 12.81 Crore towards Net shortage / impairment of Fixed assets. GETCL clarified that these expenses comprise of the impairment of capital expenditure of the projects, which have been dropped and impairment of capital expenditure of the projects held up / dropped as the supplier/ contractor is admitted under Insolvency and Bankruptcy Code. The Commission has disallowed expenses of Rs. 12.81 Crore as per approach adopted in earlier Tariff Orders. Further, the Commission has also disallowed expenses of Rs. 0.07 Crore towards expected credit loss of recoverable.

# Accordingly, the Commission approves A&G Expenses of Rs. 117.02 Crore for FY 2020-21 after truing up.

The Commission accordingly approves the actual O&M Expenses for FY 2020-21, as shown in the following Table:

Table 4-13: Actual O&M Expenses approved for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Actual Claimed	Approved in Truing up
1	Employee Expenses	954.68	951.93
2	R&M Expenses	367.25	367.25
3	A&G Expenses	129.90	117.02
4	Total O&M Expenses	1,451.84	1,436.21

Further, O&M Expenses are controllable in nature under the GERC (MYT) Regulations, 2016. However, the Commission is of the view that the variance in the O&M Expenses, as approved in the MYT Order and the normative O&M Expenses, as per actual performance during the year, is uncontrollable, and variance between the normative O&M Expenses as per actual performance and the Audited Accounts is controllable.



Further, the Commission has considered the impact of Rs. 69.90 Crore towards 7<sup>th</sup> Pay Commission as uncontrollable. The O&M Expenses and Gain/(Loss) considered in the Truing up for FY 2020-21 are summarised in the Table below:

Table 4-14: Gain/(Loss) from O&M Expenses approved for FY 2020-21 (Rs. Crore)

Particulars	Approved in the MYT Order	Normative Approved in Truing up	Approved as per Audited Accounts in Truing up	as per Audited Deviation Accounts in Truing		Gain/(Loss) due to Uncontrollable Factors
1	2	3	4	5 = 2-4	6 = (3-4 and Impact of 7 <sup>th</sup> Pay Commission)	7 = (2-3 and Impact of 7 <sup>th</sup> Pay Commission)
O&M Expenses	1,882.18	1,890.08	1,436.21	523.47	(77.49)	1,882.18

## 4.4 Depreciation

#### **Petitioner's Submission**

GETCO has claimed Depreciation of Rs. 1,189.71 Crore for FY 2020-21, as against Depreciation of Rs. 1,355.67 Crore approved in the MYT Order dated 31<sup>st</sup> March, 2017.

GETCO has calculated the Depreciation for FY 2020-21 in accordance with the provisions of the GERC (MYT) Regulations, 2016 and the aforementioned directives of the Commission. The addition to GFA has been considered based on capitalisation considered for FY 2020-21. The Weighted Average Rate of Depreciation, works out to be 4.18% which is less than 4.87%, rate approved by the Commission for FY 2020-21, as given in the Table below:

Table 4-15: Depreciation claimed for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed
1	Opening Gross Block	26,628.91	27,523.86
2	Net Additions during the Year	2,387.59	1,830.93
3	Closing Gross Block	29,016.51	29,354.79
4	Average Rate of Depreciation	4.87%	4.18%
5	Depreciation for the Year	1,355.67	1,189.71



The variation in the amount of depreciation as per the actual cost incurred by GETCO in FY 2020-21 against the amount approved by the Commission is considered as Gain/(Loss) on account of uncontrollable factors, as detailed in the Table below:

Table 4-16: Gain/(Loss) claimed from Depreciation for FY 2020-21 (Rs. Crore)

Particula		pproved in the MYT Order	Actual Claimed	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Depreciat	ion	1,355.67	1.189.71		165.96

## **Commission's Analysis**

The Commission in accordance with the GERC (MYT) Regulations, 2016 has computed the allowable depreciation for FY 2020-21. The opening GFA for FY 2020-21 has been considered equal to closing GFA as approved in true-up for FY 2018-19. The addition to GFA has been considered based on capitalisation approved in earlier Section of this Order.

GETCO confirmed that the deprecation on assets that have already depreciated up to 90% of GFA have not been considered. As regards the treatment of depreciation on assets funded by grants, GETCO clarified that the assets created from grants are depreciated as per the rates provided in GERC (MYT) Regulations which works out to be 5.28%. Further, as per the requirements of Ind AS20, Government grants shall be recognized in profit or loss on a systematic basis over the periods in which the entity recognizes as expenses the related costs for which the grants are intended to compensate. In order to be compliant with the provisions of Ind AS-20 and to match the Deprecation charged on the assets, GETCO is amortizing Grants and Consumer contribution for first 12 years as per the rate of depreciation of GERC (5.28%) and then remaining balance of Grants and Consumer contribution is amortized over remaining 23 years (As per GERC's methodology of calculating depreciation in MYT regulations). In view of the above, the Commission has not considered the depreciation on assets funded through grant.

Further, while computing weighted average rate of depreciation, it was observed that GETCO has calculated depreciation only on the addition of the assets and depreciation on the reduction of the assets has not been considered. However, while computing the depreciation and depreciation rate, the Commission has considered net of depreciation during the year. Accordingly, the Commission has computed weighted average rate of



depreciation of 4.13% against the proposed depreciation rate of 4.18%. The depreciation approved for FY 2020-21 after true-up is detailed in the Table below:

Table 4-17: Depreciation approved for FY 2020-21 (Rs. Crore)

Sr. No	Particulars	Approved in the MYT Order	Actual Claimed	Approved in Truing up
1	Opening Gross Block	26,628.91	27,523.86	27,523.86
2	Net Additions during the Year	2,387.59	1,830.93	1,827.95
3	Closing Gross Block	29,016.51	29,354.79	29,351.81
4	Average Rate of Depreciation	4.87%	4.18%	4.13%
5	Depreciation for the Year	1,355.67	1,189.71	1,173.49

# The Commission, accordingly, approves depreciation at Rs. 1,173.49 Crore in the truing up for FY 2020-21.

As regards the computation of Gain/(Loss), if the Gain is on account of lower capital expenditure and capitalisation, it cannot be attributed to the efficiency of the utility. Similarly, if the Loss is on account of higher capital expenditure and capitalisation due to bonafide reasons, the Utility cannot be penalised by allowing only two-thirds of the Loss in the ARR. Hence, the Commission has considered the variation in capitalization as uncontrollable, to this extent. This applies to debt and equity in allowing Gain/(Loss) on account of Interest and Return on Equity too.

The Commission, accordingly, approves the Gain/(Loss) on account of depreciation, on account of uncontrollable factors in the Truing up for FY 2020-21, as detailed in the Table below:

Table 4-18: Gain / (Loss) from Depreciation approved for FY 2020-21 (Rs. Crore)

Particulars	Approved in the MYT Order	Approved in Truing up	Deviation +/(-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Depreciation	1,355.67	1,173.49	182.18	1	182.18

## 4.5 Interest and Finance Charges

#### **Petitioner's Submission**

GETCO has claimed Interest and Finance Charges of Rs. 506.10 Crore in the Truing up for FY 2020-21, as against approved amount of Rs. 618.80 Crore in the MYT Order. The debt component of the capitalisation during the year (net of grants) is considered at the



debt-equity ratio of 70:30. GETCO has submitted that the weighted average interest rate of loans is 6.95% on the actual loan portfolio during FY 2020-21 as per Regulation 38.5 of the GERC (MYT) Regulations, 2016. GETCO has calculated Interest on Loans by considering repayment of loan equivalent to Depreciation for the year as given below:

Table 4-19: Interest and Finance Charges Claimed for FY 2020-21 (Rs. Crore)

Sr. No	Particulars	Approved in the MYT Order	Actual Claimed
1	Opening Loans	6,223.13	7,213.59
2	Loan Additions during the Year	1,448.19	979.17
3	Repayment during the Year	1,355.67	1,189.71
4	Closing Loans	6,315.65	7,003.04
5	Average Loans	6,269.39	7,108.32
6	Interest on Loan	617.80	493.84
7	Other Charges (Guarantee + Financing Charges)	1.00	12.25
8	Total Interest & Financial Charges	618.80	506.10
9	Weighted Average Interest Rate on Loan	9.85%	6.95%

GETCO has claimed Rs. 112.70 Crore as Gain from Interest and Finance Charges due to uncontrollable factors, as detailed in the Table below:

Table 4-20: Gain/ (Loss) claimed from Interest & Finance Charges for FY 2020-21 (Rs. Crore)

Particulars	Approved in the MYT Order	Actual Claimed	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Interest & Finance Charges	618.80	506.10	-	112.70

## **Commission's Analysis**

The Commission has examined the submission of GETCO. The repayment of loans during the year has been considered equal to the depreciation for FY 2020-21. As per first proviso of Regulation 38.5 of the GERC (MYT) Regulations, 2016, at the time of truing up, the weighted average rate of interest calculated on the basis of the actual loan portfolio during the year applicable to the Transmission Licensee shall be considered as the rate of interest.

As per the aforesaid Regulation and the data provided by GETCO, the Commission has computed the weighted average interest rate as 6.95% and applied the same on the normative loan amount.



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Further, the Commission notes that GETCO has claimed Other Finance Charges of Rs. 12.25 Crore. As per Note 34 of the Audited Accounts, this includes an amount of Rs. 1.68 Crore towards Bank Charges and Rs. 10.57 Crore towards loss on foreign exchange fluctuation.

The Bank Charges of Rs. 1.68 Crore relates to the Commitment Charges of Rs. 1.63 Crore on kfW Loan and Rs. 0.05 Crore related to Stamp Duty charges, for raising finance and Other Bank Charges. The Commission allows the actual Bank Charges after prudence check.

GETCO has also claimed Loss on Foreign Exchange Fluctuation of Rs. 10.57 Crore. The Commission has verified the computation of the said amount and it was observed that as per Note 57 of the annual accounts, of the total Foreign Exchange Fluctuation of Rs. 10.57 Crore, the amount of Rs. 9.39 Crore is capitalized and Rs. 0.97 Crore is revenue in nature. As per GETCO the same has not been considered as part of GFA for FY 2020-21. However, such cost been capitalised in nature, in future, the same will be allocated to GFA on which depreciation, interest on loan and Return on Equity will be allowed. Allowing such cost as expenses under "Finance Charges" will result in double impact under revenue and capital which is not a normal under accounting principle and same cannot be allowed as expenses. Accordingly, the Commission disallows the Loss on foreign exchange fluctuation to the extent of Rs. 9.39 Crore which is capitalised.

Also, Regulation 44.3 of the GERC (MYT) Regulations, 2016 specifies that:

"To the extent the Generating Company or the Transmission Licensee or SLDC or the Distribution Licensee is not able to hedge the foreign exchange exposure, the extra rupee liability towards interest payment and loan repayment corresponding to the normative foreign currency loan in the relevant year shall be permissible provided it is not attributable to the Generating Company or the Transmission Licensee or SLDC or the Distribution Licensee or its suppliers or contractors."

Since, the Regulations allow the liability towards interest as well as repayment, the amount of Rs. 0.97 Crore related to foreign exchange fluctuation is allowed by the Commission.

In view of the above, the Commission approves Other Finance Charges of Rs. 2.87 Crore for FY 2020-21 for the purpose of Truing up for FY 2020-21.

Based on the actual capitalisation achieved by GETCO during FY 2020-21 and the approved normative borrowings, considering the interest rate of 6.95%, the Commission



has computed the interest on normative loans, as detailed in the Table below:

Table 4-21: Interest and Finance Charges approved for FY 2020-21 (Rs. Crore)

Sr. No	Particulars	Approved in the MYT Order	Actual Claimed	Approved in Truing up
1	Opening Loans	6,223.13	7,213.59	7,213.59
2	Loan Additions during the Year	1,448.19	979.17	977.08
3	Repayment during the Year	1,355.67	1,189.71	1,173.49
4	Closing Loans	6,315.65	7,003.04	7,017.17
5	Average Loans	6,269.39	7,108.32	7,115.38
6	Weighted Average Rate of Loan	9.85%	6.95%	6.95%
7	Interest on Loan	617.80	493.84	494.33
8	Other Charges (Guarantee + financing charges)	1.00	12.25	2.87
9	Total Interest & Finance Charges	618.80	506.10	497.20

The Commission accordingly, approves Interest and Finance Charges of Rs. 497.20 Crore for FY 2020-21.

As noted above, the Commission is of the view that the parameters, which affect Interest and Finance Charges should be treated as uncontrollable. The Commission, accordingly, approves the Gain/(Loss) on account of Interest and Finance Charges in the Truing up for FY 2020-21, as detailed in the Table below:

Table 4-22: Gain/(Loss) from Interest & Finance Charges approved for FY 2020-21 (Rs. Crore)

Particulars	Approved in the MYT Order	Approved in the Truing up	Deviation +/(-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Interest and Finance Charges	618.80	497.20	121.60	-	121.60

The Commission accordingly approves the Gain of Rs. 121.60 Crore on account of uncontrollable factors.

## 4.6 Return on Equity

### **Petitioner's Submission**

GETCO has claimed Rs. 996.05 Crore towards Return on Equity (ROE) in the Truing up for FY 2020-21, as against Rs. 1,013.02 Crore approved for the year in the MYT Order.



ROE has been computed @ 14% as provided in the GERC (MYT) Regulations, 2016. The deviation in ROE is considered as uncontrollable factor. The comparison between the actual values of ROE for FY 2020-21 with the values approved by the Commission in the Order dated 31<sup>st</sup> March, 2017 is shown in the Table below:

Table 4-23: Return on Equity claimed for FY 2020-21 (Rs. Crore)

Sr. No	Particulars	Approved in the MYT Order	Actual Claimed
1	Opening Equity Capital	6,925.52	6,904.82
2	Equity Addition during the Year	620.66	419.64
3	Closing Equity	7,546.18	7,324.46
4	Average Equity	7,235.85	7,114.64
5	Rate of Return on the Equity	14%	14%
6	Return on Equity	1,013.02	996.05

## **Commission's Analysis**

The Commission has examined the submission of GETCO. ROE is allowed on the average equity deployed during the year considering the Opening Equity and addition to Equity. The quantum of Equity addition has been considered as approved in earlier Section of this Order. The Closing Equity approved in the truing up for FY 2019-20 is considered as the Opening Equity for FY 2020-21. Accordingly, the Commission has computed the ROE for FY 2020-21, as detailed in the Table below:

Table 4-24: Return on Equity approved for FY 2020-21 (Rs. Crore)

Sr. No	Particulars	Approved in the MYT Order	Actual Claimed	Approved in Truing up
1	Opening Equity Capital	6,925.52	6,904.82	6,904.82
2	Equity Addition during the Year	620.66	419.64	418.75
3	Closing Equity	7,546.18	7,324.46	7,323.57
4	Average Equity	7,235.85	7,114.64	7,114.19
5	Rate of Return on the Equity	14%	14%	14%
6	Return on Equity	1,013.02	996.05	995.99

The Commission accordingly approves Return on Equity at Rs. 995.99 Crore in the Truing up for FY 2020-21.

The Commission is of the view that the parameters which affect ROE should be treated as uncontrollable. The Commission accordingly approves the Gain and Loss on account of ROE in the Truing up for FY 2020-21, as detailed in the Table below:



Table 4-25: Gain/(Loss) from Return on Equity approved for FY 2020-21 (Rs. Crore)

Particulars	Approved in the MYT Order	Approved in Truing up	Deviation +/(-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Return on Equity	1,013.02	995.99	17.03	-	17.03

## 4.7 Interest on Working Capital

#### **Petitioner's Submission**

GETCO has claimed an amount of Rs. 72.76 Crore towards Interest on Working Capital in the Truing up for FY 2020-21, as against an amount of Rs. 93.39 Crore approved in the MYT Order dated 31<sup>st</sup> March, 2017. GETCO has submitted that Working Capital is computed based on the norms provided in the GERC (MYT) Regulations, 2016 by considering O&M expenses, Receivables for 1 month and maintenance spares @ 1% of historical cost (i.e., GFA).

GETCO has further submitted that as per the GERC (MYT) Regulations, 2016, interest rate is considered as 1-year SBI MCLR plus 250 basis points, i.e., 9.57%. The comparison of actual value of Interest on Working Capital based on above methodology and the value approved by the Commission is shown in the Table below. This deviation has been considered as loss to GETCO on account of uncontrollable factors.

Table 4-26: Interest on Working Capital claimed for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed
1	O&M Expenses (1 Month)	156.85	120.99
2	Maintenance Spares (1% of opening GFA)	266.29	275.24
3	Receivables (1 Month)	375.11	364.10
4	Total Working Capital	798.25	760.33
5	Rate of Interest on Working Capital	11.70%	9.57%
6	Interest on Working Capital	93.39	72.76

## **Commission's Analysis**

The Commission has examined the computation of normative working capital and interest thereon under the GERC (MYT) Regulations, 2016. The working capital comprises one month's O&M Expenses, Maintenance Spares at 1% of historical cost and Receivables equivalent to one month of Transmission Charges calculated on target



availability level.

The Commission has considered the weighted average of 1-year State Bank of India (SBI) Marginal Cost of Funds Based Lending Rate (MCLR) prevailing during FY 2020-21 plus 250 basis points, as the interest rate. Accordingly, the rate of interest is worked out to be 9.57%.

Based on the O&M Expenses and GFA approved in the Truing up, the Working Capital requirement and Interest thereon calculated at 9.57%, are detailed in the Table below:

Table 4-27: Interest on Working Capital approved for 2020-21 (Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed	Approved in Truing Up
1	O & M Expenses (1 Month)	156.85	120.99	119.68
2	Maintenance Spares (1% of Opening GFA)	266.29	275.24	275.24
3	Receivables (1 Month)	375.11	364.10	354.00
4	Total Working Capital	798.25	760.33	748.92
5	Rate of Interest on Working Capital	11.70%	9.57%	9.57%
6	Interest on Working Capital	93.39	72.76	71.67

The Commission, accordingly, approves the Interest on Working Capital at Rs. 71.67 Crore in the Truing up for FY 2020-21.

The Commission considers the Interest on Working Capital as uncontrollable, since the components forming part of the Working Capital are mostly uncontrollable. The Commission, accordingly, approves the Gain/(Loss) on account of Interest on Working Capital in the Truing up for FY 2020-21, as detailed in the Table below:

Table 4-28: Gain/(Loss) from Interest on Working Capital approved for FY 2020-21 (Rs. Crore)

Particulars	Approved in the MYT Order	Approved in Truing up	Deviation + / (-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Interest on Working Capital	93.39	71.67	21.72	ı	21.72



## 4.8 Contribution to Contingency Reserve

### **Petitioner's Submission**

GETCO has not claimed any contribution towards Contingency Reserve in the Truing up for FY 2020-21.

## **Commission's Analysis**

Regulation 68.3 of the GERC (MYT) Regulations, 2016 specifies that where the Transmission Licensee has made an appropriation to the Contingency Reserve, a sum not more than 0.5 percent of the original cost of fixed assets shall be allowed annually towards such appropriation in the calculation of ARR. As GETCO has not claimed any contribution to Contingency Reserve, the Commission approves 'Nil' amount as per audited accounts of FY 2020-21.

The Commission accordingly approves the contribution to Contingency Reserve as 'Nil' in the Truing up for FY 2020-21.

## 4.9 Income Tax

#### **Petitioner's Submission**

GETCO has claimed the Income Tax of Rs. 329.88 Crore in the Truing up for FY 2020-21, as against Rs. 64.62 Crore approved in the MYT Order dated 31<sup>st</sup> March, 2017, as given in the Table below:

Table 4-29 Income Tax claimed by GETCO for FY 2020-21 (Rs. Crore)

Sr. No	Particulars	Approved in the MYT Order	Actual Claimed	Deviation +/(-)
1	Income Tax	64.62	329.88	(265.26)

## **Commission's Analysis**

The Commission notes that income tax amount shown in annual account is Rs. 332.01 Crore. As against this, GETCO has claimed Income Tax amount of Rs. 329.88 Crore, after deducting the income tax of Rs. 2.13 Crore allocated to SLDC.

The Commission, in Tariff Order dated 24<sup>th</sup> April, 2019 and in Tariff Order dated 26<sup>th</sup> March, 2020 while undertaking Truing up for FY 2017-18 and FY 2018-19, respectively, has decided that Income Tax shall be allowed based on Current Tax reported in the audited accounts for respective year.



The Commission sought the details of income tax computation including challans and payment receipts. The Commission observes that the income tax of Rs. 332.01 Crore includes the interest u/s 234 B of Rs. 8.09 Crore and interest u/s 234C of Rs. 7.07 Crore. As principle adopted in past Tariff Orders, the Commission has not allowed any penalties and interest payment made towards claim amount. Accordingly, the Commission has not considered this interest amount of Rs. 15.16 Crore for FY 2020-21.

Accordingly, the Commission has computed the income tax of Rs. 316.86 Crore for FY 2020-21, which has been allocated to transmission as Rs. 314.73 Crore and to SLDC as Rs. 2.13 Crore.

# Accordingly, the Commission approves the Income Tax of Rs. 314.73 Crore for FY 2020-21 after truing up.

As regards the computation of Gain/(Loss), Regulation 22.1 (h) of the GERC (MYT) Regulations, 2016 considers variation in taxes on income as uncontrollable. The Commission, accordingly, approves the Gain/(Loss) on account of tax on income in the Truing up for FY 2020-21, as detailed in the Table below:

Table 4-30: Gain/(Loss) from Income Tax approved for FY 2020-21 (Rs. Crore)

Particulars	Approved in the MYT Order	Approved in Truing up	Deviation +/(-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Income Tax	64.62	314.73	(250.11)	-	(250.11)

## 4.10 Capitalization of Expenses

#### **Petitioner's Submission**

GETCO has claimed actual capitalization of expenses of Rs. 213.84 Crore for FY 2020-21 as against Rs. 194.13 Crore approved for the year in the MYT Order dated 31<sup>st</sup> March, 2017, as given in the Table below:

Table 4-31: Expenses Capitalised claimed for FY 2020-21 (Rs. Crore)

Sr. No	Particulars	Approved in the MYT Order	Actual Claimed	Deviation +/(-)
1	Expenses Capitalised	194.13	213.84	(19.71)



## **Commission's Analysis**

The gross O&M Expenses as per audited accounts are allowed in the ARR and, therefore, it is appropriate to consider the deduction of capitalisation of O&M Expenses from the ARR.

The Commission approves the capitalisation of O&M Expenses for FY 2020-21 as shown in the following Table:

Table 4-32: O&M Expenses Capitalized approved for FY 2020-21 (Rs. Crore)

Sr No.	Particulars	FY 2020-21
1	Employee Expenses Capitalized	181.39
2	R&M Expenses Capitalized	-
3	A&G Expenses Capitalized	32.45
4	Total Expenses Capitalised	213.84

The Commission, accordingly, approves the Capitalisation of O&M Expenses at Rs. 213.84 Crore, as per the audited annual accounts for the purpose of Truing up for FY 2020-21. The Commission considers the Capitalisation of O&M Expenses as uncontrollable as shown in the Table below:

Table 4-33: Gain/(Loss) from Expenses Capitalized approved for FY 2020-21 (Rs. Crore)

Particulars	Approved in the MYT Order	Approved in Truing up	Deviation +/(-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Expenses Capitalised	194.13	213.84	(19.71)	-	(19.71)

## 4.11 Non-Tariff Income for FY 2020-21

#### **Petitioner's Submission**

GETCO submitted that Non-Tariff Income includes income from investments, income from sale of scrap, parallel operation charges, reactive energy charges, O&M charges for dedicated lines, and supervision charges for deposit work, etc.

GETCO submitted that the variation of actual Non-Tariff Income from the approved value is due to the treatment of EAC Opinion (Expert Advisory Committee of Institute of Chartered Accountants of India) on deferred income adopted by GETCO and other state-owned utilities in Gujarat. It is to mention that in January, 2015, Ministry of Corporate Affairs ('MCA') issued the road map for implementation of Indian Accounting Standards ('Ind AS') (as converged with the International Financial Reporting Standards



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('IFRS')) for certain specified class of companies other than Banking Companies, Insurance Companies and Non-Banking Finance Companies ('NBFCs'). As per the road map, Ind AS are applicable in a phased manner on a mandatory basis for the accounting periods beginning on or after 1<sup>st</sup> April, 2016, with comparatives for the periods ending 31<sup>st</sup> March, 2016, or thereafter and is applicable to following companies;

- (a) Companies whose equity and/or debt securities are listed or are in the process of listing on any stock exchange in India or outside India and having net worth of Rs. 500 Crore or more.
- (b) Companies having net worth of Rs. 500 Crore or more other than those covered above.

Holding, subsidiary, joint venture or associate companies of companies covered above. As GETCO has Net Worth more than Rs. 500 Crore, Ind AS as notified by MCA on 16<sup>th</sup> February, 2015 was applicable to GETCO.

As per the provisions of Ind AS, the company has to recognize grants in proportion of the depreciation expense. Further, deferred income is to be recognized in the profit and loss statement on a systematic and rational basis over the useful life of the asset. Accordingly in order to comply with the mandatory provisions of Ind As and in order to align the method of offering deferred income with the depreciation, GETCO has to revise its method and offer deferred income @ 5.28 % Straight Line Method (SLM) for the first 12 years and then over remaining useful life as against depreciation rate @ 5.28% SLM for first 12 years and then spread over 23 years (35 years life less first 12 years) as approved by GERC for Plant & Machinery and Transmission Lines in MYT Regulations.

C&AG has scrutinized and observed during the Supplementary Audit of GETCO for FY 2016-17 that the excess income (Deferred Income offered @ 10% WDV (from FY 2005-06 to FY 2010-11) and @ 11.75% WDV (from FY 2010-11 to FY 2015-16) as against depreciation rate of 3.60% SLM (from FY 2005-06 to FY 2008-09) and @ 5.28% SLM (FY 2009-10 to FY 2015-16) offered in earlier years shall be debited to General Reserve and Surplus and not to P&L Account. Finally, C&AG while conducting the Supplementary Audit of GETCO for FY 2019-20, insisted GETCO to seek an opinion from Expert Advisory Committee (EAC) of Institute of Chartered Accountants of India for accounting of the aforesaid excess income offered in early years which works out to Rs. 424.17 Crore.



Accordingly, as per the insistence of C&AG and as per the opinion of EAC, GETCO has to finally debit the amount of Rs. 417.60 Crore from the Opening Reserve and Surplus and Deferred Tax Liability of 01.04.2019 and credit to the balance of Government Grant & Consumer Contribution of 01.04.2019. Further for FY 2019-20, the amount of Rs. 6.57 Crore have been reduced from the deferred income and the same is credited to the balance of Government Grant & Consumer Contribution of 31.03.2020. This whole accounting procedure for accounting excess income offered of Rs. 424.17 Crore (Rs. 417.60 Crore + Rs. 6.57 Crore) is done as per the insistence of C&AG, requirement of Ind-AS (Indianize version of IFRS) and as per the opinion of EAC.

It is to state that only while giving Ind AS mandatory effect, it comes out that GETCO has been offering excess deferred income (as Non-Tariff Income Deductions) for all these years and has offered excess deferred income (non-tariff income) to the tune of Rs. 424.17 Crore in tariff determination/Truing Up exercise of those years.

GETCO therefore requested to kindly allow to recover Rs. 424.17 Crore of excess deferred income offered during FY 2005-06 to 2019-20, by reducing Rs. 424.17 Crore from Non-tariff income of FY 2020-21 in Tariff determination/Truing Up as this excess income amount has already been fully passed by GETCO to its transmission beneficiaries in the form of passing higher non-tariff income at the time of truing up and tariff determination at respective years.

The accounting entries which have been passed in FY 2019-20 and FY 2020-21 for such prior period error/adjustments are shown in the Table Below:

Table 4-34: Calculation of Deferred Income by GETCO (Rs. Crore)

Sr. No.	Particular	Original Accounts (FY 2019-20)	Restated Accounts (FY 2019-20)	Difference
1	Opening balance of Government Grants & Subsidies towards Cost of Capital Assets	404.32	592.10	187.78
1 (A)	Grant Addition	15.00	15.00	-
2	Opening balance of Consumer Contribution towards Capital Assets	1,399.87	1,629.69	229.83
2 (A)	CC Addition	347.49	347.49	-
3 (A)	Grant transferred to P&L	(55.26)	(51.94)	3.31
3 (B)	CC transferred to P&L	(137.92)	(134.67)	3.25
3	Deferred Income towards Government Grants/ Subsidies and Consumer Contribution towards Cost of Capital Assets [3= 3(A) +3(B)]	(193.18)	(186.61)	6.56



## Gujarat Energy Transmission Corporation Limited Truing Up for FY 2020-21 and Determination of ARR and Tariff for FY 2022-23

Sr. No.	Particular	Original Accounts (FY 2019-20)	Restated Accounts (FY 2019-20)	Difference
4	Closing balance of Govt. Grants & Subsidies towards Cost of Capital Assets [4=1+1(A)+3(A)]	364.07	555.16	191.09
5	Closing balance of Consumer Contribution towards Capital Assets [5=2+2(A)+3(B)]	1,609.43	1,842.51	233.08
6	Total Reversal of Grant & Consumer Contribution	1,973.50	2,397.67	424.17

In view of the above, GETCO has reduced Rs. 424.17 Crore as Reversal of Grant and Consumer Contribution from Non-Tariff income of Rs. 494.48 Crore earned during FY 2020-21 and net Non-Tariff Income is considered for claim.

GETCO has claimed Non-Tariff Income at Rs. 70.31 Crore in the Truing up for FY 2020-21, as against Rs. 331.37 Crore approved for the year in the MYT Order.

Table 4-35: Non-Tariff Income claimed by GETCO for 2020-21 (Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed	Deviation +/(-)
1	Non-Tariff Income	331.37	70.31	261.06

## **Commission's Analysis**

The Commission notes that, as per Audited accounts, Non-Tariff Income for FY 2020-21 is Rs. 506.95 Crore. This income includes Non-Tariff Income of Rs. 9.80 Crore for SLDC, which has been excluded for the purpose of Truing up for GETCO. Further, as per settled principle, the interest income on Staff loans and advances of Rs. 2.66 Crore and income of reversal of expected credit loss of Rs. 1.38 Crore for GETCO has not been considered.

After analysis of Annual Accounts and the details submitted by GETCO as mentioned above, the claim of GETCO for impact of restatement of accounts retrospectively is found justified and the Commission accepts the submission of GETCO regarding income towards reversal of grants and consumer contribution of Rs. 424.17 Crore and same has not been considered in Non-Tariff Income for FY 2020-21.

The Commission, accordingly, approves the Non-Tariff Income of Rs. 68.93 Crore as actual, as per the audited annual accounts in the Truing up for FY 2020-21 as detailed in the Table below:



Table 4-36: Non-Tariff Income approved for 2020-21 (Rs. Crore)

Sr. No.	Particulars	GETCO	SLDC	Net GETCO
1	Non-Tariff income as per annual accounts		9.80	506.95
2	Less: Income from Staff loan & advances	2.66	-	2.66
3	Less: Income from Reversal of grant & consumer contribution	424.17	1	424.17
4	Less: Income from Reversal of Expected Credit Loss	1.39	-	1.39
5	Net Non-Tariff Income	68.93	9.80	78.73

The Commission considers the Non-Tariff Income as uncontrollable and, accordingly, approves the Gain/(Loss) on Non-Tariff Income in the Truing up for FY 2020-21, as detailed in the Table below:

Table 4-37: Gain/(Loss) on Non-Tariff income approved in the Truing up for 2020-21 (Rs. Crore)

Particulars	Approved in the MYT Order	Approved in the Truing up	Deviation + / (-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Non-Tariff	331.37	68.93	262.44	_	262.44

## 4.12 Incentive for Target Availability Factor

### **Petitioner's Submission**

GETCO has achieved the availability of 99.47% for its transmission network during FY 2020-21 as certified by SLDC against the targeted availability of 98.50%. GETCO further submitted that it has computed the incentive due to higher availability on the ARR, based on the target availability of 98.50% as presented in the Table below:

Table 4-38: Incentive for Target Availability claimed for FY 2020-21 (Rs. Crore)

Sr. No	Particulars	FY 2020-21
1	Target Availability as per the GERC (MYT) Regulations	98.50%
2	Actual Availability	99.47%
3	Annual Transmission Charges	4,369.24
4	Incentive for Transmission System Availability	43.03



## **Commission's Analysis**

The Commission has verified the availability of the Transmission System from SLDC Certificate as 99.47%. Incentive has to be given as per the formula mentioned in Regulation 73.1 of the GERC (MYT) Regulations, 2016, as shown below:

Incentive = ATC x [Annual availability achieved – Target Availability]/ Target Availability

For computation of incentive, the Commission has considered Annual Transmission Charges equivalent to Aggregate Revenue Requirement approved after truing up for FY 2020-21.

The Commission has accordingly computed the incentive of Rs. 41.42 Crore for the Truing up for FY 2020-21 as detailed in the Table below:

Table 4-39: Incentive for Higher Availability approved for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars Particulars	Approved
1	Target Availability as per MYT Regulations	98.50%
2	Actual Availability	99.47%
3	Annual Transmission Charges	4,206.52
4	Incentive for Transmission System Availability	41.42

The Commission considers the deviation in Incentive as uncontrollable and accordingly approves the Gain/(Loss) in the Truing up for FY 2020-21 as given in the Table below:

Table 4-40: Gain/ (loss) from Incentive approved for FY 2020-21 (Rs. Crore)

Particulars	Approved in the MYT Order	Approved in Truing up	Deviation +/(-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Incentive	0.00	41.42	(41.42)	-	(41.42)

## 4.13 Gain / (Loss) under Truing Up

The Commission has reviewed the performance of GETCO under Regulation 21 of the GERC (MYT) Regulations, 2016, with reference to the Audited Annual Accounts for FY 2020-21.

The Commission has computed the sharing of Gain and (Loss) for FY 2020-21, based on the Truing up for each of the components, as discussed in the above paragraphs.



The fixed charges approved for FY 2020-21 in the MYT Order dated 31<sup>st</sup> March, 2017, claimed by GETCO in Truing up (Gain / (Loss)), and computed in accordance with the GERC (MYT) Regulations, 2016, are given in the Table below:



Table 4-41: ARR & Gains /(losses) approved in Truing up Order for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed	Approved in Truing up	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Uncontrollable Factor
1	Operation & Maintenance Expenses	1,882.18	1,451.84	1,436.21	523.47	(77.49)
2	Depreciation	1,355.67	1,189.71	1,173.49		182.18
3	Interest & Finance Charges	618.80	506.10	497.20		121.60
4	Interest on Working Capital	93.39	72.76	71.67		21.72
5	Return on Equity	1,013.02	996.05	995.99		17.03
6	Total Fixed Costs	4,963.06	4,216.46	4,174.56	523.47	265.03
7	Add: Provision for Tax	64.62	329.88	314.73		(250.11)
8	Less: Expenses Capitalized	194.13	213.84	213.84		(19.71)
9	Total Transmission Charges	4,833.55	4,332.50	4,275.45	523.47	34.63
10	Less: Non-Tariff Income	331.37	70.31	68.93		262.44
11	Aggregate Revenue Requirement	4,502.18	4,262.19	4,206.52	523.47	(227.81)
12	Add: Incentive for target availability	-	43.03	41.42		(41.42)
13	Total ARR	4,502.18	4,305.22	4,247.95	523.47	(269.23)



### 4.14 Sharing of Gains / (Losses) for FY 2020-21

The Commission has analysed the Gain/(Loss) on account of controllable and uncontrollable factors. The relevant Regulations of the GERC (MYT) Regulations, 2016 are extracted below:

# "Regulation 23. Mechanism for pass-through of gains or losses on account of uncontrollable factors

23.1 The approved aggregate gain or loss to the Generating Company or Transmission Licensee or SLDC or Distribution Licensee on account of uncontrollable factors shall be passed through as an adjustment in the tariff of the Generating Company or Transmission Licensee or SLDC or Distribution Licensee over such period as may be specified in the Order of the Commission passed under these Regulations.

...

# Regulation 24. Mechanism for sharing of gains or losses on account of controllable factor

- 24.1 The approved aggregate gain to the Generating Company or Transmission Licensee or SLDC or Distribution Licensee on account of controllable factors shall be dealt with in the following manner:
- a. One-third of the amount of such gain shall be passed on as a rebate in tariffs over such period as may be stipulated in the Order of the Commission under Regulation 21.6:
- b. The balance amount, which will amount to two-thirds of such gain, may be utilised at the discretion of the Generating Company or Transmission Licensee or SLDC or Distribution Licensee.
- 24.2 The approved aggregate loss to the Generating Company or Transmission Licensee or SLDC or Distribution Licensee on account of controllable factors shall be dealt with in the following manner:
- a. One-third of the amount of such loss may be passed on as an additional charge in tariffs over such period as may be stipulated in the Order of the Commission under Regulation 21.6; and



b. The balance amount of loss, which will amount to two-thirds of such loss, shall be absorbed by the Generating Company or Transmission Licensee or SLDC or Distribution Licensee."

The Revenue (Gap)/Surplus, based on the Trued-up ARR and the Gains/(Losses) approved in the Truing up for FY 2020-21, is summarised in the Table below:

Table 4-42: Revenue (Gap)/ Surplus approved for FY 2020-21

Sr. No	Particulars	Claimed	Approved
1	Gain/(loss) on Account of Uncontrollable Factors to be Passed on to the Consumers	(314.74)	(269.23)
2	Gain/(loss) on Account of Controllable Factors to be Passed on to the Consumers (1/3 <sup>rd</sup> )	170.57	174.49
3	Revenue (Gap)/Surplus	(144.18)	(94.74)

The Commission has arrived at a Revenue gap of **Rs. 94.74 Crore** in the truing up for FY 2020-21. This revenue gap is carried forward to the ARR of FY 2022-23 for determination of Transmission Charges.



# 5 Determination of Aggregate Revenue Requirement (ARR) for FY 2022-23

#### 5.1 Introduction

This Chapter deals with the determination of ARR and Transmission Charges for FY 2022-23.

### 5.2 Capital Investment

#### **Petitioner's Submission**

For improving the transmission network availability and to strengthen the overall transmission network, GETCO has proposed Capital Expenditure of Rs. 2,968.44 Crore during FY 2022-23 for construction of new transmission lines and sub-stations along with augmentation and Renovation & Modernisation work. The detailed breakup of proposed capital expenditure is given in the Table below:

Table 5-1: Proposed Capital Expenditure of GETCO for FY 2022-23

Sr. No.	Particulars	FY 2022-23
Α	New Projects	
1	765 kV Substations	-
2	765 kV Lines	-
3	400 kV Substations	116.50
4	400 kV Lines	365.33
5	220 kV Substations	343.58
6	220 kV Lines	178.23
7	132 kV Substations	0.80
8	132 kV Lines	14.48
9	66 kV Substations	460.00
10	66 kV Lines	843.20
11	Capacitor Bank	20.00
12	Reactor and Reactor Bay	-
Total (A)		2,477.46
В	Renovation & Modernisation	
1	Renovation and Modernization	278.14
2	Augmentation of Sub-stations/Lines	226.03
3	Replacement of RTU	-



Sr. No.	Particulars	FY 2022-23	
Total (B)		470.00	
С	Others		
1	OPGW	118.14	
2	Supply-of LDMS System with Firewall and router	4.00	
Total (C)	Total (C)		
Total Cap	Total Capital Expenditure (A+B+C)		

The details of proposed Transmission asset addition in Bays and Transmission Lines are summarised below:

Table 5-2: Proposed Bay and Line Ckt. km addition for FY 2022-23

Sr. No.	Project Name	400 kV	220 kV	132 kV	66 kV	33 kV	Total
1	400 kV Bhachunda GIS substation (Dist. Kutch)	13	0	0	0	0	13
2	400/220/66 kV Bhogat GIS substation (Dist. Jamnagar)	11	17	0	20	0	48
3	220kV Mera S/S / (220kV MithiPaldi S/S)	0	7	0	0	0	7
4	220 kV Giyavad substation (Dist. Morbi)	0	9	0	13	0	22
5	220 kV Kamlapur substation (Dist. Rajkot)	0	14	0	14	0	28
6	132kV System at 220kV Vijapur S/S	0	2	3	0	0	5
7	Up gradation of 66kV Sevalia S/S to 220kV Level	0	9	0	14	0	23
9	220 kV Bhesan (AIS) 220/66 kV s/s	0	10	0	15	0	25
10	220kV Patkhilori 220/66 kV s/s with 2x160 MVA X'mer	0	9	0	15	0	24
11	220 kV Babarzar (AIS)	0	13	0	25	0	38
10	66 kV & 33 kV Substation (Approx 60 S/s planned to commercialized with line with 6 nos. of bays in each sub-station	0	0	0	360	0	360
Augment	Augmentation with Transmission Bays				60		60
	EHV Tr. Line bays on each side other than new EHV Substation		28	6	0	0	48
Lir	nk Line FB under KSY	0	0	0	200	0	200
То	tal Nos of Bays Addition	38	118	9	736	0	901
CK	(M Addition (in CKM)	740	488	148	1000	0	2376



### 5.3 Capital Expenditure and Capitalisation

#### **Petitioner's Submission**

GETCO has proposed capital expenditure, capitalization and funding for FY 2022-23 as given in the Table below:

Table 5-3: Projected Capital Expenditure and Capitalisation in FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	FY 2022-23
1	Capex for the Year	2,968.44
2	Capitalisation	2,556.42
3	Debt	1,487.01
4	Equity	637.29
5	Grant	432.12

The Capitalisation has been assumed at 86.12% (ratio as considered by the Commission while approval of Capitalization of FY 2021-22 in Tariff Order dated 30<sup>th</sup> March, 2021) of capital expenditure is carried out during FY 2022-23. The Capitalisation net of grants is assumed to be funded on normative basis through the means of debt and equity with the debt:equity ratio of 70:30 on normative basis as per GERC (MYT) Regulations, 2016.

#### **Commission's Analysis**

The Commission is of the opinion that CAPEX is required due to increased loading of current system, new addition of generating capacity, system strengthening and regular Renovation & Modernisation. Hence, the Commission partially accepts the CAPEX requirement as proposed by GETCO. However, during the truing-up exercise for FY 2022-23, actual CAPEX will be compared with the CAPEX proposed in the present Petition and approved in the present Order, along with detailed justification for deviation, if any.

GETCO has claimed capitalization as 86.12% of the proposed CAPEX considering the ratio as approved in the tariff order dated 30<sup>th</sup> March, 2021. The Commission is of the view that a realistic view must be taken considering past trends and is required to be updated on a regular basis. The Commission has analysed the trend of CAPEX and Capitalisation in the last five years which includes the capitalisation for FY 2020-21 approved in this order, to assess the reasonability of CAPEX and Capitalisation proposed by GETCO for FY 2022-23, as shown in the Table below:



Table 5-4: 5-year trend of capex and Capitalisation (Rs. Crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21	Average of 5 years
Capex	2,371	2,911	2,770	3,232	2,196	2,696
Capitalization	2,164	2,213	2,747	2,354	1,831	2,262
Capitalisation as % of Capex	91.27%	76.02%	99.16%	72.85%	83.39%	83.90%

From the above analysis, it is observed that the average CAPEX is around Rs. 2696 Crore and the average Capitalisation is around Rs. 2,262 Crore, i.e., ratio of Capitalisation to CAPEX of 83.90%.

In order to assess the preparedness of GETCO to undertake CAPEX of the proposed magnitude in FY 2022-23, the Commission has sought scheme-wise status of preparedness and through its replies dated 8<sup>th</sup> January, 2022, GETCO has submitted the required details. The Commission has analysed the replies and found it to be in order.

The Commission notes that the Capex and Capitalisation proposed by GETCO for FY 2022-23 is higher than the average capex actually achieved by GETCO in past 5 years. Hence, for the purpose of approving ARR for FY 2022-23, the Commission has considered the Capex based on average of last 5 years Capex by GETCO. However, all Projects proposed by GETCO are approved, and actual capex and capitalisation achieved by GETCO shall be subject to final adjustments as per Regulations/Prudence check at the time of truing up. The complete list of CAPEX Schemes approved by the Commission in this Order for FY 2022-23 is given at **Annexure 1** to this Order.

Therefore, the Commission has approved CAPEX of Rs. 2,968.44 Crore. Further, looking at the past trends, the Commission has considered Capitalisation equal to 83.90% of the approved CAPEX for FY 2022-23, i.e., Capitalisation of Rs. 2,490.49 Crore has been approved for FY 2022-23.

The Commission also notes that GETCO has considered grant funding of Rs. 432.12 Crore for FY 2022-23, which is equivalent to the actual grant funding in FY 2020-21. The Commission has accepted GETCO's projection in this regard and hence, considered grant funding of Rs. 432.12 Crore for FY 2022-23. The approved Capitalisation, net of grant funding, has been considered to be funded by the normative debt:equity ratio of 70:30.

Hence, the Commission approves the CAPEX and Capitalization and its financing through Grants, Debt and Equity for FY 2022-23, as given in the Table below:



Table 5-5: Approved CAPEX and Capitalization for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	Capex	2,968.44	2,968.44
2	Capitalisation	2,556.42	2,490.49
3	Debt	1,487.01	1,440.86
4	Equity	637.29	617.51
5	Grant	432.12	432.12

### 5.4 Fixed Charges for FY 2022-23

Total fixed charges for FY 2022-23 have been categorized into following elements:

- O&M expenses
  - Employee cost
  - Administration and General expenses
  - Repairs and Maintenance expenses
- Depreciation
- Interest and Finance charges
- Interest on Working Capital
- Return on Equity
- Contribution to Contingency Reserve

#### **5.5 O&M Expenses for FY 2022-23**

#### **Petitioner's Submission**

GETCO has projected O&M expenses for FY 2022-23 as Rs. 2,156.84 Crore as detailed in the Table below:

Table 5-6: Proposed Normative O&M expenses for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Units	FY 2022-23
1	Substations (Bays)		
	Opening Number of Bays	Number	15,771.00
	Addition During Year	Number	901.00
	Reduction During Year	Number	-
	Closing Number of Bays	Number	16,672.00



Sr. No.	Particulars	Units	FY 2022-23
	Average Number of Bays	Number	16,221.50
	O&M Expense Norm Per Bay	Rs. Lakh	9.49
	Total O&M Expenses - Substations	Rs. Crore	1,539.42
2	Transmission Lines (Ckt Km)		
	Opening Ckt Km	Ckt Km	65,201.41
	Addition During Year	Ckt Km	2,376.00
	Reduction During Year	Ckt Km	-
	Closing Ckt Km	Ckt Km	67,577.41
	Average Ckt Km	Ckt Km	66,389.41
	O&M Expense Norm Per Ckt Km	Rs. Lakh	0.93
	Total O&M Expenses - Transmission Lines	Rs. Crore	617.42
3	Total O&M Expenses (As Per Norms)	Rs. Crore	2,156.84

GETCO has projected the O&M expenses for FY 2022-23 by applying escalation rate of 5.72% (as approved in the GERC (MYT) Regulations, 2016) on the norms as approved for FY 2021-22 in tariff order dated 30<sup>th</sup> March, 2021. GETCO has projected the O&M expenses as per details submitted regarding Bays and ckt. Km of Transmission Lines expected to be operationalized in FY 2022-23.

GETCO also submitted that the above claims only account for the inflation aspects of O&M Costs, but does not include additional expenses on account of 7<sup>th</sup> Pay Commission. GETCO requested to approve the additional impact on account of 7<sup>th</sup> Pay Commission as and when paid by GETCO, as an uncontrollable expense.

#### Commission's analysis

The Commission has examined the submissions made by GETCO. The Commission has considered actual closing values of Bays and ckt. km of FY 2020-21 as the opening values of Bays and ckt. km of FY 2021-22 and addition as approved in Tariff Order dated 30<sup>th</sup> March, 2021 so as to arrive at the closing of FY 2021-22 which would resultant be the opening values of No. of Substation Bays and Transmission Lines (ckt. km) of FY 2022-23 which is 15,702 and 65,056, respectively, so as to arrive at the O&M expenses for FY 2022-23.

Further, as discussed in earlier Section, the Commission has allowed Capex based on past trends. Hence, the Commission has considered the addition of Bays and



Transmission Lines in FY 2022-23, also on proportionate basis in the similar ratio of 83.90% as considered for capitalisation.

The Commission also observes that actual O&M expenses have been lower than approved normative O&M expenses in recent years. Under normal circumstances, the Commission would have revised the O&M norms based on analysis of actual O&M expenses, while framing the GERC (MYT) Regulations for the next Control Period, including FY 2022-23. However, as stated earlier, due to unavoidable circumstances, there is a delay in framing the GERC (MYT) Regulations for the next Control Period, and hence, the applicability of the GERC (MYT) Regulations, 2016 has been extended by one year, to include FY 2022-23 also. Therefore, the O&M expenses is required to be normalised based on the approach adopted at the time of framing of MYT Regulations. Accordingly, the Commission in the last tariff order dated 30<sup>th</sup> March, 2021, has already normalised the O&M expenses norms for FY 2020-21, considering the actual O&M Expenses in the previous years, by adopting the same principles as adopted in the previous MYT Order. Also, the impact of pay revision as per 7<sup>th</sup> Pay Commission has been pro-rated for the entire FY 2017-18, while considering the actual O&M expenses for FY 2017-18.

Based on the above approach, the O&M Expense per Bay and per ckt. km has been derived based on average number of Bays and ckt. km of Transmission lines in last 3 years and was escalated by 5.72% yearly as specified in the GERC (MYT) Regulations, 2016. Since the normalisation impact has already been considering by deriving the O&M norms for FY 2021-22, the Commission doesn't find any logic to recalculate the average O&M expenses to derive the new norms and accordingly has considered the escalation of 5.72% on the norms as approved for FY 2021-22 to derive the O&M norms for FY 2022-23, which is also in line with the proposal submitted by GETCO.

Table 5-7: Approved O&M norms for FY 2022-23 (Rs. Crore)

Particulars	Per Bay	Per ckt. km
O&M Norms for FY 2021-22	8.98	0.88
Escalation Rate	5.72%	5.72%
O&M Norms for FY 2022-23	9.49	0.93

Accordingly, the approved number of Bays and ckt. km of Transmission Lines, and the normative O&M expenses for FY 2022-23 have been computed as detailed in the Table below:



Table 5-8: Approved O&M expenses for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Units	Petition	Approved
1	Substations (Bays)			
	Opening Number of Bays	Number	15,771.00	15,702.00
	Addition During Year	Number	901.00	878.00
	Reduction During Year	Number	-	-
	Closing Number of Bays	Number	16,672.00	16,580.00
	Average Number of Bays	Number	16,221.50	16,141.00
	O&M Expense Norm Per Bay	Rs. Lakh	9.49	9.49
	Total O&M Expenses - Substations	Rs. Crore	1,539.42	1,531.78
2	Transmission Lines (Ckt Km)			
	Opening Ckt Km	Ckt Km	65,201.41	65,056.45
	Addition During Year	Ckt Km	2,376.00	2,314.72
	Reduction During Year	Ckt Km	-	-
	Closing Ckt Km	Ckt Km	67,577.41	67,371.17
	Average Ckt Km	Ckt Km	66,389.41	66,213.81
	O&M Expense Norm Per Ckt Km	Rs. Lakh	0.93	0.93
	Total O&M Expenses - Transmission Lines	Rs. Crore	617.42	615.79
3	Total O&M Expenses (As Per Norms)	Rs. Crore	2,156.84	2,147.57

The Commission accordingly approves the normative O&M expenses for FY 2022-23 as Rs. 2,147.57 Crore.

### 5.6 Depreciation for FY 2022-23

#### **Petitioner's Submission**

GETCO has projected depreciation of Rs. 1,382 Crore for FY 2022-23 as given in the Table below:



Table 5-9: Proposed Depreciation for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	FY 2022-23
1	Opening Gross Block	31,755
2	Net Additions during the Year	2,556
3	Closing Gross Block	34,312
4	Depreciation for the Year	1,382
5	Average Rate of Depreciation	4.18%

GETCO has submitted that the closing GFA of FY 2020-21 has been considered as the opening GFA of FY 2021-22. The addition during FY 2021-22 has been considered based on the approved capitalisation in Tariff Order dated 30<sup>th</sup> March, 2021 and for FY 2022-23, it has considered based on projected capitalisation for that year. Depreciation has been calculated taking into consideration the opening balance of assets at the beginning of the year and the projected capitalisation during the year.

#### **Commission's Analysis**

The Commission has computed the depreciation applying the weighted average rate of depreciation of 4.13% for FY 2022-23 based on the approved weighted average rate of depreciation for FY 2020-21. The closing GFA approved in the truing up of FY 2020-21 has been considered as opening GFA of FY 2021-22. Asset addition in FY 2021-22 has been considered equal to the capitalisation approved for FY 2021-22 in the Tariff Order dated 30<sup>th</sup> March, 2021. Further, Asset addition in FY 2022-23 on account of capitalization is considered as approved for FY 2022-23 in Table 5-5 above.

Thus, the Commission approves Depreciation for FY 2022-23 as detailed in the Table below:

Table 5-10: Approved Depreciation for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	Opening Gross Block	31,755.45	31,752.47
2	Net Additions during the Year	2,556.42	2,490.49
3	Closing Gross Block	34,311.87	34,242.96
4	Depreciation for the Year	4.18%	4.13%
5	Average Rate of Depreciation	1,381.91	1,361.66

The Commission approves the Depreciation of Rs. 1,361.66 Crore for FY 2022-23.



### 5.7 Interest and Finance charges for FY 2022-23

#### **Petitioner's Submission**

GETCO has projected interest and finance charges of Rs. 507.86 Crore for FY 2022-23 as detailed in the Table below:

Table 5-11: Proposed Interest and Finance Charges for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	FY 2022-23
1	Opening Loans	7,081.08
2	Loan Addition during the Year	1,487.01
3	Repayment during the Year	1,381.91
4	Closing Loans	7,186.18
5	Average Loans	7,133.63
6	Interest on Loan	495.60
7	Other Charges (Guarantee + Financing Charges)	12.25
8	Total Interest & Finance Charges	507.86
9	Weighted Average Interest Rate	6.95%

The closing balance of loan portfolio for FY 2020-21 has been taken as opening balance of FY 2021-22. The Normative loan addition during FY 2021-22 is considered as approved in Tariff Order dated 30<sup>th</sup> March, 2021 to work out closing balance of FY 2021-22 and for FY 2022-23, the same has been computed as per Capex Funding Plan projected by GETCO as discussed above.

The repayment for the year during FY 2020-21 is considered as approved in Tariff Order dated 30<sup>th</sup> March, 2021 which was equivalent to the depreciation approved for the respective year and for FY 2021-22, it is equal to the depreciation calculated for the respective year and proposed in this petition. The rate of interest has been taken as the weighted average rate of interest on the actual loan portfolio for FY 2020-21, which is 6.95%. Other Bank Charges have been taken at the same level as in FY 2020-21.

#### **Commission's Analysis**

The Commission has examined the interest and finance charges projected by GETCO for FY 2022-23. The closing loan as approved in the Truing-up for FY 2020-21 has been considered as the opening balance of loan for FY 2021-22. The loan addition and repayment in FY 2021-22 has been considered as approved for the year in the Tarff Order dated 30<sup>th</sup> March, 2021. The loan addition in FY 2022-23 has been considered as approved in Table 5-5 above.



The weighted average rate of interest has been considered as 6.95%, based on the truing-up for FY 2020-21 and as proposed by the Petitioner. In accordance with the GERC (MYT) Regulations, 2016, repayment for FY 2022-23 has been considered equal to the depreciation allowed for FY 2022-23.

The Commission also notes that Other Bank Charges have been unusually high in FY 2020-21 on account of forex variations, and may not be incurred at the same levels in FY 2022-23. The Commission has provisionally considered Other Bank Charges as Rs. 1.50 Crore. GETCO can recover the variation, if any, on actual basis in the Truing-up for FY 2022-23.

The Commission has accordingly computed the interest expenses for FY 2022-23, as detailed in the Table below:

Table 5-12: Approved Interest and Finance Charges for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	Opening Loans	7,081.08	7,095.21
2	Loan Addition during the Year	1,487.01	1,440.86
3	Repayment during the Year	1,381.91	1,361.66
4	Closing Loans	7,186.18	7,174.41
5	Average Loans	7,133.63	7,134.81
6	Interest on Loan	495.60	495.68
7	Other Charges (Guarantee + Financing Charges)	12.25	1.50
8	Total Interest & Finance Charges	507.86	497.18
9	Weighted Average Interest Rate	6.95%	6.95%

The Commission approves the interest and finance charges of Rs. 497.18 Crore for FY 2022-23.

### 5.8 Interest on working capital for FY 2022-23

#### Petitioner's submission

GETCO has projected interest on working capital of Rs. 87.06 Crore for FY 2022-23 as detailed in the Table below:



Table 5-13: Proposed Interest on Working Capital for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	FY 2022-23
1	O&M Expenses (1 Month)	179.74
2	Maintenance Spares (1% of opening GFA)	317.55
3	Receivables (1 Month)	419.16
4	Total Working Capital	916.45
5	Rate of Interest on Working Capital	9.50%
6	Interest on Working Capital	87.06

GETCO submitted that the interest on working capital has been computed on normative basis in accordance with the GERC (MYT) Regulations, 2016.

GETCO further submitted that Interest rate has been considered as per the GERC (MYT) (First Amendment) Regulations, 2016. Thus, GETCO has considered the Interest rate of 9.50% (MCLR rate as on 1<sup>st</sup> April, 2021, i.e., 7.00% plus 250 basis points)

#### **Commission's Analysis**

The Commission has computed the normative working capital requirement and interest on working capital in accordance with Regulation 40.2 of the GERC (MYT) Regulations, 2016, and its First Amendment. Considering the 1-year MCLR of State Bank of India as on 1<sup>st</sup> April, 2021, i.e., 7.00%, and adding a spread of 250 basis points, the interest rate works out to 9.50%. The Commission has calculated the working capital and interest on working capital for FY 2022-23 as detailed in the Table below:

Table 5-14: Approved Interest on Working Capital for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	O&M Expenses (1 Month)	179.74	178.96
2	Maintenance Spares (1% of opening GFA)	317.55	317.52
3	Receivables (1 Month)	419.16	410.34
4	Total Working Capital	916.45	906.83
5	Rate of Interest on Working Capital	9.50%	9.50%
6	Interest on Working Capital	87.06	86.15

The Commission thus, approves Interest on Working Capital of Rs. 86.15 Crore for FY 2022-23.



### 5.9 Return on Equity for FY 2022-23

#### Petitioner's submission

GETCO has projected ROE of Rs. 1,155.66 Crore for FY 2022-23 as detailed in the Table below:

Table 5-15: Proposed Return on Equity for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	FY 2022-23
1	Opening Equity	7,936.06
2	Equity Addition during the year	637.29
3	Closing Equity	8,573.35
4	Average Equity	8,254.71
5	Rate of Return on the Equity	14.00%
6	Return on Equity	1,155.66

The closing balance of Equity for FY 2020-21 has been taken as opening balance of FY 2021-22. The Normative equity addition during FY 2021-22 is considered as approved in Tariff Order dated 30<sup>th</sup> March, 2021 to work out closing balance of FY 2021-22 and for FY 2022-23, the same has been computed as per Capex Funding Plan projected by GETCO in as discussed above.

GETCO has submitted that ROE has been considered on the average equity for FY 2022-23 at 14%, in accordance with the GERC (MYT) Regulations, 2016.

#### **Commission's Analysis**

The Commission has examined the submission made by GETCO. The ROE is to be considered on normative basis on the opening balance of equity and approved equity addition during FY 2022-23. The rate of ROE as per GERC (MYT) Regulations, 2016 is 14% as claimed by GETCO.

The closing balance of equity as approved in the Truing-up for FY 2020-21 has been considered as the opening balance of loan for FY 2021-22. The equity addition in FY 2021-22 has been considered as approved for the year in the Tarff Order dated 30<sup>th</sup> March, 2021. The equity addition in FY 2022-23 has been considered as approved in Table 5-5 above. The Commission has computed the ROE for FY 2022-23 as detailed in the Table below:



Table 5-16: Approved Return on Equity for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	Opening Equity	7,936.06	7,935.16
2	Equity Additions during year	637.29	617.51
3	Closing Equity	8,573.35	8,552.67
4	Average Equity	8,254.71	8,243.92
5	Rate of Return on the Equity	14.00%	14%
6	Return on Equity	1,155.66	1,154.15

The Commission approves the Return on Equity of Rs. 1,154.15 Crore for FY 2022-23.

#### 5.10 Tax on Income for FY 2022-23

#### **Petitioner's Submission**

GETCO has projected the Income Tax for FY 2022-23 as detailed in the Table below:

Table 5-17: Proposed Tax on Income for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	FY 2022-23
1	Tax on Income	329.88

GETCO submitted that it has computed the Income Tax for FY 2022-23 in line with the provisions of GERC (MYT) Regulations, 2016 by considering the tax incurred during FY 2020-21. The relevant provision of the Regulation is as mentioned below:

"41.1 The Commission in its MYT Order shall provisionally approve Income Tax payable for each year of the Control Period, if any, based on the actual income tax paid, including cess and surcharge on the same, if any, as per latest Audited Accounts available for the Applicant, subject to prudence check."

#### **Commission's Analysis**

The Commission has examined the submission made by GETCO. As provided in Regulation 41.1 of GERC (MYT) Regulations 2016, the Commission approves Income Tax for FY 2022-23, as approved in the truing up for FY 2020-21. Any variation in Income Tax actually paid and approved shall be reimbursed based on documentary evidence.



at the time of truing up for FY 2022-23 subject to prudence check, in accordance with Regulation 41.2 of the GERC (MYT) Regulations, 2016.

Table 5-18: Approved Income Tax for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	Tax on Income	329.88	314.73

Thus, the Commission approves Income Tax of Rs. 314.73 Crore for FY 2022-23.

### 5.11 Expenses capitalized during FY 2022-23

#### Petitioner's submission

GETCO has considered the capitalized expenses for FY 2022-23 with an escalation of 5.72% to the actual expenses capitalized in FY 2020-21 as detailed in the Table below:

Table 5-19: Proposed Expenses Capitalised for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	FY 2022-23
1	Expenses Capitalised	239.00

#### **Commission's Analysis**

The Commission notes that Expenses Capitalised are directly linked with O&M Expenses. The Expenses Capitalised in FY 2020-21 work out to 14.73% of the actual O&M expenses. However, the expenses capitalised for FY 2020-21, if allowed for FY 2022-23 will result in 11.13% of the normative O&M expenses as approved by the Commission in Table 5-8 of this order. Hence, the Commission approves the expenses capitalised for FY 2022-23 as proposed by GETCO and as approved in true-up for FY 2020-21, as given in the Table below.

Table 5-20: Approved Expenses Capitalised for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	Expenses Capitalised	239.00	239.00

Thus, the Commission approves Expenses Capitalised of Rs. 239.00 Crore for FY 2022-23.



#### 5.12 Non-Tariff Income for FY 2022-23

#### **Petitioner's Submission**

GETCO has projected the Non-Tariff Income for FY 2022-23 as detailed in the Table below:

Table 5-21: Projected Non-Tariff Income for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	FY 2022-23
1	Non-Tariff Income	494.48

GETCO has submitted that it has estimated Non-Tariff Income at the same levels as actual for FY 2020-21.

#### **Commission's Analysis**

The Commission has examined the submission of GETCO. GETCO has estimated the Non-Tariff Income to remain constant at FY 2020-21 levels in FY 2022-23. The Commission has accepted GETCO's submission in this regard and accordingly approves Non-Tariff Income for FY 2022-23 equivalent to Non-Tariff Income as approved in truing up for FY 2020-21 (excluding the impact of Reversal of Grant & Consumer Contribution) as shown in the Table below:

Table 5-22: Approved Non-Tariff Income for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	Non-Tariff Income	494.48	493.10

Thus, the Commission approves Non-Tariff Income of Rs. 493.10 Crore for FY 2022-23.

### 5.13 Projected and Approved Fixed Costs for FY 2022-23

The ARR as projected by GETCO and as approved by the Commission for FY 2022-23 is given in the Table below:



Table 5-23: ARR Approved for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Projected By GETCO	Approved
1	Operation & Maintenance Expenses	2,156.84	2,147.57
2	Depreciation	1,381.91	1,361.66
3	Interest & Finance Charges	507.86	497.18
4	Interest on Working Capital	87.06	86.15
5	Return on Equity	1,155.66	1,154.15
6	Total Fixed Costs	5,289.33	5,246.71
7	Less: Expenses Capitalised	239.00	239.00
8	Add: Provision for Income Tax	329.88	314.73
9	Total Transmission Charges	5,380.21	5,322.43
10	Less: Non-Tariff Income	494.48	493.10
11	Aggregate Revenue Requirement	4,885.73	4,829.33



### 6 Determination of Transmission Charges for FY 2022-23

#### 6.1 Introduction

This Chapter deals with the determination of Transmission Charges for FY 2022-23 for GETCO. The Commission has approved the ARR for FY 2022-23 in accordance with the GERC (MYT) Regulations, 2016, as specified in the earlier Chapter of this Order.

#### 6.2 Determination of Transmission Tariff for FY 2022-23

The Table below summarizes the ARR for FY 2022-23, as approved by the Commission in Table 5-23 of this Order:

Table 6-1: Approved ARR for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	FY 2022-23
1	Operation & Maintenance Expenses	2,147.57
2	Depreciation	1,361.66
3	Interest & Finance Charges	497.18
4	Interest on Working Capital	86.15
5	Return on Equity	1,154.15
6	Total Fixed Costs	5,246.71
7	Less: Expenses Capitalized	239.00
8	Add: Provision for Tax	314.73
9	Total Transmission Charges	5,322.43
10	Less: Non-Tariff Income	493.10
11	Aggregate Revenue Requirement	4,829.33

GETCO has submitted the total projected loading for GETCO system for FY 2022-23 as shown in the Table below:

Table 6-2: Total Loading in MW

Sr. No.	Stations	FY 2022-23 Projected
Α	GSECL Plants	6,202
В	IPPs	4,230
С	Share from Central Sector	7,449
D	CPP Wheeling	566
Е	Wind Farm Capacity	6,525
F	Solar Project	8,021
G	Bio-Mass Power capacity	171



Sr. No.	Stations	FY 2022-23 Projected
Н	Others (Small/ Mini Hydal & MSW)	61
I	Western Railway (OA)	105
	Total Loading in MW	33,330

The Petitioner has submitted Transmission Tariff for FY 2022-23, based on the Truing up projected for FY 2020-21. The Commission has determined the Revenue (Gap) / Surplus, based on the truing up for FY 2020-21. The detailed computation of the Revenue (Gap) / Surplus amount has been provided in earlier sections.

The Petitioner's proposal and the Transmission Tariff approved by the Commission for FY 2022-23 are given in the Table below:

Table 6-3: Approved Transmission Tariff for FY 2022-23

Sr. No.	Stations	Unit	Claimed	Approved
1	ARR for FY 2022-23	Rs. Crore	4,885.73	4,829.33
2	Add: Revenue Gap/(Surplus) for FY 2020-21	Rs. Crore	144.18	94.74
3	ARR after considering Gap/(Surplus) of FY 2020-21	Rs. Crore	5,029.90	4,924.08
4	Total MW allocation	MW	33,330	33,330
5	Transmission Tariff	Rs./MW/Day	4,134.58	4,047.60

# The Commission, accordingly, approves the Transmission Tariff for FY 2022-23, as mentioned above.

Regulation 72.1 of the GERC (MYT) Regulations, 2016 has specified a formula for sharing of the ARR of the Transmission Licensee, as approved by the Commission, by all Long-Term and Medium-Term users of the transmission system on monthly basis in the ratio of their respective contracted transmission capacities to the total contracted transmission capacity. Accordingly, Transmission ARR for FY 2022-23 as approved by the Commission shall be shared by all Long-Term and Medium-Term users of the transmission system on monthly basis.

Further, the Commission vide the GERC (MYT) (Second Amendment) Regulations, 2018, substituted the Regulations 72.2 and 72.3 of the principal Regulations by Regulation 72.2 as stated below:

"72.2 For Short-term users, including the collective transactions through power exchanges, the transmission charges shall be determined in Rs. Per kWh in accordance with the following formula:



 $TC(Rs./kWh) = Transmission ARR \div Total units wheeled,$ Where,

Transmission ARR = Aggregate Revenue Requirement of the Transmission Licensee, determined in accordance with Regulation 68 of these Regulations;

Total units wheeled = Total energy units wheeled through the transmission system, which shall be equal to the total energy input into the intra-State transmission system during the financial year"

The Commission has determined Transmission ARR of Rs. 4,924.08 Crore for FY 2022-23 as shown in the Table above.

In the past tariff orders, the Commission has decided the methodology for working out short term transmission charges on per kWh basis and worked out short term charges for FY 2020-21. Similar principle has been followed by GETCO in its Petition and accordingly estimated the energy input, based on energy received during FY 2020-21 for working out the energy input for FY 2022-23 on proportionate basis considering the Transmission Loading Capacity of 33,330 MW. The Commission notes that, as per the principle followed during past tariff Orders, base energy received for FY 2020-21 is required to be considered for working out the energy input for FY 2022-23 based on the expected load factors.

However, the Commission is also of view that, energy demand was lower during widespread of COVID Pandemic and lockdown situation in the State of Gujarat resulted in the impact of the same on energy wheeled / transmitted during FY 2020-21. Therefore, it is prudent to compute the short-term transmission charges considering the average load factor of last five years i.e. FY 2016-17 to FY 2020-21 based on the energy wheeled and transmission loading capacity of the respective years. The load factors considered by the Commission in past Tariff Orders is shown in the following Table:

Table 6-4: Average Load Factor of system demand for past 5 years

Sr. No.	Tariff Order	MW Allocation	Wheeled Energy (MU)	Load Factor (%)
1	FY 2016-17	21,547	89,632	47.49
2	FY 2017-18	22,653	95,446	48.10
3	FY 2018-19	24,164	1,05,158	49.68
4	FY 2019-20	24,134	1,02,865	48.66
5	FY 2020-21	27,727	1,02,048	42.01
6	Average	24,045	99,030	47.02



Accordingly, the Commission has worked out the total estimated wheeled units during FY 2022-23 as 1,37,270 MUs on proportionate basis considering the Transmission Loading Capacity of 33,330 MW during FY 2022-23 and average load factor of 47.02%. Thus, the Transmission Charges payable by the Short-Term users, including the collective transactions through Power Exchanges, works out to:

TC = Rs. 4,924.08 Crore / 1,37,270 MU = 35.87 Paise/kWh

### 6.3 Reactive Energy Charges

The Petitioner in its Petition has requested for continuation of Reactive Energy Charges for all renewable sources, i.e., Wind, Solar, Biomass, Bagasse, Mini-hydel, MSW, etc., at the same rate as approved in Order dated 30<sup>th</sup> March, 2021 in Case No. 1909 of 2020.

After considering the submission of the Petitioner, the Commission decides to continue with the existing Reactive Energy Charges and approved the charges for FY 2022-23 as shown in the following Table:

Table 6-5: Reactive Energy Charges approved for FY 2022-23

Sr. No.	Category	Approval Rate
1	For the drawal of reactive energy at 10% or less of the net energy exported	10 Paisa / kVARh
2	For the drawal of reactive energy at more than 10% of the net energy exported	50 Paisa / kVARh



### 7 Compliance of Directives

### 7.1 Compliance of Directives issued by the Commission

The Commission had given certain directives to GETCO. GETCO has submitted a report on compliance of the Directives issued by the Commission. The comments of the Commission on the submission/compliance of GETCO are given below:

#### Directive 1: Submission of Peak and Average Loading of Transmission Elements

The Commission, while dealing with objections/suggestion of the stakeholders, has observed that many transmission elements are functioning on overloading conditions. GETCO has been directed to adhere to the Manual of CEA on Transmission Planning Criteria to avoid such overloading operation of transmission elements. The Commission has been directing GETCO to submit report on peak and average loading of various 220 kV, 132 kV and 66 kV sub-stations. GETCO is directed to keep submitting the said reports at quarterly interval along with the report on peak loading and average loading of transmission elements. GETCO shall also apprise the Commission on quarterly basis about the transmission elements, which are running in overload condition for more than two times in a calendar month.

#### Compliance:

GETCO has submitted a report on average as well as peak loading of various 220 kV, 132 kV and 66 kV substations in Gujarat for 1<sup>st</sup> Quarter of FY 2020-21.

Further, GETCO has submitted the loading of important EHV elements during the 1<sup>st</sup> Quarter of FY 2020-21 and EHV transmission elements, which are running in overload condition for more than two times in a calendar month during the 1<sup>st</sup> Quarter of FY 2020-21.

GETCO has submitted the report on average and peak loading of important EHV Substation and elements during 2<sup>nd</sup> Quarter of FY 2021-22 and EHV transmission elements, which are running in overload condition for more than two times in a calendar month during the 2<sup>nd</sup> Quarter of FY 2021-22, along with the Petition. It has also submitted the details of area wise transmission constraint.

#### **Commission's Comment:**

The Commission has noted the submission of the Petitioner. GETCO is directed to



continue submitting reports in this regard on quarterly basis rather as well as at the time of filing of the tariff petition in future.

# Directive 2: Calculation of Availability of State transmission System (vide Order dated 30<sup>th</sup> March, 2021)

GETCO is directed to submit detailed calculation of system availability according to the applicable GERC (MYT) Regulations, describing all transmission elements categorised voltage-wise and element-wise.

#### Compliance:

GETCO submitted that it has provided the calculation of system availability vide letter no. CE(R&C)/Dire.Comp./Tariff Order-1909 of 2020/1574 dated 5<sup>th</sup> July, 2021.

#### **Commission's Comment:**

The Commission has noted the submission of the Petitioner. It is noted that the system availability is being calculated as per the formula specified in GERC (MYT) Regulations.

# Directive 3: Adoption of Tariff Based Competitive Bidding (TBCB) for Intra-State Transmission Projects (vide Order dated 30<sup>th</sup> March, 2021)

As per the letter from Ministry of Power dated 15<sup>th</sup> March, 2021, the Government of India has strongly recommended that Tariff Based Competitive Bidding (TBCB) is to be adopted for all Intra-State Transmission Projects. In this regard, GETCO was directed to submit a complete proposal by 31<sup>st</sup> May, 2021, including its suggestions for determination of Threshold Limit, which kind of projects can be taken up under TBCB, etc.

#### Compliance:

GETCO submitted that it has complied directive vide letter no. CE(R&C)/Dire.Comp./Tariff Order-1909 of 2020/1539 dated 30<sup>th</sup> June, 2021.

#### **Commission's Comment:**

The Commission has noted the submission of the Petitioner. However, looking to the growing demand and markets, GETCO is advised to submit a plan for carrying out TBCB for its 220 kV and above sub-stations and lines.



#### Directive 4: Voltage Class wise O&M norms for Transmission Bays and Lines

The O&M norms specified by the Commission in the GERC (MYT) Regulations, 2016 are not differentiated based on voltages. The CERC, as well as some other SERCs, have specified differential O&M norms based on voltages. The Commission is actively considering specifying differential O&M norms linked to the voltage of the transmission asset, in the MYT Regulations for the next Control Period, for which necessary data will be required. GETCO shall submit the voltage-wise asset break-up and O&M expenses across different voltages, within one month of issue of this Order, to enable the Commission to propose the voltage-wise O&M norms in the draft GERC (MYT) Regulations, 2021.

#### Compliance:

GETCO submitted that it has complied directive vide letter no. CE(R&C)/Dire.Comp./Tariff Order-1909 of 2020/975 dated 30<sup>th</sup> April, 2021.

#### **Commission's Comment:**

The Commission has noted the submission of the Petitioner.



#### **COMMISSION'S ORDER**

The Commission approves the components of Transmission Charges and the Transmission Tariff for GETCO for FY 2022-23, as shown in the Tables below:

#### ARR for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	FY 2022-23
1	Operation & Maintenance expenses	2,147.57
2	Depreciation	1,361.66
3	Interest & Finance charges	497.18
4	Interest on working capital	86.15
5	Return on equity	1,154.15
6	Total fixed costs	5,246.71
7	Less: Expenses Capitalized	239.00
8	Add: Provision for tax	314.73
9	Total Transmission Charges	5,322.43
10	Less: Non-Tariff Income	493.10
11	Aggregate Revenue Requirement	4,829.33
12	Add: Revenue Gap/(Surplus) for FY 2020-21	94.74
13	Total Revenue Requirement	4,924.08

#### **Transmission Tariff for FY 2022-23**

Sr. No.	Particulars	Unit	FY 2022-23
1	Transmission Tariff	Rs./MW/Day	4,047.60
2	Transmission Tariff for STOA	Ps./kWh	35.87

This order shall come into force with effect from 1st April, 2022.

-Sd-	-Sd-	-Sd-
S.R. PANDEY	MEHUL M. GANDHI	ANIL MUKIM
Member	Member	Chairman

Place: Gandhinagar Date: 30.03.2022





### **Annexure 1: Capex Details for FY 2022-23**

Table: CAPEX FY 2022-23 - Substation Details (Rs. Crore)

Sr. No.	BR. No. Voltage class Name of Substation			
1.	95.4/1504 Dt: 24.04.15	400 kV	400 kV Bhachunda GIS substation (Dist. Kutch) (220/66 kV scheme is already approved) (1) 400/220 kV, 3 X 500 MVA (2) 6 Nos. of 400 kV feeder bays (3) 400 kV, 1 x 125 MVAR Reactor with bay	7.20
2.	59.11/878 dated 08.10.09, 109.15/1815 dated 27.10.16	400 kV	400 kV Pachham (Fedra) 400/220 kV, 2x500 MVA X'mers, 400 kV FB - 6, 220 kV FB - 6, 63 MVAR Bus Reactor, 220/66 kV, 2x160 MVA X'mer; 66 kV FB - 6 and 66 kV interconnection	16.30
3.	59.11/878 dt 23- 10-09 105.8/1731 dt 11- 02-16	400 kV	400/220/66 kV Bhogat GIS substation (Dist. Jamnagar) (1) 400/220 kV, 3 X 500 MVA (2) 220/66 kV, 2 X 160 MVA (3) 4 Nos. of 400 kV feeder bays (4) 400 kV, 1 x 125 MVAR Reactor with bay (5) 8 Nos. of 220 kV & 10 Nos. of 66 kV feeder bays	16.56
4.	59.11/878 Dt.: 08.10.2009 119.6/1995 dated 01.06.2018	400 kV	400/220 kV Kalavad GIS substation (Dist. Jamnagar) (1) 400/220 kV, 2 X 500 MVA (2) 8 Nos. of 400 kV feeder bays (3) 400 kV, 1 x 125 MVAR Reactor with bay	23.10
5.	81.21/1279 dated 04.07.12	400 kV	400 kV Shapar GIS substation (Dist. Surendranagar) (1) 400/220 kV, 3 X 500 MVA Trf with Bay (2) 220/66 kV 3 X 160 MVA Trf with bay (3) 10 Nos. of 400 kV feeder bays (4) 10 Nos. of 220 kV Line Bays (5) 400 kV, 1 x 125 MVAR Reactor with bay (6) 12 nos of 66 kV Bays	14.64
6.	59.11/878 dated 08.10.09 119.6/1995 Dtd. 01.06.2018	400 kV	400/220/66 kV Keshod GIS substation (Dist. Junagadh) (1) 400/220 kV, 2 X 500 MVA (2) 220/66 kV, 2 X 160 MVA (3) 6 Nos. of 400 kV feeder bays (4) 400 kV, 1 x 125 MVAR Reactor with bay (5) 8 Nos. of 220 kV & 8 Nos. of 66 kV feeder bays	2.00
7.	119.6/1995 Dtd. 01.06.18	400 kV	400/220/66 kV Shivlakha GIS substation (Dist. Kutch) (1) 400/220 kV, 2 X 500 MVA (2) 220/66 kV, 2 X 160 MVA (3) 6 Nos. of 400 kV feeder bays (4) 400 kV, 1 x 125 MVAR Reactor with bay (5) 8 Nos. of 220 kV & 8 Nos. of 66 kV feeder bays	1.00
8.	129.4/2138 dated 15.06.2020	400 kV	400/220 kV, 500 MVA ICT at Ukai TPS - Replacement of 315 MVA ICT with 500 MVA ICT and 2nd 500 MVA ICT with Bays, Termination arrangement for 2nd ICT	10.00
9.	130.9/2173 dated 20.08.2020	400 kV	400 kV Saykha (GIS) substation Ta. Wagra Dist. Bharuch 400/220 kV - 3x500 MVA Trf, 220/66 kV - 2x160 MVA Trf, 400 kV 1x125 MVAr bus reactor, 400 kV FB - 4 nos, 220 kV FB - 6 nos & 66 kV FB - 10 nos	6.00
10.	129.4/2138 dated 15.06.2020	400 kV	400/220 kV, 500 MVA 2nd ICT at Wanakbori TPS along with bay	8.00
11.	B.R 133.4/2218 dated 12.02.2021	400 kV	Upgradation of 220 kV Babarzar substation to 400 kV level (GIS) with 220/400 kV, 2x500 MVA, 4 Nos. 400 kV feeder bays, 125 MVAR Bus Reactor	5.00



Sr. No.	BR. No.	Voltage class	Name of Substation	Capex (Rs. Crore)
12.	B.R 133.4/2218 dated 12.02.2021	400 kV	400 kV Dholera GIS 400/220 kV 3x500 MVA Transformer 220/66 kV 2x160 MVA Transformer 1x125 MVAR 4 nos of 400 kV Bays	6.70
			400 kV Total	116.50
1.	95.2/1502 dtd.24.06.2014	220 kV	400 kV Sankhari (Veloda) substation220/132 kV, 2x150 MVA X'mer	0.50
2.	B.R.No.: 86.6/1347 Dt.: 04.02.13	220 kV	220 kV Rajula (Sintex / Lunsapur) 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220 kV TBC - 1, 66 kV FB - 6 along with 66 kV interconnections	1.20
3.	89.5/1405 Dt.: 31.07.13	220 kV	220 kV Khajod 220/66 kV GIS s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220 kV TBC - 1, 66 kV FB - 6 along with 66 kV interconnections	6.03
4.	59.11/878 dated 08.10.09 119.6/1995 Dtd. 01.06.2018	220 kV	220/66 kV Kalavad (1) 220/66 kV, 3x160 MVA (2) 8 Nos. of 220 kV & 6 Nos. of 66 kV feeder bays	10.00
5.	89.5/1405 Dt.: 31.07.13 119.6/1995 Dt: 01.06.18	220 kV	220 kV Kundiyana (Olpad) 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220 kV TBC - 1, 66 kV FB - 10	6.03
6.	119.6/1995 Dt: 01.06.18	220 kV	220 kV Metoda S/s 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-2, 220 kV BC bay-1, 220 kV TBC - 1, 66 kV FB - 8 and 66 kV interconnections	2.50
7.	107.12/1772 Dt: 20.05.16	220 kV	220 kV Sarigam GIS (Umagam) 220/66 kV, 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, PT Bays - 2 nos. 66 kV FB - 6	23.75
8.	86.6/1347 Dt.: 04.02.13	220 kV	220 kV Halol 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220 kV TBC - 1, 66 kV FB - 6 along with 66 kV interconnections	2.00
9.	99.10/1590 dated 09.02.15	220 kV	220 kV Maglana 220/66 kV, 2X160 MVA ICT	6.00
10.	100.8/1606 30.03.2015	220 kV	220/66 kV Babara substation 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-8, 220 kV BC bay-1, 220 kV TBC - 1, 66 kV FB - 6 220/132 kV, 2 X 150 MVA ICTs	1.55
11.	109.16.1816 Dt: 27.10.16 123.3/2049 Dtd. 22.01.19	220 kV	220kV Mera S/S / (220kV MithiPaldi S/S) 220/66 kV, 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, PT Bays - 2 nos. 66 kV FB – 10 (Provision of 4 No. of 220 kV & 6 Nos. of 66 kV bays for future purpose)	28.12
12.	109.16.1816 Dt: 27.10.16	220 kV	220kV Ghodasar (Rah) S/S 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220 kV TBC - 1, 66 kV FB - 10	5.55
13.	114.6/1908 Dtd. 18.09.2017	220 kV	220 kV Nichi Mandal (Vankda) / Shapar (Dist. Morbi) GIS (1) 220/66 kV, 2 X 160 MVA, (2) 6 Nos. 220 kV, 6 Nos. 66 kV feeder bays.	4.16
14.	114.6/1908 Dtd. 18.09.2017	220 kV	220 kV Giyavad substation (Dist. Morbi) (1) 220/66 kV, 2 X 160 MVA, (2) 8 Nos. 220 kV, 6 Nos. 66 kV feeder bays.	22.40



Sr. No.	BR. No.	Voltage class	Name of Substation	Capex (Rs. Crore)		
15.	114.6/1908 Dtd. 18.09.2017	220 kV	220 kV Kamlapur substation (Dist. Rajkot) (1) 220/66 kV, 2 X 160 MVA, (2) 8 Nos. 220 kV, 6 Nos. 66 kV feeder bays.	22.40		
16.	114.6/1908 Dtd. 18.09.2017	220 kV	132kV System at 220kV Vijapur S/S with FB & Termination from 220/132 kV ICT to 132 kV Bus and other misc civil works	23.92		
17.	114.6/1908 Dtd. 18.09.2017	220 kV	Up gradation of 66kV Sevalia S/S to 220kV Level 220/66 kV s/s with 2X 160 MVA Transformers, 220 kV FB-4, 220 kV BC Bay-1, 220 kV TBC-1, 66 kV FB-6	35.88		
18.	119.6/1995 Dtd. 01.06.18	220 kV	220 kV Dhama (1) 220/66 kV, 2 X 160 MVA, (2) 8 Nos. 220 kV, 6 Nos. 66 kV feeder bays.	2.00		
19.	123.3/2049 Dtd. 22.01.2019	220 kV	Upgradation of 66kV Bhildi substation to 220kV level using Hybrid Modules 220/66 kV, 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, PT Bays - 2 nos. 66 kV FB - 10	33.74		
20.	129.4/2138 dated 15.06.2020	220 kV	220kV Sisrana/ Satlasana 220/66 kV s/s with 2x160 MVA ICTs (provision to be kept for additional 2 ICTs for later stage); 220 kV FB-4 (provision to be kept for additional 8 bays for later stage), 220 kV BC bay-1, 220 kV TBC - 1, 66 kV FB – 10	6.49		
21.	129.4/2138 dated 15.06.2020	220 kV	220 kV Bhesan (AIS) 220/66 kV s/s with 2x160 MVA X'mer (2 Nos for future provision); 220 kV FB-5 (additional space for 4 nos. of future bays), 220 kV BC bay-1, 220 kV TBC - 1, 66 kV FB – 10	21.65		
22.	129.4/2138 dated 15.06.2020	220 kV	220kV Patkhilori 220/66 kV s/s with 2x160 MVA X'mer (provision to be kept for additional 2 ICTs for later stage); 220 kV FB-4 (provision to be kept for additional 4-6 bays for later stage), 220 kV BC bay-1, 220 kV TBC - 1, 66 kV FB - 10	21.65		
23.	130.9/2173 dated 20.08.2020	220 kV	220 kV Dumas (GIS) 220/66 - 3 x160 MVA Trf, 220 kV FB - 6 nos, 66 kV FB - 8 nos	2.00		
24.	130.9/2173 dated 20.08.2020 & 133.4/2218 dated 12.02.2021	220 kV	220 kV Babarzar (AIS) 220/66 kV 6x160 MVA Trf,220 kV FB -4, 220 kV BC Bay - 1, 220 kV TBC - 1, 220 kV 25 MVAR Bus reactor, 66 kV FB - 16	42.06		
25.	130.8/2172 dated 20.08.2020	220 kV	220/33 kV Dholera Pooling Substation 220/33 kV 8x125 MVA Tfr, 220 kV FB - 4, 220 kV BC Bay - 1, PT bays - 2, 33 kV Line bays - 24	10.00		
26.	75.10/1184 dated 06-09-11 Transferred to GEC-II Projects as per BR No 119.6/1995 Dtd. 01.06.18	220 kV	220 kV Kuwadiya (Khambhalia) substation (Dist. Jamnagar) (1) 220/66 kV, 2 X 160 MVA, (2) 6 Nos. 220 kV, 6 Nos. 66 kV feeder bays.	2.00		
			220 kV Total	343.58		
1	B.R 131.11/2200 dated 28.10.2020	132 kV	132 kV Supedi	0.80		
132 kV Total				0.80 460.87		
Total EHV						
66 kV Substation Lump sum @ Rs. 5 Crs taking 92 nos.						
	G. Total 920.87					



#### Table: CAPEX FY 2022-23 – Transmission Line Details (Rs. Crore)

Sr. No.	Br. No.	Voltage class	Name of Transmission line	Capex (Rs. Crore)
1.	41.22/506 dated 09.08.2007 & 62.7/949 dated 07.04.2010	400 kV	400 kV Essar - Amreli line (Twin Moose) (Vadinar- Amreli)	40.00
2.	51.2/696 dated 03.01.2008	400 kV	400 kV D/C Vadavi - Halvad line	12.53
3.	51.2/696 dated 03.01.2008	400 kV	400 kV S/C Mundra - Hadala line LILO at Halvad	3.96
4.	59.11/878 dated 08.10.2009	400 kV	400 kV D/C Varsana - Halvad (Quad Moose)	23.00
5.	59.11/878 dated 08.10.2009	400 kV	400 kV D/C Kasor - Amreli line (Quad Moose)	91.00
6.	99.10/1590 dated 09.02.2015	400 kV	400 kV D/C Wanakbori TPS - Soja	11.00
7.	99.10/1590 dated 09.02.2015	400 kV	400 kV D/C Soja - Zerda line (Twin moose)	12.00
8.	BR no. 95.4/1504 dated 24.06.14 (Development of Green Energy Corridor) (Revised as per BR. No. 105.8/1731 dated 11.02.16)	400 kV	400 kV D/C Bhachunda - Varsana line	20.00
9.	40.19/473 dated 31.05.2007	400 kV	400 kV D/C Adani - Zerda line-1	80.59
10.	104.13/1708 dated 21.11.2015	400 kV	400 kV D/C Shapar - Fedra line (twin moose)	21.08
11.	104.13/1708 dated 21.11.2015	400 kV	400 kV D/C Hadala - Shapar line (Twin Moose)	8.00
12.	77.3/1203 dated 16.12.2011	400 kV	LILO of one ckt of 400 kV D/C Halvad - Vadavi line at 400 kV Chharodi s/s (ACSR Twin Moose)	3.81
13.	95.4/1504 dated 24.06.14 (Development of Green Energy Corridor) (Revised as per BR. No. 105.8/1731 dated 11.02.16)	400 kV	400 kV D/C Bhogat - Kalavad line	20.25
14.	130.8/2172 dated 20.08.2020 & 133.4/2218 dated 12.02.2021	400 kV	400KV D/C FEDRA (PACHCHHAM) - DHOLERA 'AA' LINE	5.00
15.	130.8/2172 dated 20.08.2020 & 133.4/2218 dated 12.02.2021	400 kV	LILO of both circuits of 400 kV D/C Fedra - Dholera AA line at Dholera Solar Park Pooling Substation. (Extension of 400 kV D/C Fedra - Dholera 'AA' line up to Dholera Solar Park Pooling Substation (400 kV M/C with AL-59 conductor) and Termination of line on 400 KV switchyard which is intially terminated at 220 KV system	5.00
16.	69.8/1073 dated 27.11.10	400 kV	LIL O of one ckt of proposed 400 kV D/C Wanakbori - Soja line at Prantij s/s	2.00
17.	B.R No. 119.6/1995 dated 01.06.2018	400 kV	400kV D/C Veloda - Prantij line (2 x150 = 300KM)	2.00



Sr. No.	Br. No.	Voltage class	Name of Transmission line	Capex (Rs. Crore)
18.	B.R No. 119.6/1995 dated 01.06.2018	400 kV	LILO of 400kV S/C Chorania - Asoj line at 400kV Pachham (Fedra) S/s (2 x 25 = 50Ckm)	4.13
		400 kV Tota	I	365.33
1.	51.2/696 dated 10.11.2008 62.8/950 dated 07.04.2010	220 kV	220 kV D/C Gavasad - Salejda line	5.00
2.	109.16/1816 dated 27.10.2016	220 kV	LILO of one circuit of 220 kV D/C Jetpur - Sardargadh line at 220 kV Shapur substation	0.60
3.	B.R. No. 89.5/1405 dated 31.07.13	220 kV	LILO of both ckt of 220 kV D/C Kawas - Nvasari(PG) line at 220 kV Khajod s/s	0.58
4.	77.3/1203 16.12.2011 92.7/1444 12.12.2013	220 kV	220 kV D/C BECL- Botad	2.00
5.	119.6/1995 Dtd. 01.06.2018	220 kV	220kV D/C Chorania - Salejada line with AL-59 conductor	1.53
6.	75.10/1184 dated 06.09.2011	220 kV	220 kV D/C Bhatia - Kalavad line	6.00
7.	B.R.No. 75.10/1184 dated 06-09-11	220 kV	220 kV D/C Kalavad - Kangasiali	6.00
8.	84.11/1325 dated 05.10.12	220 kV	220 kV D/C Chorania - Botad line	2.00
9.	107.12/1772 dated 20.05.2016	220 kV	LILO of 220kV S/C GSEG - Kim and S/C GSEG - Mora - Kim at Velanja (4 x 10=40Ckm)	2.76
10.	95.2/1502 dated 24.06.2014	220 kV	220 kV D/C Bhogat (400 kV) - Moti Gop line	4.40
11.	105.8/1731 dtd. 11.02.16	220 kV	LILO of 220 kV S/C Lalpar - Sartanpar line at 220 kV Wankaner substation on M/C tower by dismentalling of existing 132 kV S/C Lalpar - Wankaner line	2.30
12.	99.10/1590	220 kV	LILO of one circuit of 220 kV D/C Kasor - Gavasad line at 220 kV Gotri substation	8.00
13.	B.R No. 119.6/1995 dated 01.06.2018	220 kV	LILO of both circuits of 220 kV GSEG  – Kosamba line at 220 kV Kudiyana with pile foundation	18.28
14.	B.R No. 119.6/1995 dated 01.06.2018	220 kV	LILO of 220 kV S/C Jetpur - Rajkot line at Metoda s/s (U/G)	1.88
15.	81.21/1279 dated 04.07.12 and B. R. No. 89.5/1405 dtd. 31.07.13	220 kV	LILO of 220 kV S/C Chorania - Sarla & Sarla - Gondal line (due to LILO of 220 kV S/C Chorania - Gondal line at Sarla S/s) at Shapar S/s	0.85
16.	95.4/1504 dated 24.06.14 (Development of Green Energy Corridor) (Revised as per BR. No. 105.8/1731 dated 11.02.16)	220 kV	220 kV Bhogat - Ranavav line	7.00
17.	84.11/1325 dated 05.10.12	220 kV	220 kV D/C Pirana (PG) - Barejadi line	1.20
18.	100.8/1606 30.03.2015	220 kV	220 kV D/C Amreli - Babara line	4.20



Sr. No.	Br. No.	Voltage class	Name of Transmission line	Capex (Rs. Crore)
19.	100.8/1606 30.03.2015	220 kV	220 kV D/C Babara - Shapar line	7.05
20.	B.R No. 119.6/1995 dated 01.06.2018	220 kV	LILO of both circuits of 220 kV D/C Otha - Sagapara line at Talaja	2.33
21.	B.R No. 119.6/1995 dated 01.06.2018	220 kV	LILO of 220kV S/C Bala - Dhanki at 220kV Sarla S/s (2 x 45 = 90Ckm)	3.15
22.	B.R No. 119.6/1995 dated 01.06.2018	220 kV	LILO of both ckts of 220kV D/C Bhimasar - Charadva at Vankda (Nichimandal), (Shapar) (4 x 10 = 40Ckm)	1.58
23.	129.4/2138 dated 15.06.2020	220 kV	LILO of 220 kV S/C Gondal – Padavala – Shapar – Sadla line at 220 kV Kamlapur	8.86
24.	B.R No. 119.6/1995 dated 01.06.2018	220 kV	LILO of one ckt of 220kV D/C Hadala - Sartanpar at 220kV Ghiyavad (2 x 10 = 20Ckm)	0.70
25.	B.R No. 119.6/1995 dated 01.06.2018	220 kV	LILO of both ckts of 220kV D/C Jambuva - Karamsad line at Dhuvaran CCPP (by using existing LILO portion and through 220kV D/C Pachham - Kasor line)	6.40
26.	B.R No. 119.6/1995 dated 01.06.2018	220 kV	220 kV D/C Vapi-II (ISTS substation)  – Atul (GETCO) line (AL-59 conductor)	1.75
27.	B.R No. 119.6/1995 dated 01.06.2018	220 kV	LILO of 220 kV D/C Bhatia - Kalavad line at Khambhalia-II	1.04
28.	123.3/2049 dated 22.01.2019	220 kV	LILO of one circuit of 220kV D/C Tharad-Deodar at 220kV Mera S/S	2.28
29.	109.16/1816 dated 27.10.2016	220 kV	LILO of bothcircuit of 220kV D/C Tharad-Dhanera at 220kV Rah S/S	5.61
30.	129.4/2138 dated 15.06.2020	220 kV	LILO of 220 kV S/C Kosamba – Ichchhapore line at GSEG along with other miscellaneous work (High Ampacity Conductor)	4.60
31.	129.4/2138 dated 15.06.2020	220 kV	LILO of both circuit of 220 kV D/C Palanpur - Kheralu line at 220 kV Sisrana/Satlasana s/s (2x D/C or M/C tower)	12.59
32.	129.4/2138 dated 15.06.2020	220 kV	LILO of 220 kV S/C Jetpur - Visavadar line at 220 kV Bhesan substation	4.20
33.	129.4/2138 dated 15.06.2020	220 kV	220 kV S/C (400 kV) Jetpur - Bhesan line (Spare S/C line of D/C tower to be used in Jetpur)	2.62
34.	129.4/2138 dated 15.06.2020	220 kV	220 kV D/C Bhesan - Patkhilori line AL – 59 conductor	3.06
35.	129.4/2138 dated 15.06.2020	220 kV	LILO of one circuit of 220 kV Amreli - Babara line at 220 kV Patkhilori	27.97
36.	129.4/2138 dated 15.06.2020	220 kV	220 kV D/C Patkhilori - Gomta line	4.37
37.	130 9/2173 dated		3.50	
		220 kV Tota	I	178.23



Sr. No.	Br. No.	Voltage class	Name of Transmission line	Capex (Rs. Crore)		
1.	B.R. No. 89.5/1405 dated 31.07.13	132 kV	LILO of 132 kV S/C Chhota Udepur - Tilakwada line at220 kV Kawant	4.50		
2.	95.3/1503 dated 24.06.2014	132 kV	LILO of circuit of 132 kV S/C Gondal - Haripur line at 220 kV Visavadar substation	0.65		
3.	BR no. 114.6/1908 dated 18.09.17	132 kV	LILO of circuit of 132 kV D/C Mehsana - Patan line at 400 kV Sankhari substation with AL-59	1.29		
4.	95.2/1502 dated 24.06.2014	132 kV	132 kV S/C Sankhari (400 kV) - Deesa line	1.57		
5.	114.6/1908 dated 18.09.2017	132 kV	132 kV Nadiad - Mahemdavad line	0.30		
6.	109.16/1816 dated 27.10.2016	132 kV	Up-gradation of 132 kV ACSR Panther (340 Amp) conductor with high ampacity conductors (around 800-1000 Amp) (8 nos of lines)	5.00		
7.	105.8/1731 dated 11.02.2016  LILO of both circuits of 132 kV D/C Shikarpur WF – Samakhiali line at Vondh substation (M/C line with		Shikarpur WF – Samakhiali line at	1.10		
8.	B.R 131.11/2200 dated 28.10.2020	132 kV	132 kV one ckt of Gondal- Bhayavadhar LILO at Supedi	0.07		
		Total 132 kV	1	14.48		
		Total EHV		558.05		
	66 kV (Lump sum) of Associated Substation					
	66 kV Lines under KSY					
	Т	otal 66 kV Lir	nes	843.20		
		Total		1,401.25		



### Table: CAPEX FY 2022-23 – Reactor Capacitor Banks & OPGW (Rs. Crore)

Board Resolution No. & Date	Name of substation or Transmission Line	Name of Transmission Element	Approved Amount in Cr (with inflation)	FY 2022- 23
B.R No. 114.6/1908 dated 18.09.2017	Providing Optical Fiber based communication by laying OPGW on existing lines of 132 KV and above with PSDF support	Total Cost of the Project	576.64	118
		66 KV, 20 MVAR Capacitor bank	4	1.155
	Requirement of	66 KV, 10 MVAR Capacitor bank	13	3.918
	66 KV and 11 KV Capacitor banks	11 KV 7.5 MVAR Capacitor bank	6	1.68
	in GETCO	11 KV 5 MVAR Capacitor bank	13	3.753
	substation	11 KV 2.5 MVAR Capacitor bank	46	9.114
		Cost for Capacitor Banks	80.59	20



### Table: CAPEX FY 2022-23 - Renovation & Modernisation / Augmentation of Line (Rs. Crore)

Sr. No.	Particulars	Unit	Qty	Unit end cost in Lakhs	Total cost in Cr.
Α	Equipment to be replaced under Buyback scheme				47.15
В	New equipment's/Mesh type earthling/Bus strengthening				
1	11KV Bus coupler Panel, 1600A.	No	18	6.70	1.21
2	LT Panel board	No	13	1.17	0.15
3	3-Ph / 50Amp Battery charger & 110 V 250 AH Battery set with FRP stand and accessories including erection & commissioning, for EHV class s/s second source.	No	1	7.44	0.07
4	110V DCDB (Without Scada)	No	5	0.53	0.03
5	Mesh type earthing				
i	220 kv class s/s	No	1	42.56	0.43
ii	66kv class s/s (Industrial + Urban area)	No	30	22.00	6.60
6	S/S Bus strengthening				
i	66KV Bus strengthening	No	S6		5.17
ii	132kv Bus strengthening	No	2		0.26
7	Conventional Bus Insulators Replaced by SRI for EHV Sub Station				
i	400kv class s/s	No	3		4.30
ii	220kv class sls	No	6		0.62
iii	132kv class s/s	No	5		0.15
8	Special Work				
i	The work to develop 66KV Chhani-A Ss under Jambuva Circle as a Model Substation.	Но	1	23.99	0.24
ii	Conversion of 11kV Outdoor to 11KV Indoor - 66KV Dabhoi SS under Jambuva Circle	No	1	69.03	0.69
iii	Control Room shifting work				
a)	220 kV Thavar	No	1	142.79	1.43
b)	220 kV Navsari	No	1	552.79	5.53
c)	132 kV Bhestan	No	1	96.28	0.96
d)	220 kV Jamnagar	No	1	97.53	0.98
e)	66 kV Dolvan	No	1	99.30	0.99
f)	66 kV Sikka	No	1	42.99	0.43
g)	66 kV Dholka City	No	1	69.22	0.69
h)	220 kV Karjan	No	1	78.56	0.79
i)	66 kV Sami	No	1	69.82	0.70
iv	Bus section Isolator with 2nd PT bay- 220 Kv Atul under Navsari Circle	No	1	10.61	0.11
V	Conversion of second 220kV bus as TBC- 220 kV Morbi under Gondal Circle	No	1	31.35	0.31



Sr. No.	Particulars	Unit	Qty	Unit end cost in Lakhs	Total cost in Cr.
				Total [B]	32.83
С	Relay and Testing equipment				2.43
i	PLCC equipment				2.05
ii	IT				0.30
				Total [C]	4.78
D	Providing of Link line				93.78
i	Conversion of Line (Dog to Panther)				16.54
ii	Replacement of Insulator by SRI				7.86
iii	R&M Line (Replacement of conductor / mechanical strengthening)				25.20
				Total [D]	143.38
E	Civil work (Maintenance of quarter / substation building etc.)				50.00
F	66KV substation augmentation				146.03
G	EHV substation augmentation				80.00
	Total – Sum (A+B+C+D+E+F+G)	•		•	504.17

