GUJARAT ELECTRICITY REGULATORY COMMISSION



Tariff Order

Truing up for FY 2019-20 and

Determination of ARR and Tariff for FY 2021-22

For

Gujarat Energy Transmission Corporation Limited (GETCO)

Case No. 1909 of 2020 30th March, 2021

6th Floor, GIFT ONE, Road 5-C, GIFT CITY Gandhinagar-382355 (Gujarat), INDIA Phone: +91-79-23602000 Fax: +91-79-23602054/55 E-mail: gerc@gercin.org: Website www.gercin.org



GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)

GANDHINAGAR

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ABBREVIATIONS

ABT	Availability Based Tariff
Act	Electricity Act, 2003
A&G	Administration and General
ARR	Aggregate Revenue Requirement
ATC	Annual Transmission Charges payable by Long-Term user or 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
EPTA	Electric Power Transmission Association
FPPPA	Fuel and Power Purchase Price Adjustment
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
kCal	kilo Calorie
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	
300	and Medium-Term Users of the Transmission System	
SCM	Standard cubic meter	
SLDC	State Load Despatch Centre	
TBCB	Tariff Based Competitive Bidding	
TC (Rs. /MW/Day)	Transmission Charges payable by the Short-Term user of the	
10 (10. /www.bay)	Transmission System	
TC (Rs. /kWh)	Transmission Charges payable in the case of Short-Term	
10 (110.71011)	collective transactions through Power Exchanges	
TPL	Torrent Power Limited	
Wt. Avg.	Weighted Average	





Before the Gujarat Electricity Regulatory Commission at Gandhinagar

Case No. 1909 of 2019

Date of the Order: 30th March, 2021

CORAM

Shri Anand Kumar, Chairman Shri Mehul M. Gandhi, Member Shri S.R. Pandey, Member

ORDER



1 Background and Brief History

1.1 Background

Gujarat Energy Transmission Corporation Limited (hereinafter referred to as "GETCO" or the "Petitioner") has filed the present Petition on 27th November, 2020 for the Truing up for FY 2019-20 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 29th March, 2016, which is applicable for determination of tariff in all cases covered under the Regulations from 1st April, 2016 until 31st March, 2021. The Commission, vide Suo-Motu Order No. 7 of 2020 dated 22nd December, 2020, extended the time of applicability of the same from 31st March, 2021 to 31st March, 2022 and directed all the concerned Utilities to file the Tariff Petition for FY 2021-22 based on the principles and methodology specified in the GERC (MYT) Regulations, 2016 on or before 8th January, 2021.

Thus, Regulation 17.2 (b) of the GERC (MYT) Regulations, 2016 provides for submission of Petition comprising of Truing up for FY 2019-20, Aggregate Revenue Requirement (ARR) for FY 2021-22, revenue from the sale of power at existing tariffs and charges for FY 2021-22, and Revenue Gap or Revenue Surplus for FY 2021-22.

After Technical Validation of the Petition, it was registered on 9th December, 2020, as Case No. 1909/2020. GETCO submitted the Petition for approval of ARR and determination of Tariff for FY 2021-22 on 4th January, 2021. This Petition has been considered as Addendum Petition to the original Petition of Case No. 1909/2020. As provided under Regulation 29.1 of the GERC (MYT) Regulations, 2016, the Commission has proceeded with this Tariff Order.

1.2 Gujarat Energy Transmission Corporation Limited (GETCO)

Government of Gujarat unbundled and restructured the Gujarat Electricity Board with effect from 1st 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 3rd October, 2006 notified the final opening Balance Sheets of the transferee Companies as on 1st 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).

1.3 Commission's Order for approval of Multi-Year ARR for FY 2016-17 to FY 2020-21 and Determination of Tariff for FY 2017-18

The Commission vide its Order dated March 31, 2017 in Case No. 1620 of 2016 has approved the final ARR for FY 2016-17 and Multi-Year ARR for the Control Period from FY 2016-17 to FY 2020-21 and Tariff for FY 2017-18.

1.4 Commission's Order for approval of True-up of FY 2016-17 and Determination of Tariff for FY 2018-19

The Commission vide its Order dated 31st March, 2018 in Case No. 1692 of 2017 has approved the Truing up for FY 2016-17 and determined the Tariff for FY 2018-19.



1.5 Commission's Order for approval of True up of FY 2017-18 and Determination of Tariff for FY 2019-20

The Commission vide its Order dated 24th April, 2019 in Case No. 1757 of 2018 has approved the Truing up for FY 2017-18 and determined the Tariff for FY 2019-20.

1.6 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 26th 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.

1.7 Background of the present Petition

The Commission has notified the GERC (MYT) Regulations, 2016 for the Control Period from FY 2016-17 to FY 2020-21. Regulation 16.2 (iii) of the GERC (MYT) Regulations, 2016 provides for the truing up of previous year's expenses and revenue based on audited accounts vis-à-vis the approved forecast and categorization of variation in performance as those caused by factors within the control of the applicant (controllable factors) and those caused by factors beyond the control of the applicant (uncontrollable factors).

Regulation 16.2 (ii) of the GERC (MYT) Regulations, 2016 provides for Determination of Aggregate Revenue Requirement by the Commission for the entire Control Period. The Commission, vide Suo-Motu order dated 22nd December in Case No, 07 of 2020 in the matter of "Filing of application for determination of Aggregate Revenue Requirement (ARR) and Tariff for FY 2021-22, has decided to determine the ARR for FY 2021-22 based on the principles and methodology as provided in the GERC (MYT) Regulations, 2016 and defer the next MYT Control Period by one year. Regulation 16.2 (vi) of the GERC (MYT) Regulations, 2016 provides for annual determination of Tariff for the Generating Company, Transmission Licensee, SLDC, Distribution Wire Business and Retail Supply Business, for each financial year within the Control Period, based on the approved ARR and results of the truing up exercise.

1.8 Registration of the current Petition and Public Hearing Process

The Petitioner submitted the current Petition for Truing up for FY 2019-20 on 27th November, 2020. After Technical Validation of the Petition, it was registered on 9th December, 2020 (Case No. 1909 of 2020).



The Commission vide Suo-Motu Order No. 7 of 2020 dated 22nd December, 2020 directed all the concerned Utilities to file the Tariff Petition for FY 2021-22 based on the principles and methodology specified in the GERC (MYT) Regulations, 2016 on or before 8th January 2021.

Accordingly, GETCO has filed the Petition for approval of ARR and Determination of Tariff for FY 2021-22 on 4TH January, 2021. This Petition has been considered as Addendum Petition to the original Petition of Case No. 1909/2020. As provided under Regulation 29.1 of the GERC (MYT) Regulations, 2016, the Commission has proceeded with the 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

SI. No.	Name of Newspaper	Language	Date of Publication
1	The Indian Express	English	13/01/2020
2	Gujarat Samachar	Gujarati	13/01/2020

The Petitioner also placed the Public Notice and the Petition on its website (www.getcogujarat.com), for inviting objections and suggestions. The interested parties / stakeholders were asked to file their objections / suggestions on the Petition on or before 12th February, 2021.

The Commission also placed the Petition and additional details received subsequently from the Petitioner on its website (www.gercin.org) 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

SI. No.	Name of Newspaper	Language	Date of Publication
1	The Indian Express	English	20/02/2021
2	Divya Bhaskar	Gujarati	20/02/2021
3	Sandesh	Gujarati	20/02/2021

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 4th March, 2021.

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

Table 1-3: List of Stakeholders

SI. No.	Name of Newspaper	Written Submission	Oral Submission	Participated in the Public hearing
1	Torrent Power Limited	Yes	Yes	Yes
2	Electric Power Transmission Association	Yes	Yes	Yes
3	Utility Users Welfare Association (UUWA)	Yes	Yes	Yes

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.

1.9 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 2019-20;
- (e) The Fifth Chapter deals with the Aggregate Revenue Requirement (ARR) for FY 2021-22;
- (f) The Sixth Chapter deals with the determination of Tariff for FY 2021-22;
- (g) The Seventh Chapter deals with the compliance of directives.

1.10 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 31st March, 2017.

The Commission, vide Suo-Motu order dated 22nd December, 2020 in Case No. 07 of 2020 decided to defer the next MYT Control Period by one year. The Commission also directed all Generating Companies, Transmission Licensees and Distribution Companies to file the Tariff Petition based on principles and methodology specified in the GERC (MYT) Regulations, 2016.

GETCO has approached the Commission with the present Petition for Truing up for FY 2019-20 and determination of ARR and tariff for FY 2021-22.

The Commission has undertaken Truing up for FY 2019-20, based on the submissions of the Petitioner. The Commission has undertaken the computation of Gains and Losses for FY 2019-20, based on the audited annual accounts and prudence check.

While Truing up for FY 2019-20, 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 2019-20 has been considered, based on the GERC (MYT) Regulations, 2016.

The Commission has determined ARR and Tariff for FY 2021-22 as per the GERC (MYT) Regulations, 2016 and its amendments thereof as the base. Truing up of FY 2021-22 shall be carried out based on the principles and methodology adopted in GERC (MYT) Regulations, 2016.



2 Summary of GETCO Petition for True-up of FY 2019-20 and Determination of ARR and Tariff for FY 2021-22

2.1 Summary of GETCO's Petition

This Chapter highlights the summary of the Petition for True-Up of FY 2019-20 and Determination of ARR and Tariff for FY 2021-22.

2.2 True-Up of FY 2019-20

GETCO submitted the Petition on 27th November, 2020 seeking approval of Truing up of ARR for FY 2019-20. GETCO has computed its ARR for FY 2019-20 as a part of the True-up of FY 2019-20. GETCO has presented the actual cost components based on audited annual accounts for FY 2019-20. A summary of the proposed ARR for Truing up for FY 2019-20 compared with the approved final ARR for FY 2019-20 in the MYT Order dated 31st March, 2017 is presented in the Table below:

Table 2-1: Summary of Truing up for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed	Deviation
1	Operation & Maintenance Expenses	1,709.77	1,633.85	75.92
2	Depreciation	1,242.10	1,143.14	98.96
3	Interest & Finance Charges	610.40	601.02	9.38
4	Interest on Working Capital	85.28	76.14	9.14
5	Return on Equity	928.19	925.56	2.63
6	Total Fixed Costs	4,575.73	4,379.72	196.02
7	Add: Provision for Tax	64.62	217.46	(152.84)
8	Total Transmission Charges	4,640.35	4,597.18	43.18
9	Less: Expenses Capitalized	194.13	300.80	(106.67)
10	Less: Non-Tariff Income	331.37	412.83	(81.46)
11	Add: Incentive for Target Availability	-	35.48	(35.48)
12	Aggregate Revenue Requirement	4,114.85	3,919.03	195.83

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	1,709.77	1,633.85	314.73	(238.82)
2	Depreciation	1,242.10	1,143.14		98.96
3	Interest & Finance Charges	610.40	601.02		9.38
4	Interest on Working Capital	85.28	76.14		9.14
5	Return on Equity	928.19	925.56		2.63
6	ARR (1 to 5)	4,575.73	4,379.72	314.73	(118.71)
7	Add: Provision for Tax	64.62	217.46		(152.84)
8	Less: Non-Tariff Income	331.37	412.83		(81.46)
9	Add: Incentive for Target Availability	-	35.48		(35.48)
10	Less: Expenses Capitalized	194.13	300.80		(106.67)
11	Total ARR	4,114.85	3,919.03	314.73	(118.91)
12	Net Gain / (Loss) on account of Controllable/ Uncontrollable Factors			314.73	(118.91)
13	Gain on account of Controllable Factors to be passed on to Consumer (1/3 x Sr. No. 12)			104.91	
14	Losses on account of Uncontrollable Factors to be passed on to Consumer				(118.91)

Based on the above sharing of Gain and Loss, the Petitioner has claimed the following Gap for FY 2019-20.

Table 2-3: Gap for FY 2019-20, 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 2019-20	(118.91)
2	Gain / (Loss) on account of Controllable factor to be passed on to Beneficiaries (1/3rd of Total Gain / (Loss) for FY 2019-20	104.91
3	Less: Under Recovery of revenue during FY 2019-20 due to applicability of Tariff Order from 1 May, 2019	(7.48)
4	Total Gain/ (Loss) of the true up to be addressed in the determination of tariff for FY 2021-22	(21.47)



2.3 ARR and Tariff for FY 2021-22

In accordance with provisions of the GERC (MYT) Regulations, 2016, ARR for FY 2021-22 has been computed by GETCO as follows:

Table 2-4: ARR for FY 2021-22, as submitted by GETCO (Rs. Crore)

Sr. No.	Particulars	2021-22
1	Operation & Maintenance Expenses	2,102.00
2	Depreciation	1,362.95
3	Interest & Finance Charges	644.76
4	Interest on Working Capital	89.64
5	Return on Equity	1,109.87
6	Total Fixed Costs	5,309.23
7	Less: Expenses Capitalized	336.20
8	Add: Provision for Tax	217.46
9	Total Transmission Charges	5,190.49
10	Less: Non-Tariff Income	412.83
11	Aggregate Revenue Requirement	4,777.66

GETCO has calculated the Transmission Tariff for FY 2021-22 after considering the Gap of FY 2019-20 as follows:

Table 2-5: Transmission Tariff for FY 2021-22 as submitted by GETCO (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	Aggregate Revenue Requirement for FY 2021-22	4,777.66
2	Add / (Less): Revenue Gap / (Surplus) for FY 2019-20	21.47
3	ARR after considering Gap of true-up for FY 2019-20 (1 + 2)	4,799.13
4	Total MW allocation	28,797.24
5	Transmission tariff (Rs/MW/day)	4,565.82

Further, GETCO has proposed to allow recovery of transmission charges at 39.10 Paise/kWh for all types of Short-Term transactions.

Further, 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. 1837 of 2019 dated 26th March, 2019, as shown in the Table below:

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

Sr. No.	Particulars	FY 2021-22
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

Further, GETCO requested the Commission to provide necessary direction on whether should GETCO continue to recover the ABT meter charges as per Notification No. 9 of 2005 or stop recovering such charges in line with the Commission's Tariff Order for DISCOMs dated 31st March, 2018.

2.4 Additional Submission by GETCO

GETCO made an Additional Submission as regards the True-up for FY 2019-20 and consequential impact on the Tariff for FY 2021-22, on Affidavit, vide its submission dated 25th February, 2021. In its Additional Submission, GETCO has submitted that it has inadvertently reduced SLDC employee expenses of Rs. 20.60 crore instead of Rs. 17.13 crore from the Employee Expenses (as per Audited Accounts). GETCO submitted that inclusion of the above changes will require changes in certain parts of the Petition, and submitted the revised parts of the Petition, as summarised below:

Table 2-7: Revised Gap for FY 2019-20, 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 2019-20	(119.00)
2	Gain / (Loss) on account of Controllable factor to be passed on to Beneficiaries (1/3rd of Total Gain / (Loss) for FY 2019-20	103.76
3	Less: Under Recovery of revenue during FY 2019-20 due to applicability of Tariff Order from 1 May, 2019	(7.48)
4	Total Gain/ (Loss) of the true up to be addressed in the determination of tariff for FY 2021-22	(22.72)



Table 2-8: Revised Transmission Tariff for FY 2021-22 as submitted by GETCO (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	Aggregate Revenue Requirement for FY 2021-22	4,777.67
2	Add / (Less): Revenue Gap / (Surplus) for FY 2019-20	22.72
3	ARR after considering Gap of true-up for FY 2019-20 (1 + 2)	4,800.39
4	Total MW allocation	28,797.24
5	Transmission tariff (Rs/MW/day)	4,567.02

Accordingly, GETCO has proposed to allow recovery of revised transmission charges at 39.11 Paise/kWh for all types of Short-Term transactions.

2.5 Request of GETCO

- (a) To admit this Petition seeking True-up of FY 2019-20 and Determination of ARR & Tariff for FY 2021-22;
- (b) To approve the True-up of FY 2019-20 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 2019-20 as part of Tariff Determination for FY 2021-22:
- (d) To approve incentive on availability for FY 2019-20 as prayed;
- (e) To approve Transmission Tariff for FY 2021-22;
- (f) To grant any other relief as the Commission may consider appropriate;
- (g) The Petitioner craves leave of the Hon'ble Commission to allow further submissions, addition and alteration to this Petition as may be necessary from time to time;
- (h) Pass any other Order as the Commission may deem fit and appropriate under the circumstances of the case.



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 2019-20 and determination of ARR and Tariff for FY 2021-22 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. 1: Voltage-wise Transmission Cost and losses

M/s Torrent Power Limited (TPL) has filed the objection in its capacity as a Distribution Licensee in the State of Gujarat. TPL 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 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.

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 towards the cost recovery of the higher voltage levels also. Since, TPL-D is connected 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.

TPL-D 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 should be allocated appropriately to arrive at the per MW transmission charges.

TPL-D requested the Commission to determine the Transmission Charge and Losses of GETCO network for 220 kV and above voltage level and below voltage level from FY 2020-21 (to be read as "FY 2021-22"), 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.

Response of GETCO

GETCO 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 were 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 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 GETCO, and finds merit in the same. Even at inter-State level, the charges and losses are not differentiated based on voltage level. 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.

GETCO 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 and shall not be applicable voltage-wise.

Issue No. 2: Threshold Limit to ensure competitive bidding based Intra-State Transmission Projects

Electric Power Transmission Association (EPTA) submitted that competitively discovered tariffs have proven cheaper than cost-plus tariffs in the Inter-State (ISTS) and Intra-State (InSTS) transmission projects awarded by the Central Government as



well as by States such as Uttar Pradesh, Madhya Pradesh, and Rajasthan, among others. Recently, Uttar Pradesh and Madhya Pradesh have awarded three InSTS projects under Tariff Based Competitive Bidding (TBCB) route. Further, Rajasthan has already decided to award multiple projects on competitive bidding route. It has now been well established that the suggested mechanism ensures timely completion of projects, has optimal tariff discovery to the tune of 30-40% (as against tariff determination) and avoids cost over-run.

The EA 2003 seeks to encourage competition in the power sector with appropriate regulatory intervention. Competition is expected to yield efficiency gains and result in improved quality of electricity supply to consumers at competitive rates. Clause 5.3 of the Tariff Policy, 2016 envisages the development of all Intra-State Transmission projects costing above a threshold limit under TBCB.

EPTA submitted that the Commission may decide a 'threshold limit', above which all new projects and augmentation schemes for transmission shall be developed under TBCB route, as envisaged by the EA 2003 and the Tariff Policy. To ensure the same, the following para may be considered for inclusion in the Tariff Order:

"All new Intra-State Transmission projects, costing above a threshold limit value to be notified separately, shall be developed through Tariff Based Competitive Bidding (TBCB), as per provisions of the Electricity Act and the Tariff Policy. The Commission is in the process of notifying of the threshold limit and after the notification the projects costing above the threshold limit shall be implemented through TBCB process."

The mechanism would not only ensure discovery of competitive tariffs but would also give an equal opportunity to GETCO to compete in these bids very similar to PGCIL's participation in the ISTS and InSTS bids.

Response of GETCO

GETCO has been constructing around 100 nos. of substations along with associated transmission lines every year consistently since year 2010. GETCO is professionally managed and has a skilled workforce at administrative level as well as field level, for successful execution of transmission projects. Moreover, it has a number of suppliers and contractors to supply materials for completion of projects in a timely manner. Further, it follows proven and transparent practice for procurement of material and award of contracts to ensure good competition and cheaper rate, which ensures tariff



advantages to end consumers. GETCO had completed majority of 66 kV class assets at various locations across Gujarat and incurred very less cost compared to very high cost EHV projects in a specific area for ISTS network. Therefore, as per past performance of GETCO of completing projects at competitive costs, TBCB is not required for intra-State transmission projects in Gujarat.

Competitive bidding is supposed to create competitive environment between the poorperforming State Utilities and efficient private developers in terms of ability to perform and integrate capital expenditure for proposed projects. The EHV transmission network in the State is very vast and sufficiently widespread all over Gujarat. Moreover, the prices received by GETCO for construction of EHV sub-stations and EHV lines are very competitive and generally lesser in comparison with those received through TBCB for ISTS network. In Gujarat, 66 kV network is also constructed by GETCO and almost 60% of works related to 66 kV voltage level all across the State does not warrant TBCB objectives. GETCO is a performing Utility and manages resources and performs as per the standards specified by the Commission. GETCO has both internal and external resources to manage projects. Also, GETCO is completing most of the projects in a timely manner and therefore, there is hardly any cost over-run in the projects. Hence, at this point of time, there is no need of TBCB for intra-State transmission projects.

Commission's View

The Commission has noted the response of the Petitioner. In view of the Tariff Policy and Guidelines of Ministry of Power in this regard, the Commission is in the process of taking appropriate decision with regard to the threshold limit for TBCB for Transmission Projects.

Issue No. 3: Transmission Availability

UUWA submitted that GETCO should provide explanation of low availability factor of 99.40% despite having 765 kV and 400 kV assets in its portfolio. Comparable assets around the world do not have availability factor less than 99.50%.

UUWA, through its Rejoinder dated 16th March, 2021, submitted that the methodology for calculation of system availability of GETCO is not described. Component reliability may not be the same as system reliability. Some component may fail without affecting the delivery system, if the system is designed as per National Policy of Designs.

UUWA further submitted that GETCO has contended that component-wise availability is not available (like 400 kV, 66 kV lines, associated transformers), however, system



availability cannot be calculated without data on component-wise availability, and the Availability incentive claimed shall not be on scientific grounds in the absence of component-wise availability.

UUWA added that line being taken out for maintenance does not imply that system delivery is affected as the system is designed on N+1 basis. With hot line washing and insulator change being normal practice, the reply is without technical merit.

UUWA submitted that GETCO has not replied to the query regarding the performance norms of other countries in similar position, hence, the Commission may get the data before permitting any incentive. UUWA reckoned that EHV lines have baseline index of about 99.50% to 99.95%, and definitely not 98.5%. UUWA added that incentive should not be based on base line set long ago and must be fixed on preceding three years moving average.

Response of GETCO

Transmission availability submitted by GETCO is the transmission availability of Transmission system of GETCO as a whole, comprising 66 kV to 765 kV Transmission assets. Lower voltage Transmission assets have lower availability as many lines have to be maintained throughout the year. Also, Voltage-wise availability calculation is not possible as of date and transmission availability is calculated for the system as whole.

Commission's View

The Commission has noted the submission of GETCO. The normative Transmission Availability for full recovery of annual transmission charges is 98%, and the Transmission Licensees are entitled to incentive for Transmission Availability in excess of 98.5% up to 99.75%. GETCO's Transmission Availability of 99.40% is well above the normative levels. Further, the Normative Availability has been specified in the GERC (MYT) Regulations, 2016, and GETCO is entitled to incentive with respect to such normative Availability, which cannot be linked to the actual performance in last three years. However, the Commission will consider the actual Availability achieved by GETCO along with the norms specified by CERC, while specifying the Availability norms for the next MYT Control Period.

As regards the issue of methodology used to compute the Availability, SLDC calculates Transmission System Availability based on the methodology specified in Annexure II of GERC (MYT) Regulations, 2016 after considering the provisions of Regulation 67 of the GERC (MYT) Regulations, 2016. The methodology of computing the System Availability



is based on aggregating the Availability of each components of the Transmission System, viz., transmission lines, transformer/ICT, bus reactor, sub-conductors, etc. Hence, GETCO's submission that the voltage-wise Availability is not maintained is not appropriate.

The Commission has given a detailed directive in this regard, as detailed subsequently.

Issue No. 4: Transmission Loss

UUWA submitted that GETCO should provide the explanation for high transmission losses despite huge capital expenditure for reducing losses, which is burdening the consumers with needlessly high tariff.

UUWA, through its Rejoinder dated 16th March, 2021, submitted that Losses while delivering power at 400/220kV are EHV losses and cannot be loaded in the DISCOM accounts. The money value of the losses is captured but unit value is avoided. UUWA requested the Commission to resolve the contentious method of laundering loss figure.

Response of GETCO

The transmission loss of GETCO comprises losses from 66 kV to 765 kV. GETCO has a very high percentage of 66 kV transmission infrastructure and losses in these lines are much higher due to lower voltage.

Commission's View

The Commission has noted the submission of GETCO.

Issue No. 5: Capex claimed higher than approved

UUWA submitted that GETCO should provide the explanation for incurring higher capital expenditure than approved. If the capital expenditure is higher due to quantity variation, and if the quantity variation is without the Commission's approval, it would be regulatory violation and the Commission should disallow such Capex projects.

UUWA, through its rejoinder dated 16th March, 2021, submitted that it is essential to scrutinise the capex on financial parameters to afford easy comparison with other similarly placed Utilities, such as accumulated gross block/net block per MW and per MWh in the preceding 4 years.



Response of GETCO

Actual capex expenditure is higher compared to approved capex expenditure because many projects of last year could not be completed last year and they have spilled over to this year. The Capitalisation has been claimed based on actual project cost. There has been cost overrun in some projects. The reasons for the cost overrun have been submitted to the Commission.

Commission's View

The Commission noted the submission made by GETCO and has allowed capitalisation of assets after due prudence check, as detailed in the Truing up Chapter.

Issue No. 6: O&M Expenses

UUWA, through its Rejoinder dated 16th March, 2021, submitted that O&M expenses have to be considered separately for assets at different voltages, viz., 400 kV, 220 kV, 22 kV, 11 kV, etc., as the capital cost of 400 kV bays would be more than capital cost of 220 kV bays or 22 kV bays. It is improper to average out the O&M expenses across different voltages.

Commission's View

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. The Commission has given a detailed directive in this regard, as detailed subsequently.

Issue No. 7: Multi-layered voltage

UUWA, through its Rejoinder dated 16th March, 2021, submitted that Transmission network has multi-layered voltages of 400 kV, 220 kV, 132 kV, 66 kV, and 22 kV. GETCO may be asked to study and report if some intermediary voltage could be eliminated or reduced in the future.



Commission's View

The GETCO 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 considerations in mind.

Issue No. 8: Return on Equity

UUWA, through its Rejoinder dated 16th March, 2021, submitted that in the era of excessive liquidity and stimulus, it is essential that the Commission should adopt present day return on additional equity, which is total risk free, as not more than 7%. In the alternative, return on equity should be allowed at RBI Bank Rate at the beginning and end of the year.

Commission's View

The Commission has allowed the Return on Equity as specified in the GERC (MYT) Regulations, 2016.

Issue No. 9: Recovery of Cost

UUWA, through its Rejoinder dated 16th March, 2021, submitted that the full recovery of fixed cost on revalued assets is incorrect. It is a reward for idleness and laggardness. Full recovery is leading to gold plating of assets with risk free returns when viewed in the context of unprecedented stimulus and excess liquidity.

Commission's View

The cost recovery is allowed only on the original cost of fixed assets and not on the revalued assets.

Issue No. 10: System Loading

UUWA, through its Rejoinder dated 16th March, 2021, submitted that GETCO has projected system loading as 28797 MW while system demand is about 15,000 MW. UUWA submitted that even assuming extreme conditions, loading on the system cannot be 28797 MW.

Commission's View

The actual system loading was 24,134 MW during FY 2019-20, as approved by the Commission in the truing up for FY 2019-20. GETCO has projected the system loading



as 28797 MW for FY 2021-22, which translates to annual growth of 9.2%. The Commission has accepted GETCO's projection of system loading for FY 2021-22.

Issue No. 11: Interest on Working Capital

UUWA, through its Rejoinder dated 16th March, 2021, submitted that the rate of interest considered as 10.25% under prevailing conditions, should not be more than 6% for current and ensuing year. Receivables should be considered as actual or normative, whichever is lower. UUWA submitted that this should be approved subsequent to review of actual performance for the preceding 5 years.

Commission's View

The Commission has allowed the normative interest on normative capital as specified in the GERC (MYT) Regulations, 2016. The GERC (MYT) Regulations, 2016 specifies the components of the working capital as well as the interest rate to be considered.

Issue No. 12: Parallel Operation Charges

UUWA, through its Rejoinder dated 16th March, 2021, submitted that Commission may specifically rule regarding whether GETCO, GSECL or DISCOMs have to file for review of Parallel Operation Charges.

Commission's View

The Commission has noted the suggestion and will take appropriate decision in this regard.



4 Truing up for FY 2019-20

4.1 Introduction

This Chapter deals with the Truing up for FY 2019-20.

While doing 'Truing up' of various components of ARR for FY 2019-20, the actuals for FY 2019-20 are compared with the approved ARR as per the MYT Order issued on 31st 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 2019-20.

GETCO has submitted the actual capital expenditure at Rs. 3,231.68 Crore for FY 2019-20, as against Rs. 2,842.67 Crore approved for FY 2019-20 in the MYT Order dated 31st March 2017. The actual Capitalisation for FY 2019-20 is submitted as Rs. 2,388.31 Crore.

The Commission in its Tariff Order dated 26th March, 2020 in Case No. 1837 of 2019 disallowed Capitalisation of Rs. 153.26 Crore as part of True-up of FY 2018-19, on account of power flow not having commenced in FY 2018-19. This amount has been added to the capitalisation booked in the audited accounts of FY 2019-20. So, total Capitalisation for FY 2019-20 works out to Rs. 2388.31 Crore (Rs. 2235.05 Crore of FY 2019-20 + Rs. 153.26 Crore capitalisation disallowed during FY 2018-19)

GETCO has submitted that the Capitalisation incurred during FY 2019-20 has been funded through grants, equity and debt, as detailed in the Table below:



Table 4-1: Capital Expenditure and Capitalisation as submitted by GETCO (Rs. Crore)

Sr. No	Particulars	Approved in the MYT Order	Actual Claimed
1	Capex	2,842.67	3,231.68
2	Capitalisation	2,274.14	2,388.31
	Funding of Capitalisation		
3	Consumer Contributions / Grants	303.60	362.49
4	Debt	1,379.38	1,418.07
5	Equity	591.16	607.75

Based on the capitalisation, the addition of number of substations and transmission lines during FY 2019-20, as submitted by GETCO, is shown in the following Table:

Table 4-2: Network Addition as submitted by GETCO

Sr. No	Particulars	Substations (Nos.)	Transmission Line (Ckt-km)
1	400 kV	1	12.892
2	220 kV	2	311.340
3	132 kV	-	4.154
4	66 kV	57	866.225
	Total	60	1,214.611

Commission's Analysis

The Commission notes that GETCO has submitted the actual capitalisation of Rs. 2,388.31 Crore as against the approved amount of Rs. 2,274.14 Crore. The Commission also notes that GETCO has submitted the details of date of charging and load of substations and lines capitalised during FY 2019-20, along with the Petition.

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. The Commission sought the relevant details from GETCO. The prudence check undertaken by the Commission is discussed in subsequent paragraphs.

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:

Table 4-3: Details of Work-wise capitalisation disallowed by the Commission (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	66 kV Ochhan (Telod -Ikhar)	29.03.19 & 12.06.19	12.06.19	2.6 MVA, 10.10.19, 14:00 hrs	0.01 MVA, 10.07.19, 15:00 hrs	5.25
2	66 kV Panvi-Navda (Panvi S/s)	25.11.19	17.01.20	Soak charge	Soak charge	0.70
3	1 No. FB of Magharvada line at 66 kV Kheradi SS	05.11.18	03.06.19	4 MVA, 03.12.19, 04:00 hrs	0.2 MVA, 04.09.19, 8:00 hrs	0.35



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
4	2 No.s FB at 66 kV Dhrangda S/s for 66 kV D/C Dhrangda Virpar line	21.10.19	18.11.19	Line has been on soak charge		0.70
5	66 kV Rozva - J K Cement line	10.02.20	13.02.20	Soak Charge	Soak Charge	0.04
6	220 kV Ranasan	16.03.2020	31.03.20	Soak Charge	Soak Charge	2.18
7	66 kV Wadhwan S/s	05.03.20	09.03.20	Soak Charge	Soak Charge	1.09
8	220 kV Visavadar	15.09.18	02.06.18	Soak Charge	Soak Charge	1.09
9	66 kV Bunder (Bandar Rd)	24.04.19	24.04.19	Soak Charge	Soak Charge	1.09
10	66 kV Ratavirda	10.01.19	10.01.19	15.3 MVA, 30.06.20, 12:00 hrs	1.3 MVA, 21.09.20, 23:00 hrs	1.09
	Sub-total (A)					12.49
	Transmission Lines					
11	66 kV LILO line to proposed 66 kV Sondarda S/s from existing 66 kV Keshod - Ajab H-frame line on Panther Tower with ACSR Dog conductor	12.03.19	10.08.19	25 MW, 20.12.19, 11:00 hrs	11 MW, 02.03.20, 23:00 hrs	0.14
12	66 kV LILO to 66 kV Bapodar S/s from 66 kV Rana Kandorna - Hiraco (Solar) line (on D/C Panther tower with ACSR Panther conductor)	16.01.19	19.08.19	Erected by Tr. Circle Junagadh & Handed over to Tr. Circle Jamnagar		1.06
13	66 kV Bagodara - Kalyangadh line 1 & 2 66kv M/C & D/C Tower line from220kv Bagodara s/s	08.10.18	06.11.19	5.1 MW, 24.03.20, 12:00 hrs	2.0 MW, 28.01.20, 20:00hrs	6.25
14	66KV Bagodara - Kesardi line 66 kV M/C & D/C Tower line from 220 kV Bagodara S/s	08.10.18	06.11.19	43 MW, 28.03.20, 16:00 hrs	36 MW, 13.02.20, 21:00 hrs	6.24
15	66 kV Rozva - J K Cement line	10.02.20	13.02.20	Soak Charge	Soak Charge	0.31
16	66KV line from 220KV Virpur SS to 66KV	28.06.19	28.06.19	Soak Charge	Soak Charge	2.88

Gujarat Electricity Regulatory Commission



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
	Galkuva SS -(2nd Source)					
17	220KV Bhilad - Sarigam line	23.03.20	23.03.20	Soak Charge	Soak Charge	4.67
	Sub-total (B)					21.56
	Grand Total (A+B)					34.05

In view of the above, the actual capitalisation allowed by the Commission for FY 2019-20, and the funding considered by the Commission, are shown in the following Table:

Table 4-4: Capitalisation approved for FY 2019-20 (Rs. Crore)

Sr. No	Particulars	Approved
1	Actual Capitalisation*	2,391.79
2	Less: Capitalisation for SLDC	3.48
3	Less: Capitalisation Disallowed	34.05
4	Capitalisation Approved	2,354.26

^{*}As per Note 2 of Audited accounts

The funding of capitalization approved for FY 2019-20 is shown in the following Table:

Table 4-5: Funding of Capitalisation approved for FY 2019-20 (Rs. Crore)

Sr. No	Particulars	Approved
1	Grant	362.49
2	Debt	1,394.24
3	Equity	597.53
4	Capitalisation Approved	2,354.26

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. 1,719.82 Crore in the truing up for FY 2019-20, as against Rs. 1,709.77 Crore approved in the MYT Order dated 31st March, 2017.



The O&M Expenses approved for FY 2019-20 by the Commission in the MYT Order dated 31st March, 2017 and computed by GETCO in the truing up for FY 2019-20 are given in the Table below:

Table 4-6: Normative O&M Expenses Claimed for FY 2019-20 (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.	13,771.80	14,019.00
	O&M Expenses per Bay	Rs. Lakh	8.98	8.98
	O&M Expenses based on Number of Bays (A)	Rs. Crore	1,236.71	1,258.91
2	Based on Transmission Line Length (ckt. km)			
	Average Line Length during the Year	ckt. km	62,245.04	60,646.31
	O&M Expenses per ckt. km	Rs. Lakh	0.76	0.76
	O&M Expenses based on Transmission Line Length (B)	Rs. Crore	473.06	460.91
3	Total O&M Expenses (normative) (A + B)	Rs. Crore	1,709.77	1,719.82

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 2019-20 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 4-7: Actual O&M Expenses claimed for FY 2019-20 (Rs. Crore)

Sr. No	Particulars	Actual Claimed
1	Employees Expenses	996.35*
2	Actual Arrears Pay out to employees from Cumulative Provisions, which has not reflected in Employee Cost (in Profit & Loss Statement)	132.88
3	R&M Expenses	364.56
4	A&G Expenses	143.53
5	Total O&M Expenses	1,637.32

Note: * - revised in Additional Submission dated 25 February, 2021

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 Commission has allowed actual pay out towards impact of the 7th Pay Commission in True-up of FY 2017-18 and FY 2018-19 as uncontrollable. Accordingly, in True up of FY 2019-20, GETCO has considered the actual impact of the 7th Pay Commission as uncontrollable. GETCO has also computed additional impact of Rs. 132.88 Crore due to implementation of 7th Pay Commission, which has been claimed as uncontrollable employee expenses. This additional amount has been paid out from the provisions made from FY 2015-16 to FY 2019-20. The Commission did not approve provisions against 7th Pay Commission impact in these years and stated that those will be allowed as and when paid. Further, GETCO added that the actual provision of employee cost for whole GETCO including SLDC was Rs. 33.12 Crore for FY 2015-16 and Rs. 73.11 Crore for FY 2018-19, however, deduction by the Commission was higher at Rs. 33.64 crore and Rs. 74.15 crore, respectively. GETCO has calculated actual Arrears Pay out to employees from Cumulative Provisions, which has not reflected in Employee Cost (in the Profit & Loss Statement) as shown in the table below:

Table 4-8:Actual Payout of GETCO from 7th Pay Commission Provisions from FY 2015-16 to FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Net Amount
	7 th Pay Commission Provisions not considered by the	
	Commission while approving Employee Cost	
1	FY 2015-16	33.12
2	FY 2016-17	138.26
3	FY 2017-18	93.83
4	FY 2018-19	73.11
5	FY 2019-20	72.91
Α	Provided Year on Year - Total (1 to 5)	411.23
В	7 th Pay Commission Provision cumulative balance as on 31st March, 2020	278.35
С	Actual Arrears Pay out to employees from Cumulative Provisions, which has not reflected in Employee Cost (P&L) (A - B)	132.88



The O&M Expenses and Gain/(Loss) claimed by GETCO in the Truing up for FY 2019-20 are summarized in the Table below:

Table 4-9: Gains/ (Loss) Claimed from O&M Expenses for FY 2019-20 (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+5	7=2-3-5
O&M Expenses	1,709.77	1,719.82	1,637.32	72.45	311.27	(238.82)

Commission's Analysis

As stated earlier while approving the Capitalisation for FY 2019-20, certain Bays and Transmission Lines have been disallowed, as they have either been already considered as capitalised in FY 2018-19 or have only been put on soak charge in FY 2019-20, and have not really been *put to use* in FY 2019-20.

The Commission has observed that 7 Nos. of bays (5 Bays at 66 kV Occhan (Telod-Ikhar), 1 Bay at 66 kV Kheradi, and 1 Bay at 66kV Ratavirda) and 42.62 ckt. km of transmission lines has already been considered as capitalised in FY 2018-19. In addition, 9 No. of Bays and 26.47 ckt. km of transmission lines have been put on soak charge. Hence, these Bays and Lines have not been considered as added in FY 2019-20. Accordingly, the addition of number of bays and transmission line length considered for the purpose of allowing O&M expenses for FY 2019=20, is shown in the following Table:

Table 4-10: Addition of Network parameters approved for FY 2019-20

Sr. No	Particulars	Claimed	Less: Assets Disallowed due to being on Soak Charge	Less: Already Allowed in FY 2018-19	Approved in Truing up
Α	Number of Bays				
1	S/S Bays	404		5	399
2	Feeder Bays	81	4	1	76
3	For Augmentation	121	5	1	115



Sr. No	Particulars	Claimed	Less: Assets Disallowed due to being on Soak Charge	Less: Already Allowed in FY 2018-19	Approved in Truing up
4	Grand Total	606	9	7	590
В	Transmission Line length (ckt. km)	1,214.61	26.47	42.616	1,145.53

The Commission has, therefore, considered addition of 590 number of bays and 1145.53 ckt. km of transmission lines during FY 2019-20. Accordingly, the Commission has computed the normative O&M Expenses as detailed in the Table below:

Table 4-11: Normative O&M Expenses approved for FY 2019-20 (Rs. Crore)

	Claimed			Approved		
Particulars	Lines	Bays	Total	Lines	Bays	Total
	(ckt. km)	(Nos.)		(ckt. km)	(Nos.)	
At the beginning of the Year	60,039	13,716		60,039	13,716	
Addition during the Year	1,215	606		1,146	590	
At the end of the Year	61,254	14,322		61,185	14,306	
Average	60,646	14,019		60,612	14,011	
Rate (Rs. Lakh)	0.76	8.98		0.76	8.98	
O&M Expenses	460.91	1,258.91	1,719.82	460.65	1,258.19	1,718.84

The Commission approves the normative O&M Expenses at Rs. 1,718.84 Crore in the Truing up for FY 2019-20.

In its Additional Submission, GETCO has submitted that it has inadvertently reduced SLDC employee expenses of Rs. 20.60 Crore instead of Rs. 17.13 Crore from the Employee Expenses (as per Audited Accounts). The Commission has verified the submission, and observes that SLDC employee expenses have been reduced incorrectly. The Commission accepts this submission, as the same is in line with the actual expenses as per the audited accounts. However, the Commission also observes that Rs. 2.95 Crore. Of R&M expenses have been claimed twice, in both SLDC and GETCO Petitions. The Commission has reduced this excess amount of R&M expenses from GETCO's R&M expenses.



Thus, the actual O&M Expenses of the Petitioner for FY 2019-20 excluding O&M Expenses of SLDC, as per audited annual accounts, are Rs. 1501.48 Crore. Further, GETCO has claimed an additional amount of Rs. 132.88 Crore against actual arrears pay out to employees from Cumulative Provisions, which has not reflected in Employee Cost as per the audited accounts. The Commission notes that this amount of Rs. 132.88 Crore is the cumulative actual Payout till date, and there has been no actual Payout of arrears in FY 2019-20. The Commission has already allowed actual Payout from provisions of Rs. 53.54 Crore and Rs. 129.79 Crore in the True-up Orders of FY 2017-18 and FY 2018-19, respectively. The Commission sought clarification from GETCO in this regard. GETCO, vide its reply dated 19th March, 2021, submitted that it actually claims two types of Uncontrollable Impact due to 7th Pay Commission, one is actual arrears Payout due to 7th Pay Commission against 7th Pay Provision account, and the other is actual increase/impact in employee cost due to implementation of 7th Pay Commission. Both are uncontrollable expenses. GETCO, in FY 2017-18 and FY 2018-19 has claimed Rs. 53.54 Crore and Rs. 129.79 Crore in the True-up Orders of FY 2017-18 and FY 2018-19 on account of impact due to implementation of 7th Pay Commission. GETCO further claimed that it has inadvertently claimed Rs. 129.79 Crore as uncontrollable expenses in FY 2018-19 instead of Rs. 79.53 Crore as impact due to implementation of 7th Pay Commission. GETCO further claimed that it has inadvertently not claimed actual Pay-out of arrears from Provision of 7th Pay of Rs.130.77 Crore in FY 2018-19. Hence, it is claiming the same in FY 2019-20. The Commission notes the submission made by GETCO. The Commission agrees that actual arrears paid out from 7th Pay Provision and actual impact in employee cost due to implementation of 7th Pay Commission is an uncontrollable expense as has been decided in its Order dated 31st March, 2018, as reproduced below:

"4.2 Operations and Maintenance Expenses for FY 2016-17

. . .

Commission's Analysis

. . .

The Petitioner vide e-mail dated 12th January, 2018 informed that the aforesaid employee expenses are inclusive of provision of Rs.138.26 Crore towards revision in salaries due to 7th Pay Commission. As the amount is only a provision at this moment, it has been removed by the Commission from the total employee expenses while truing up. The impact in Employee Expenses due to revision in salary shall be considered by



the Commission after prudence check as an uncontrollable factor in the year in which the actual pay out occurs. Accordingly, the Commission approves the employee expenses of Rs. 801.21 Crore (Rs. 939.47 Cr- Rs. 138.26 Cr) in the true up of FY 2016-17.

..."

Thus, Commission allows actual Pay out from 7th Pay Provision till now as Rs. 130.77 Crore. GETCO further submitted that the Commission has inadvertently disallowed higher provision of Rs. 2.12 Crore till FY 2019-20. After due diligence, the Commission agrees that excess 7th Pay Provision of Rs. 2.12 Crore has been disallowed inadvertently. The Commission notes that this Rs. 2.12 Crore would have been a Controllable expense had it been allowed in the respective year. Thus, Commission considers Rs. 2.12 Crore as Controllable expense only.

The Commission also notes that based on GETCO additional submission and its own prudence check, it is verified that excess uncontrollable losses of Rs. 50.26 Crore have been approved in the true-up of FY 2018-19.

Hence, the Commission has adjusted the excess uncontrollable losses of Rs. 50.26 Crore allowed in the true-up of FY 2018-19 from this year's total uncontrollable losses. The Commission has reconciled the O&M Expenses submitted by GETCO with audited accounts for FY 2019-20. It is observed that GETCO has incurred A&G expenses of Rs. 0.14 Crore against sponsorship of sports event and Rs. 0.28 Crore against celebration of Events/Festivals/Gifts etc. The Commission is of the view that these expenses should be incurred by GETCO out of its profits and should not be recovered from the consumers. Hence, the Commission has disallowed A&G expenses of Rs. 0.42 Crore against these items. The Commission accordingly approves the actual O&M Expenses for FY 2019-20, as shown in the following Table:



Table 4-12: Actual O&M Expenses approved for FY 2019-20 (Rs. Crore)

Sr. No,	Particulars	Actual Claimed	Approved in Truing up
1	Employee Expenses	996.35	996.35
2	Actual Arrears Pay out to employees from Cumulative Provisions, which has not reflected in Employee Cost (in Profit & Loss Statement)	132.88	130.77
3	Expense due to higher disallowances in 7 th Pay Provision of Previous Years		2.12
3	R&M Expenses	364.56	361.60
4	A&G Expenses	143.53	143.11
5	Total O&M Expenses	1,637.32	1,633.95

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. The O&M Expenses and Gain/(Loss) considered in the Truing up for FY 2019-20 are summarised in the Table below:

Table 4-13: Gain/(Loss) from O&M Expenses approved for FY 2019-20 (Rs. Crore)

Particulars	Approved in the MYT Order	Normative Approved in Truing up	Approved as per Audited Accounts in Truing up	Deviation +/(-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	2	3	4	5 = 2-4	6 = (3-4 and Impact of 7 th Pay Commission)	7 = (2-3 and Impact of 7 th Pay Commission)
O&M Expenses	1,709.77	1,718.84	1,633.95	75.82	261.29	(185.47)



4.4 Depreciation

Petitioner's Submission

GETCO has claimed Depreciation of Rs. 1,143.14 Crore for FY 2019-20, as against Depreciation of Rs. 1,242.10 Crore approved in the MYT Order dated 31st March, 2017 as given in the Table below:

Table 4-14: Depreciation claimed for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed
1	Opening Gross Block	24,354.78	25,169.61
2	Net Additions during the Year	2,274.14	2,388.31
3	Closing Gross Block	26,628.91	27,557.92
4	Depreciation for the Year	1,242.10	1,143.14
5	Average Rate of Depreciation	4.87%	4.34%

The Petitioner has submitted that the depreciation of Rs. 3.63 Crore has been disallowed as the capitalization of Rs. 153.26 Crore has been disallowed in the True-up of FY 2018-19. As the said capitalization is now considered as *put-to-use*, it has considered disallowed depreciation of Rs. 3.63 Crore over and above actual depreciation of Rs. 1139.51 Crore. The variation in the amount of depreciation as per the actual cost incurred by GETCO in FY 2019-20 against the amount approved by the Commission is considered as Gain/(Loss) on account of uncontrollable factors, as detailed in the Table below:

Table 4-15: Gain/(Loss) claimed from Depreciation for FY 2019-20 (Rs. Crore)

Particulars	Approved in the MYT Order	Actual Claimed	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Depreciation	1,242.10	1,143.14	-	98.96

Commission's Analysis

The Commission in accordance with the GERC (MYT) Regulations, 2016 has computed the allowable depreciation for FY 2019-20. The opening GFA for FY 2019-20 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. Further, it is noted that Non-Tariff Income submitted in the Petition includes the



deferred income of Rs. 193.18 crore towards Government Grant/Subsidies. Hence, the Commission has not disallowed depreciation on grants as the same is being reduced by considering under Non-Tariff Income. The depreciation approved for FY 2019-20 after true-up is detailed in the Table below:

Table 4-16: Depreciation approved for FY 2019-20 (Rs. Crore)

Sr. No	Particulars	Approved in the MYT Order	Actual Claimed	Approved in Truing up
1	Opening Gross Block	24,354.78	25,169.61	25,169.61
2	Net Additions during the Year	2,274.14	2,388.31	2,354.26
3	Closing Gross Block	26,628.91	27,557.92	27,523.86
4	Depreciation	1,242.10	1,143.14	1,142.40
5	Average Rate of Depreciation	4.87%	4.34%	4.34%

The Commission, accordingly, approves depreciation at Rs 1,142.40 Crore in the truing up for FY 2019-20.

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 2019-20, as detailed in the Table below:

Table 4-17: Gain / (Loss) from Depreciation approved for FY 2019-20 (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	1,242.10	1,142.40	99.70	-	99.70



4.5 Interest and Finance Charges

Petitioner's Submission

GETCO has claimed Interest and Finance Charges of Rs. 601.02 Crore in the Truing up for FY 2019-20, as against approved amount of Rs. 610.40 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 7.65% on the actual loan portfolio during FY 2019-20 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 4-18: Interest and Finance Charges Claimed for FY 2019-20 (Rs. Crore)

Sr. No	Particulars	Approved in the MYT Order	Actual Claimed
1	Opening Loans	6,085.85	6,961.75
2	Loan Additions during the Year	1,379.38	1,418.07
3	Repayment during the Year	1,242.10	1,143.14
4	Closing Loans	6,223.13	7,236.68
5	Average Loans	6,154.49	7,099.22
6	Interest on Loan	609.40	542.83
7	Other Charges (Guarantee + Financing Charges)	1.00	58.19
8	Total Interest & Financial Charges	610.40	601.02
9	Weighted Average Interest Rate on Loan	9.90%	7.65%

GETCO has claimed Rs. 9.38 Crore as Gain from Interest and Finance Charges due to uncontrollable factors, as detailed in the Table below:

Table 4-19: Gain/ (Loss) claimed from Interest & Finance Charges for FY 2019-20 (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	610.40	601.02	-	9.38

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 2019-20. 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 7.65% and applied the same on the normative loan amount.

Further, the Commission notes that GETCO has claimed Other Finance Charges of Rs. 58.19 Crore. As per Note 34 of the Audited Accounts, this includes an amount of Rs. 2.78 Crore towards Bank Charges and Rs. 55.41 Crore towards loss on foreign exchange fluctuation.

The Bank Charges of Rs. 2.78 Crore relate to Commitment Charges of Rs. 2.14 Crore on kfW Loan, Stamp Duty charges Rs. 0.54 Crore for raising finance, and Other Bank Charges and Title investigation report fees of Rs. 0.10 Crore for mortgage of assets as per Loan Agreement. The Commission allows the actual Bank Charges after prudence check.

GETCO has also claimed Loss on Foreign Exchange Fluctuation of Rs. 55.41 Crore. The Commission has verified the computation of the said amount. 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'.

The Commission notes that GETCO has booked a loss of Rs. 55.41 Crore for kfW and ADB Loan, on purchase of imported goods. The Commission notes that GETCO has increased the loan liability by the same amount during FY 2019-20. Since, the Regulations allow the liability towards interest as well as repayment, the amount of Rs. 55.41 Crore is allowed by the Commission.

In view of the above, the Commission approves Other Finance Charges of Rs. 58.19 Crore for FY 2019-20 for the purpose of Truing up for FY 2019-20.

Based on the actual capitalisation achieved by GETCO during FY 2019-20 and the approved normative borrowings, considering the interest rate of 7.65%, the Commission has computed the interest on normative loans, as detailed in the Table below:



Table 4-20: Interest and Finance Charges approved for FY 2019-20 (Rs. Crore)

Sr. No	Particulars	Approved in the MYT Order	Actual Claimed	Approved in Truing up
1	Opening Loans	6,085.85	6,961.75	6,961.75
2	Loan Additions during the Year	1,379.38	1,418.07	1,394.24
3	Repayment during the Year	1,242.10	1,143.14	1,142.40
4	Closing Loans	6,223.13	7,236.68	7,213.59
5	Average Loans	6,154.49	7,099.22	7,087.67
6	Weighted Average Rate of Loan	9.90%	7.65%	7.65%
7	Interest on Loan	609.40	542.83	541.95
8	Other Charges (Guarantee + financing charges)	1.00	58.19	58.19
9	Total Interest & Finance Charges	610.40	601.02	600.14

The Commission accordingly, approves Interest and Finance Charges of Rs. 600.14 Crore for FY 2019-20.

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 2019-20, as detailed in the Table below:

Table 4-21: Gain/(Loss) from Interest & Finance Charges approved for FY 2019-20 (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	610.40	600.14	10.26		10.26

The Commission accordingly approves the Gain of Rs. 10.26 Crore on account of uncontrollable factors.

4.6 Return on Equity

Petitioner's Submission

GETCO has claimed Rs. 925.56 Crore towards Return on Equity (ROE) in the Truing up for FY 2019-20, as against Rs. 928.19 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 2019-20 with the values approved by the Commission in the Order dated 31st March 2017 is shown in the Table below:

Table 4-22: Return on Equity claimed for FY 2019-20 (Rs. Crore)

Sr. No	Particulars	Approved in the MYT Order	Actual Claimed	Deviation +/(-)
1	Opening Equity Capital	6,334.36	6,307.29	
2	Equity Addition during the Year	591.16	607.75	
3	Closing Equity	6,925.52	6,915.04	
4	Average Equity	6,629.94	6,611.16	
5	Rate of Return on the Equity	14%	14%	
6	Return on Equity	928.19	925.56	2.63

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 2018-19 is considered as the Opening Equity for FY 2019-20. Accordingly, the Commission has computed the ROE for FY 2019-20, as detailed in the Table below:

Table 4-23: Return on Equity approved for FY 2019-20 (Rs. Crore)

Sr. No	Particulars	Approved in the MYT Order	Actual Claimed	Approved in Truing up
1	Opening Equity Capital	6,334.36	6,307.29	6,307.29
2	Equity Addition during the Year	591.16	607.75	597.53
3	Closing Equity	6,925.52	6,915.04	6,904.82
4	Average Equity	6,629.94	6,611.16	6,606.05
5	Rate of Return on the Equity	14%	14%	14%
6	Return on Equity	928.19	925.56	924.85

The Commission accordingly approves Return on Equity at Rs. 924.85 Crore in the Truing up for FY 2019-20.



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 2019-20, as detailed in the Table below:

Table 4-24: Gain/(Loss) from Return on Equity approved for FY 2019-20 (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	928.19	924.85	3.34	-	3.34

4.7 Interest on Working Capital

Petitioner's Submission

GETCO has claimed an amount of Rs. 76.20 Crore towards Interest on Working Capital in the Truing up for FY 2019-20, as against an amount of Rs. 85.28 Crore approved in the MYT Order dated 31st 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., 10.66%. 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 4-25: Interest on Working Capital claimed for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed	Deviation +/(-)
1	O&M Expenses (1 Month)	142.48	136.44	
2	Maintenance Spares (1% of opening GFA)	243.55	251.70	
3	Receivables (1 Month)	342.84	326.88	
4	Total Working Capital	728.87	715.02	
5	Rate of Interest on Working Capital	11.70%	10.66%	
6	Interest on Working Capital	85.28	76.20	9.08



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) of 8.16% prevailing during FY 2019-20 plus 250 basis points, as the interest rate. Accordingly, the rate of interest is worked out to be 10.66%.

Based on the O&M Expenses and GFA approved in the Truing up, the Working Capital requirement and Interest thereon calculated at 10.66%, are detailed in the Table below:

Table 4-26: Interest on Working Capital approved for 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed	Approved in Truing Up
1	O & M Expenses (1 Month)	142.48	136.44	136.16
2	Maintenance Spares (1% of Opening GFA)	243.55	251.70	251.70
3	Receivables (1 Month)	342.84	326.88	326.40
4	Total Working Capital	728.87	715.02	714.26
5	Rate of Interest on Working Capital	11.70%	10.66%	10.66%
6	Interest on Working Capital	85.28	76.20	76.12

The Commission, accordingly, approves the Interest on Working Capital at Rs. 76.12 Crore in the Truing up for FY 2019-20.

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 2019-20, as detailed in the Table below:



Table 4-27: Gain/(Loss) from Interest on Working Capital approved for FY 2019-20 (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	85.28	76.12	9.16	-	9.16

4.8 Contribution to Contingency Reserve

Petitioner's Submission

GETCO has not claimed any contribution towards Contingency Reserve in the Truing up for FY 2019-20.

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 2019-20.

The Commission accordingly approves the contribution to Contingency Reserve as 'Nil' in the Truing up for FY 2019-20.

4.9 Income Tax

Petitioner's Submission

GETCO has claimed the Income Tax of Rs. 217.46 Crore in the Truing up for FY 2019-20, as against Rs. 64.62 Crore approved in the MYT Order dated March 31, 2017, as given in the Table below:

Table 4-28 Income Tax claimed by GETCO for FY 2019-20 (Rs. Crore)

Sr. No	Particulars	Approved in the MYT Order	Actual Claimed	Deviation +/(-)
1	Income Tax	64.62	217.46	(152.84)



Commission's Analysis

The Commission notes that GETCO has claimed Income Tax amount of Rs. 217.46 Crore, which is the amount booked as Current Tax as per audited accounts.

The Commission, in Tariff Order dated April 24, 2019 and in Tariff Order dated March 26, 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.

Accordingly, the Commission approves the Income Tax of Rs. 217.46 Crore for FY 2019-20 as per audited accounts.

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 2019-20, as detailed in the Table below:

Table 4-29: Gain/(Loss) from Income Tax approved for FY 2019-20 (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	217.46	(152.84)	1	(152.84)

4.10 Capitalization of Expenses

Petitioner's Submission

GETCO has claimed actual capitalization of expenses of Rs. 300.80 Crore for FY 2019-20 as against Rs. 194.13 Crore approved for the year in the MYT Order dated 31st March, 2017, as given in the Table below:

Table 4-30: Expenses Capitalised claimed for FY 2019-20 (Rs. Crore)

Sr. No	Particulars	Approved in the MYT Order	Actual Claimed	Deviation +/(-)
1	Expenses Capitalised	194.13	300.80	(106.67)

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 2019-20 as shown in the following Table:

Table 4-31: O&M Expenses Capitalized approved for FY 2019-20 (Rs. Crore)

Sr No.	Particulars	FY 2019-20
1	Employee Expenses Capitalized	261.66
2	R&M Expenses Capitalized	-
3	A&G Expenses Capitalized	39.14
4	Total Expenses Capitalised	300.80

The Commission, accordingly, approves the Capitalisation of O&M Expenses at Rs. 300.80 Crore, as per the audited annual accounts for the purpose of Truing up for FY 2019-20. The Commission considers the Capitalisation of O&M Expenses as uncontrollable as shown in the Table below:

Table 4-32: Gain/(Loss) from O&M Expenses Capitalized approved for FY 2019-20 (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	300.80	(106.67)	-	(106.67)

4.11 Non-Tariff Income for FY 2019-20

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 has claimed Non-Tariff Income at Rs. 412.83 Crore in the Truing up for FY 2019-20, as against Rs. 331.37 Crore approved for the year in the MYT Order.

Table 4-33: Non-Tariff Income claimed by GETCO for 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in the MYT Order	Actual Claimed	Deviation +/(-)
1	Non-Tariff Income	331.37	412.83	(81.46)



Commission's Analysis

The Commission notes that, as per Audited accounts, Non-Tariff Income for FY 2019-20 is Rs. 425.45 Crore. This income includes Non-Tariff Income of Rs. 9.36 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. 3.26 Crore for GETCO has not been considered.

The Commission, accordingly, approves the Non-Tariff Income of Rs. 412.84 Crore as actual, as per the audited annual accounts in the Truing up for FY 2019-20 as detailed in the Table below:

Table 4-34: Non-Tariff Income approved for 2019-20 (Rs. Crore)

Sr. No.	Particulars	GETCO	SLDC	Net GETCO
1	Parallel Operation Charge	79.69	1	79.69
2	Interest Income from Fixed Deposits	0.22	1	0.22
3	Interest from Banks (other than on Fixed Deposits)	10.43	-	10.43
4	Income from Trading -Stores, Scrap etc.	6.90	1	6.90
5	Penalties Received from Suppliers and Contractors	41.46	0.04	41.42
6	Income towards Govt. Grants/ Subsidies towards Cost of Capital Assets (Deferred amount)	193.18	1	193.18
7	Miscellaneous Receipts.	13.68	0.08	13.60
8	Gain on Foreign Exchange Fluctuation	0.17	1	0.17
9	Misc. Charges from Consumers	18.57	9.20	9.37
10	Reactive Charges Income	7.34	1	7.34
11	Operation & Maintenance Charges	35.01	-	35.01
12	Supervision Income from Execution of Deposit Work	15.37	0.03	15.34
13	Gain on sale of Fixed Assets (Net of Loss)		0.01	(0.01)
14	Grant for Energy Conservation	0.19	-	0.19
15	Net Non-Tariff Income	422.19	9.36	412.84

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 2019-20, as detailed in the Table below:



Table 4-35: Gain/(Loss) on Non-Tariff income approved in the Truing up for 2019-20 (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 Income	331.37	412.84	(81.47)	1	(81.47)

4.12 Incentive for Target Availability Factor

Petitioner's Submission

GETCO has achieved the availability of 99.40% for its transmission network during FY 2019-20 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 4-36: Incentive for Target Availability claimed for FY 2019-20 (Rs. Crore)

Sr. No	Particulars	2019-20
1	Target Availability as per the GERC (MYT) Regulations	98.50%
2	Actual Availability	99.40%
3	ARR	3,887.08
4	Incentive for Transmission System Availability	35.52

Commission's Analysis

The Commission has verified the availability of the Transmission System from SLDC Certificate as 99.40%. 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

The Commission has accordingly computed the incentive of Rs. 35.46Crore for the Truing up for FY 2019-20 as detailed in the Table below:

Table 4-37: Incentive for Higher Availability approved for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved
1	Target Availability as per MYT Regulations	98.50%
2	Actual Availability	99.40%
3	ARR	3,881.29



Sr. No.	Particulars	Approved
4	Incentive for Transmission System Availability	35.46

The Commission considers the deviation in Incentive as uncontrollable and accordingly approves the Gain/(Loss) in the Truing up for FY 2019-20 as given in the Table below:

Table 4-38: Gain/ (loss) from Incentive approved for FY 2019-20 (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	35.46	(35.46)	-	(35.46)

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 2019-20.

The Commission has computed the sharing of Gain and (Loss) for FY 2019-20, based on the Truing up for each of the components, as discussed in the above paragraphs.

The fixed charges approved for FY 2019-20 in the MYT Order dated 31.03.2017, 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 4-39: ARR & Gains /(losses) approved in Truing up Order for FY 2019-20 (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	1,709.77	1,637.32	1,633.95	261.29	(185.47)
2	Depreciation	1,242.10	1,143.14	1,142.40		99.70
3	Interest & Finance Charges	610.40	601.02	600.14		10.26
4	Interest on Working Capital	85.28	76.20	76.12		9.16
5	Return on Equity	928.19	925.56	924.85		3.34
6	Total Fixed Costs	4,575.73	4,383.25	4,377.46	261.29	(63.01)
7	Add: Provision for Tax	64.62	217.46	217.46		(152.84)
8	Less: Expenses Capitalized	194.13	300.80	300.80		(106.67)
9	Total Transmission Charges	4,446.22	4,299.91	4,294.13	261.29	(109.18)
10	Less: Non-Tariff Income	331.37	412.83	412.84		(81.47)
11	Aggregate Revenue Requirement	4,114.85	3,887.08	3,881.29	261.29	(27.71)
12	Add: Incentive for target availability	-	35.52	35.46		(35.46)
13	Total ARR	4,114.85	3,922.59	3,916.76	261.29	(63.18)



4.14 Sharing of Gains / (Losses) for FY 2019-20

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 2019-20, is summarised in the Table below:

Table 4-40: Revenue (Gap)/ Surplus approved for FY 2019-20

Sr. No	Particulars	Claimed	Approved
1	ARR approved in the MYT Order dated 31.03.2017	4,114.85	4,114.85
2	Gain/(loss) on Account of Uncontrollable Factors to be Passed on to the Consumers	(119.00)	(63.18)
3	Gain/(loss) on Account of Controllable Factors to be Passed on to the Consumers (1/3 rd)	103.76	87.10
4	Less: Under Recovery of revenue during FY 2019-20 due to applicability of Tariff Order from 1 May, 2019	(7.48)	(7.48)
5	Revised ARR for 2019-20	3,922.59	3,916.76
6	Revenue (Gap)/Surplus	(22.72)	16.44

The Commission has arrived at a Revenue Surplus of **Rs. 16.44 Crore** in the truing up for FY 2019-20. This Revenue Surplus is carried forward to the ARR of FY 2021-22 for determination of Transmission Charges.



5 Determination of Aggregate Revenue Requirement (ARR) for FY 2021-22

5.1 Introduction

This Chapter deals with the determination of ARR and Transmission Charges for FY 2021-22.

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. 3,062.79 Crore during FY 2021-22 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 2021-22

SI. No.	Particulars	FY 2021-22
Α	New Projects	
1	765 kV Substations	-
2	765 kV Lines	-
3	400 kV Substations	282.74
4	400 kV Lines	399.79
5	220 kV Substations	352.59
6	220 kV Lines	304.66
7	132 kV Substations	14.83
8	132 kV Lines	36.85
9	66 kV Substations	450.00
10	66 kV Lines	620.00
11	Capacitor Bank	16.00
12	Reactor and Reactor Bay	-
Total (A)	2477.46
В	Renovation & Modernisation	
1	Renovation and Modernization	270.00
2	Augmentation of Sub-stations/Lines	200.00



SI. No.	Particulars	FY 2021-22
3	Replacement of RTU	-
Total (B)		470.00
С	Others	
1	OPGW	115.33
Total Ca	pital Expenditure (A+B)	3062.79

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

Table 5-2: Proposed Bay and Line Ckt. km addition for FY 2021-22

Sr. No.	Project Name	400 kV	220 kV	132 kV	66 kV	33 kV	Total
1	400 kV Pachham (Fedra)	19	17	0	13	0	49
2	400 kV Shapar GIS substation	17	17	0	17	0	51
3	220 kV Kalavad	0	16	0	17	0	33
4	220 kV Talaja substation	0	9	0	12	0	21
5	220 kV Khambhalia substation	0	9	0	13	0	22
6	220 kV Rajula	0	5	0	14	0	19
7	220 kV Dholera	0	6	0	0	10	16
8	220 kV Raghanesda	0	8	0	0	12	20
9	132 kV Supedi	0	0	7	10	0	17
10	66 kV Substation (Approx 80 S/s planned to be commissioned with line, with 6 no. of bays in each substation	0	0	0	480	0	480
Augr Bays	mentation with Tr.	0	0	0	30	0	30
220/ ICTs	132 kV, 2 x 100 MVA at Dhuvaran CCPP-3 bays	0	2	2	0	0	4
EHV Tr. Line bays on each side other than new EHV Substation		14	10	6	0	0	30
	Line FB under KSY	0	0	0	132	0	132
	Total Nos of Bays Addition		99	15	738	22	924
Ckt.	km Addition	656	659	200	1895	0	3410



5.3 Capital Expenditure and Capitalisation

Petitioner's Submission

GETCO has proposed capital expenditure, capitalization and funding for FY 2021-22 as given in the Table below:

Table 5-3: Projected Capital Expenditure and Capitalisation in FY 2021-22 (Rs. Crore)

SI. No.	Particulars	FY 2021-22
1	Capex for the Year	3,062.79
2	Capitalisation	2,975.00
3	Debt	1,829.10
4	Equity	783.90
5	Grant	362.00

The Capitalisation has been assumed based on the schemes likely to be put to use for which capital expenditure is carried out during FY 2021-22 or in past year. 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 2021-22, 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.

The Commission observes that GETCO has analysed its project pipeline to propose the projected Capitalisation for FY 2021-22. The Commission is of the view that a realistic view must be taken considering past trends. The Commission has analysed the trend of CAPEX and Capitalisation in the last five years, to assess the reasonability of CAPEX and Capitalisation proposed by GETCO for FY 2021-22, as shown in the Table below:



Table 5-4: 5-YEAR TREND OF CAPEX AND CAPITALISATION (Rs. CRORE)

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	Average of 5 years
Capex	2655	2371	2911	2770	3,232	2788
Capitalization	2525	2164	2213	2747	2,354	2401
Capitalisation as % of Capex	95.12%	91.27%	76.02%	99.16%	72.85%	86.12%

From the above analysis, it is observed that the average CAPEX is around Rs. 2788 Crore and the average Capitalisation is around Rs. 2401 Crore, i.e., ratio of Capitalisation to CAPEX of 86%.

In order to assess the preparedness of GETCO to undertake CAPEX of the proposed magnitude in FY 2021-22, the Commission sought scheme-wise status of preparedness and through its replies dated 6th February, 2021 and 10th March, 2021 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 2021-22 is higher than the average capex actually achieved by GETCO in past 5 years. Hence, for the purpose of approving ARR for FY 2021-22, 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 2021-22 is given at **Annexure I** to this Order.

Therefore, the Commission has approved CAPEX of Rs. 2787.71 Crore. Further, looking at the past trends, the Commission has considered Capitalisation equal to 86.12% of the approved CAPEX for FY 2021-22, i.e., Capitalisation of Rs. 2400.66 Crore has been approved for FY 2021-22.

The Commission also notes that GETCO has considered grant funding of Rs. 362 Crore for FY 2021-22, which is same as the actual grant funding in FY 2019-20. The Commission has accepted GETCO's projection in this regard and hence, considered grant funding of Rs. 362 Crore for FY 2021-22. 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 2021-22, as given in the Table below:



Table 5-5: Approved CAPEX and Capitalization for FY 2021-22 (Rs. CRORE)

SI. No.	Particulars	Petition	Approved
1	Capex	3,062.79	2,787.71
2	Capitalisation	2,975.00	2,400.66
3	Debt	1,829.10	1,427.06
4	Equity	783.90	611.60
5	Grant	362.00	362.00

5.4 Fixed Charges for FY 2021-22

Total fixed charges for FY 2021-22 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 2021-22

Petitioner's Submission

GETCO has projected O&M expenses for FY 2021-22 as Rs.2102.00 Crore as detailed in the Table below:

Table 5-6: Proposed Normative O&M expenses for FY 2021-22 (Rs. Crore)

SI. No.	Particulars	Units	FY 2021-22
1	Substations (Bays)		
	Opening Number of Bays	Number	14,883.60
	Addition During Year	Number	924.00
	Reduction During Year	Number	-



SI.	Particulars	Units	FY 2021-22	
No.	Farticulars	Onits	F1 2021-22	
	Closing Number Of Bays	Number	15,807.60	
	Average Number Of Bays	Number	15,345.60	
	O&M Expense Norm Per Bay	Rs. Lakh	10.04	
	Total O&M Expenses - Substations	Rs. Crore	1,540.70	
2	Transmission Lines (Ckt Km)			
	Opening Ckt Km	Ckt Km	63,563.21	
	Addition During Year	Ckt Km	3,410.00	
	Reduction During Year	Ckt Km	-	
	Closing Ckt Km	Ckt Km	66,973.21	
	Average Ckt Km	Ckt Km	65,268.21	
	O&M Expense Norm Per Ckt Km	Rs. Lakh	0.86	
	Total O&M Expenses - Transmission Lines	Rs. Crore	561.31	
3	Total O&M Expenses (As Per Norms)	Rs. Crore	2102.00	

GETCO has projected the O&M expenses for FY 2021-22 by applying escalation rate of 5.72% on the norms applicable for FY 2020-21 as per GERC (MYT) Regulations, 2016. 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 2021-22.

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 7th Pay Commission. GETCO requested to approve the additional impact on account of 7th Pay Commission as and when paid by GETCO, as an uncontrollable expense.

Commission's analysis

The Commission has examined the submissions made by GETCO. GETCO has considered closing values of Bays and ckt. km of FY 2019-20 as opening value of Bays and ckt. km for FY 2020-21. However, as shown in Table No. 4.10 of this Order, closing values of Bays and ckt. km for FY 2019-20 are 14,306 and 61,185, respectively. The Commission has considered actual closing values of Bays and ckt. km of FY 2019-20 as the opening values of FY 2020-21 to arrive at the O&M expenses for FY 2021-22.



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 2021-22 on proportionate basis.

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 2021-22. 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 2021-22 also. However, this does not mean that the O&M expenses have to be allowed at higher levels. Hence, the Commission has derived the O&M norms for FY 2021-22 based on actual O&M Expenses in the previous years, by adopting the same principles as adopted in the previous MYT Order.

The average of the actual O&M expenses of last 3 years, i.e., FY 2017-18, FY 2018-19, and FY 2019-20, has been considered as the O&M expenses for FY 2018-19. Further, since the pay revision as per 7th Pay Commission was implemented from August 2017, the impact of Wage Revision has been pro-rated for the entire FY 2017-18, while considering the actual O&M expenses for FY 2017-18. 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. The O&M expense per Bay and per ckt. km of Transmission Lines for FY 2021-22 has been determined by escalating the average O&M expense by 5.72% yearly as specified in the GERC (MYT) Regulations, 2016. Thus, the approved O&M Norms for FY 2021-22 are given in the Table below:

Table 5-7: Approved O&M Norms for FY 2021-22 (Rs. Lakh)

Particulars	Per Bay	Per ckt. km
O&M Norms for FY 2021-22	8.98	0.88

The approved number of Bays and ckt. km of Transmission Lines, and the normative O&M expenses for FY 2021-22 have been computed as detailed in the Table below:

Table 5-8: Approved O&M expenses for FY 2021-22 (Rs. Crore)

SI. No.	Particulars	Units	Petition	Approved
1	Substations (Bays)			



SI.	Particulars	Units	Petition	Approved
No.	Faiticulais	Units	Petition	Approved
	Opening Number of Bays	Number	14,883.60	14,868
	Addition During Year	Number	924.00	746
	Reduction During Year	Number	-	-
	Closing Number Of Bays	Number	15,807.60	15,613
	Average Number Of Bays	Number	15,345.60	15,240
	O&M Expense Norm Per Bay	Rs. Lakh	10.04	8.98
	Total O&M Expenses - Substations	Rs. Crore	1,540.70	1,368.04
2	Transmission Lines (Ckt Km)			
	Opening Ckt Km	Ckt Km	63,563.21	63,494
	Addition During Year	Ckt Km	3,410.00	2,752
	Reduction During Year	Ckt Km	-	-
	Closing Ckt Km	Ckt Km	66,973.21	66,246
	Average Ckt Km	Ckt Km	65,268.21	64,870
	O&M Expense Norm Per Ckt Km	Rs. Lakh	0.86	0.88
	Total O&M Expenses - Transmission Lines	Rs. Crore	561.31	567.82
3	Total O&M Expenses (As Per Norms)	Rs. Crore	2102.00	1,935.86

The Commission accordingly approves the normative O&M expenses for FY 2021-22 as Rs. 1,935.86 Crore.

5.6 Depreciation

Petitioner's Submission

GETCO has projected depreciation of Rs. 1,363 Crore for FY 2021-22 as given in the Table below:



Table 5-9: Proposed Depreciation for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	Opening Gross Block	29,946
2	Net Additions during the Year	2,975
3	Closing Gross Block	32,921
4	Depreciation for the Year	1,363
5	Average Rate of Depreciation	4.34%

GETCO has submitted that the closing GFA of FY 2019-20 has been considered as the opening GFA of FY 2020-21. The addition during FY 2020-21 and FY 2021-22 has been considered based on projected capitalisation for each 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 4.34% for FY 2021-22. The closing GFA approved in the truing up of FY 2019-20 has been considered as opening GFA of FY 2020-21. Asset addition in FY 2020-21 has been considered equal to the capitalisation approved for FY 2020-21 in the MYT Order. Asset addition in FY 2021-22 on account of capitalization is considered as approved for FY 2021-22 in Table 5.5 above.

Thus, the Commission approves Depreciation for FY 2021-22 as detailed in the Table below:

Table 5-10: Approved Depreciation for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved	
1	Opening Gross Block	29,946	29,911.45	
2	Net Additions during the Year	2,975	2,400.66	
3	Closing Gross Block	32,921	32,312.11	
4	Depreciation for the Year	1,363	1,349.02	
5	Average Rate of Depreciation	4.34%	4.34%	

The Commission approves the Depreciation of Rs. 1,349.02 Crore for FY 2021-22.



5.7 Interest and Finance charges for FY 2021-22

Petitioner's Submission

GETCO has projected interest and finance charges of Rs. 644.76 crore for FY 2021-22 as detailed in the Table below:

Table 5-11: Proposed Interest and Finance Charges for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	Opening Loans	7,438.19
2	Loan Addition during the Year	1,829.10
3	Repayment during the Year	1,362.95
4	Closing Loans	7,904.35
5	Average Loans	7,671.27
6	Interest on Loan	586.57
7	Other Charges (Guarantee + Financing Charges)	58.19
8	Total Interest & Finance Charges	644.76
9	Weighted Average Interest Rate	7.65%

The closing balance of loan portfolio for FY 2019-20 has been taken as opening balance of FY 2020-21. The Normative loan addition in FY 2020-21 and FY 2021-22 has been computed as per Capex Funding Plan projected by GETCO as discussed above.

The repayment for the year during FY 2020-21 and FY 2021-22 has been taken equal to depreciation calculated for the year. The rate of interest has been taken as the weighted average rate of interest on the actual loan portfolio for FY 2019-20, which is 7.65%. Other Bank Charges have been taken at the same level as in FY 2019-20.

Commission's Analysis

The Commission has examined the interest and finance charges projected by GETCO for FY 2021-22. The closing loan approved in the Truing-up for FY 2019-20 has been considered as the opening balance of loan for FY 2020-21. The loan addition in FY 2020-21 has been considered as approved for the year in the MYT Order dated 31st March, 2017. The loan addition in FY 2021-22 has been considered as approved in Table 5.5 above.

The weighted average rate of interest has been considered as 7.65%, based on the truing-up for FY 2019-20, as proposed by the Petitioner. In accordance with the GERC (MYT) Regulations, 2016, repayment for FY 2021-22 has been considered equal to the depreciation allowed for FY 2021-22.



The Commission also notes that Other Bank Charges have been unusually high in FY 2019-20 on account of forex variations, and may not be incurred at the same levels in FY 2021-22. The Commission has provisionally considered Other Bank Charges as Rs. 1 Crore. GETCO can recover the variation, if any, on actual basis in the Truing-up for FY 2021-22.

The Commission has accordingly computed the interest expenses for FY 2021-22, as detailed in the Table below:

Table 5-12: Approved Interest and Finance Charges for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	Opening Loans	7,438.19	7,416.57
2	Loan Addition during the Year	1,829.10	1,427.06
3	Repayment during the Year	1,362.95	1,349.02
4	Closing Loans	7,904.35	7,494.61
5	Average Loans	7,671.27	7,455.59
6	Interest on Loan	586.57	570.08
7	Other Charges (Guarantee + Financing Charges)	58.19	1.00
8	Total Interest & Finance Charges	644.76	571.08
9	Weighted Average Interest Rate	7.65%	7.65%

The Commission approves the interest and finance charges of Rs. 571.08 Crore for FY 2021-22.

5.8 Interest on working capital for FY 2021-22

Petitioner's submission

GETCO has projected interest on working capital of Rs. 89.65 crore for FY 2021-22 as detailed in the Table below:



Table 5-13: Proposed Interest on Working Capital for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	O&M Expenses (1 Month)	175.17
2	Maintenance Spares (1% of opening GFA)	299.46
3	Receivables (1 Month)	400.03
4	Total Working Capital	874.65
5	Rate of Interest on Working Capital	10.25%
6	Interest on Working Capital	89.65

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 10.25% (MCLR rate as on 1st April, 2020, i.e., 7.75% 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 1st April, 2020, i.e., 7.75%, and adding a spread of 250 basis points, the interest rate works out to 10.25%. The Commission has calculated the working capital and interest on working capital for FY 2021-22 as detailed in the Table below:

Table 5-14: Approved Interest on Working Capital for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	O&M Expenses (1 Month)	175.17	161.32
2	Maintenance Spares (1% of opening GFA)	299.46	299.11
3	Receivables (1 Month)	400.03	373.84
4	Total Working Capital	874.65	834.28
5	Rate of Interest on Working Capital	10.25%	10.25%
6	Interest on Working Capital	89.65	85.51

The Commission thus, approves Interest on Working Capital of Rs. 85.51 Crore for FY 2021-22.



5.9 Return on Equity for FY 2021-22

Petitioner's submission

GETCO has projected ROE of Rs. 1,109.87 crore for FY 2021-22 as detailed in the Table below:

Table 5-15: Proposed Return on Equity for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	Opening Equity	7,535.69
2	Equity Addition during the year	783.90
3	Closing Equity	8,319.59
4	Average Equity	7,927.64
5	Rate of Return on the Equity	14%
6	Return on Equity	1,109.87

GETCO has submitted that ROE has been considered on the average equity for FY 2021-22 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 2021-22. The rate of ROE as per GERC (MYT) Regulations, 2016 is 14% as claimed by GETCO. The closing balance of equity approved in the truing up for FY 2019-20 has been considered as opening balance of equity for FY 2020-21 and the equity addition approved for FY 2020-21 and FY 2021-22 in the MYT Order dated 31st March, 2017 and Table 5.5 of this Order, respectively, has been considered. The Commission has computed the ROE for FY 2021-22 as detailed in the Table below:

Table 5-16: Approved Return on Equity for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Petition Approve	
1	Opening Equity	7,535.69	7,525.48
2	Equity Additions during year	783.90	611.60
3	Closing Equity	8,319.59	8,137.08
4	Average Equity	7,927.64	7,831.28
5	Rate of Return on the Equity	14%	14%
6	Return on Equity	1,109.87	1,096.38



The Commission approves the Return on Equity of Rs. 1,096.38 Crore for FY 2021-22.

5.10 Tax on Income for FY 2021-22

Petitioner's Submission

GETCO has projected the Income Tax for FY 2021-22 as detailed in the Table below:

Table 5-17: Proposed Tax on Income for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	Tax on Income	217.46

GETCO submitted that it has computed the Income Tax for FY 2021-22 in line with the provisions of GERC (MYT) Regulations, 2016 by considering the tax incurred during FY 2019-20. 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 2021-22, as approved in the truing up for FY 2019-20. Any variation in Income Tax actually paid and approved shall be reimbursed based on documentary evidence. at the time of truing up for FY 2021-22 subject to prudence check, in accordance with Regulation 41.2 of the GERC (MYT) Regulations, 2016.

Table 5-18: Approved Income Tax for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	Tax on Income	217.46	217.46

Thus, the Commission approves Income Tax of Rs. 217.46 Crore for FY 2021-22.



5.11 Expenses capitalized during FY 2021-22

Petitioner's submission

GETCO has projected capitalization of expenses of Rs. 336.20 Crore for FY 2021-22 as detailed in the Table below:

Table 5-19: Proposed Expenses Capitalised for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	Expenses Capitalised	336.20

Commission's Analysis

The Commission notes that Expenses Capitalised are directly linked with O&M Expenses. The Expenses Capitalised in FY 2019-20 work out to 18.4% of the actual O&M expenses. Hence, the Commission has considered the Expenses Capitalised at 18.4% of the O&M expenses approved for FY 2021-22, as given in the Table below.

Table 5-20: Approved Expenses Capitalised for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	Expenses Capitalised	336.20	356.38

Thus, the Commission approves Expenses Capitalised of Rs. 356.38 Crore for FY 2021-22.

5.12 Non-Tariff Income for FY 2021-22

Petitioner's Submission

GETCO has projected the Non-Tariff Income for FY 2021-22 as detailed in the Table below:

Table 5-21: Projected Non-Tariff Income for FY 2021-22 (Rs. Crore)

S	r. No.	Particulars	FY 2021-22
	1	Non-Tariff Income	412.83

GETCO has submitted that it has estimated Non-Tariff Income at the same levels as actual for FY 2019-20.



Commission's Analysis

The Commission has examined the submission of GETCO. GETCO has estimated the Non-Tariff Income to remain constant at FY 2019-20 levels in FY 2021-22. The Commission has accepted GETCO's submission in this regard and accordingly approves Non-Tariff Income for FY 2021-22 as shown in the Table below:

Table 5-22: Approved Non-Tariff Income for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	Non-Tariff Income	412.83	412.84

Thus, the Commission approves Non-Tariff Income of Rs. 412.84 Crore for FY 2021-22.

5.13 Projected and Approved Fixed Costs

The ARR as projected by GETCO and as approved by the Commission for FY 2021-22 is given in the Table below:

Table 5-23: ARR Approved for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Projected By GETCO	Approved
1	Operation & Maintenance Expenses	2,102.00	1,935.86
2	Depreciation	1,362.95	1,349.02
3	Interest & Finance Charges	644.76	571.08
4	Interest on Working Capital	89.65	85.51
5	Return on Equity	1,109.87	1,096.38
6	Total Fixed Costs	5,309.11	5,037.85
7	Less: Expenses Capitalised	336.20	356.38
8	Add: Provision for Income Tax	217.46	217.46
9	Total Transmission Charges	5,190.50	4,898.93
10	Less: Non-Tariff Income	412.83	412.84
11	Aggregate Revenue Requirement	4,777.67	4,486.10



6 Determination of Transmission Charges for FY 2021-22

6.1 Introduction

This Chapter deals with the determination of Transmission Charges for FY 2021-22 for GETCO. The Commission has approved the ARR for FY 2021-22 in accordance with the GERC (MYT) Regulations, 2016 in the earlier Chapter of this Order.

6.2 Determination of Transmission Tariff for FY 2021-22

The Table below summarizes the ARR for FY 2021-22, as approved by the Commission in Table 5.23 of this Order:

Table 6-1: Approved ARR for FY 2021-22 (Rs. Crore)

SI. No.	Particulars	FY 2021-22
1	Operation & Maintenance Expenses	1,935.86
2	Depreciation	1,349.02
3	Interest & Finance Charges	571.08
4	Interest on Working Capital	85.51
5	Return on Equity	1,096.38
6	Total Fixed Costs	5,037.85
7	Less: Expenses Capitalized	356.38
8	Add: Provision for Tax	217.46
9	Total Transmission Charges	4,898.93
10	Less: Non-Tariff Income	412.84
11	Aggregate Revenue Requirement	4,486.10

GETCO has submitted the total projected loading for GETCO system for FY 2021-22 as shown in the Table below:



Table 6-2: Total Loading in MW

Sr. No.	Stations	FY 2021-22 Projected
Α	GSECL Plants	6,202
В	IPPs	4,381
С	Share from Central Sector	6,209
D	CPP Wheeling	566
Е	Wind Farm Capacity	6,352
F	F Solar Project	
G	Bio-Mass Power capacity	40
Н	Others (Small/ Mini Hydal & MSW)	158
1	I Western Railway (OA)	
	Total Loading in MW	28,797

The Petitioner has submitted Transmission Tariff for FY 2021-22, based on the Truing up projected for FY 2019-20. The Commission has determined the Revenue (Gap)/Surplus, based on the truing up for FY 2019-20. The Commission has also ruled that some amount has to be disallowed from ARR in FY 2021-22, on account of excess amount allowed in the truing up of FY 2018-19. The detailed computation of the amount to be disallowed has been provided in earlier sections.

The Petitioner's proposal and the Transmission Tariff approved by the Commission for FY 2021-22 are given in the Table below:

Table 6-3: Approved Transmission Tariff for FY 2021-22

Sr. No	Stations	Unit	Claimed	Approved
1	ARR for FY 2021-22	Rs. Crore	4,777.67	4,486.10
2	Add: Revenue Gap/(Surplus) for FY 2019-20	Rs. Crore	22.72	(16.44)
3	ARR after considering Gap/(Surplus) of FY 2019-20	Rs. Crore	4,800.39	4,469.66
4	Total MW allocation	MW	28,797.24	28,797.24
5	Transmission Tariff	Rs./MW/Day	4,567.02	4,252.37

The Commission, accordingly, approves the Transmission Tariff for FY 2021-22, 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 2021-22 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 + 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. 4,469.66 Crore for FY 2021-22 as shown in the Table above. The Commission has taken energy input of 1,02,864.95 MUs in Transmission System for FY 2019-20 and Transmission Capacity utilised of 24,134 MW during FY 2019-20 as submitted by the Petitioner. Total estimated wheeled units during FY 2021-22 works out as 1,22,740.82 MUs on proportionate basis considering the Transmission Loading Capacity of 28,797 MW as submitted by the Petitioner. As per the above formula, Transmission Charges payable by the Short-Term users, including the collective transactions through Power Exchanges, works out to:

TC (Rs/kWh) = 4,469.66 Crore/ 1,22,740.82 MU= 36.42 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 26th March, 2020 in Case No. 1837 of 2019.

After considering the submission of the Petitioner, the Commission decides to continue with the existing Reactive Energy Charges and approved the charges for FY 2021-22 as shown in the following Table:

Table 6-4: Reactive Energy Charges approved for FY 2021-22

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

6.4 Recovery of ABT Meter Charges

GETCO has submitted that it has been recovering Meter Rental Charges from Open Access Consumers for meters installed by GETCO. The Charges are recovered in line with the Commission's Order in Notification 9 of 2005.

GETCO further submitted that the Commission in its Tariff Order dated 31st March, 2018 for Distribution Companies abolished recovery of Meter rent from consumers by Licensee, after which Distribution Companies have stopped recovering the same. However, GETCO has continued recovering meter rent from its Open Access Consumers in absence of a clear direction from Commission on the same. GETCO has been receiving many representations from beneficiaries to stop the recovery of ABT Meter Rental Charges similar to the DISCOM Order dated 31st March, 2018. GETCO has prayed for clear direction on whether it should continue to recover ABT Meter Rent Charges from Open Access consumers or discontinue the same in line with Commission's Tariff Order for DISCOM dated 31st March, 2018.

Commission's Analysis

The Commission, while dealing with the issue of merging of meter charges in the Tariff Orders for FY 2018-19 for Distribution Licensees of the State, decided to abolish Meter Charges effective from 1st April 2018. The relevant excerpt is reproduced below:



"Meter Rent

The State-owned Distribution Licensees have proposed merging of meter charges with the fixed charges/ demand charges. Some of the stakeholders have repeatedly suggested to abolish meter rent from the electricity bill.

At present Meter Rent is being collected by the Distribution Licensee in accordance with the Gujarat Electricity Regulatory Commission (Licensee's Power to Recover Expenditure incurred in providing supply and other Miscellaneous Charges) Regulations, 2005.

In view of the proposal of the petitioner, representations of the stakeholders and in exercise of the powers conferred under the aforesaid Regulations, the Commission decides to abolish Meter Charges effective from 1st April 2018."

In view of the above decision, it is required by GETCO to discontinue the recovery of Meter Rent from Open Access consumers immediately.



7 Compliance of Directives and New Directives

7.1 Compliance of Directives issued by the Commission

In the Tariff Order issued by the Commission on 26th March, 2020, 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:

7.2 Compliance to directives

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.

GETCO Compliance/Action taken/initiated:

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 1st Quarter of FY 2020-21.

Further, GETCO has submitted the loading of important EHV elements during the 1st 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 1st Quarter of FY 2019-20.

Commission's Comment:

The Commission noted the submission of the Petitioner. GETCO is directed to continue submitting reports in this regard on quarterly basis.



7.3 New Directives:

Directive 1: Calculation of Availability of State transmission System

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.

Directive 2: Adoption of Tariff Based Competitive Bidding (TBCB) for Intra-State Transmission Projects

As per the letter from Ministry of Power dated 15th 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 is directed to submit a complete proposal by 31st May, 2021, including its suggestions for determination of Threshold Limit, which kind of projects can be taken up under TBCB, etc.

Directive 3: 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.



COMMISSION'S ORDER

The Commission approves the components of Transmission Charges and the Transmission Tariff for GETCO for FY 2021-22, as shown in the Tables below:

Table 7-1: ARR for FY 2021-22 (Rs. Crore)

SI. No.	Particulars	FY 2021-22
1	Operation & Maintenance expenses	1,935.86
2	Depreciation	1,349.02
3	Interest & Finance charges	571.08
4	Interest on working capital	85.51
5	Return on equity	1,096.38
6	Total fixed costs	5,037.85
7	Less: Expenses Capitalized	356.38
8	Add: Provision for tax	217.46
9	Total Transmission Charges	4,898.93
10	Less: Non-Tariff Income	412.84
11	Aggregate Revenue Requirement	4,486.10
12	Add: Revenue Gap/(Surplus) for FY 2019-20	(16.44)
13	Total Revenue Requirement	4,469.66

Table 7-2: Transmission Tariff for FY 2021-22

SI. No. Particulars		Unit	FY 2021-22
1	Transmission Tariff	Rs./MW/Day	4,252.37
2	Transmission Tariff for STOA	Ps./kWh	36.42

This order shall come into force with effect from 1st April, 2021.

-Sd- -Sd- -Sd-

S.R. PANDEY MEHUL M. GANDHI ANAND KUMAR
Member Member Chairman

Place: Gandhinagar Date: 30.03.2021



8 Annexure 1: Capex approved for FY 2021-22

Table 8-1: ARR FY 2021-22: SUBSTATION DETAIL (Rs. CRORE)

Sr. No.	BR. No.	Voltage class	Name of Substation	2021-22
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	59.70
2		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	33.06
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	66.86
4	220/132 KV, 2 x 100 MVA ICTs at Dhuvaran CCPP-3 with bays	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	26.75
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	96.36
		400 kV Total		283



Sr. No.	BR. No.	Voltage class	Name of Substation	2021-22
1	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	20.00
2	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	9.40
3	69.6/1071 dated 27.11.10 Transferred to GEC-II Projects as per BR No:- 119.6/1995 Dtd. 01.06.18	220 KV	220 KV Talaja substation (Dist. Bhavnagar) (1) 220/66 KV, 2 X 160 MVA, (2) 6 Nos. 220 KV, 6 Nos. 66 KV feeder bays.	2.53
4	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	18.56
5	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)	11.25
6	109.16.1816 Dt: 27.10.16	220 KV	220KV 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	7.41
7	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	11.25
8	123.3/2049 Dtd. 22.01.2019	220 KV	220kV Avana SS/ Padana S/S / upgradation of Gandhidham-B S/S to 220KV Level (GIS/HGIS) 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	18.17
9	129.4/2138 dated 15.06.2020	220 KV	220/132 KV, 2 x 100 MVA ICTs at Dhuvaran CCPP-3 with bays	7.54

Sr. No.	BR. No.	Voltage class	Name of Substation	2021-22
10	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	8.66
11	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	8.66
12	129.4/2138 dated 15.06.2020	220 KV	220KV Patkhilori220/66 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	8.66
13	129.4/2138 dated 15.06.2020	220 KV	220 KV Khodu/Dudhrej	8.66
14	130.9/2173 dated 20.08.2020	220 KV	220 kV Babarzar (AIS) 220/66 kV 3x160 MVA Trf,220 kV FB -4, 220 kV BC Bay - 1, 220 kV TBC - 1, 220 kV 25 MVAR Bus reactor, 66 kV FB - 10	11.30
15	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	115.68
16	130.8/2172 dated 20.08.2020	220 KV	220 kV Raghanesda Pooling Substation 220/33 kV 6 x125 MVA ICT 220 kV FB -2 nos BC Bay -1 PT Bays - 2 33 kV Line bays - 18	73.28
17	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 Khambhalia substation (Dist. Jamnagar) (1) 220/66 KV, 2 X 160 MVA, (2) 6 Nos. 220 KV, 6 Nos. 66 KV feeder bays.	11.60
		220 kV Total		353

Gujarat Electricity Regulatory Commission



Sr. No.	BR. No.	Voltage class	Name of Substation	2021-22	
1	Yet to Approve	132 KV	132 kV Supedi	14.83	
		132 kV Total		15	
			Total EHV	650.16	
	66 kV Substation Lump sum @ Rs 5 Crore				
	Grand Total				



Table 8-2: ARR FY 2021-22: TRANSMISSION LINE DETAIL (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)	37.98
2	51.2/696 dated 03.01.2008	400 KV	400 KV D/C Vadavi - Halvad line	5.00
3	51.2/696 dated 03.01.2008	400 KV	400 KV S/C Mundra - Hadala line LILO at Halvad	5.95
4	59.11/878 dated 08.10.2009	400 KV	400 KV D/C Kasor - Amreli line (Quad Moose)	61.13
5	99.10/1590 dated 09.02.2015	400 KV	400 KV D/C Wanakbori TPS - Soja	20.93
6	99.10/1590 dated 09.02.2015	400 KV	400 KV D/C Soja - Zerda line (Twin moose)	21.00
7	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	57.27
8	40.19/473 dated 31.05.2007	400 KV	400 KV D/C Adani - Zerda line-1	54.14
9	104.13/1708 dated 21.11.2015	400 KV	400 KV D/C Shapar - Fedra line (twin moose)	72.70
10	104.13/1708 dated 21.11.2015	400 KV	400 KV D/C Hadala - Shapar line (Twin Moose)	39.41
11	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)	2.59
12	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	17.57
13	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 Total				
1	51.2/696 dated 10.11.2008	220 KV	220 KV D/C Gavasad - Salejda line	0.76



Sr. No.	Br. No.	Voltage class	Name of Transmission line	Capex (Rs. Crore)
	62.8/950 dated 07.04.2010			
2	B.R. No. 86.6/1347 dated 04.02.13	220 KV	LILO of 220 KV S/C Vadavi - Chhatral line at 220 KV Santej substation	0.20
3	BR no. 114.6/1908 dated 18.09.17	220 KV	220KV D/C Vadodara (PG) – Jambuva line	0.22
4	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	0.11
5	77.3/1203 16.12.2011 92.7/1444 12.12.2013	220 KV	220 kV D/C BECL- Botad	1.48
6	59.11/878 08.10.2009	220 KV	220kV D/C Halvad - Sadla line with AL-59 conductor	3.18
7	119.6/1995 Dtd. 01.06.2018	220 KV	220kV D/C Chorania - Salejada line with AL-59 conductor	1.72
8	75.10/1184 dated 06.09.2011	220 KV	220 KV D/C Bhatia - Kalavad line	4.30
9	B.R.No. 75.10/1184 dated 06-09-11	220 KV	220 KV D/C Kalavad - Kangasiali	19.33
10	84.11/1325 dated 05.10.12	220 KV	220 KV D/C Chorania - Botad line	13.53
11	107.12/1772 dated 20.05.2016	220 KV	LILO of one circuit of 220 KV D/C Ukai(Thermal) - Achhalia 3 line at 220 KV Virpore	0.30
12	107.12/1772 dated 20.05.2016	220 KV	LILO of 220 KV S/C Ukai(Thermal) - Achhalia line - 2 at 220 KV Virpore	1.03
13	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)	11.04
14	BR. No. 105.8/1731 dated 11.02.16	220 KV	LILO of both circuits of 220 KV D/C Gandhinagar TPS - Soja/Ranasan line at Chiloda substation	2.38
15	95.2/1502 dated 24.06.2014	220 KV	220 KV D/C Bhogat (400 KV) - Moti Gop line	1.88



Sr. No.	Br. No.	Voltage class	Name of Transmission line	Capex (Rs. Crore)
16	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	0.53
17	99.10/1590	220 KV	LILO of one circuit of 220 KV D/C Kasor - Gavasad line at 220 KV Gotri substation	8.66
18	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	5.62
19	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	2.55
20	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 - Bhatia line	0.24
21	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	4.26
22	84.11/1325 dated 05.10.12	220 KV	220 KV D/C Pirana (PG) - Barejadi line	0.28
23	100.8/1606 30.03.2015	220 KV	220 KV D/C Amreli - Babara line	0.56
24	100.8/1606 30.03.2015	220 KV	220 KV D/C Babara - Shapar line	11.79
25	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	18.63
26	99.10/1590 dated 09.02.15	220 KV	LILO of 220 KV S/C Vallabhipur - Vartej line at 220 KV Maglana substation	0.41
27	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
28	B.R No. 119.6/1995 dated 01.06.2018	220 KV	LILO of both ckt of 220kV D/C Shapar - Babra at Kamlapur (M/C) (4 x 15 = 60CKM)	2.28



Sr. No.	Br. No.	Voltage class	Name of Transmission line	Capex (Rs. Crore)
29	129.4/2138 dated 15.06.2020	220 KV	LILO of 220 KV S/C Gondal – Padavala – Shapar – Sadla line at 220 KV Kamlapur	1.48
30	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
31	B.R No. 119.6/1995 dated 01.06.2018	220 KV	220 KV D/C Vapi-II (ISIS substation) – Atul (GETCO) line (AL-59 conductor)	1.75
32	B.R No. 119.6/1995 dated 01.06.2018	220 KV	LILO of 220 KV S/C Chikhli (Ambetha) – Vapi (GETCO) line at Vapi-II (ISTS substation) (AL-59 conductor)	1.40
33	B.R No. 119.6/1995 dated 01.06.2018	220 KV	LILO of 220 KV D/C Bhatia - Kalavad line at Khambhalia-II	8.28
34	123.3/2049 dated 22.01.2019	220 KV	LILO of one circuit of 220KV D/C Tharad-Deodar at 220KV Mera S/S	3.42
35	123.3/2049 dated 22.01.2019	220 KV	220 KV D/C Mera - Agathala line	3.04
36	123.3/2049 dated 22.01.2019	220 KV	LILO of both circuit of 220KV D/C Kansari-Deodar at 220KV Bhildi	10.42
37	123.3/2049 dated 22.01.2019	220 KV	LILO of both of 220kV S/C Anjar - Welspun and 220kV S/C Shivlakha - Welspun at Gandhidham B S/s (2 x 1.5KM, 1200sq. Mm)	15.53
38	B.R No. 114.6/1908 dated 18.09.2017	220 KV	LILO of 220 KV S/C Wanakbori - Asoj & 220 KV S/C Wanakbori - Vyankatpura lines at 220 KV Sevalia substation with M/C tower or 2 X D/C Tower	9.00
39	109.16/1816 dated 27.10.2016	220 KV	LILO of bothcircuit of 220KV D/C Tharad-Dhanera at 220KV Rah S/S	4.21
40	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)	0.46



Sr. No.	Br. No.	Voltage class	Name of Transmission line	Capex (Rs. Crore)
41	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)	6.29
42	129.4/2138 dated 15.06.2020	220 KV	LILO of 220 KV S/C Jetpur - Visavadar line at 220 KV Bhesan substation	2.10
43	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
44	129.4/2138 dated 15.06.2020	220 KV	220 KV D/C Bhesan - Patkhilori line AL – 59 conductor	3.06
45	129.4/2138 dated 15.06.2020	220 KV	LILO of one circuit of 220 KV Amreli - Babara line at 220 KV Patkhilori	10.49
46	129.4/2138 dated 15.06.2020	220 KV	220 KV D/C Patkhilori - Gomta line	4.37
47	130.9/2173 dated 20.08.2020	220 KV	LILO of both Ckt of 220 kV D/C Motigop - Kalawad line at 220 kV Babarzar substation	9.42
48	130.8/2172 dated 20.08.2020	220 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)	56.00
49	130.8/2172 dated 20.08.2020	220 KV	220 kV D/C Raghanesda - Vav (Khimanvas) with AL-59 Conductor	24.51
		220 kV Tot	al	305
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	1.47
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	0.52
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	10.30
4	95.2/1502 dated 24.06.2014	132 KV	132 KV S/C Sankhari (400 KV) - Deesa line	12.06



Sr. No.	Br. No.	Voltage class	Name of Transmission line	Capex (Rs. Crore)		
5	114.6/1908 dated 18.09.2017	132 KV	132 KV Karamsad - Nadiad line	0.47		
6	114.6/1908 dated 18.09.2017	132 KV	132 KV Nadiad - Mahemdavad line	0.50		
7	105.8/1731 dated 11.02.2016	132 KV	LILO of both circuits of 132 KV D/C Shikarpur WF – Samakhiali line at Vondh substation (M/C line with OPGW)	4.96		
8	105.8/1731 dated 11.02.2016	132 KV	132 KV S/C Samakhiali - Vondh line • Part utilization of old 132 KV Samakhiali - Anjar line,• New 132 KV D/C line from Vondh end (one circuit 66 KV chirai line termination and other circuit 132 KV Samakhiali line termination at Vondh end)	0.61		
9	100.8/1606 30.03.2015	132 KV	LILO of both circuits of 132 KV D/C Jasdan Wind farm - Jasdan line at 220 KV Babara substation on M/C Tower line (132 KV JASDAN - THIOLIA LINE LILO to 220 kV Babra)	5.22		
10	Yet to Approve	132 KV	132 kV Gondal-Bhayavadhar LILO at Supedi	0.74		
Total 132 kV						
Total EHV						
66 kV (Lump sum)						
	Total					



Table 8-3: ARR FY 2021-22: REACTOR CAPACITOR BANKS AND OPGW (Rs. CRORE)

Board Resolution No. & Date	Name of substation or Transmission Line	Name of Transmission Element	2021- 22
B.R No. 114.6/1908 dated 18.09.2017	Providing Optical Fibre based communication by laying OPGW on existing lines of 132 KV and above with PSDF support	Total Cost of the Project	115.33
B.R No. 119.6/1995 dated 01.06.2018	GEC-II	400 KV, 50 MVAR line Reactor for 400 KV D/C Bhachunda - Shivlakha & Shivlakha - Veloda lines : 50 MVAR line rector for each circuits at both the ends - 8 nos	0
		66 KV, 20 MVAR Capacitor bank	0.77
	Requirement of 66	66 KV, 10 MVAR Capacitor bank	2.61
	KV and 11 KV	11 KV 7.5 MVAR Capacitor bank	1.12
	Capacitor banks in	11 KV 5 MVAR Capacitor bank	2.50
	GETCO substation	11 KV 2.5 MVAR Capacitor bank	9.11
		Cost for Capacitor Banks	16

