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



#### **Tariff Order**

Truing up for FY 2022-23 and

Determination of ARR and Tariff for FY 2024-25

For

# Gujarat Energy Transmission Corporation Limited (GETCO)

Case No. 2316 of 2024 1st June, 2024

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# GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)

#### **GANDHINAGAR**

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#### **ABBREVIATIONS**

ABT	Availability Based Tariff
A&G	Administration and General
ARR	Aggregate Revenue Requirement
ATC	Annual Transmission Charges payable by Long-Term user or Medium-
AIC	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
DISCOMs	Distribution Companies
EA 2003	Electricity Act, 2003
FGI	Federation of Gujarat Industries
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
GoI	Government of India
GSECL	Gujarat State Electricity Corporation Limited
GUVNL	Gujarat Urja Vikas Nigam Limited
HVDC	High Voltage Direct Current
IPP	Independent Power Producer
kV	kilo Volt
kVAh	kilo Volt Ampere hour
kWh	kilo Watt hour
MCLR	Marginal Cost of Funds based Lending Rate
MVA	Mega Volt Ampere
MW	Mega Watt
MYT	Multi-Year Tariff
O&M	Operations & Maintenance
OEM	Original Equipment Manufacturer
PPA	Power Purchase Agreement
R&M	Repair & Maintenance
RE	Renewable Energy
RoE	Return on Equity



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



# Before the Gujarat Electricity Regulatory Commission at Gandhinagar

Case No. 2316 of 2024

Date of the Order: 1st June, 2024

#### **CORAM**

Anil Mukim, Chairman

Mehul M. Gandhi, Member

Shri S.R. Pandey, Member

**ORDER** 



#### 1. Background and Brief History

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

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

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

Four Distribution Companies, namely:

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

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

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



# 1.2. Commission's Order for approval of True up of FY 2020-21 and Determination of tariff for FY 2022-23

The Commission vide its Order dated 30<sup>th</sup> March, 2022 in Case No. 2026 of 2021 approved the Truing up for FY 2020-21 and determined the Tariff for FY 2022-23.

# 1.3. Commission's Order for approval of True up of FY 2021-22 and Determination of tariff for FY 2023-24

The Commission vide its Order dated 31st March, 2023 in Case No. 2163 of 2022 approved the Truing up for FY 2021-22 and determined the Tariff for FY 2023-24.

#### 1.4. Background of the present Petition

Gujarat Energy Transmission Corporation Limited (hereinafter referred to as "GETCO" or the "Petitioner") has filed the present Petition on 11<sup>th</sup> January, 2024 for the Truing up for FY 2022-23 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 was applicable for determination of tariff in all cases covered under the Regulations from 1st April, 2016 until 31st March, 2021. Subsequently, the Commission vide its Suo-Motu Order No. 7 of 2020 dated 22nd December, 2020 deferred the notification of the Regulations by one year and directed the Licensees / utilities to file the tariff application for the FY 2021-22 based on the principles and methodologies as provided in the GERC (MYT) Regulations, 2016. Similarly, the Commission vide Order in Suo-Motu Petition No. 2264 of 2023 dated 5th December, 2023 directed all the concerned utilities to file the tariff application for approval of true-up for FY 2022-23, Approval of Aggregate Revenue Requirement (ARR) and Determination of Tariff for FY 2024-25 on or before 12th January, 2024 based on principles and methodology as provided in the GERC (MYT) Regulations, 2016.

Regulation 17.2 (b) of the GERC (MYT) Regulations, 2016 provides for submission of Petition comprising of Truing up for FY 2022-23, ARR for FY 2024-25, revenue from the sale of power at existing tariffs and charges for FY 2024-25, and Revenue Gap or Revenue Surplus for FY 2024-25.



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

GETCO has filed the current Petition for Truing up for FY 2022-23 and Determination of ARR and Tariff for FY 2024-25 on 11<sup>th</sup> January, 2024. After Technical Validation of the Petition, it was registered on 24<sup>th</sup> January, 2024, as Case No. 2316 of 2024. As provided under Regulation 29.1 of the GERC (MYT) Regulations, 2016, the Commission has proceeded with this Tariff Order.

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

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

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

Sl. No. Name of Newspaper		Language	Date of Publication
1	The Indian Express	English	30/01/2024
2	Sandesh	Gujarati	30/01/2024

The Petitioner also placed the Public Notice and the Petition on its website (www.getcogujarat.com), for inviting objections and suggestions on the Petition. The interested parties/stakeholders were asked to file their objections / suggestions on the Petition on or before 29<sup>th</sup> February, 2024.

The Commission also placed the Petition on its website (<u>www.gercin.org</u>) 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** 

Sl. No.	Name of Newspaper	Language	Date of Publication
1	The Indian Express	English	29/02/2024
2	Divya Bhaskar	Gujarati	28/02/2024
3	Gujarat Samachar	Gujarati	28/02/2024

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 Public Hearing at the Commission's Office for the Petition on  $4^{th}$  March, 2024 at 11.30 AM.

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

Table 1-3: List of Stakeholders

Sl. No.	Name of Newspaper	Written Submission	Oral Submission	Participated in the Public hearing
1	Federation of Gujarat Industries (FGI)	Yes	Yes	Yes
2	Torrent Power Limited	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.

#### 1.6. Contents of this Order

The Order is divided into Seven Chapters as under: -

- (a) The **First Chapter** provides the background of the Petitioner, the Petition and details of the Public Hearing process and the approach adopted for this Order;
- (b) The **Second Chapter** outlines the summary of GETCO's Petition;
- (c) The **Third Chapter** provides a brief account of the Public Hearing process, including the objections raised by various stakeholders, GETCO's response and the Commission's views on the response;
- (d) The **Fourth Chapter** deals with the Truing up for FY 2022-23;
- (e) The **Fifth Chapter** deals with the Aggregate Revenue Requirement (ARR) for FY 2024-25;
- (f) The **Sixth Chapter** deals with the determination of Tariff for FY 2024-25;
- (g) The **Seventh Chapter** deals with the compliance of directives.



#### 1.7. Approach of this Order

The GERC (MYT) Regulations, 2016, provide for "Truing up" of the previous year and determination of tariff for the ensuing

The Commission vide Order in Suo-Motu Petition No. 2264 of 2023 dated 5<sup>th</sup> December, 2023 directed all the concerned utilities to file the tariff application for approval of true-up for FY 2022-23, Approval of ARR and Determination of Tariff for FY 2024-25 on or before 12<sup>th</sup> January, 2024 based on principles and methodology as provided in the GERC (Multi- Year Tariff) Regulations, 2016.

Accordingly, GETCO has approached the Commission with the present Petition for Truing up for FY 2022-23 and determination of ARR and tariff for FY 2024-25.

The Commission has undertaken Truing up for FY 2022-23, based on the submissions of the Petitioner. The Commission has undertaken the computation of Gains and Losses for FY 2022-23, based on the audited annual accounts and prudence check.

While truing up for FY 2022-23, the Commission has been primarily guided by the following principles:

- Controllable parameters have been considered at the level approved as per the Tariff 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 2022-23 has been considered, based on the GERC (MYT) Regulations, 2016.

The Commission has determined ARR and Tariff for FY 2024-25 as per the GERC (MYT) Regulations, 2016 and its amendments thereof as the base. Truing up of FY 2024-25 shall be carried out based on the principles and methodology adopted in GERC (MYT) Regulations, 2016.



#### 2. Summary of GETCO's Petition

#### 2.1. Summary of GETCO's Petition

This Chapter highlights the summary of the Petition for True-Up of FY 2022-23 and Determination of ARR and Tariff for FY 2024-25.

#### 2.2. True-Up of FY 2022-23

GETCO submitted the Petition on 11<sup>th</sup> January, 2024 seeking approval of Truing up of ARR for FY 2022-23. GETCO has computed its ARR for FY 2022-23 as a part of the True-up of FY 2022-23. GETCO has presented the actual cost components based on audited Annual Accounts for FY 2022-23. A summary of the proposed ARR for Truing up for FY 2022-23 compared with the approved final ARR for FY 2022-23 in the Tariff Order dated 31<sup>st</sup> March, 2022 is presented in the Table below:

Table 2-1: Summary of Truing up for FY 2022-23 (Rs. Crore)

Sl. No.	Particulars	Approved in the Tariff Order	Actual Claimed	Deviation +/ (-)
1	Operation & Maintenance Expenses	2,147.57	1,825.69	321.88
2	Depreciation	1,361.66	1,394.37	(32.71)
3	Interest & Finance Charges	497.18	479.63	17.55
4	Interest on Working Capital	86.15	90.46	(4.31)
5	Return on Equity	1,154.15	1,175.66	(21.51)
6	<b>Total Fixed Costs</b>	5,246.71	4,965.81	280.90
7	Add: Provision for Tax	314.73	588.48	(273.75)
8	Total Transmission Charges	5,561.44	5,554.29	7.15
9	Less: Expenses Capitalized	239.00	382.85	(143.85)
10	Less: Non-Tariff Income	493.10	532.37	(39.27)
11	Add: Incentive for Target Availability	<u> </u>	48.49	(48.49)
12	Aggregate Revenue Requirement	4,829.34	4,687.57	141.77

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



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

Sl. No.	Particulars	Approved in Tariff Order	Actual Claimed	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Operation & Maintenance Expenses	2,147.57	1,825.69	568.13	(246.26)
2	Depreciation	1,361.66	1,394.37		(32.71)
3	Interest & Finance Charges	497.18	479.63		17.55
4	Interest on Working Capital	86.15	90.46		(4.31)
5	Return on Equity	1,154.15	1,175.66		(21.51)
6	ARR (1 to 5)	5,246.71	4,965.81	568.13	(287.24)
7	Add: Provision for Tax	314.73	588.48		(273.75)
8	Less: Non-Tariff Income	493.10	532.37		(39.27)
9	Add: Incentive for Target Availability	-	48.49		(48.49)
10	Less: Expenses Capitalized	239.00	382.85		(143.85)
11	Total ARR	4,829.34	4,687.57	568.13	(426.36)
12	Net Gain / (Loss) on account of Controllable / Uncontrollable Factors			568.13	(426.36)
13	Gain on account of Controllable Factors to be passed on to Consumer (1/3 x Sr. No. 12)			189.38	
14	Losses on account of Uncontrollable Factors to be passed on to Consumer				(426.36)

Based on the above sharing of Gain and Loss, the Petitioner has claimed the following Gap for FY 2022-23.

Table 2-3: Gap for FY 2022-23, as submitted by GETCO (Rs. Crore)

Sl. No.	Particulars	Amount
1	Gain / (Loss) on account of Uncontrollable factor to be passed on to Beneficiaries for FY 2022-23	(426.36)
2	Gain / (Loss) on account of Controllable factor to be passed on to Beneficiaries ( $1/3^{rd}$ of Total Gain / (Loss) for FY 2022-23	189.38
3	Total Gain/ (Loss) of the true up to be addressed in the determination of tariff for FY 2024-25	(236.98)



#### 2.3. ARR and Tariff for FY 2024-25

In accordance with provisions of the GERC (MYT) Regulations, 2016, ARR for FY 2024-25 has been computed by GETCO as follows:

Table 2-4: ARR for FY 2024-25, as submitted by GETCO (Rs. Crore)

Sl. No.	Particulars	FY 2024-25
1	Operation & Maintenance Expenses	2,653.37
2	Depreciation	1,673.75
3	Interest & Finance Charges	553.98
4	Interest on Working Capital	117.76
5	Return on Equity	1,423.00
6	Contribution to Contingency Reserves	190.59
7	Total Fixed Costs	6,612.45
8	Less: Expenses Capitalized	427.90
9	Add: Provision for Tax	588.48
10	Total Transmission Charges	6,773.04
11	Less: Non-Tariff Income	532.37
12	Aggregate Revenue Requirement	6,240.67

GETCO has calculated the Transmission Tariff for FY 2024-25 after considering the Gap of FY 2022-23 as follows:

Table 2-5: Transmission Tariff for FY 2024-25 as submitted by GETCO (Rs. Crore)

Sl. No.	Particulars	FY 2024-25
1	Aggregate Revenue Requirement for FY 2024-25	6,240.67
2	Add / (Less): Revenue Gap / (Surplus) for FY 2022-23	(236.98)
3	Add: Unrecovered impact of implementation of 7th Pay Revision for FY 2020-21	(16.16)
4	Revised ARR	6,493.81
5	Total MW allocation	41,594.63
6	Transmission tariff (Rs/MW/day)	4,277.30

Further, GETCO has proposed recovery of transmission charges at 40.48 Paise/kWh for all types of Short-Term transactions.



#### 2.4. Prayers made by GETCO

In the present Petition, GETCO has made the following prayers:

- 1. "To admit this Petition seeking True up of FY 2022-23, Aggregate Revenue Requirement for FY 2024-25 and Tariff Proposal for FY 2024-25.
- 2. To approve the True up for FY 2022-23 and allow sharing of gains/ (losses) with the Consumers as per sharing mechanism prescribed in the GERC (MYT) Regulations, 2016.
- 3. To allow recovery of Revenue (Gap) / Surplus of FY 2022-23 as part of Tariff determination for FY 2024-25.
- 4. To approve Aggregate Revenue Requirement for FY 2024-25 as submitted by the Petitioner.
- 5. Pass suitable orders for implementation of Tariff Proposal for FY 2024-25 for making it applicable from 1st April, 2024 onwards.



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

#### 3.1. Public Response to the Petition

In response to the Public Notice inviting objections/suggestions from the stakeholders on the Petition filed by GETCO for Truing up for FY 2022-23 and determination of ARR and Tariff for FY 2024-25 under the GERC (MYT) Regulations, 2016, some consumers /Consumer organizations filed their objections/suggestions in writing, and also participated in the Public Hearing.

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

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

#### 3.2. Issue-wise Submissions and Replies

#### Issue No. 01: Shortfall in required Network capacity

The Objector submitted that looking to the progress of the network expansion with huge capital expenditure and actions like delayed creation of required network to control loading of elements within specified design capacity, it seems that this prime function to create needed network capacity is neglected.

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

In the period from FY 2016-17 to FY 2022-23, in Extra High Voltage (EHV) network expansion, GETCO has commissioned the following voltage-wise transmission network:

Voltage Class (kV)	Substation (Nos.)	Transmission Line (Ckm)
400 kV	7	840.25
270 kV	18	3528.52
132 kV	5	480.21
Total	30	4848.98

GETCO has analysed the commissioned network on the Grid System and it is found that with the commissioning of Transmission elements, the Transmission Grid of GETCO is further



strengthened, specially Central and Southern Gujarat, and tribal belts of Gujarat and Saurashtra region. The network addition has facilitated higher Renewable Energy (RE) integration and evacuation system and also improved the voltage profile and short circuit level of majority of locations.

For providing sustainable and reliable power, N-1 Contingency has been achieved, and overloading of the transmission elements was avoided. Further, significant addition of RE integration in the GETCO grid was achieved because of addition of the network.

Hence, GETCO has created the needed network appropriately in consultation with State utilities and DISCOM as per specific technical and design criteria for planning and development of the power system.

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

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

# Issue No. 02: Comparison of GERC Approved amounts with actual expenses last year

The Objector submitted that the Petitioner has incurred 40% lower expenditure in 400 kV substations and 65% lower expenditure in 400 kV lines, which indicates that GETCO is not able to match their targets of 400 kV system. GETCO has incurred 74% higher expenditure against the approved amounts for 66 kV substations, which indicates that the planning of proposed amounts was inadequate or they have created higher number of 66 kV substations as compared to that approved. Approved expenditure has not been utilised for capacitor bank. Total actual capital expenditure incurred is higher by 22% as compared to approved expenditure.

The Objector also sought the details regarding the transmission elements commissioned during FY 2022-23 with present status and updated commissioning schedules.

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

GETCO submitted that all the elements of a network are planned in an integrated manner. The planning also ascertains the various requirements at different voltage levels. The endeavour of such a comprehensive planning is to reduce the power losses and optimize the expenditures and revenues to the extent possible while maintaining the demand-supply balance. The variation of the actual expenditure from the approved expenditure for various



categories of new projects relate to the above-mentioned reasons. Also, the on-ground implementation of CAPEX is always an ongoing process. The non-utilisation/under-utilisation of funds allocated and variation of implementation plan is due to the impact of COVID-19, which resulted in delay in projects scheduled for commissioning at that time. Various important ongoing projects, mainly in Kutch region, are held up or having slow progress due to severe Right of Way (RoW) issues or because of objections by local farmers and associations. GETCO puts efforts to clear such pending issues and targets completion of projects at the earliest.

Further, with due diligence on respective ongoing projects and their progress level and making efforts, projects of FY 2021-22 delayed due to unexpected pandemic were competed in FY 2022-23. Also, to mitigate the government KSY planning obligations toward the transmission, GETCO has also completed such transmission projects, which are projected to be completed in next year, in advance.

Hence, higher capex may be seen on 66 kV elements, whereas lower capex is seen in case of 220 kV and 400 kV elements. Transmission network planned to be commissioned during FY 2022-23 with present status and updated commissioning schedule along with reasons for the deviation is also furnished by the Petitioner.

#### Commission's View

The Commission has noted the data submitted by GETCO regarding the capitalisation made during FY 2022-23. However, the Commission has given appropriate directive in this regard to GETCO as narrated in Chapter 7 of this Order.

#### Issue No. 03: Transmission Losses

The Objector submitted that the transmission losses projected by GETCO for FY 2024-25 is 3.84%, which is already achieved during FY 2022-23. Despite this, huge capex is planned to be incurred during FY 2023-24 and FY 2024-25 for expansion of the GETCO network. This needs to be looked in to with in-depth analysis of network power flow and all associated elements.

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

The transmission loss depends on numerous factors such as pocket wise generationdemand mismatch, loop power flow through elements at various voltage levels, type of load, seasonal demand variation, prolonged agriculture power supply, reactive power



requirement due to inductive load (Agriculture pump sets), ambient temperature, renewables, loss of generation / non-availability of generation in load centres due to merit order, etc.

Additional inter-State/inter-regional power flow through GETCO Network increases current flow and higher I<sup>2</sup>R losses on the State network.

Wind and solar power injection is mainly concentrated in remote locations of Saurashtra and Kutch area. With high wind and solar power injection, the generating stations located in South and Central Gujarat area are backed down on account of higher variable cost.

Transmission of huge wind and solar power available in Saurashtra, Kutch and north region to major load centres in South and Central Gujarat area through long transmission lines increases the I<sup>2</sup>R losses.

Absolute value of transmission loss cannot be predicted or controlled. Transmission loss is purely a technical loss. It is inevitable and varies according to power flow profile in reference to transmission system operation with respect to energy demand, energy supply and energy direction.

#### Commission's View

The Commission has noted the submission of GETCO on the projected transmission losses of 3.84% for FY 2024-25. This shall again be verified at the time of true-up exercise.

#### Issue No. 04: Annual Plans for expansion of network

The Objector submitted that GETCO has proposed huge investment for expanding its network. However, Gandhinagar TPS Unit No. 3 & 4, Ukai TPS Unit No. 3, 4 & 5, and Wanakbori TPS Unit No. 1,2,3,4,5 and 6 have completed more than 25/40 years, and generation at full capacity may not be possible and correction in capacity needs to be considered.

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



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

The Petitioner submitted that the STU network expansion is planned based on future demand requirements, harnessing Renewable Energy sources in the State, ISTS-STU interconnections to increase TTC/ATC for drawal/injection from ISTS grid, and operational feedback from SLDC and field offices. All planned transmission schemes are being finalized by STU after due diligence of having consultative process through a joint meeting of DISCOM representatives. All planned schemes are being reviewed periodically and prioritised as per DISCOM, SLDC and field inputs.

Further, the retirement and de-rated capacity of any generation station is decided by the Generating Company and procurer Company, hence, full capacity is considered while commissioning. The network addition is planned by GETCO based on detailed study of the requirements and also taking into consideration the existing network and its loading. Based on the same, an integrated development plan, which includes the schemes to be developed by GETCO to strengthen/augment the existing network capacity is developed.

Further, the proposal/requirements received from the DISCOMs are also taken into consideration while developing this plan. GETCO creates sub-transmission network, i.e., 66 kV system, purely on the demand of DISCOMs. Procedure for the creation of 66 kV substation was discussed at length during review meeting of the performance of Distribution Companies and GETCO. it was decided that DISCOMs have to decide judiciously on the need for creation of new 66 kV substations and submit the proposal to GETCO. Further, proposal for creation of new 66 kV substations is being approved by the MD/Board of DISCOM before sending to GETCO along with priority list. Based on the proposal received from DISCOM, GETCO applies for the land to the Revenue Department and as per the availability of land, GETCO creates new 66 kV substations. Apart from that, every year, GETCO circulates the list of the upcoming new 66 kV substations to all DISCOMs and requests them to complete the downstream network so that load can be taken as soon as substations are commissioned. Loading of important elements are being updated on GETCO website on quarterly basis.

#### Commission's View

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



#### **Issue No. 05: Compliance of Directives**

The Objector submitted that the Petitioner has complied partly with the directives and has not furnished the data in its Petition. The Petitioner should submit the data along with the Petition for study.

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

GETCO has submitted the compliance of Directive 1: Submission of peak and average loading of transmission elements to the Commission.

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

The Commission has noted the compliance of the directive.

#### **Issue No. 06: Voltage-wise Transmission Charges and Losses**

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

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

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

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



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

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

Further, this approach is in contradiction with the proviso of Regulation 21(2)(i) of the GERC (Terms and Conditions of Intra-State Open Access) Regulations, 2011, as amended from time to time.

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



purview of above referred provisions of the Regulations.

*"*.....

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

However, the provision related to dedicated transmission systems is not implemented and the cost is socialised whereby all have to bear such cost in intra-State system. Therefore, necessary changes in accordance with the provisions of the Regulations read with the provisions of the EA 2003 are required to be implemented.

Further, the reference was made to RE projects during the hearing held on 28th February, 2023. In case RE project is connected at lower voltage and supplies power to upstream network, cost of evacuation of power from such RE projects is to be borne by specific generator including TPL. However, consumers of TPL should not be asked to bear the cost of such generators.

The Commission may direct GETCO to furnish necessary details for determination of transmission charges in accordance with provisions of GERC (Terms and Conditions of Intra-State Open Access) Regulations, 2011 read with GERC (MYT) Regulations, 2016.

Further, the Objector submitted that there is no bar in the existing regulatory framework for the Commission to determine voltage-wise transmission charges and losses. The Objector requested the Commission to determine the Transmission Charge and Losses of GETCO network for 220 kV and above voltage level and below voltage level for FY 2024-25.

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

The Petitioner submitted that the power system network in the State as well as at national level is operated as an integrated power network. The power flow in the integrated power network depends upon factors like location of load and power generation, line impedance of network element, etc. Therefore, when the entity is drawing power at particular voltage level, the power flow in the network not only involves network element of that particular voltage level or higher voltage level but also involves network element of lower voltage level. Whenever entity is drawing power at 220 kV voltage level, the power flow in the network also involves network element of voltage level less than 220 kV. Therefore, it would not be appropriate to say that as TPL is drawing power at 220 kV, it is not utilizing transmission network of lower voltage level, i.e., lower than 220 kV voltage level. All the



entities concerned are required to bear the network charges and losses determined on the basis of network as a whole, involving transmission elements of all voltage levels. Considering the above peculiarity of integrated power network, even in case of PGCIL, the transmission charges and losses are not differentiated on the basis of voltage-level connectivity.

In case of inter-State Transmission lines, during the old regime, calculation was based on Postage Stamp method, and the applicable transmission charges were uniform irrespective of voltage level at which the user of transmission line is connected. The present regime of Point of Connection (PoC) charges mechanism for inter-State transmission lines 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 the Petitioner. The PoC mechanism implemented at inter-State level is yet to be introduced at intra-State level, and the present postage-stamp method will continue till such time the PoC mechanism is implemented at intra-State level.

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

# Issue No. 07: Duplication of Losses in Dholera SIR Distribution Licence area

The Objector, M/s Torrent Power Limited (TPL), submitted that TPLD- has commenced its operations during the third Quarter of FY 2023-24. At present, TPL-D is connected at 220 kV level through LILO of network between GETCO Pacham S/s and GETCO Dholera S/s.



As per the Commission's approved Tariff Order for FY 2023-24 read with the GERC (MYT) Regulations 2016, GETCO is required to levy the actual transmission losses on monthly basis from all entities availing open access in the State network. However, in case of TPL-D, GETCO has levied additional line losses for the network between GETCO Pacham S/s and GETCO Dholera S/s, in addition to the State transmission losses. This amounts to additional recovery of transmission losses from TPL-D in addition to intra-State transmission losses being charged by GETCO. The recovery of such additional losses is contrary to the Commission's Regulations and Tariff Order and amounts to discrimination.

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

GETCO submitted that TPL-D, vide letter dated 7<sup>th</sup> April 2021, had expressed concerns regarding reliability of power to consumers in its licence area in case only single source is made available. TPL-D requested for dual feed of power to ensure uninterrupted power in its licence area.

GETCO submitted that through letter dated 3rd June 2021, GETCO had finalized and conveyed the metering scheme for connectivity of TPL-D as Distribution Licensee in Dholera 4A substation, considering the stage-wise implementation of the scheme, as and when the elements are commissioned. In the above-said letter, GETCO had clearly mentioned as under:

- "2. On commissioning of 220 kV GETCO solar substation at Dholera the metering scheme will be with one radial line from Paccham and one line from Solar Dholera substation of GETCO. Metering CT PT will be at GETCO Solar end as per specification attached. Stage2. Main meter for purpose of Tariff metering will be at GETCO substations. The GETCO will add notional loss of 0.6% to the reading at the bus coupler placed at Torrent substation in dholera to finally certify the energy at 220 kV Fedra substation till the final Stage 3 is established and commissioned.
- 3. On commissioning of 400 kV GIS substation of GETCO at Dholera solar ark the metering scheme will be through D/C dedicated lines from 220 kV Dholera substation at GETCO end as shown in Stage 3." (emphasis added)

Further, TPL, through mail dated 29th February 2024 to SLDC has submitted the said GETCO letter dated 3rd June 2021 for carrying the energy accounting as finalized methodology. In the said email, TPL-D has acknowledged that the energy measurement for TPL-Dholera till commissioning of 400 kV GIS substation of GETCO at Dholera Solar Park (i.e. Stage 3) shall be as finalised through GETCO letter dated 3rd June 2021.



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

The Commission has noted the submission of GETCO. It is clear from the documents and correspondence that TPL-D, in its recent mail dated 29th February 2024, has itself acknowledged in its correspondence with SLDC that the energy measurement for TPL-Dholera, till commissioning of 400 kV GIS Substation of GETCO at Dholera Solar Park (Stage III), shall be as finalised in accordance with GETCO letter dated 3rd June 2021. The said GETCO letter clearly stipulates that notional loss of 0.6% shall be added to the reading at the bus coupler placed at Torrent substation in Dholera to finally certify the energy at 220 kV Fedra substation, till the final Stage 3 is established and commissioned. In view of the above, the Objector's contention that GETCO is discriminating against TPL-D by incorrectly charging additional losses, is not acceptable.



#### 4. Truing up for FY 2022-23

#### 4.1. Introduction

This Chapter deals with the Truing up for FY 2022-23.

While doing 'Truing up' of various components of ARR for FY 2022-23, the actuals for FY 2022-23 are compared with the approved ARR as per the Tariff Order issued on 30<sup>th</sup> March, 2022.

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 has incurred significant capital expenditure for construction of transmission lines and substations during FY 2022-23.

GETCO has submitted the actual capital expenditure at Rs. 3,649.67 Crore for FY 2022-23, as against Rs. 2,968.44 Crore approved for FY 2022-23 in the Order dated 30<sup>th</sup> March, 2022. The actual Capitalisation for FY 2022-23 is submitted as Rs. 3,908.26 Crore, as against approved Capitalisation of Rs. 2490.49 Crore. GETCO has incurred this expenditure in construction of new substations and transmission lines required for strengthening of the transmission network of GETCO.

Further, GETCO submitted that the Commission in its Tariff Order in Case No. 2026 of 2021 dated 30<sup>th</sup> March, 2022 has considered capex for FY 2022-23 based on the average capex done by GETCO in past five years. The relevant part of the same is reproduced below:

"The Commission notes that the Capex and Capitalisation proposed by GETCO for FY 2022-23 is higher than the average capex actually achieved by GETCO in past 5 years. Hence, for the purpose of approving ARR for FY 2022-23, the Commission has considered the Capex based on average of last 5 years Capex by GETCO. However, all Projects proposed by GETCO are approved, and actual capex



and capitalisation achieved by GETCO shall be subject to final adjustments as per Regulations/Prudence check at the time of truing up. The complete list of CAPEX Schemes approved by the Commission in this Order for FY 2022-23 is given at Annexure I to this Order." (emphasis added)

Thus, the Commission had mentioned that all the projects proposed by GETCO are approved and the actual capex proposed by GETCO shall be subject to final adjustments as per Regulations/prudence check at the time of truing up. GETCO has incurred the actual expenditure in construction of new substations and transmission lines required for strengthening of the transmission network of GETCO. The comparison of CAPEX approved by the Commission and actual capital expenditure incurred during FY 2022-23 is shown below:

Table 4-1:Capital Expenditure submitted by GETCO for FY 2022-23 (Rs. Crore)

Sl. No.	Particulars	Approved	Actual	
New Projects				
1	765 kV Substations	-	-	
2	765 kV Lines	-	-	
3	400 kV Substations	116.50	68.45	
4	400 kV Lines	365.33	158.87	
5	220 kV Substations	343.58	598.17	
6	220 kV Lines	178.23	220.60	
7	132 kV Substations	0.80	12.82	
8	132 kV Lines	14.48	16.77	
9	66 kV Substations	460.00	798.62	
10	66 kV Lines	843.20	914.03	
11	Capacitor Bank	20.00	0.15	
12	Reactor and Reactor Bay	-	2.16	
	Total	2,342.12	2,790.65	
Renovation & Modernisation				
1	Renovation and Modernization	278.14	255.44	
2	Augmentation of Substation/Lines	226.03	533.93	
3	Replacement of RTU	-	-	
	Total	504.17	789.37	
1	City Development Plan	-	-	
2	OPGW	118.14	66.81	
3	Supply of LDMS System with Firewall and Router	4.00	2.84	



Sl. No.	Particulars	Approved	Actual
	Capital Expenditure Plan	2,968.44	3,649.67

GETCO submitted that as per the Audited Accounts of FY 2022-23, GETCO has capitalised assets of Rs. 3,924.36 Crore, which also include capitalised figure of SLDC assets of Rs 16.11 Crore. In the present Petition, GETCO has not claimed any disallowed capitalization over and above the actual capitalization for FY 2022-23. Hence, total capitalization for FY 2022-23 works out to Rs. 3,908.26 Crore (Rs 3,924.36 Crore of consolidated GETCO assets – Rs 16.11 Crore of SLDC capitalised assets).

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

Sl. No.	Particulars	Approved	Actual
1	CAPEX	2,968.44	3,649.67
2	Capitalization	2,490.49	3,908.26
3	Consumer Contribution/Grants	432.12	442.44
4	Debt	1,440.86	2,426.07
5	Equity	617.51	1,039.75

Based on the capitalisation, the addition of number of substations and transmission lines during FY 2022-23, as submitted by GETCO, is shown in the following Table:

Table 4-3: Network Addition as submitted by GETCO

	1		
Sl. No	Particulars	Substations (Nos.)	Transmission Line (Ckt-km)
1	400 kV	-	214.14
2	220 kV	4	300.11
3	132 kV	1	62.42
4	66 kV	99	2,326.84
5	33 kV	-	-
	Total	104	2,903.51

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

The Commission notes that GETCO has submitted the actual capitalisation of Rs. 3,908.26 Crore as against the approved amount of Rs. 2,490.49 Crore, after deducting the capitalisation of SLDC. The Commission also notes that GETCO has submitted the details of date of charging and load of substations and lines capitalised during FY 2022-23, along with the Petition.



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

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

"..

The Commission notes that Regulation 34 of the GERC (MYT) Regulations, 2016 specifies that assets, which have been part of the project but have not been put to use, will not be considered for capitalisation. The Commission in earlier Orders has relied on the Certificate of Chief Electrical Inspector (CEI). The Commission understands that CEI Certificate provides for safety norms. Moreover, it is clear that assets cannot be put to use before certification of CEI. Hence, Certificate of CEI is considered as one of the milestones for asset to be put to use. Further, in some cases, it is observed that after issuance of Certificate of CEI, the respective transmission assets are not being charged on account of delay in connectivity from lower voltages, etc. However, it is expected that transmission works are to be in co-ordination with Distribution Licensee or Beneficiaries, so that there would be optimum utilisation of assets. In light of the foregoing analysis, the Commission, while undertaking prudence check, has considered the actual capitalisation based on CEI certification as well as actual power flow.

..."

Similar approach has been adopted by the Commission in the present Order for approving the capitalisation for FY 2022-23. The Commission sought the relevant details from GETCO.

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

The Commission notes that while undertaking truing up for FY 2021-22, it has disallowed the capitalisation of Rs. 92.33 Crore in the true up of FY 2021-22 with



consequent impact on other elements of ARR. GETCO was directed to remove the asset value from its Books of Accounts and also not to claim any kind of capitalisation through the ARR in future against development of RE evacuation network in respect to Radhanesda and Dholera Solar Park. It is noted that in its Petition, GETCO has submitted that it has filed Review Petition No. 2220 of 2023 claiming that the stated bays and transmission lines have been commissioned by GETCO and are in use, and the cost of the same needs to be recovered through ARR as the funding of these lines has been borne by GETCO.

In reply to the Commission's queries, vide Reply dated  $19^{th}$  April 2024, GETCO has submitted that the actual capitalisation claimed for FY 2022-23 "includes capitalisation during FY 2022-23 towards (a) 220 kV Radhanesda S/S-Rs. 93,41,368.80 & (b) Radhanesda-Vav 220 kV line No. 1-Rs. Rs. 83,51,068.34 from the total capitalisation claim in Truing up of FY 2022-23."

However, the Commission is yet to issue its Order on the Review Petition No. 2220 of 2023, and hence, the impact of the same, if any, cannot be considered at this stage. Accordingly, as the original capitalisation against Radhanesda and Dholera Solar Park has been disallowed, the Commission has disallowed the additional capitalisation of Rs. 1.769 Crore (Rs. 0.934 Crore + Rs. 0.835 Crore) against the actual capitalisation claimed by GETCO for FY 2022-23.

The actual capitalisation allowed by the Commission for FY 2022-23, and the funding considered by the Commission, are shown in the following Table:

Table 4-4:Capitalisation approved for FY 2022-23 (Rs. Crore)

SL. No.	Particulars	Claimed	Approved after true-up
1	Capitalisation as per accounts	3,924.36	3,924.36
2	Less: Net Capitalisation for SLDC	16.11	16.11
3	Less: Capitalisation disallowed		1.77
4	Net Capitalisation Approved	3,908.25	3,906.49

The funding of capitalization approved for FY 2022-23 is shown in the following Table:



Table 4-5: Funding of Capitalisation approved for FY 2022-23 (Rs. Crore)

SL. No.	Particulars	Claimed	Approved after true-up
1	Grant and Consumer Contribution	442.44	442.44
2	Debt	2,426.07	2,424.83
3	Equity	1,039.74	1,039.21
4	Capitalisation Approved	3,908.25	3,906.49

### 4.3. O&M Expenses

#### Petitioner's Submission

The normative O&M Expenses have been computed in accordance with the norms specified in Regulation 68.2.1 of the GERC (MYT) Regulations, 2016, based on the number of bays and length of transmission lines. GETCO has computed the normative O&M expenses of Rs. 2,150.64 Crore in the truing up for FY 2022-23, as against Rs. 2,147.57 Crore approved in the Order dated 30th March, 2022.

GETCO has submitted the addition of transmission lines and bays during FY 2022-23 as shown in the Table below:

Table 4-6: Network addition by GETCO in FY 2022-23 (Rs. Crore)

Sl. No	Voltage level	Sub-stations (No.)	Transmission Lines (ckt. km)
1	400 kV	-	214.14
2	220 kV	4	300.11
3	132 kV	1	62.42
4	66 kV	99	2,326.84
5	33 kV	-	-
	Total	104	2,903.51

GETCO has submitted that the Commission had approved 15,720 bays as the closing bays for FY 2021-22 and 64,123 ckt. km of transmission lines as the closing line length for FY 2021-22 in its Order in Case No. 2163 of 2022 dated 31st March 2023. However, in the stated Order, the Commission disallowed capitalisation and the related 0&M cost for 8 Bays in respect of 220 kV Radhanesda substation and 71.08 ckt. km in respect to 220 kV D/C Radhanesda - Vav (Khimanavas PGCIL) Line.

GETCO stated that it has submitted a Review Petition No. 2220 of 2023 claiming that the stated 8 bays and 71.08 ckt. km of transmission lines has been



commissioned by GETCO and are in use. Further, the funding of these lines has been borne by GETCO and the same needs to be recovered through ARR apart from other costs.

Accordingly, based on the Review Petition No. 2220 of 2023, GETCO has added 8 bays and 71.08 ckt. km transmission line length to the approved closing bays for FY 2021-22 and closing line length for FY 2021-22 and suitable effect has been considered in the opening numbers of bays and ckt. km for FY 2022-23, as shown in the table below:

Table 4-7: Summary of opening balance of bays and ckt. km of transmission lines considered by GETCO for FY 2022-23

Sl. No	Particulars	Unit	Value
1	Approved closing balance of Bays for FY 2021-22	Nos.	15,720.00
2	Add: Disallowed bays claimed to be in use (based on Review Petition)	Nos.	8.00
3	Revised Opening Number of Bays for FY 2022-23	Nos.	15,728.00
4	Approved closing balance of Transmission Lines for FY 2021-22	ckt. km	64.123.00
5	Add: Disallowed Transmission Lines claimed to be in use (based on Review Petition)	ckt. km	71.08
6	Revised Opening Number of Transmission Lines for FY 2022-23	ckt. km	64,198.08

Accordingly, the number of bays and transmission lines considered by GETCO in the Petition is given in the Table below:

Table 4-8: Transmission lines and No. of bays for FY 2022-23

Sl. No	Particulars	Unit	Value
1	Bays		
	Opening number of Bays	Nos.	15,728
	Addition during the year	Nos.	1,002
	Closing number of Bays	Nos.	16,730
	Average number of Bays	Nos.	16,229
2	Transmission Line		
	Opening ckt. km	ckt. km	64,194.08
	Addition during the year	ckt. km	2,903.51
	Closing ckt. Km	ckt. km	67,097.59
	Average ckt. km.	ckt. km	65,645.83

The normative O&M Expenses approved for FY 2022-23 by the Commission in the Tariff Order dated 30<sup>th</sup> March, 2022 and computed by GETCO in the truing up for



FY 2022-23 are given in the Table below:

Table 4-9: Normative O&M Expenses Claimed for FY 2022-23 (Rs. Crore)

Sl. No	Particulars	Unit	Approved in Order	Actual Claimed
1	Based on Number of Bays			
	Average No. of Bays during the Year	Nos.	16,141.00	16,229.00
	O&M Expenses per Bay	Rs. Lakh	9.49	9.49
	O&M Expenses based on Number of Bays (A)	Rs. Crore	1,531.78	1,540.13
2	Based on Transmission Line Length (ckt. km)			
	Average Line Length during the Year	ckt. km	66,213.81	65,645.83
	O&M Expenses per ckt. km	Rs. Lakh	0.93	0.93
	O&M Expenses based on Transmission Line Length (B)	Rs. Crore	615.79	610.51
3	Total O&M Expenses (normative) (A + B)	Rs. Crore	2,147.57	2,150.64

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 2022-23 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 4-10: Actual O&M Expenses claimed for FY 2022-23 (Rs. Crore)

Sl. No.	Particulars	Actual Claimed
1	Employees Expenses	1,238.69
2	R&M Expenses	438.69
3	A&G Expenses	148.31
4	Total O&M Expenses	1,825.69

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

**Employee Cost:** The Employee Cost claimed by GETCO in True up of ARR of FY 2022-23 is as under:

Table 4-11: Employee cost claimed for FY 2022-23 (Rs. Crore)

Sl. No.	Particulars	Amount
1	Gross Employee Cost as per Accounts	1,208.88
2	Less: SLDC Employee Cost	(20.83)
3	Less: Provision for 7th Pay of FY 2022-23 - (GETCO)	-
4	Less: Provision for COVID-19 of FY 2022-23 (GETCO)	(9.00)



Sl. No.	Particulars	Amount
5	Add: Payment for COVID-19 of FY 2022-23 (GETCO)	1.75
6	Add: Impact of Employee Cost in Other Comprehensive Income as per P&L account of FY 2022-23 (GETCO)	29.15
7	Add: Arrear Payment of 7 <sup>th</sup> Pay in FY 2022-23 (GETCO)	28.74
8	Employee Cost Claimed in True Up of FY 2022-23	1,238.69

GETCO submitted that the O&M norms approved by the Commission in the GERC (MYT) Regulations, 2016 are based on the 6th Pay Commission scales, and hence, do not include the impact of the implementation of the 7th Pay Commission. Further, the Commission allows employee expenses based on the actual payment made and does not consider the provisions made in the employee costs.

GETCO submitted that in past true-up Orders, the Commission had ruled that the impact in Employee Expenses due to revision in salary shall be considered as an uncontrollable factor by the Commission after prudence check. Accordingly, in the present Petition, GETCO has claimed the differential expenses on account of the 6<sup>th</sup> Pay and 7<sup>th</sup> Pay Commission implementation as an uncontrollable expense and sought full pass through of such expenses in line with the provisions of the GERC (MYT) Regulations, 2016. This also includes the actual payments made towards wage revision arrears payment by GETCO during FY 2022-23. The details of provision and the actual payout by GETCO on account of 7<sup>th</sup> Pay Commission is given in the table below:

Table 4-12: Provisions and actual payments made by GETCO in FY 2022-23 (Rs. Crore)

Financial Year	Provisioning(A)	Payments against the Provision (B)	Cumulative Provision after adjusting arrear payment (C)	Differential Payments of 7 <sup>th</sup> Pay and 6 <sup>th</sup> Pay (D)	Total Pay- out on account of 7 <sup>th</sup> Pay (B+D)
2015-16	33.13	0.00	33.13	0.00	0.00
2016-17	138.26	0.00	171.39	0.00	0.00
2017-18	93.83	0.00	265.22	53.54	53.54
2018-19	71.51	131.29	205.44	79.53	210.82
2019-20	72.91	0.00	278.35	95.89	95.89
2020-21	53.49	0.00	331.84	86.55	86.55
2021-22	22.73	195.63	158.94	138.63	334.26
2022-23	0.00	28.74	0.20	212.69	241.43



GETCO has claimed the following costs as uncontrollable and fully pass through as per the provisions of the GERC (MYT) Regulations, 2016:

- (a) differential between the payment as per 6<sup>th</sup> Pay Commission and 7<sup>th</sup> Pay Commission amounting to Rs. 212.69 Crore. This cost is included in the actual employee cost as per Accounts, however, has been identified separately as a cost attributable to uncontrollable factors and claimed entirely (without sharing) through the ARR.
- (b) Incentive arrear payment of Rs. 28.74 crore made by GETCO in FY 2022-23 against the provision made in earlier years for the period 1<sup>st</sup> January, 2016 to 31<sup>st</sup> March, 2020.
- (c) Payment of Rs. 1.75 Crore made under ambit of COVID.

The summary of uncontrollable employee expenses cost claimed by GETCO in its Petition is given in the table below:

7th Pay Impact Paid in/ **Particular** Period claimed (Rs. Crore) Claimed in Arrear Payment of Incentive against 1st Ian 2016 to 28.74 FY 2022-23 the provisions made in previous years 31st Mar 2020 Differential 7th Pay Impact in 1st Apr 2022 to 212.69 FY 2022-23 Employee Cost in FY 2022-23 31st Mar 2023 Impact of payment made under ambit 1st Apr 2022 to 1.75 FY 2022-23 of COVID-19 31st Mar 2023 **Total Uncontrollable Employee Expenditure claimed in True-up of** 243.18 FY 2022-23

Table 4-13: Summary of uncontrollable employee expenses

**R&M Expenses:** The actual R&M expenses for FY 2022-23 have been claimed as Rs. 438.69 Crore. As per the provisions of the GERC (MYT) Regulations, 2016, R&M expenses are categorised as controllable expenses.

**A&G Expenses:** The actual A&G expenses for FY 2022-23 have been claimed as Rs. 148.31 Crore. As per the provisions of the GERC (MYT) Regulations, 2016, A&G expenses are categorised as controllable expenses. In line with the approach adopted by the Commission in the past Tariff Order in Case No. 2163 of 2022, the expected credit loss on recoverable has not been considered as part of the A&G expenses.

The Petitioner has submitted that O&M expenses are controllable in nature under Regulation 22.2 of GERC (MYT) Regulations, 2016. However, as per the



methodology adopted by the Commission, the variance in the normative O&M expenses as approved originally in the earlier Order and the revised normative O&M expense as per actual performance during the year is considered as uncontrollable and variation in the normative O&M expenses and actual as per audited accounts is considered as controllable. GETCO has identified certain expenses related to impact of implementation of 7th Pay Commission (Rs. 212.69 Crore), incentive arrears (Rs. 28.74 Crore), and COVID related payments (Rs. 1.75 Crore) as uncontrollable, which are considered in the sharing of gains/losses.

The O&M Expenses and Gain/(Loss) claimed by GETCO in the Truing up for FY 2022-23 are summarized in the Table below:

Table 4-14: Gains/ (Loss) claimed from O&M Expenses for FY 2022-23 (Rs. Crore)

Particular	Approved in the Tariff Order	Normative Claimed	Actual as per Audited Accounts	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Uncontrollable Factor
O&M Expenses	2,147.57	2,150.64	1,825.69	568.13	(246.26)

### **Commission's Analysis**

The Commission has examined the submissions made by GETCO. It is observed that GETCO has considered opening values of bays and ckt. Km. for truing up of FY 2022-23, based on closing values of Bays and ckt. km. as submitted in GETCO's Review Petition No. 2220 of 2023. However, the Commission is yet to issue its Order on the Review Petition No. 2220 of 2023, and hence, the impact of the same, if any, cannot be considered at this stage.

The Commission has hence, considered the closing values of bays and ckt. Km. for FY 2021-22 as approved in the Order on the Petition No. 2163 of 2022 dated 31st March, 2023. The same are considered as opening values of bays and ckt. km. for FY 2022-23.

The Commission has verified the details of network elements put to use during FY 2022-23. On verification, it is found that there is one arithmetic error in the total length of ckt. km. of a line item showing the length of line being put to use during the year. Further, it is found that one line item of underground cable line of 0.53 ckt. km. underground cable of 66 kV voltage has been considered twice. It is also



observed that the line length of 2.53 ckt. km. of 66 kV voltage has been claimed as commissioned during FY 2022-23, though the same has already been considered as commissioned during FY 2021-22 and the same has been allowed by the Commission while truing up of FY 2021-22. After correcting the arithmetic error and deleting the duplicate line items, the Commission has reduced the 66 kV line addition by 3.36 ckt. km. and accordingly approves the total transmission line addition as 2900.14 ckt. km for the purpose of allowing O&M expenses. The Commission finds the number of addition of bays during the FY 2022-23 as submitted by the Petitioner to be correct.

Accordingly, the addition of transmission lines and bays during FY 2022-23 approved by the Commission is as shown in the Table below:

Table 4-15: Network addition approved for FY 2022-23 (Rs. Crore)

Sl. No	Voltage level	Sub-stations (No.s)	Transmission Lines (ckt. km)
1	400 kV	-	214.14
2	220 kV	4	300.11
3	132 kV	1	62.42
4	66 kV	99	2,323.48
5	33 kV	-	-
	Total	104	2,900.14

Accordingly, the number of bays and transmission lines considered by the Commission for FY 2022-23 is given in the Table below:

Table 4-16: Approved Transmission lines and No. of bays for FY 2022-23

Sl. No	Particulars	Unit	Value
1	Bays		
	Opening number of Bays	No.s	15,720
	Addition during the year	No.s	1,002
	Closing number of Bays	No.s	16,722
	Average number of Bays	No.s	16,221
2	Transmission Lines		
	Opening ckt. Km	ckt. km	64,123.00
	Addition during the year	ckt. km	2,900.14
	Closing ckt. km	ckt. km	67,023.14
	Average ckt. km	ckt. km	65,573.07

Accordingly, the normative O&M Expenses claimed by GETCO and approved by the Commission in the truing up for FY 2022-23 are given in the Table below:



Table 4-17: Normative O&M Expenses Approved for FY 2022-23 (Rs. Crore)

Sl. No	Particulars	Unit	Claimed	Approved after truing up
1	Based on Number of Bays			
	Average No. of Bays during the Year	Nos.	16,229.00	16,221.00
	O&M Expenses per Bay	Rs. Lakh	9.49	9.49
	O&M Expenses based on Number of Bays (A)	Rs. Crore	1,540.13	1,539.37
2	Based on Transmission Line Length (ckt. km)			
	Average Line Length during the Year	ckt. km	65,645.83	65,573.07
	O&M Expenses per ckt. km	Rs. Lakh	0.93	0.93
	O&M Expenses based on Transmission Line Length (B)	Rs. Crore	610.51	609.83
3	Total O&M Expenses (normative) (A + B)	Rs. Crore	2,150.64	2149.20

The Commission approves the normative O&M Expenses at Rs. 2,149.20 Crore in the Truing up for FY 2022-23.

### **Actual O&M Expenses**

As regards Employee cost, the Commission notes the submission of GETCO and accordingly approves the total Employee Cost of Rs. 1238.69 Crore in the truing up of FY 2022-23.

The Commission has reviewed the calculation providing bifurcating the employee expenses into 6<sup>th</sup> Pay Commission and additional payment due to implementation of 7<sup>th</sup> Pay Commission. Accordingly, the Commission approves the payment against the implementation of 7<sup>th</sup> Pay Commission, and the arrear incentive payment made by GETCO in FY 2022-23, as well as the payment against COVID, as uncontrollable employee expenses. Accordingly, the Commission approves Rs. 243.18 Crore of Employee Cost as an uncontrollable expense.

Further, the consolidated R&M expenses of GETCO in FY 2022-23 were Rs. 456.53 Crore, which includes SLDC expenses of Rs 17.85 Crore. Therefore, the SLDC R&M expense amount is deducted from consolidated GETCO R&M expenses. Accordingly, the Commission has approved total R & M expense of GETCO as Rs. 438.69 Crore.

The consolidated A&G Expenses of GETCO in FY 2022-23 were Rs. 151.89 Crore, which includes SLDC expenses of Rs. 3.58 Crore. The Commission has disallowed expenses of Rs. 0.12 Crore under Miscellaneous Losses and Write -off Expenses paid as compensation for injury/death. Accordingly, the Commission approves total A&G Expenses of Rs. 148.19 Crore for GETCO for FY



2022-23 after truing up.

The Commission accordingly approves the actual O&M Expenses for FY 2022-23, as shown in the following Table:

Table 4-18: Actual O&M Expenses approved for FY 2022-23 (Rs. Crore)

Sl. No.	Particulars	Actual Claimed	Approved after Truing up
1	Employee Expenses	1,238.69	1,238.69
2	R&M Expenses	438.69	438.69
3	A&G Expenses	148.31	148.19
4	Total O&M Expenses	1,825.69	1.825.57

Further, O&M Expenses are controllable in nature under the GERC (MYT) Regulations, 2016. However, the Commission is of the view that the variance in the O&M Expenses, as approved in the 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 2022-23 by the Commission are summarised in the Table below:

Table 4-19: Gain/(Loss) from O&M Expenses approved for FY 2022-23 (Rs. Crore)

Particular	Approved in the Tariff Order	Normative Approved in Truing up	Approved 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 <sup>th</sup> Pay Commission)	7= (2-3 and Impact of 7 <sup>th</sup> Pay Commission)
O&M Expenses	2,147.57	2,149.20	1,825.57	322.00	568.45	(244.82)

### 4.4. Depreciation

### Petitioner's Submission

GETCO has claimed Depreciation of Rs. 1,394.37 Crore for FY 2022-23, as against Depreciation of Rs. 1,361.66 Crore approved in the MYT Order dated 30<sup>th</sup> March, 2022. GETCO submitted that it has calculated the Depreciation for FY 2022-23 in accordance with the provisions of the GERC (MYT) Regulations, 2016. The addition to GFA has been considered based on capitalisation considered for FY 2022-23.

GETCO has submitted that the deprecation on assets that have already depreciated up to 90% of



GFA have not been considered by GETCO. GETCO added that the Commission has approved the rate of depreciation of 4.15% in its Order, which is same as that considered by GETCO in its Petition. However, it is observed that the approved rate of depreciation is actually 4.1417% (4.14% after rounding off) instead of 4.15% mentioned in Table 4-20 of the Order, against the average rate of depreciation of 4.1460% (4.15% after rounding off) as per GETCO'S submission. Consideration of lower rate of depreciation has led to lower approval of depreciation to the extent of Rs. 1.31 Crore. GETCO has filed a Review Petition to correct this anomaly.

Further, the Commission while approving the capitalization for GETCO for FY 2021-22 had disallowed capitalisation of Rs. 92.33 Crore against erection of 220/33 kV Radhanesda S/S and 220 kV transmission line, for evacuation of power from 700 MW Radhanesda solar park. In this context, GETCO has filed Review Petition No. 2220 of 2023.

Accordingly, to capture the cascading impact of the differential depreciation of Rs. 1.31 Crore not recovered and disallowed Capitalisation of Rs. 92.33 Crore, as claimed in Review Petition No. 2220 of 2023, in other cost elements of ARR such as loan, interest on Working capital, along with other accounting elements such as Gross block, in this True-up of FY 2022-23, GETCO has added the disallowed capitalisation and differential depreciation in the "capitalisation" and "depreciation" heads of FY 2021-22 to arrive at the revised open Gross block for FY 2022-23, as shown in the Table below:

Table 4-20: Revised Closing GFA and Depreciation Rate for FY 2021-22 (Rs. Crore)

Sl. No.	Particulars	Unit	Value
1	Approved Opening Balance of GFA for FY 2021-22	Rs. Crore	29,534.80
2	Net Additions during the Year		2,141.04
3	Add: Disallowed capitalisation (based on Review Petition)	Rs. Crore	92.33
4	Revised Closing GFA for FY 2021-22	Rs. Crore	31,588.17
5	Approved Depreciation Rate	%	4.1417
6	Add: Additional Depreciation Rate (based on Review Petition)	%	0.0043
7	Effective Depreciation Rate for FY 2021-22	%	4.1460

Accordingly, GETCO has computed the depreciation for FY 2022-23 based on the revised figures. GETCO submitted that the Weighted Average Rate of Depreciation works out to 4.157%, which is more than 4.13%, rate approved by the Commission for FY 2022-23, as given in the Table below:



Table 4-21: Depreciation claimed for FY 2022-23 (Rs. Crore)

Sl. No.	Particulars	Approved in Tariff Order	Actual Claimed
1	Opening Gross Block	31,752.47	31,588.17
2	Net Additions during the Year	2,490.49	3,908.26
3	Closing Gross Block	34,242.96	35,496.43
4	Average Rate of Depreciation	4.13%	4.15%
5	Depreciation for the Year	1,361.66	1,394.37

The variation in the amount of depreciation as per the actual cost incurred by GETCO in FY 2022-23 against the amount approved by the Commission is considered as Gain/(Loss) on account of uncontrollable factors, as detailed in the Table below:

Table 4-22: Gain/(Loss) claimed from Depreciation for FY 2022-23 (Rs. Crore)

Particular	Approved in the Tariff Order	Actual Claimed	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Depreciation	1,361.66	1,394.37		(32.71)

### **Commission's Analysis**

The Commission has computed the allowable depreciation for FY 2022-23 in accordance with the GERC (MYT) Regulations, 2016.

It is observed that GETCO has considered the opening values of GFA for truing up of FY 2022-23, based on closing values of GFA as submitted in GETCO's Review Petition No. 2220 of 2023. However, the Commission is yet to issue its Order on the Review Petition No. 2220 of 2023, and hence, the impact of the same, if any, cannot be considered at this stage.

The Commission has hence, considered the opening GFA for FY 2022-23 equal to closing GFA of FY 2021-22 as per the Order dated 31<sup>st</sup> March, 2023. The addition to GFA has been considered based on capitalisation approved in earlier Section of this Order.

As stated earlier, the Commission has disallowed the capitalisation of Rs. 1.769 Crore on account of additional capitalisation against Radhanesda and Dholera Solar Park. Hence, the Commission has considered the addition to GFA during FY 2022-23 as Rs. 3906.49 Crore.

GETCO has confirmed that the deprecation on assets that have already depreciated up to 90% of GFA have not been considered. As regards the treatment of depreciation on assets funded by grants, GETCO has clarified that the assets created from grants are depreciated as per the rates provided in GERC (MYT) Regulations. Further, in order to be compliant with the provisions of Ind



AS-20 and to match the Deprecation charged on the assets, GETCO has amortized the Grants and Consumer contribution for first 12 years as per the rate of depreciation specified by the Commission and the remaining balance of Grants and Consumer contribution is amortized over remaining Useful Life of 23 years.

The depreciation approved for FY 2022-23 after true-up is detailed in the Table below:

Table 4-23: Depreciation approved for FY 2022-23 (Rs. Crore)

Sl. No	Particulars	Approved in Tariff Order	Actual Claimed	Approved after Truing up
1	Opening Gross Block	31,752.47	31,588.17	31,495.83
2	Net Additions during the Year	2,490.49	3,908.26	3,906.49
3	Closing Gross Block	34,242.96	35,496.43	35,402.32
4	Average Rate of Depreciation	4.13%	4.1570%	4.1570%
5	Depreciation for the Year	1,361.66	1,394.37	1,390.49

The Commission, accordingly, approves depreciation at Rs. 1,390.49 Crore in the truing up for FY 2022-23.

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 2022-23, as detailed in the Table below:

Table 4-24: Gain / (Loss) from Depreciation approved for FY 2022-23 (Rs. Crore)

Particulars	Approved in the Tariff Order	Approved in Truing up	Deviation +/(-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Depreciation	1,361.66	1,390.49	(28.87)		(28.83)

### 4.5. Interest and Finance Charges

### Petitioner's Submission

GETCO has claimed Interest and Finance Charges of Rs. 479.63 Crore in the Truing up for FY 2022-



23, as against amount of Rs. 497.18 Crore approved in the Tariff Order dated 30<sup>th</sup> March 2022. GETCO has submitted that the closing loan approved for FY 2021-22 in the Order in Case No. 2163 of 2022 dated 31st March, 2023 has been considered as the opening loan for FY 2022-23. Further, to capture the consequential effect of the Review Petition No. 2220 of 2023, GETCO has considered capitalisation of Rs. 92.33 Crore pertaining to the erection of 220/33 kV Radhanesda S/S and 220 kV transmission line, for evacuation of power from 700 MW Radhanesda solar park, which was disallowed by the Commission in its Order in Case No. 2163 of 2022. The corresponding debt funding (70% debt of Rs. 92.33 Crore = Rs. 64.63 Crore) pertaining to the claimed capitalisation has been added to the opening loan balance for FY 2022-23.

Further, consequential impact of revised depreciation rate of 4.1460% considered in Review Petition has also been captured while depreciating the Rs. 92.33 Crore of disallowed capitalisation on an average basis as per the methodology adopted by the Commission. This higher rate of depreciation has a direct effect on the repayment made by GETCO in FY 2021-22, thereby reducing the closing loan balance for FY 2021-22 by Rs. 3.22 Crore, as shown in the Table below:

Table 4-25: Impact of Differential Depreciation for FY 2021-22 (Rs. Crore)

Sl. No.	Particulars	FY 2021-22 without impact of Review Petition	FY 2021-22 after impact of Review Petition	Increase in Depreciation, affecting Loan Repayment in FY 2021-22
1	Opening Gross Block	29,354.80	29,354.80	
2	Net Additions during the Year	2,233.37	2,233.37	
3	Closing Gross Block	31,588.17	31,588.17	
4	Average GFA	30,471.49	30,471.49	
5	Depreciation for the Year	1,260.13	1,263.35	3.22
6	Average Rate of Depreciation	4.1417%	4.1460%	

Accordingly, GETCO has considered the opening loan balance for FY 2022-23 as Rs. 7,030.60 Crore (6969.19 + 64.63 - 3.22). The debt component of the Capitalisation during the year, net of grants, is considered in the debt-equity ratio of 70:30.

In line with the approach adopted by the Commission and as specified in GERC (MYT) Regulations, 2016, repayment during the year has been considered equal to the depreciation for the financial year.

The weighted average rate of interest during FY 2022-23 is 5.43% as against 6.95% as approved by the Commission.

In line with past approval methodology of the Commission, the other charges, which include loss



on foreign exchange fluctuation, bank charges, commission, etc., have been considered at actuals as per the audited accounts.

GETCO has availed two foreign exchange loans, one from ADB for Gujarat Solar Power Project and another from for Green Energy Corridor Project. The projects related to the loan from ADB have already been completed in FY 2016-17 and thereafter, foreign exchange/gain loss related to ADB loan is accounted in Finance cost in case of loss and accounted in Other Income in case of Gain and any foreign exchange deviation (Loss or Gain) is not capitalized/booked in Fixed Assets.

Further, as regards the projects funded by the loan from KfW, some of the projects are capitalized and some of the projects are under work in progress. For the projects that are already commissioned, the foreign exchange/gain loss related to those projects is accounted in Finance cost in case of loss and accounted in Other Income in case of Gain. For the projects which are under work in progress, the foreign exchange/gain loss is capitalized [booked to the Assets].

The interest and finance charges approved by the Commission and claimed by GETCO for FY 2022-23 are shown in the table below:

Table 4-26: Interest and Finance Charges Claimed for FY 2022-23 (Rs. Crore)

Sl. No	Particulars	Approved in Tariff Order	Actual Claimed
1	Opening Loans	7,095.21	7,030.60
2	Loan Additions during the Year	1,440.86	2,426.07
3	Repayment during the Year	1361.66	1,394.37
4	Closing Loans	7,174.41	8,062.30
5	Average Loans	7,134.81	7,546.45
6	Interest on Loan	495.68	409.44
7	Other Charges (Guarantee + Financing Charges)	1.50	83.50
8	Less: Foreign Exchange Loss capitalised	-	13.31
9	Total Interest & Financial Charges	497.18	479.63
10	Weighted Average Interest Rate on Loan	6.95%	5.43%

GETCO has claimed Rs. 17.55 Crore as Gain from Interest and Finance Charges due to uncontrollable factors, as shown in the Table below:



Table 4-27: Gain/ (Loss) claimed from Interest & Finance Charges for FY 2022-23 (Rs. Crore)

Particulars	Approved in the Tariff Order	Actual Claimed	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Interest & Finance Charges	497.18	479.63		17.55

### Commission's Analysis

The Commission has computed the allowable interest on loan for FY 2022-23 in accordance with the GERC (MYT) Regulations, 2016.

It is observed that GETCO has considered the opening values of loan for truing up of FY 2022-23, based on GETCO's Review Petition No. 2220 of 2023. However, the Commission is yet to issue its Order on the Review Petition No. 2220 of 2023, and hence, the impact of the same, if any, cannot be considered at this stage.

The Commission has hence, considered the opening loan for FY 2022-23 equal to closing loan of FY 2021-22 as per the Order dated 31<sup>st</sup> March, 2023. The addition to loan has been considered as 70% of the capitalisation approved in earlier Section of this Order.

As stated earlier, the Commission has disallowed the capitalisation of Rs. 1.769 Crore on account of additional capitalisation against Radhanesda and Dholera Solar Park. Hence, the Commission has considered the addition to loan during FY 2022-23 as Rs. 2424.83 Crore. The repayment of loans during the year has been considered equal to the depreciation allowed for FY 2022-23. 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 5.47% and applied the same on the normative loan amount.

Further, the Commission notes that GETCO has claimed Other Finance Charges of Rs. 83.50 Crore. As per Note 34 of the Audited Accounts, this includes an amount of Rs. 2.356 Crore towards Bank Charges and Rs. 81.14 Crore towards loss on foreign exchange fluctuation. The Commission has verified the computation of the said amount. Also, Regulation 44.3 of the GERC (MYT) Regulations, 2016 specifies that:

"To the extent the Generating Company or the Transmission Licensee or SLDC or the Distribution Licensee is not able to hedge the foreign exchange exposure, the extra rupee liability towards



interest payment and loan repayment corresponding to the normative foreign currency loan in the relevant year shall be permissible provided it is not attributable to the Generating Company or the Transmission Licensee or SLDC or the Distribution Licensee or its suppliers or contractors."

In view of the above, the Commission approves Other Finance Charges of Rs. 83.50 Crore for FY 2022-23 for the purpose of Truing up for FY 2022-23.

The Commission has approved the interest on normative loans, as detailed in the Table below:

Table 4-28: Interest and Finance Charges approved for FY 2022-23 (Rs. Crore)

SI. No	Particulars	Approved in the Tariff Order	Claimed	Approved after Truing up
1	Opening Loans	7,095.21	7,030.60	6969.19
2	Loan Additions during the Year	1,440.86	2,426.07	2,424.83
3	Repayment during the Year	1,361.66	1,394.37	1,390.49
4	Closing Loans	7,174.41	8,062.30	8,003.53
5	Average Loans	7,134.81	7,546.45	7,486.36
6	Weighted Average Rate of Interest	6.95%	5.43%	5.47%
7	Interest on Loan	495.68	409.44	409.59
8	Other Charges (Guarantee + financing charges)	1.50	83.50	83.50
9	Less: Foreign Exchange Loss Capitalised		13.31	13.31
9	Total Interest & Finance Charges	497.18	479.63	479.78

The Commission, accordingly, approves Interest and Finance Charges of Rs. 479.78 Crore for FY 2022-23.

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 2022-23, as detailed in the Table below:

Table 4-29: Gain/(Loss) from Interest & Finance Charges approved for FY 2022-23 (Rs. Crore)

Particular	Approved in the Tariff Order	Approved in the Truing up	Deviation +/ (-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Interest and Finance Charges	497.18	497.78	17.40		17.40



The Commission accordingly approves the Gain of Rs. 17.40 Crore on account of uncontrollable factors.

### 4.6. Return on Equity

#### Petitioner's Submission

GETCO has claimed Rs. 1,175.66 Crore towards Return on Equity (ROE) in the Truing up for FY 2022-23, as against Rs. 1,154.15 Crore approved for the year in the Tariff Order. GETCO has computed ROE @ 14% as specified in the GERC (MYT) Regulations, 2016.

GETCO has considered the closing balance of equity of FY 2021-22 approved in the Case No. 2163 of 2022 dated 30<sup>th</sup> March, 2022 as the opening balance of equity of FY 2022-23. However, as discussed earlier, in view of the Review Petition No. 2220 of 2023 filed by GETCO, the opening equity balance for FY 2022-23 has been revised to capture the consequential impact of disallowed capitalisation of Rs. 92.33 Crore under Case No. 2163 of 2022. The corresponding equity funding (30% debt of Rs. 92.33 Crore = Rs. 27.70 Crore) pertaining to claimed capitalisation has been added to the opening equity balance for FY 2022-23.

Accordingly, the closing equity in FY 2021-22 has been increased from Rs. 7850.01 Crore to Rs. 7,877.71 Crore (Rs. 7850.01 crores + Rs. 27.69 Crore of consequential impact). The equity component of the Capitalisation during the year, net of grants, has been considered at the debt-equity ratio of 70:30.

The comparison between the actual values of ROE for FY 2022-23 with the values approved by the Commission in the Order dated 30<sup>th</sup> March, 2022 is shown in the Table below:

Table 4-30: Return on Equity claimed for FY 2022-23 (Rs. Crore)

Sl. No	Particulars	Approved in the Tariff Order	Claimed
1	Opening Equity Capital	7,935.16	7,877.71
2	Equity Addition during the Year	617.51	1,039.75
3	Closing Equity	8,552.67	8,917.45
4	Average Equity	8,243.92	8,397.58
5	Rate of Return on the Equity	14%	14%
6	Return on Equity	1,154.15	1,175.66

The deviation in ROE has been considered as gain/(loss) on account of uncontrollable factors, as shown in the Table below:



Table 4-31: Gain/ (Loss) claimed from RoE for FY 2022-23 (Rs. Crore)

Particulars	Approved in the Tariff Order	Actual Claimed	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Return on Equity	1,154.15	1,175.66		(21.51)

### **Commission's Analysis**

The Commission has computed the allowable RoE for FY 2022-23 in accordance with the GERC (MYT) Regulations, 2016.

ROE is allowed on the average equity deployed during the year considering the Opening Equity and addition to Equity. It is observed that GETCO has considered the opening values of equity for truing up of FY 2022-23, based on GETCO's Review Petition No. 2220 of 2023. However, the Commission is yet to issue its Order on the Review Petition No. 2220 of 2023, and hence, the impact of the same, if any, cannot be considered at this stage.

The Commission has hence, considered the opening equity for FY 2022-23 equal to closing equity of FY 2021-22 as per the Order dated 30<sup>th</sup> March, 2022. The addition to equity has been considered as 30% of the capitalisation approved in earlier Section of this Order, after reducing the equity contribution corresponding to the disallowed additional capitalisation of Rs. 1.769 Crore against Radhanesda and Dholera Solar Park.

Accordingly, the Commission has approved the ROE for FY 2022-23, as detailed in the Table below:

Table 4-32: Return on Equity approved for FY 2022-23 (Rs. Crore)

Sl. No.	Particulars	Approved in the Tariff Order	Actual Claimed	Approved after Truing up
1	Opening Equity Capital	7,935.16	7,877.71	7,850.01
2	Equity Addition during the Year	617.51	1,039.75	1,039.21
3	Closing Equity	8,552.67	8,917.45	8,889.22
4	Average Equity	8,243.92	8,397.58	8,369.62
5	Rate of Return on Equity	14%	14%	14%
6	Return on Equity	1,154.15	1,175.66	1,171.75

The Commission accordingly approves Return on Equity at Rs. 1,171.75 Crore in the Truing up for FY 2022-23.



The Commission is of the view that the parameters that affect ROE should be treated as uncontrollable. The Commission accordingly approves the Gain/(Loss) on account of ROE in the Truing up for FY 2022-23, as detailed in the Table below:

Table 4-33: Gain/(Loss) from Return on Equity approved for FY 2022-23 (Rs. Crore)

Particulars	Approved in the Tariff Order	Approved in Truing up	Deviation +/(-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Return on Equity	1,154.15	1,171.75	(17.60)		(17.60)

### 4.7. Interest on Working Capital

#### Petitioner's Submission

GETCO has claimed an amount of Rs. 90.46 Crore towards Interest on Working Capital (IoWC) in the Truing up for FY 2022-23, as against an amount of Rs. 86.15 Crore approved in the Order dated 30<sup>th</sup> March, 2022. GETCO has submitted that it has computed Working Capital requirement based on the norms specified in the GERC (MYT) Regulations, 2016 by considering 0&M expenses and 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 weighted average of 1-year SBI MCLR plus 250 basis points, i.e., 10.30%. The comparison of actual value of IoWC based on above methodology and the value approved by the Commission is shown in the Table below:

Table 4-34: Interest on Working Capital claimed for FY 2022-23 (Rs. Crore)

Sl. No.	Particular	Approved in the Tariff Order	Claimed
1	O&M Expenses (1 Month)	178.96	152.14
2	Maintenance Spares (1% of opening GFA)	317.52	315.88
3	Receivables (1 Month)	410.34	410.34
4	Total Working Capital	906.83	878.36
5	Rate of Interest on Working Capital	9.50%	10.30%
6	Interest on Working Capital	86.15	90.46

GETCO has considered the deviation between approved and actual IoWC as an uncontrollable factor, as shown in the Table below:



Table 4-35: Gain/ (Loss) claimed from IoWC for FY 2022-23 (Rs. Crore)

Particulars	Approved in the Tariff Order	Actual Claimed	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Interest on Working Capital	86.15	90.46		(4.31)

### **Commission's Analysis**

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

The Commission has considered the weighted average of 1-year State Bank of India (SBI) Marginal Cost of Funds Based Lending Rate (MCLR) prevailing during FY 2022-23 plus 250 basis points, as the interest rate. Accordingly, the rate of interest is worked out as 10.30%.

Based on the O&M Expenses and GFA approved in the Truing up, the Working Capital requirement and IoWC approved for FY 2022-23 at 10.30%, are detailed in the Table below:

Table 4-36: Interest on Working Capital approved for 2022-23 (Rs. Crore)

Sl. No.	Particulars	Approved in the Tariff Order	Actual Claimed	Approved in Truing Up
1	O & M Expenses (1 Month)	178.96	152.14	152.13
2	Maintenance Spares (1% of Opening GFA)	317.52	315.88	314.96
3	Receivables (1 Month)	410.34	410.34	389.55
4	Total Working Capital	906.83	878.36	856.64
5	Rate of Interest on Working Capital	9.50%	10.30%	10.30%
6	Interest on Working Capital	86.15	90.46	88.22

The Commission, accordingly, approves the Interest on Working Capital at Rs. 88.22 Crore in the Truing up for FY 2022-23.

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 2022-23, as detailed in the Table below:



Table 4-37: Gain/(Loss) from Interest on Working Capital approved for FY 2022-23 (Rs. Crore)

Particulars	Approved in the Tariff Order	Approved in Truing up	Deviation +/ (-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Interest on Working Capital	86.15	88.23	(2.07)		(2.07)

### 4.8. Contribution to Contingency Reserve

### **Petitioner's Submission**

GETCO has not claimed any contribution towards Contingency Reserve in the Truing up for FY 2022-23.

### 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 2022-23.

The Commission accordingly approves the contribution to Contingency Reserve as 'Nil' in the Truing up for FY 2022-23.

### 4.9. Income Tax

#### Petitioner's Submission

GETCO has claimed the Income Tax of Rs. 588.48 Crore in the Truing up for FY 2022-23, as against Rs. 314.73 Crore approved in the Tariff Order dated 30th March, 2022, as given in the Table below:

Table 4-38: Income Tax claimed by GETCO for FY 2021-22 (Rs. Crore)

Sl. No.	Particulars	Approved in the Tariff Order	Actual Claimed	Deviation +/ (-)
1	Income Tax	314.73	588.48	(273.75)



GETCO has considered the deviation between approved and actual Income Tax as an uncontrollable factor, as shown in the Table below:

Table 4-39: Gain/ (Loss) claimed from Income Tax for FY 2022-23 (Rs. Crore)

Particulars	Approved in the Tariff Order	Actual Claimed	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Income Tax	314.73	588.48		(273.75)

### **Commission's Analysis**

The Commission notes that income tax amount shown in audited accounts is Rs. 588.48 Crore, as claimed by GETCO in its Petition. The Commission has disallowed Rs 1.76 Crore towards additional capitalisation towards Radhanesda and Dholera Solar Park, and accordingly, disallowed the corresponding equity addition. In view of this, the Commission decides to reduce impact of Income Tax on Transmission ARR corresponding to reduction in equity contribution for truing up of FY 2022-23. Accordingly, the Commission approves the Income Tax of Rs. 588.46 Crore for FY 2022-23 after truing up.

As regards the computation of Gain/(Loss), Regulation 22.1 (h) of the GERC (MYT) Regulations, 2016 considers variation in taxes on income as uncontrollable. The Commission, accordingly, approves the Gain/(Loss) on account of tax on income in the Truing up for FY 2022-23, as detailed in the Table below:

Table 4-40: Gain/(Loss) from Income Tax approved for FY 2022-23 (Rs. Crore)

Particulars	Approved in Tariff Order	Approved in Truing up	Deviation + / (-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Income Tax	314.73	588.46	(273.73)		(273.73)

### 4.10. Capitalization of Expenses

### Petitioner's Submission

GETCO has claimed actual capitalization of expenses of Rs. 382.85 Crore for FY 2022-23 as against Rs. 239.00 Crore approved for the year in the Tariff Order dated 30<sup>th</sup> March, 2022, as given in the Table below:



Table 4-41: Expenses Capitalised claimed for FY 2022-23 (Rs. Crore)

Sl.	No.	Particulars	Approved in Tariff Order	Actual Claimed	Deviation +/(-)
1		Expenses Capitalised	239.00	382.85	(143.85)

### **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 2022-23 as shown in the following Table:

Table 4-42: 0&M Expenses Capitalized approved for FY 2022-23 (Rs. Crore)

Sl. No.	Particulars	FY 2022-23
1	Employee Expenses Capitalized	322.93
2	R&M Expenses Capitalized	-
3	A&G Expenses Capitalized	59.92
4	Total Expenses Capitalised	382.85

The Commission, accordingly, approves the Capitalisation of O&M Expenses at Rs. 382.85 Crore, as per the audited annual accounts for the purpose of Truing up for FY 2022-23. The Commission considers the Capitalisation of O&M Expenses as uncontrollable as shown in the Table below:

Table 4-43: Gain/(Loss) from Expenses Capitalized approved for FY 2022-23 (Rs. Crore)

Particulars	Approved in Tariff Order	Approved in Truing up	Deviation +/(-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Expenses Capitalised	239.00	382.85	(143.85)		(143.85)

### 4.11. Non-Tariff Income for FY 2022-23

### **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, supervision charges of deposit work as approved by the Commission, deferred revenue from the asset to nullify the effect of expansion of the assets built for consumption from grants, consumer



contribution including pro-rata charges from all new additional HT/EHT applicant for the development of upstream network, proportionate charges from HT/EHT applicants in case of strengthening of immediate network, etc., to nullify the effect of depreciation of the assets built from Consumer Contribution and Grants.

GETCO has claimed Non-Tariff Income at Rs. 532.37 Crore in the Truing up for FY 2022-23, as against Rs. 493.10 Crore approved for the year in the Tariff Order.

Table 4-44: Non-Tariff Income claimed by GETCO for 2022-23 (Rs. Crore)

Sl. No.	Particulars	Approved in the Tariff Order	Actual Claimed	Deviation +/(-)	
1	Non-Tariff Income	493.10	532.37	(39.27)	

GETCO has considered the deviation between approved and actual Non-Tariff Income as an uncontrollable factor, as shown in the Table below:

Table 4-45: Gain/ (Loss) claimed from Non-Tariff Income for FY 2022-23 (Rs. Crore)

Particulars	Approved in the Tariff Order	Actual Claimed	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors	
Non-Tariff Income	493.10	532.37		(39.27)	

### **Commission's Analysis**

The Commission notes that as per Audited accounts, Non-Tariff Income for FY 2022-23 is Rs. 541.58 Crore. This income includes Non-Tariff Income of Rs. 9.21 Crore for SLDC, which has been excluded for the purpose of Truing up for GETCO.

The Commission, accordingly, approves the Non-Tariff Income of Rs. 532.37 Crore as per the audited accounts in the Truing up for FY 2022-23 as detailed in the Table below:

Table 4-46: Non-Tariff Income approved for 2022-23 (Rs. Crore)

Sl. No.	Particulars	Approved in the Tariff Order	Actual Claimed	Approved
1	Non-Tariff Income	493.10	532.37	532.37

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 2022-23, as detailed in the Table below:



Table 4-47: Gain/(Loss) on Non-Tariff income approved in the Truing up for 2022-23 (Rs. Crore)

Particulars	Approved in the Tariff Order	Approved in the Truing up	Deviation +/(-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Non-Tariff Income	493.10	532.37	(39.27)		(39.27)

### 4.12. Incentive for Target Availability Factor

### **Petitioner's Submission**

GETCO submitted that it has achieved the availability of 99.47% for its transmission network during FY 2022-23 as certified by SLDC, against the targeted availability of 98.50%. GETCO 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 4-48: Incentive for Target Availability claimed for FY 2022-23 (Rs. Crore)

Sl. No	Particulars	FY 2022-23
1	Target Availability as per the GERC (MYT) Regulations	98.50%
2	Actual Availability	99.47%
3	Annual Transmission Charges	4,924.08
4	Incentive for Transmission System Availability	48.49

### **Commission's Analysis**

The Commission has verified the availability of the Transmission System from SLDC Certificate as 99.47%. Incentive has to be given as per the formula mentioned in Regulation

73.1 of the GERC (MYT) Regulations, 2016, as shown below:

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

For computation of incentive, the Commission has considered Annual Transmission Charges equivalent to Aggregate Revenue Requirement approved after truing up for FY 2022-23.

The Commission has accordingly computed the incentive of Rs. 46.04 Crore for the Truing up for FY 2022-23 as detailed in the Table below:

Table 4-49: Incentive for Higher Availability approved for FY 2022-23 (Rs. Crore)

S. No.	Particulars	Approved
1	Target Availability as per MYT Regulations	98.50%



S. No.	Particulars	Approved
2	Actual Availability	99.47%
3	Annual Transmission Charges	4,629.06
4	Incentive for Transmission System Availability	45.59

The Commission considers the deviation in Incentive as uncontrollable and accordingly approves the Gain/(Loss) in the Truing up for FY 2022-23 as given in the Table below:

Table 4-50: Gain/ (loss) from Incentive approved for FY 2022-23 (Rs. Crore)

Particulars	Approved in Tariff Order	Approved in Truing up	Deviation +/(-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Incentive	-	45.59	(45.59)		(45.59)

### 4.13. Gain / (Loss) after Truing Up for FY 2022-23

The Commission has reviewed the performance of GETCO under Regulation 21 of the GERC (MYT) Regulations, 2016, with reference to the Audited Accounts for FY 2022-23.

The Commission has computed the sharing of Gain and (Loss) for FY 2022-23, based on the Truing up for each of the components, as discussed in the above paragraphs.

The fixed charges approved for FY 2022-23 in the Tariff Order dated 30<sup>th</sup> March, 2022, 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 4-51: ARR & Gains /(losses) approved in Truing up Order for FY 2022-23 (Rs. Crore)

Sl. No.	Particulars	Approved in Tariff Order	Actual Claimed	Approved in Truing up	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Uncontrollable Factor
1	Operation & Maintenance Expenses	2,147.57	1,825.69	1,825.57	568.45	(244.82)
2	Depreciation	1,361.66	1,394.37	1,390.49		(28.83)
3	Interest & Finance Charges	497.18	479.63	479.78		17.40
4	Interest on Working Capital	86.15	90.46	88.22		(2.07)
5	Return on Equity	1,154.15	1,175.66	1,171.75		(17.60)
6	Total Fixed Costs	5,246.71	4,965.81	4,955.81	568.45	(275.92)
7	Add: Provision for Tax	314.73	588.48	588.46		(273.73)
8	Less: Expenses Capitalized	239.00	382.85	382.85		(143.85)
9	Total Transmission Charges	5,322.44	5,171.45	5,161.43	568.45	(417.58)
10	Less: Non-Tariff Income	493.10	532.37	532.37		(39.27)
11	Aggregate Revenue Requirement	4,829.34	4,639.08	4,629.06	568.45	(378.31)
12	Add: Incentive for target availability	-	48.49	45.59		(45.59)
13	Total ARR	4,829.34	4,687.57	4,674.64	568.45	(412.12)
14	Net Gains / Losses on account of Controllable/ Uncontrollable factor				568.45	(412.12)
15	Gain on account of Controllable factor to be passed on to Consumer (1/3 x Sr. No. 12)				189.48	
16	Losses on account of Uncontrollable factor to be passed on to Consumer					(412.12)



### Truing Up for FY 2022-23 and Determination of ARR and Tariff for FY 2024-25

### 4.14. Sharing of Gains / (Losses) for FY 2022-23

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 2022-23, is summarized in the Table below:

Table 4-52: Revenue (Gap)/ Surplus approved for FY 2022-23

Sl. No.	Particulars	Claimed	Approved
1	Gain/(loss) on Account of Uncontrollable Factors to be Passed on to the Consumers	(426.36)	(412.12)
2	Gain/(loss) on Account of Controllable Factors to be Passed on to the Consumers (1/3 <sup>rd</sup> )	189.38	189.48
3	Revenue (Gap)/Surplus	(236.98)	(222.64)

The Commission has arrived at a Revenue Gap of Rs. 222.64 Crore in the truing up for FY 2022-23. This Revenue Gap is carried forward to the ARR of FY 2024-25 for determination of Transmission Charges.



# 5. Determination of Aggregate Revenue Requirement (ARR) for FY 2024-25

### 5.1. Introduction

This Chapter deals with the determination of ARR and Transmission Charges for FY 2024-25.

### 5.2. Transmission Losses

#### Petitioner's Submission

GETCO has projected the Transmission Losses for FY 2024-25 as 3.84%.

### **Commission's Analysis**

The actual Transmission Losses in FY 2022-23 were 3.84%, and GETCO has proposed the same Transmission Loss level for FY 2024-25. The Commission approves the Transmission Loss level for FY 2024-25 as 3.84%, as proposed by GETCO.

### 5.3. Transmission Availability

#### Petitioner's Submission

GETCO has projected the Transmission Availability for FY 2024-25 as 99.47%.

### Commission's Analysis

The normative Transmission Availability is specified as 98.50% in the GERC (MYT) Regulations, 2016. Hence, the Commission approves the normative Transmission Availability level for FY 2024-25 as 98.50%, as proposed by GETCO. The Commission shall compute the sharing of Gains/(Loss) at the time of true-up for FY 2024-25 based on the actual Transmission Availability.

### 5.4. Capital Investment

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



### Truing Up for FY 2022-23 and Determination of ARR and Tariff for FY 2024-25

For improving the transmission network availability and to strengthen the overall transmission network, GETCO has proposed Capital Expenditure of Rs. 5,060.94 Crore during FY 2024-25 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 2024-25

Sl. No.	Particulars	FY 2024-25
A	New Projects	
1	765 kV Substations	10.00
2	765 kV Lines	20.00
3	400 kV Substations	286.13
4	400 kV Lines	249.97
5	220 kV Substations	592.35
6	220 kV Lines	399.82
7	132 kV Substations	22.25
8	132 kV Lines	18.28
9	66 kV Substations	494.36
10	66 kV Lines	1,551.71
11	Capacitor Bank	72.34
12	Reactor and Reactor Bay	90.90
Total (A)		3,808.11
В	Renovation & Modernization	
1	Renovation and Modernization	485.07
2	Augmentation of Sub-stations/Lines	742.45
3	Replacement of RTU	5.00
Total (B)		1,232.52
С	Others	
1	OPGW	20.31
2	Supply-of LDMS System with Firewall and router	-
Total (C)		20.31
Total Capi	ital Expenditure (A+B+C)	5,060.94

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



Table 5-2: Proposed Bay and Line Ckt. km addition for FY 2024-25

Sl. No.	Project Name	400 kV	220 kV	132 kV	66 kV	Total
1	400 KV D/C Shapar – Pachham (Fedra) line	2				2
2	400/220 kV Kalavad 400/220 kV, 3 X 500 MVA TR Bays 10 Nos. of 400 kV feeder bays 400 kV, 1 x 125 MVAR Reactor Bay	17				17
3	400 kV D/C Bhachunda – Varsana line	0				0
4	LILO of one Ckt of 400kV D/C Soja - Zerda line at Veloda	2				2
5	400 kV Varsana - Halvad line (Pkg 1)	2				2
6	400 kV Varsana-Halwad (Pkg 2)	2				2
7	220 kV Babarzar 220/66 kV s/s with 3x160 MVA X'mer; 220KV reactor-1 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, TBC bay-1, 66 kV FB -12, 66KV X'mer 3+1, 66KV BC-1, 66KV PT bay-2		12		19	31
8	220kV Sisrana / Satlasana 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2 66 kV FB – 10, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2		9		16	25
9	220 kV Maglana 220/66 kV, 2X160 MVA ICT 220 kV FB-6, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB -6, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2		11		12	23
10	220kV Ghodasar (Rah) S/S 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB - 10 ,66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2		9		16	25
11	Upgradation of 66kV Bhildi substation to 220kV level using GIS 220/66 kV, 2 (3)x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, PT Bays - 2 nos. 66 kV FB - 10, 66KV X'mer 3, 66KV BC-1, 66KV PT bay-2		9		16	25
12	220KV Bhesan 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-5, 220 kV BC bay-1, 220 KV PT bay-2, 66 kV FB -10, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2		10		16	26
13	220 kV FB Extension at 400 kV Jetpur S/s		1			1
14	LILO of 220 kV S/c Navsari - Atul line at Chikhli substation		2			2
15	LILO of 220 kV Talangpore (Sachin) - Navsari and 220 kV Talangpore (Sachin) - Vav line at 765 kV Navsari (new) substation of ISTS		2			2
16	220 kV D/C Navsari (765 kV) - Talangpore line		2			2
17	LILO of both circuits of 220 kV D/C KAPP - Vapi line (ISTS line) at 400 kV Vapi - II substation of ISTS		4			4
18	LILO of 220 kV S/C Chikhli - Vapi line at Atul substation		2			2
19	LILO of 220 kV S/C Chikhli - Atul - Vapi line (Atul - Vapi section) at Vapi-II substation		2			2
20	LILO of one circuit of 220 kV D/C Kasor - Gavasad line at 220 kV Gotri substation and 2 no.s of 220 kV FB at 220 kV Gotri S/s		2			2
21	220 kV D/C Gavasad - Salejda line		2			2
22	220 kV D/C BECL- Botad		2			2
23	Interconnection of 220KV D/C Halvad-Sadla line & 220KV D/C Hadala - Sartanpur Line		1			1
24	132kV Kansumara S/S 2x132KV x 150MVA, X'mers, BC-1, PT Bay- 2, 132 kV FB - 4, 66 kV FB -8, 66KV X'mer 2+1, 66KV BC-1, 66KV PT			9	15	24



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Sl. No.	Project Name		400 kV	220 kV	132 kV	66 kV	Total
	bay-2, cap. Bank-1						
25	132 kV Nadiad - Mahemdavad line				1		1
26	132 kV S/C Sankhari (400 kV) - Deesa lin	e			1		1
27	66 kV FB of New substations and its associated lines					507	507
28	Augmentation with Trf. Bays		2	21	4	129	156
	Total No.s of Bays Addition		27	103	15	746	891
Ckt. km. Addition			799	904	87	2447	4237

### 5.5. Capital Expenditure and Capitalisation

### Petitioner's Submission

GETCO has proposed capital expenditure, capitalization and funding for FY 2024-25 as given in the Table below:

Table 5-3: Projected Capital Expenditure and Capitalisation in FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	FY 2024-25
1	Capex for the Year	5,060.94
2	Capitalisation	4,290.95
3	Grant	442.44
4	Debt	2,693.96
5	Equity	1,154.55

GETCO has considered the Capitalisation at 84.79%, i.e., average of the ratio of capitalisation to capital expenditure for the past 5 years, i.e., FY 2018-19 to FY 2022-23, of capital expenditure projected to be carried out during FY 2024-25. The Capitalisation net of grants is assumed to be funded on normative basis through debt:equity ratio of 70:30 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 & Modernization. However, during the truing-up exercise for FY 2024-25, actual CAPEX and



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Capitalisation will be compared with the CAPEX and Capitalisation proposed in the present Petition and approved in the present Order, along with detailed justification for deviation, if any.

GETCO has considered capitalization as 84.79% of the proposed CAPEX considering the ratio based on the average ratio of capitalisation to capital expenditure over the period from FY 2018-19 to FY 2022-23. 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, which includes the capitalisation for FY 2022-23 approved in this order, to assess the reasonability of CAPEX and Capitalisation proposed by GETCO for FY 2024-25, as shown in the Table below:

Average of **Particulars** 2017-18 2018-19 2019-20 2020-21 2021-22 2022-23 5 years Capex 2,911.09 2,769.89 3,231.68 2,195.50 3,463.73 3,649.67 3,062.09 Capitaliza 2,213.07 2,746.59 2,354.26 1,830.93 2,141.04 3,908.26 2,596.22 tion Capitalisa 76.02% 99.16% 72.85% 83.39% 61.81% 107.09% 84.79% tion as % of Capex

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

From the above analysis, it is observed that the average CAPEX is around Rs. 3,062.09 Crore and the average Capitalisation is around Rs. 2,596.22 Crore, i.e., ratio of Capitalisation to CAPEX of 84.79%. Hence, the Commission has approved the Capitalisation as Rs. 2,596.22 Crore for FY 2024-25, which shall be trued-up based on actuals and prudence check at the time of truing up for FY 2024-25.

The Commission recognizes the list of assets that the Petitioner has proposed to erect/commission during FY 2024-25. However, as stated above, the capex and capitalisation actually incurred during FY 2024-25 shall be considered after prudence check while truing-up of FY 2024-25. The complete list of CAPEX Schemes submitted by the Petitioner for FY 2024-25 is given at **Annexure 1** to this Order.

The Commission also notes that GETCO has considered grant funding of Rs. 442.44 Crore for FY 2024-25, which is equivalent to the actual grant funding in FY 2022-23, against projected Capitalisation of Rs. 4290.95 Crore. The Commission has accepted GETCO's projection of grant funding in this regard. However, as the Commission has considered capitalisation lower than that projected by GETCO, the grant funding has also been



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considered proportionately, at Rs. 293.91 Crore for FY 2024-25. 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 2024-25, as given in the Table below:

Table 5-5: Approved CAPEX and Capitalization for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	Petition	Approved
1	Capex	5,060.94	3,062.09
2	Capitalisation	4,290.95	2,596.22
3	Grant	442.44	293.91
4	Debt	2,693.96	1,611.62
5	Equity	1,154.55	690.69

### 5.6. Fixed Charges for FY 2024-25

Total fixed charges for FY 2024-25 have been categorized into following elements:

- 0&M expenses
- Depreciation
- Interest and Finance charges
- Interest on Working Capital
- Return on Equity
- Contribution to Contingency Reserve
- Income Tax
- Non-Tariff Income

### **5.7. O&M Expenses for FY 2024-25**

### **Petitioner's Submission**

GETCO has projected O&M expenses for FY 2024-25 as Rs. 2,653.37 Crore as detailed in the Table below:

Table 5-6: Proposed Normative O&M expenses for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	Units	Amount
1	Substations (Bays)		



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Sl. No.	Particulars	Units	Amount
	Opening Number of Bays	Number	17,565.68
	Addition During Year	Number	891.00
	Closing Number of Bays	Number	18,456.68
	Average Number of Bays	Number	18,011.18
	O&M Expense Norm Per Bay	Rs. Lakh	10.61
	Total O&M Expenses - Substations	Rs. Crore	1,910.39
2	Transmission Lines (ckt. km.)		
	Opening line length	ckt. km.	69,321.95
	Addition During Year	ckt. km.	4,237.00
	Closing line length	ckt. km.	73,558.95
	Average line length	ckt. km.	71,440.45
	O&M Expense Norm Per ckt. km.	Rs. Lakh	1.04
	Total O&M Expenses - Transmission Lines	Rs. Crore	742.98
3	Total O&M Expenses (As Per Norms)	Rs. Crore	2,653.37

GETCO stated that as stated in the Chapter on true-up for FY 2022-23, GETCO has added the 8 bays in respect of 220 kV Radhanesda substation and 71.08 ckt. km. in respect of 220 kV D/C Radhanesda-Vav (Khimanavas PGCIL) line in FY 2021-22, based on its Review Petition. The revised closing values of FY 2021-22 have been considered as opening values for FY 2022-23 for bays and ckt. km. Addition in bays and ckt. km. has been considered on the opening values of FY 2022-23 to arrive at the opening numbers for FY 2023-24. Approved additions in bays and transmission line length for FY 2023-24 have been considered to arrive at opening values of FY 2024-25.

Further, GETCO stated that it has projected the O&M expenses for FY 2024-25 by considering an escalation of 5.72% on the O&M norm for FY 2023-24, as approved in the Tariff Order in Case No. 2163 of 2022 dated 31<sup>st</sup> March, 2023.

### **Commission's analysis**

The Commission has examined the submissions made by GETCO. The Commission has considered actual closing values of Bays and ckt. km as approved in the truing up for FY 2022-23 as the opening values of Bays and ckt. km. for FY 2023-24 and addition of Bays and ckt. km. as approved in the Tariff Order dated 31st March, 2023, to arrive at the opening values of Bays and ckt. km. for FY 2024-25, i.e., 17,557.68 Bays and 69,247.50 ckt. km., respectively,



for determining the normative 0&M expenses for FY 2024-25.

Further, as discussed in earlier Section, the Commission has allowed Capitalisation based on past trends. The addition of Bays and ckt. km. projected by GETCO is based on projected Capitalisation of Rs. 4,290.95 Crore. As the Commission has approved Capitalisation of Rs. 2,596.22 Crore for FY 2024-25, the Commission has considered the addition of Bays and Transmission Lines in FY 2024-25, on proportionate basis in the ratio of approved Capitalisation to projected Capitalisation.

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 2024-25. 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 2024-25 also. The Commission, in the last Tariff order dated 31st March, 2023, has considered the O&M expenses norms for FY 2023-24, by escalating the O&M norms for FY 2022-23 by 5.72%.

Hence, the Commission has considered the escalation of 5.72% on the O&M norms approved for FY 2023-24 to derive the O&M norms for FY 2024-25, which is also in line with the proposal submitted by GETCO, as shown in the Table below:

Table 5-7: Approved O&M norms for FY 2024-25 (Rs. Crore)

Particulars	Per Bay	Per ckt. km.
O&M Norms for FY 2023-24	10.03	0.98
Escalation Rate	5.72%	5.72%
O&M Norms for FY 2024-25	10.61	1.04

Accordingly, the approved number of Bays and ckt. km of Transmission Lines, and the normative O&M expenses for FY 2024-25 have been computed as detailed in the Table below:

Table 5-8: Approved O&M expenses for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	Units	Petition	Approved
1	Substations (Bays)			
	Opening Number of Bays	Number	17,565.68	17,557.68
	Addition During Year	Number	891.00	539.00



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Sl. No.	Particulars	Units	Petition	Approved
	Closing Number of Bays	Number	18,456.68	18,096.68
	Average Number of Bays	Number	18,011.18	17,827.18
	O&M Expense Norm Per Bay	Rs. Lakh	10.61	10.61
	Total O&M Expenses - Substations	Rs. Crore	1,910.39	1,890.88
2	Transmission Lines (Ckt Km)			
	Opening Ckt Km	Ckt Km	69,321.95	69,247.50
	Addition During Year	Ckt Km	4,237.00	2,563.57
	Closing Ckt Km	Ckt Km	73,558.95	71,811.08
	Average Ckt Km	Ckt Km	71,440.45	70,529.29
	O&M Expense Norm Per Ckt Km	Rs. Lakh	1.04	1.04
	Total O&M Expenses - Transmission Lines	Rs. Crore	742.98	733.11
3	Total O&M Expenses (As Per Norms)	Rs. Crore	2,653.37	2,623.98

The Commission accordingly approves the normative O&M expenses for FY 2024-25 as Rs. 2,623.98 Crore.

### 5.8. Depreciation for FY 2024-25

### Petitioner's Submission

GETCO has submitted that the closing GFA of FY 2022-23, as proposed in its true-up Petition, after adding the disallowed capitalisation against Radhanesda and Dholera Solar Park as claimed in GETCO's Review Petition, has been considered as the opening GFA of FY 2023-24. The addition to GFA during FY 2023-24 has been considered based on the capitalisation approved in the Tariff Order dated 31st March, 2023 and for FY 2024-25, it has considered based on projected capitalisation for that year. Depreciation has been calculated taking into consideration the opening balance of assets at the beginning of the year and the projected capitalisation during the year.

GETCO has considered the Depreciation rate for FY 2024-25 same as actual depreciation rate claimed in the true-up for FY 2022-23. GETCO has projected depreciation of Rs. 1,673.75 Crore for FY 2024-25 as given in the Table below:

Table 5-9: Proposed Depreciation for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	FY 2024-25
1	Opening Gross Block	38,117.61



Sl. No.	Particulars	FY 2024-25
2	Net Additions during the Year	4,290.95
3	Closing Gross Block	42,408.56
4	Depreciation for the Year	1,673.75
5	Average Rate of Depreciation	4.1570%

### **Commission's Analysis**

The Commission has computed the depreciation applying the weighted average rate of depreciation of 4.157% for FY 2024-25 based on the approved weighted average rate of depreciation for FY 2022-23. The closing GFA approved in the truing up of FY 2022-23 has been considered as opening GFA of FY 2023-24. Asset addition in FY 2023-24 has been considered equal to the capitalisation approved for FY 2023-24 in the Tariff Order dated 31st March, 2023. Further, asset addition in FY 2024-25 on account of capitalization is considered as approved earlier in this Chapter.

Thus, the Commission approves Depreciation for FY 2024-25 as detailed in the Table below:

Table 5-10: Approved Depreciation for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	Petition	Approved
1	Opening Gross Block	38,117.61	38,023.50
2	Net Additions during the Year	4,290.95	2,596.22
3	Closing Gross Block	42,408.56	40,619.71
4	Depreciation for the Year	1,673.75	1,634.61
5	Average Rate of Depreciation	4.157%	4.157%

The Commission approves the Depreciation of Rs. 1,634.61 Crore for FY 2024-25.

### 5.9. Interest and Finance charges for FY 2024-25

### **Petitioner's Submission**

The closing balance of loan portfolio as claimed in the true-up for FY 2022-23, after adding the impact of the disallowed capitalisation against Radhanesda and Dholera Solar Park and the change in the depreciation on account of change in depreciation rate, as claimed in GETCO's Review Petition, has been considered as the opening for FY 2023-24. The Normative loan addition during FY 2023-24 is considered as approved in Tariff Order dated 31st March, 2023 to work out the opening loan balance of FY 2023-24. For FY 2024-25, the

addition to loan has been computed as per Capex Funding Plan projected by GETCO.

The repayment during FY 2024-25 is considered equivalent to the depreciation computed for FY 2024-25. The rate of interest has been taken as the weighted average rate of interest on the actual loan portfolio for FY 2022-23, which is 5.43%. Other Bank Charges have been taken at the same level as in FY 2022-23.

GETCO has projected interest and finance charges of Rs. 553.98 Crore for FY 2024-25 as detailed in the Table below:

Table 5-11: Proposed Interest and Finance Charges for FY 2024-25 (Rs. Crore)

S. No.	Particulars	FY 2024-25
1	Opening Loans	8,161.28
2	Loan Addition during the Year	2,693.96
3	Repayment during the Year	1,673.75
4	Closing Loans	9,181.48
5	Average Loans	8,671.38
6	Interest on Loan	470.48
7	Other Charges (Guarantee + Financing Charges)	83.50
8	Total Interest & Finance Charges	553.98
9	Weighted Average Interest Rate	5.43%

### **Commission's Analysis**

The Commission has examined the interest and finance charges projected by GETCO for FY 2024-25. The closing loan as approved in the Truing-up for FY 2022-23 has been considered as the opening balance of loan for FY 2023-24. The loan addition and loan repayment in FY 2023-24 has been considered as approved for the year in the Tarff Order dated 31st March, 2023. The loan addition in FY 2024-25 has been considered as approved earlier in this Chapter.

The weighted average rate of interest has been considered as 5.47%, based on the truing-up for FY 2022-23. In accordance with the GERC (MYT) Regulations, 2016, repayment for FY 2024-25 has been considered equal to the depreciation allowed for FY 2024-25.

The Commission has considered the Other Bank Charges at the same level as approved for FY 2022-23. As regards FERV losses, the same have not been considered in the projected ARR for FY 2024-25, and shall be considered based on actuals subject to prudence check, at the time of true-up for FY 2024-25.



The Commission has accordingly computed the interest expenses for FY 2024-25, as detailed in the Table below:

Table 5-12: Approved Interest and Finance Charges for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	Petition	Approved
1	Opening Loans	8,161.28	8,102.51
2	Loan Addition during the Year	2,693.96	1,611.62
3	Repayment during the Year	1,673.75	1,634.61
4	Closing Loans	9,181.48	8,079.51
5	Average Loans	8,671.38	8,091.01
6	Interest on Loan	470.48	442.67
7	Other Charges (Guarantee + Financing Charges)	83.50	2.36
8	Total Interest & Finance Charges	553.98	445.03
9	Weighted Average Interest Rate	5.43%	5.47%

The Commission approves the interest and finance charges of Rs. 445.03 Crore for FY 2024-25.

### 5.10. Interest on working capital for FY 2024-25

### Petitioner's submission

GETCO submitted that the normative interest on working capital has been computed 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 10.30% (Weighted average SBI MCLR rate as on 1st April, 2023, i.e., 7.80%, plus 250 basis points).

GETCO has projected interest on working capital of Rs. 117.76 Crore for FY 2024-25 as detailed in the Table below:

Table 5-13: Proposed Interest on Working Capital for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	FY 2024-25
1	O&M Expenses (1 Month)	221.11
2	Maintenance Spares (1% of opening GFA)	381.18



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3	Receivables (1 Month)	541.15
4	Total Working Capital	1,143.44
5	Rate of Interest on Working Capital	10.30%
6	Interest on Working Capital	117.76

### **Commission's Analysis**

The Commission has computed the normative working capital requirement and interest on working capital in accordance with Regulation 40.2 of the GERC (MYT) Regulations, 2016, and its First Amendment. Considering the 1-year MCLR of State Bank of India as on 1<sup>st</sup> April, 2023, i.e., 8.50%, and adding a spread of 250 basis points, the interest rate works out to 11.00%. The Commission has calculated the working capital and interest on working capital for FY 2024-25 as detailed in the Table below:

Table 5-14: Approved Interest on Working Capital for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	Petition	Approved
1	O&M Expenses (1 Month)	221.11	218.67
2	Maintenance Spares (1% of opening GFA)	381.18	380.23
3	Receivables (1 Month)	541.15	522.59
4	Total Working Capital	1,143.44	1,121.49
5	Rate of Interest on Working Capital	10.30%	11.00%
6	Interest on Working Capital	117.76	123.36

The Commission thus, approves Interest on Working Capital of Rs. 123.36 Crore for FY 2024-25.

## 5.11. Return on Equity for FY 2024-25

### Petitioner's submission

GETCO has considered the closing balance of Equity for FY 2022-23, as claimed in the trueup for FY 2022-23, after adding the impact of the disallowed capitalisation against Radhanesda and Dholera Solar Park, as claimed in GETCO's Review Petition, as the opening equity for FY 2023-24. The Normative equity addition during FY 2023-24 is considered as approved in Tariff Order dated 31<sup>st</sup> March, 2023 to work out opening balance of equity for FY 2024-25. The equity addition during FY 2024-25 has been considered as 30% of projected capitalisation GETCO has considered ROE on the average equity for FY 2024-25 at 14%, in accordance with the GERC (MYT) Regulations, 2016.



GETCO has projected ROE of Rs. 1,423.00 Crore for FY 2024-25 as detailed in the Table below:

Table 5-15: Proposed Return on Equity for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	FY 2024-25
1	Opening Equity	9,587.04
2	Equity Addition during the year	1,154.55
3	Closing Equity	10,741.59
4	Average Equity	10,164.32
5	Rate of Return on the Equity	14.00%
6	Return on Equity	1,423.00

### **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 2024-25. The rate of ROE as per GERC (MYT) Regulations, 2016 is 14% as claimed by GETCO.

The closing balance of equity as approved in the Truing-up for FY 2022-23 has been considered as the opening balance of equity loan for FY 2023-24. The equity addition in FY 2023-24 has been considered as approved for the year in the Tariff Order dated 31<sup>st</sup> March, 2023. The equity addition in FY 2024-25 has been considered as approved earlier in this Order. The Commission has computed the RoE for FY 2024-25 as detailed in the Table below:

Table 5-16: Approved Return on Equity for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	Petition	Approved
1	Opening Equity	9,587.04	9,558.81
2	Equity Addition during the year	1,154.55	690.69
3	Closing Equity	10,741.59	10,249.50
4	Average Equity	10,164.32	9,904.16
5	Rate of Return on the Equity	14.00%	14.00%
6	Return on Equity	1,423.00	1,386.58

The Commission approves the Return on Equity of Rs. 1,386.58 Crore for FY 2024-25.



### **5.12.** Tax on Income for FY 2024-25

### Petitioner's Submission

GETCO submitted that it has considered the Income Tax for FY 2024-25 in line with the provisions of GERC (MYT) Regulations, 2016 by considering the tax incurred during FY 2022-23. 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."

GETCO has projected the Income Tax for FY 2024-25 as detailed in the Table below:

Table 5-17: Proposed Tax on Income for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	FY 2024-25
1	Tax on Income	588.48

### **Commission's Analysis**

The Commission has examined the submission made by GETCO. As specified in Regulation 41.1 of the GERC (MYT) Regulations 2016, the Commission approves Income Tax for FY 2024-25, at the same level as approved in the truing up for FY 2022-23. Any variation in Income Tax actually paid and approved shall be adjusted based on documentary evidence. at the time of truing up for FY 2024-25 subject to prudence check, in accordance with Regulation 41.1 of the GERC (MYT) Regulations, 2016.

Table 5-18: Approved Income Tax for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	Petition	Approved
1	Tax on Income	588.48	588.46

Thus, the Commission approves Income Tax of Rs. 588.46 Crore for FY 2024-25.

## 5.13. Expenses capitalized during FY 2024-25

### Petitioner's submission

GETCO has considered the capitalized expenses for FY 2024-25 with an escalation of 5.72%



on the actual expenses capitalized in FY 2022-23 as detailed in the Table below:

Table 5-19: Proposed Expenses Capitalised for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	FY 2024-25
1	Expenses Capitalised	427.90

### **Commission's Analysis**

The Commission notes that Expenses Capitalised are directly linked with O&M Expenses and the Capitalisation. The Expenses Capitalised in FY 2022-23 work out to 20.97% of the actual O&M expenses. However, the expenses capitalised for FY 2022-23, if allowed for FY 2024-25 at the same level, will amount to 14.59% of the normative O&M expenses as approved by the Commission in this Order. Hence, the Commission approves the expenses capitalised for FY 2024-25 as proposed by GETCO, as given in the Table below, which shall be trued-up based on actuals:

Table 5-20: Approved Expenses Capitalised for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	Petition	Approved
1	Expenses Capitalised	427.90	427.90

Thus, the Commission approves Expenses Capitalised of Rs. 427.90 Crore for FY 2024-25.

### 5.14. Non-Tariff Income for FY 2024-25

### **Petitioner's Submission**

GETCO has submitted that it has estimated Non-Tariff Income for FY 2024-25 at the same levels as actual for FY 2022-23, as shown in the Table below:

Table 5-21: Projected Non-Tariff Income for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	FY 2024-25
1	Non-Tariff Income	532.37

### **Commission's Analysis**

The Commission has examined the submission of GETCO. GETCO has estimated the Non-Tariff Income to remain constant at FY 2022-23 levels in FY 2024-25. The Commission has accepted GETCO's submission in this regard and accordingly approves Non-Tariff Income



for FY 2024-25 equivalent to Non-Tariff Income as approved in truing up for FY 2022-23 as shown in the Table below:

Table 5-22: Approved Non-Tariff Income for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	Petition	Approved
1	Non-Tariff Income	532.37	532.37

Thus, the Commission approves Non-Tariff Income of Rs. 532.37 Crore for FY 2024-25.

### **5.15.** Contribution to Contingency Reserve

### Petitioner's Submission

GETCO has claimed Contingency Reserve of Rs. 190.59 Crore for FY 2024-25 in accordance with Regulation 68.3 of the GERC (MYT) Regulations, 2016, which provides for appropriation to Contingency Reserve of not more than 0.5 percent of the original cost of Fixed Assets annually in the calculation of ARR, as shown in the Table below:

Table 5-23: Projected Contribution to Contingency Reserve for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	FY 2024-25
1	Contribution to Contingency Reserves	190.59

### **Commission's Analysis**

The Commission has examined the submission of GETCO. 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 of 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. Accordingly, the Commission approves Rs. 190.12 Crore towards Contribution to Contingency Reserve for FY 2024-25, which is 0.5 percent of opening GFA approved for FY 2024-25.

Table 5-24: Approved Contribution to Contingency Reserve for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	Petition	Approved
1	Contribution to Contingency Reserves	190.59	190.12

The Commission approves Contribution to Contingency Reserves of Rs. 190.12 Crore for FY



2024-25.

### 5.16. **Projected and Approved Fixed Costs for FY 2024-25**

The ARR as projected by GETCO and as approved by the Commission for FY 2024-25 is given in the Table below:

Table 5-25: ARR Approved for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	Projected By GETCO	Approved
1	Operation & Maintenance Expenses	2,653.37	2,623.98
2	Depreciation	1,673.75	1,634.61
3	Interest & Finance Charges	553.98	445.03
4	Interest on Working Capital	117.76	123.36
5	Return on Equity	1,423.00	1,386.58
6	Contribution to Contingency Reserves	190.59	190.12
7	Total Fixed Costs	6,612.45	6,403.68
8	Less: Expenses Capitalised	427.90	427.90
9	Add: Provision for Income Tax	588.48	588.46
10	Total Transmission Charges	6,773.04	6,564.25
11	Less: Non-Tariff Income	532.37	532.37
12	Aggregate Revenue Requirement	6,240.67	6,031.88



## 6. Determination of Transmission Charges for FY 2024-25

### 6.1. Introduction

This Chapter deals with the determination of Transmission Charges for FY 2024-25 for GETCO. The Commission has approved the ARR for FY 2024-25 in accordance with the GERC (MYT) Regulations, 2016, as detailed in the earlier Chapter of this Order.

### 6.2. Determination of Transmission Tariff for FY 2024-25

The Table below summarizes the ARR for FY 2024-25, as approved by the Commission in Table 5-25 of this Order:

Table 6-1: Approved ARR for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	Projected By GETCO	Approved
1	Operation & Maintenance Expenses	2,653.37	2,623.98
2	Depreciation	1,673.75	1,634.61
3	Interest & Finance Charges	553.98	445.03
4	Interest on Working Capital	117.76	123.36
5	Return on Equity	1,423.00	1,386.58
6	Contribution to Contingency Reserves	190.59	190.12
7	Total Fixed Costs	6,612.45	6,403.68
8	Less: Expenses Capitalised	427.90	427.90
9	Add: Provision for Income Tax	588.48	588.46
10	Total Transmission Charges	6,773.04	6,564.25
11	Less: Non-Tariff Income	532.37	532.37
12	Aggregate Revenue Requirement	6,240.67	6,031.88

GETCO has submitted the total projected loading for GETCO system for FY 2024-25 as shown in the Table below:



### **Gujarat Energy Transmission Corporation Limited**

### Truing Up for FY 2022-23 and Determination of ARR and Tariff for FY 2024-25

**Table 6-2: Total Loading in MW** 

Sl. No.	Stations	FY 2024-25 Projected
A	GSECL Plants	6,202
В	IPPs	5,773
С	Share from Central Sector	8,535
D	СРР	181
Е	Wind Farm Capacity	7,207
F	Solar Project	11,603
G	Hybrid	1,235
Н	Bio-Mass Power capacity	52
I	Others (Small/ Mini Hydel and MSW)	100
J	Torrent Power (Ahmedabad + Surat + Dahej + Dholera)	566
K	Western Railway (OA)	141
	Total Loading in MW	41,595

The Petitioner has submitted Transmission Tariff for FY 2024-25, based on the Truing up projected for FY 2022-23. The Commission has determined the Revenue (Gap) / Surplus, based on the truing up for FY 2022-23. The detailed computation of the Revenue (Gap) / Surplus amount has been provided in earlier sections.

The Petitioner has claimed the Transmission Tariff for FY 2024-25 on the basis of the Projections of ARR for FY 2024-25, the Revenue (Gap) / Surplus for FY 2022-23 as mentioned in the earlier Chapter. Further, based on the Order in Petition No. 2093 of 2022 dated 21<sup>st</sup> March 2023 by the Commission, wherein the Commission had approved the revised Revenue Gap of Rs. 110.90 Crore in place of Gap of Rs. 94.74 Crore approved earlier for FY 2020-21, the balance revenue gap of Rs. 16.16 Crore has been proposed to be recovered in the Transmission Tariff of FY 2024-25.

The Petitioner's proposal and the Transmission Tariff approved by the Commission for FY 2024-25 are given in the Table below:



### **Gujarat Energy Transmission Corporation Limited**

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Table 6-3: Approved Transmission Tariff for FY 2024-25

Sl. No.	Stations	Unit	Claimed	Approved
1	ARR for FY 2024-25	Rs. Crore	6,240.67	6,031.88
2	Less: Revenue (Gap)/Surplus for FY 2022-23	Rs. Crore	(236.98)	(222.64)
3	Less: Additional Revenue (Gap)/Surplus for FY 2020-21 as per Review Petition	Rs. Crore	(16.16)	(16.16)
4	ARR after considering (Gap)/ Surplus of True-up	Rs. Crore	6,493.81	6,270.67
5	Total MW allocation	MW	41,594.63	41,594.63
6	Transmission Tariff	Rs. /MW/Day	4,277.30	4,130.32

The Commission, accordingly, approves the Transmission Tariff for FY 2024-25, as mentioned above.

Regulation 72.1 of the GERC (MYT) Regulations, 2016 has specified the 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 2024-25 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. 6,270.67 Crore for FY 2024-25 as shown in the Table above.

In the past Tariff Orders, the Commission has decided the methodology for working out



short-term transmission charges on per kWh basis and worked out short-term charges for FY 2023-24. Similar principle has been followed by GETCO in its Petition and accordingly the energy input for FY 2024-25 has been worked out on proportionate basis considering the Transmission Loading Capacity of 41,595 MW. The Commission notes that, as per the principle followed during past Tariff Orders, the energy input for FY 2024-25 has to be worked out based on the expected load factors.

Accordingly, the Commission has worked out the total estimated wheeled units during FY 2024-25 as 160,427.13 MUs on proportionate basis considering the Transmission Loading Capacity of 41,595 MW during FY 2024-25 and average load factor of 44.03%. Thus, the Transmission Charges payable by the Short-Term users, including the collective transactions through Power Exchanges, works out as under:

TC = 39.09 Paise/kWh (6,270.67 Crore/160427.13 MUs)

### 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 31st March, 2023 in Case No. 2163 of 2022.

After considering the submission of the Petitioner, the Commission decides to continue with the existing Reactive Energy Charges and approves the charges for FY 2024-25 as shown in the following Table:

Table 6-4: Reactive Energy Charges approved for FY 2024-25

Sl. 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

The Reactive Energy Charges shall be levied only in case of drawal of reactive energy when the voltage at the metering point is below 97% or in case of injection of reactive energy when the voltage at the metering point is above 103%, in accordance with the GERC Grid Code Regulations, 2013, i.e., Reactive Energy Charges shall be levied only when drawal or injection of reactive energy is detrimental to the grid and shall not be levied when drawal or injection of reactive energy supports the grid.



## 7. Compliance of Directives

### 7.1. Compliance of Directives issued by the Commission

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

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

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 and about transmission elements which are running in overload condition for more than two times in a calendar month. 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, as well as the time of filing of the tariff petition in future.

## **Compliance:**

GETCO has submitted a report on average as well as peak loading of various 400 kV, 220kV, 132 kV and 66 kV substations in Gujarat for 1st Quarter of FY 2023-24 (April-2023 to June-2023) on 4th November, 2023 and 2nd Quarter of FY 2023-24 (July-2023 to September-2023) on 20th November, 2023.

Further, GETCO has also submitted the loading of important EHV elements during  $2^{nd}$  Quarter of FY 2023-24 and EHV transmission elements, which are running in overload condition for more than two times in a calendar month during  $1^{st}$  Quarter of FY 2023-24 (April-2023 to June-2023) on  $4^{th}$  November, 2023 and  $2^{nd}$  Quarter of FY 2023-24 (July-2023 to Sept-2023) on  $20^{th}$  November, 2023.

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

The Commission has noted the submission of the Petitioner. GETCO is directed to continue submitting reports in this regard on quarterly basis as well as at the time of filing of the tariff



petition in future.

### 7.2. New Directives issued by the Commission

# Directive 1: Submission of Realistic CAPEX Plan along with the Tariff Petition

The Commission has observed that the actual Capex and Capitalisation achieved by GETCO are significantly different from that projected by GETCO in its CAPEX Plan, especially in terms of Bays and Transmission Lines projected at 400 kV and lower voltages like 220 kV, 132 kV, and 66 kV. The GFA addition at 400 kV is lower than that projected, whereas the GFA addition at 220 kV, 132 kV, and 66 kV voltages is higher than projected. Hence, GETCO is directed to ensure that the CAPEX Plan submitted along with the Tariff Petition is realistic and reflects the ground realities in terms of system requirements. GETCO is directed to adhere to the capex plan line item-wise. If there is any requirement that necessitates alteration in such line item-wise numbers, GETCO shall intimate the Commission in advance along with reasons for such deviations. along .

# Directive 2: Development of Intra-State Transmission Projects through Tariff Based Competitive Bidding (TBCB)

As upheld by the Hon'ble Supreme Court in its Order dated 23<sup>rd</sup> November 2022 to introduce competitive bidding in the Transmission element, the Commission, vide Order in Suo Motu Petition No. 2171 of 2023 dated 7<sup>th</sup> March 2023 has fixed the Threshold Limit for development of intra-State Transmission projects through TBCB as Rs. 100 Crore excluding land cost. In the said Order, the Commission has ruled as under:

"Looking at the above observations/scrutiny and also the need for development of upcoming Intra-State Transmission Infrastructure in a cost-effective and timely manner due to Renewable Energy penetration in the Energy Basket of the Gujarat State, we decide that an amount of **Rs. 100 Crore excluding land cost** be kept as Threshold limit and all new and augmentation of Intra-State Transmission Projects costing above this threshold limit shall be developed through Tariff Based Competitive Bidding. We opine that it will encourage the competition amongst the stake holders and also bring more project in the TBCB ambit."



### **Gujarat Energy Transmission Corporation Limited**

### Truing Up for FY 2022-23 and Determination of ARR and Tariff for FY 2024-25

The Commission also directed the STU to take, in consultation with Government of Gujarat, steps for bundling/packaging of projects to be executed under TBCB, creation of Payment Security Mechanism (PSM), development of single window clearance mechanism, formulation of Standard Bidding Documents (SBD) and selection of Bid Process Coordinator (BPC) in line with SBD and guidelines issued by Ministry of Power, GoI from time to time. The Commission also directed GETCO to frame guidelines in this regard within four months from the issue of final order on the Suo Motu proceedings, after approval of the Commission.

GETCO is directed to submit compliance report and the status of implementation of directives issued in the above Order and guidelines, along with the list of projects proposed to be undertaken through TBCB, within 3 months of issue of this Order.

## Directive 3: Submission of Periodic Status Reports on underutilised Sub-stations and Transmission Lines

The Commission has received objection regarding underutilisation of GETCO assets. GETCO is directed to submit the line and sub-station loading data of last 4 years and reasons for under utilisation of the assets below 30%, within 2 months from the date of this Order and quarterly Status Report on under-utilised Sub-stations and Transmission Lines, segregating the Sub-stations and Transmission Lines under the following load levels for the period of last 3 years:

- Loading between 0 to 10%
- Loading above 10% and up to 20%
- Loading above 20% and up to 30%
- Loading above 30% and up to 40%

In each quarterly Status Report, GETCO should also submit the reasons for the underutilisation and the action plan for improving the utilisation of the above assets.

# Directive 4: Submission of Periodic Status Reports on critically over-loaded Sub-stations and Transmission Lines

GETCO is directed to submit the quarterly Status Report on critically over-loaded Substations and Transmission Lines, the time period for which they are over-loaded, and the action plan for mitigating the over-loading of the above assets.



### **Gujarat Energy Transmission Corporation Limited**

Truing Up for FY 2022-23 and Determination of ARR and Tariff for FY 2024-25

## Directive 5: Submission of Status of Evacuation Facilities for evacuating power from Solar, Wind and Hybrid projects contracted by GUVNL

GETCO is directed to submit the half-yearly Status Report on availability of sufficient evacuation facilities for evacuating power generated from the solar, wind, and hybrid projects contracted by GUVNL under Section 63 of the Act at the upcoming Solar Parks at Khavda, Dholera, etc., in the State, specifying the anticipated COD of the projects vis-à-vis the GETCO Sub-station/line availability or status to achieve its SCOD, specifying the reasons for delay, if any, anticipated. Moreover, the various stages of such Sub-stations/lines planned and comparison with actual achievement should also be submitted, along with the Report.



### **COMMISSION'S ORDER**

The Commission approves the components of Transmission Charges and the Transmission Tariff for GETCO for FY 2024-25, as shown in the Tables below:

## ARR for FY 2024-25 (Rs. Crore)

Sl. No.	Particulars	Approved
1	Operation & Maintenance Expenses	2,623.98
2	Depreciation	1,634.61
3	Interest & Finance Charges	445.03
4	Interest on Working Capital	123.36
5	Return on Equity	1,386.58
6	Contribution to Contingency Reserves	190.12
7	Total Fixed Costs	6,403.68
8	Less: Expenses Capitalised	427.90
9	Add: Provision for Income Tax	588.46
10	Total Transmission Charges	6,564.25
11	Less: Non-Tariff Income	532.37
12	Aggregate Revenue Requirement	6,031.88

### **Transmission Tariff for FY 2024-25**

Sl. No.	Particulars	Unit	FY 2024-25
1	Transmission Tariff	Rs./MW/Day	4,130.32
2	Transmission Tariff for STOA	Ps./kWh	39.09

This Order shall come into force with effect from 1st April, 2024.

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

Place: Gandhinagar Date:: 01 .06.2024



## **Annexure 1: Capex Details for FY 2024-25**

Table: CAPEX FY 2024-25 - Substation Details (Rs. Crore)

Sl. No.	VOLTAGE CLASS (KV)	Name of Substation	FY 2024-25 Planning
1	765	765kV Gela Somnath SS	10.00
2	765	2 NOS OF 765 FB EXTENSION AT 765 KV VATAMAN SUBSTATION	0.00
	765 kV Total		10.00
1	400	2 nos of 400 kV FB extension at 400 kV Kosamba	0.00
2	400	400 kV Achhalia (GIS) 2x500 MVA X'mers, 63/125 MVAR Bus Reactor 400KV BC-1, 400KV PT Bay-2, 400 kV FB - 6, 220KV x'mer bay-2, 220 kV FB - 8, 220/66 kV, 2x160 MVA X'mer; 66 kV FB - 6 and 66 kV interconnection (4) 220KV BC bay-1, 220KV PT bay-2 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	0.00
3	400	400/220 kV Babarzar substation to 400 kV level (GIS)	69.00
4	400	400 kV 2 nos of Bay extension at 400 kV Amreli	0.00
5	400	400 kV Balani Vav (Pipavav) 400/220 kV, 2x500 MVA X'mers, 400 kV FB - 4, 220 kV FB - 4, 63 MVAR Bus Reactor, 220/66 kV s/s with 2x160 MVA X'mer; 66 kV FB - 6 and 66 kV interconnections	0.00
6	400	2 nos of 400 kV FB extension at 400 kV Varsana substation	2.00
7	400	400/220/66 kV Shivlakha	110.37
8	400	400/220 KV Bhachunda (Abdasa) substation (Upgradation)	0.00
9	400	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	0.00
10	400	2 nos 400 kV FB extension at 400 kV Veloda S/s	0.00
11	400	400 kV Dholera GIS 400/220 kV 3x500 MVA Transformer 220/66 kV 2x160 MVA Transformer 1x125 MVAR 4 nos of 400 kV Bays	0.00
12	400	400/220 kV Kalavad	24.44
13	400	400 kV FB extension at 400 kV Kalavad S/s for 400 kV Kalavad - Keshod line	0.00
14	400	400/220/66 kV Khijadiya (Keshod) GIS substation (Dist. Junagadh) (1) 400/220 kV, 2 X 500 MVA (2) 6 Nos. of 400 kV feeder bays (3) 400 kV, 1 x 125 MVAR Reactor with bay	0.00
15	400	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	0.00
16	400	400 kV Saykha (GIS) substation Ta. Wagra Dist. Bharuch 400/220 kV- 3x500 MVA Trf, 400 kV 1x125 MVAr bus reactor, 400KV BC-1, 400KV PT bay-2, 400 kV FB - 4 nos, 220KV ICT bay-3, 220/66 kV - 2x160 MVA Trf - 220 kV FB - 6 nos, 220KV BC-1, 220KV PT bay-2 & 66 kV FB - 10 nos, 66KV PT bay-2, 66KV BC-1, 66KV x'mer- 2+1,	24.88
17	400	2 nos 400 kV FB extension at 400 kV Veloda Substation	0.00



Sl. No.	VOLTAGE CLASS (KV)	Name of Substation	FY 2024-25 Planning
18	400	2 nos 400 kV FB extension at 400 kV Jhanor S/s	0.00
19	400	400 kV Prantij 400/220 kV, 2x500 MVA X'mers, 400 kV FB - 4, 220 kV FB - 4, 63 MVAR Bus Reactor, 220/66 kV s/s with 2x160 MVA X'mer; 66 kV FB - 6 and 66 kV interconnections	55.44
		400 kV Total	286.13
1	220	Upgradation of 132kV Ankleshwar S/S to 220kV level HGIS/GIS system 220/66 kV, 2x160 MVA X'mer; 220 kV FB-6, 220 kV BC bay-1, PT Bays - 2 nos. 66 kV FB - 8 66KV x'mer 2+1, BC-1, PT-2	0.00
2	220	220kV Avana/ Padana S/s/ Upgradation of 66kV Gandhidham B S/s to 220kV Level 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB -8, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	18.17
3	220	2 nos of 220 kV FB extension at 400 kV Kosamba substation	0.00
4	220	220 kV Balethi (AIS) 220/66 kV s/s with 2x160 MVA X'mer (2 Nos for future provision); 220 kV FB-4 (additional space for 4 nos. of future bays), 220 kV BC bay-1, 220 kV PT bay-2, 66 kV FB - 10, X'mer-2+1, BC-1, PT bay-2	8.89
5	220	220 kV Bangavadi 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB-8, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	7.02
6	220	220 kV Bhalgamda 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB-8, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	7.02
7	220	220 kV Bhat (up-gradation of 66 kV to 220 kV - GIS) 220/66 kV, 2x160 MVA X'mer; 220 kV FB-6, 220 kV BC bay-1, PT Bays - 2 nos. 66 kV FB - 8 220/132 kV, 2 X 150 MVA ICTs; 132KV x'mer bay -2, 132 kV FB-4, BC bay-1, PT Bay-2 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	0.00
8	220	220 kV FB Extension at 400 kV Jetpur S/s	2.56
9	220	220KV Bhesan 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-5, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB -10, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	9.14
10	220	Upgradation of 66kV Bhildi substation to 220kV level using GIS 220/66 kV, 2(3)x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, PT Bays - 2 nos. 66 kV FB - 10, 66KV X'mer 3, 66KV BC-1, 66KV PT bay-2	18.50
11	220	220 kV Bhuteshawar (Avaniya) 220/66 kV s/s with 2x160 MVA ICT; 220 kV FB-6 (additional space for 4 nos. of future bays), 220 kV BC bay-1, 220KV PT-2, 66 kV FB - 8, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	15.63
12	220	220kV Chikada (Satwan) (Umarpada) S/S 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-6 (additional space for 4 nos. of future bays), 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB - 6, U/G cable termination, 66KV x'mer 2+1, PT bay-2, BC-1	0.00
13	220	220 kV Chiloda (up-gradation of 132 kV to 220 kV - GIS) 220/66 kV GIS substation with 2x160 MVA X'mer; 220 kV FB-6, 220 kV BC bay-1, PT Bays - 2 Nos. 66 kV FB – 8 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2 220/132 kV, 2 X 150 MVA ICTs at 220kV Chiloda	0.00
14	220	220 kV Dhama	12.79
15	220	220 kV Dhank 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4+2, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB -6, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	14.03



Sl. No.	VOLTAGE CLASS (KV)	Name of Substation	FY 2024-25 Planning
16	220	220 kV Dumas (GIS) (Vesu) 220/66 - 3 x160 MVA Trf, 220 kV FB - 6 nos, 66 kV FB - 8 nos ( PT bay-2 BC-1)	1.43
17	220	220 kV Gadhada 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB -6, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	14.03
18	220	220 kV Gadhsisa 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB-8, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	14.03
19	220	220kV Ghodasar (Rah) S/S 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB - 10 ,66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	11.11
20	220	2 nos of 220 kV FB at 400 kV Shapar substation	1.28
21	220	2 nos 220 kV FB extension at 220 kV Suva s/s	0.00
22	220	220 KV Giyavad substation 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB -8, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	3.01
23	220	2 nos of 220 kV FB at 220 kV Motigop substation	0.00
24	220	2 nos of 220 kV FB at 220 kV babra substation	0.00
25	220	220 kV Gomta substation (Dist. Rajkot) (1) 220/66 kV, 2 X 160 MVA, (2) 6 Nos. 220 kV FB, 220 kV BC bay-1, 220KV PT bay-2, 6 Nos. 66 kV feeder bays. 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	0.00
26	220	220kV Hajipir / Dhordo 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB-8, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	50.14
27	220	2 nos of 220 kV FB extension at 220 kV Vyankatpura S/s	0.00
28	220	220 kV Halol GIS 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220 kV PT bay-2, 66 kV FB - 6 along with 66 kV interconnections (4) 66KV x'mer -2+1, 66KV BC-1, 66KV PT bay-2	13.00
29	220	220 kV Hathsani 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB -6, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	7.02
30	220	220 kV Jambusar Drug Park GIS 220/66 kV, 3x160 MVA X'mer (2 nos for future provision). X'mer bay: 5 nos, 220 kV FB - 6 Nos (4 nos for future provision), 220 kV BC Bay - 1, PT bay-2, 66KV x'mer 3+2+1 66 kV FB -10 nos (4 nos for Future Provision) 66KV PT-2, BC-1	0.00
31	220	220 kV Jantral 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220 kV TBC - 1, 220KV PT bay-2, 66 kV FB -6, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	14.03
32	220	2 nos 220 kV FB extension at 220 kV Agiyol Substation	0.00



Sl. No.	VOLTAGE CLASS (KV)	Name of Substation	FY 2024-25 Planning
33	220	220 kV Kakwadi Sea Food Park GIS 220/66 kV, 2x160 MVA ICT (2 nos for future provision). X'mar bay: 2+2; 220 kV FB - 4 Nos (6 nos for future provision), 220 kV BC Bay - 1, PT bay-2, 66 kV FB -6 nos (6 nos for Future Provision) 66KV X'mer 2+2+1, 66KV BC-1, 66KV PT bay-2	0.00
34	220	2 nos 220 kV FB extension at 220 kV Dhansura Substation	1.92
35	220	220 kV Feeder bay extension at 220 kV Dehgam substation	0.00
36	220	220/66 kV (GIS) system at Kanbha (Upgradation) 220/66 kV, 2x160 MVA X'mer; 220 kV FB-6, 220 kV BC bay-1, PT Bays - 2 nos. 66 kV FB - 8 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	0.00
37	220	2 nos of 220 kV FB extension at 765 kV Navsari s/s	3.20
38	220	220 kV Khajod 220/66 kV GIS s/s with 2x160 MVA X'mer; 220 kV FB-8, 220 kV BC bay-1, 220 kV X'mer bays: 3 nos (1 for future), 66 kV FB at Khajod- 10, 220KV PT bay-2, 66 kV transformer bay-3+1, 66KV PT bay-2, BC bay-1,	29.04
39	220	220 kV Khimat 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220 kV TBC - 1, 220KV PT bay-2, 66 kV FB -6, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	7.02
40	220	220kV Khumapur (Kharedi) S/S 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB - 10, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	14.03
41	220	220 kV Kundiyana (Olpad) 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 66 kV FB - 10 220KV PT bay-2 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	6.30
42	220	220 kV Kutiyana 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB -8, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	7.02
43	220	220 kV Kuwadiya (Khambhalia) substation (Dist. Jamnagar) (1) 220/66 kV, 2 X 160 MVA, (2) 6 Nos. 220 kV, 6 Nos. 66 kV feeder bays. 220KV BC-1, 220KV PT bay -2 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	0.00
44	220	220 kV Maglana 220/66 kV, 2X160 MVA ICT 220 kV FB-6, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB -6, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	12.00
45	220	220/66 kV Khijadiya (Keshod) (1) 220/66 kV, 2 X 160 MVA (2) 8 Nos. of 220 kV & 8 Nos. of 66 kV feeder bays 220 kV BC bay-1, 220KV PT bay-2, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	19.00
46	220	220 kV Mahudha 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 220KV PT bay-2 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	7.02
47	220	Upgradation of 66kV Mahuva S/S to 220kV level HGIS/GIS 220/66 kV, 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, PT Bays - 2 nos. 66 kV FB - 8, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	9.94



Sl. No.	VOLTAGE CLASS (KV)	Name of Substation	FY 2024-25 Planning
48	220	220/132/66 KV Makansar s/s 220/66 kV s/s with 2x160 MVA X'mer; 2x 220/132KV Xmer, 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2,	0.00
		2x 220/132KV Xmer ,132 kV FB -4, 132KV PT bay-1	
		66 kV FB -6, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	
49	220	220kV Mandali S/S 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2 66 kV FB - 6 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	0.00
50	220	220 kV FB extension at 220 kV Keshod S/s for 220 kV Keshod (400 kV)-Keshod line	0.00
51	220	220 kV Mandan 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB -6, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	7.02
52	220	220 kV FB extension at 220 kV Veraval S/s for 220 kV Keshod-Veraval line	0.00
53	220	Upgradation of 132 kV Manjusar to 220 kV AIS 220/132 kV 2x150 220 kV FB - 4 nos 220 kV BC bay - 1 nos PT bay -2 & 132 kV Future bay Demolition of old building of MGVCL 132KV x'mer bay-2,	0.00
54	220	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)	3.86
55	220	220 kV Mesanka (Gariyadhar) ss 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB -6, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	0.16
56	220	220 kV Metoda S/s GIS 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-2, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB - 8 and 66 kV interconnections 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	0.51
57	220	220 KV Munjpur substation (Dist. Patan)(1) 220/66 KV, 2 X 160 MVA,(2) 6 Nos. 220 KV FB, 220KV BC-1, 220KV PT bay-2 6 Nos. 66 KV feeder bays., 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	11.96
58	220	220 kV Nagor 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB -8, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	7.02
59	220	220 kV Near Thavar 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220 kV TBC - 1, 220KV PT bay-2, 66 kV FB -6, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	7.02
60	220	220 KV Nichi Mandal (Vankda) / Shapar 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB -8, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	27.05
61	220	220 kV Raghanesda Pooling ( GIS) Substation 220/33 kV 6 x125 MVA ICT 220 kV FB -2 nos, 220KV BC Bay -1, PT Bays - 2 33 kV Line bays - 18 33KV X'mer 6+1, 33KV BC-1, 33KV PT bay-2	64.46



Sl. No.	VOLTAGE CLASS (KV)	Name of Substation	FY 2024-25 Planning
62	220	220kV Rajsitapur 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB -8, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	0.00
63	220	220 kV Rajula (Sintex / Lunsapur ) 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, PT bay-2,66 kV FB - 6 along with 66 kV interconnections 66KV X'mer 2+2+1,66KV BC-1,66KV PT bay-2	0.00
64	220	220/66 kV Kalavad GIS 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-5, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB-8, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	0.00
65	220	220 kV Samadhiyala (Bagasara) 220/66 kV, 2x160 MVA X'mer; 220 kV FB-2, 220 kV BC bay-1,220KV PT bay-2 66 kV FB - 6 and 66 kV interconnections 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	7.73
66	220	220 kV Sarigam GIS (Umagam) 220/66 kV, 2x160 MVA X'mer; X'mer Bay: 3 (1 for future), 220 kV FB-4, 220 kV BC bay-1, PT Bays - 2 nos. 66 kV FB - 10, 66KV x'mer- 3+1, cap. Bank-1, 66KV BC-1, PT-2	1.45
67	220	220kV Sarvala S/S 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 66 kV FB - 6 220KV PT bay-2 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	0.00
68	220	Up gradation of 66kV Sevalia S/S to 220kV Level 220/66 kV s/s with 2X 160 MVA Transformers, 220 kV FB-4, 220 kV BC Bay-1, 220KV PT bay-2 66 kV FB-6	8.76
69	220	220kV Sisrana/Satlasana 220/66 kV s/s with 2x160 MVA X'mers (provision to be kept for additional 2 x'mer for later stage); 220 kV FB-4 (provision to be kept for additional 8 bays for later stage), 220 kV BC bay- 1, 220KV PT bay-2 66 kV FB – 10, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	14.36
70	220	220 kV Talaja substation (Dist. Bhavnagar) (1) 220/66 kV, 2 X 160 MVA, (2) 6 (4) Nos. 220 kV, 6 Nos. 66 kV feeder bays. , 220 kV BC bay-1, 220KV PT bay-2, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	0.35
71	220	220kV Vansda (Limzer) S/S 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 66 kV FB - 6, 220KV PT bay-2 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	0.00
72	220	220 kV Vansi / Borsi Textile Park GIS 220/66 kV, 2x160 MVA ICT, X'mer bay: 2+2, (2 nos for future provision). 220 kV FB - 4 Nos (6 nos for future provision), 220 kV BC Bay - 1, PT bay-2, 66 kV FB -10 nos (4 nos for Future Provision) 66KV X'mer 2+2+1, 66KV BC-1, 66KV PT bay-2	0.00
73	220	Upgradation of 66kV Velanja S/S to 220kV level HGIS/GIS system 220/66 kV, 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, PT Bays - 2 nos. 66 kV FB - 6 X'mer 2+1, 66KV BC-1, PT bay-2	0.00
74	220	220 kV Veraval GIS 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT Bay-2,66 kV FB - 8 along with 66 kV interconnections 66KV X'mer 2+1,66KV BC-1,66KV PT bay-2	0.00
75	220	220KV Kamlapur Panchvada (Jasdan) 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-8, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB -10, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	3.30



Sl. No.	VOLTAGE CLASS (KV)	Name of Substation	FY 2024-25 Planning
76	220	220KV Patkhilori 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB -10, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	7.21
77	220	220/33 kV Dholera Pooling Substation	5.52
78	220	220KV Siddheshwar (66KV Upgradation) 220/66 kV s/s with 2x160 MVA X'mer; 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, 66 kV FB-8, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2	49.48
79	220	2 nos 220 kV FB extension at 220 kV Suva	0.00
80	220	220KV Babarzar 220/66 kV s/s with 3x160 MVA X'mer; 220KV reactor-1 220 kV FB-4, 220 kV BC bay-1, 220KV PT bay-2, TBC bay-1, 66 kV FB -12, 66KV X'mer 3+1, 66KV BC-1, 66KV PT bay-2	5.88
81	220	220 kV 2 nos of Bay extension at 220 kV Rajula S/s	0.00
82	220	2 nos of 220 kV FB extension at 220 kV Bhatia substation	0.00
83	220	2 nos of 220 kV FB extension at 220 kV Ranavav substation	0.00
84	220	2 nos of 220 kV FB extension at 220 kV Motigop substation	0.00
85	220	220 kV 2 nos of Bay extension at 220 kV Bagasara S/s	0.00
86	220	220 kV 2 nos of Bay extension at 220 kV Otha S/s	0.00
		220 KV Total	592.35
1	132	132kV Kansumara S/S 2x132KV x 150MVA, X'mers, BC-1, PT Bay-2, 132 kV FB - 4, 66 kV FB -8, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2, cap. Bank-1	10
2	132	132 kV Unjha 2x132KV x 150MVA, X'mers, BC-1, PT Bay-2, 132 kV FB - 4, 66 kV FB -8, 66KV X'mer 2+1, 66KV BC-1, 66KV PT bay-2, cap. Bank-1	12.25
3	132	2 nos of 132 kV Bay extension at Valia substation for LILO of Achachalia - Ankhleshwar line	0
		132 kV Total	22.25
		66 kV Total	494.36
		Grand Total	1405.09

## TRANSMISSION LINES (Rs. CRORES)

Sl. No.	Voltage Class	Name of Project	Length of line in CKm	FY 2024- 25 (Rs Cr.)
1	765	765 KV D/C PACHCHHAM (FEDRA) - SAYKHA LINE (765 KV LINE INITIALLY TO BE CHARGED AT 400 KV LEVEL))	320	10
2	765	765 kV D/C Gela Somnath - Vataman line	400	10
		TOTAL 765 KV LINE	720	20
1	400	400kV D/C line for reconfigurations to have 400kV D/C Chorania-kosamba & 400kV D/C fedra-Sanand(Chaarodi) line)	50	5
2	400	400 kv Varsana-Halwad (Pkg 2)	94	12
3	400	400KV VADAVI - HALVAD LINE (PKG II)	144	7



Sl. No.	Voltage Class	Name of Project	Length of line in CKm	FY 2024- 25 (Rs Cr.)
4	400	400 KV D/C Adani - Zerda line-1 (Pkg - 2)	190	0
5	400	400kV KALAVAD - SAURASTRA D/C LINE TWIN AL-59 COND. AND 2 NOS OF 400 kV FB AT 400 kV KALAVAD S/S	298	41
6	400	LILO of Both Ckt of 400kV D/C CGPL - Jetpur Line at Saurashtra substation (M/C line)	100	7
7	400	400 KV D/C Adani - Zerda line-1 (Pkg - 1)	160	0
8	400	400kV D/C Bhachunda - Shivlakha line (2 x 210 = 420KM)	420	0
9	400	400kV D/C Shivlakha - Veloda line (2 x 245 = 490KM)	490	0
10	400	400KV VARSANA - HALVAD LINE (P)	145	28
11	400	LILO of BOTH CIRCUIT OF 400 KV D/C MUNDRA – ZERDA LINE AT SHIVLAKHA (400 KV) SUBSTATION (M/C 25RKM LINE)	50	8
12	400	400kV D/C VADINAR(ESSAR)-AMRELI WITH ACSR TWIN MOOSE CONDUCTOR (PACKAGE-III)	60	0
13	400	400 kV D/C Kasor - Amreli line (Quad Moose)	164	15
14	400	400 kV D/C Adani - Zerda line-1	316	0
15	400	LILO of one Ckt of 400kV D/C Soja - Zerda line at Veloda (2 x 50 = 100Ckm)	100	10
16	400	LILO OF ONE CKT OF 400 KV D/C HALVAD - VADAVI LINE AT 400 KV CHHARODI S/S (ACSR TWIN MOOSE)	86	4
17	400	400 kV D/C Kasor - Amreli line (Quad Moose) Pkg: 3	144	6
18	400	400 kV D/C Sanand (Chharodi) - Soja line (by using LILO portion of Halvad - Vadavi LILO at Sanand)	100	8
19	400	400 kV D/C Saykha - Jhanor (NTPC) line OR LILO of 400 kV S/C Jhanor - Sugen (TPGL) line at 400 kV Sayakha substation)	50	0
20	400	400 kV D/C line for reconfigurations to have 400 kV D/C Chorania - Kosamba & 400 kV D/C Fedra - Sanand (Chharodi) line	50	8
21	400	400 KV D/C Kosamba - Achhalia line (2X70= 140 CKm) (conductor configuration changed from Twin Moose to Twin AL-59 vide BR. No. 109.16/1816 dated 27.10.16)	140	0
22	400	LILO of 400 kV S/C SSP - Asoj & Kasor line at Achhalia substation (2x40=80 CKm)	80	0
23	400	LILO OF BOTH CIRCUITS OF 400 KV D/C BHOGAT - KALAVAD LINE AT BABARZAR SUBSTATION	1	2
24	400	400kV D/C Pipavav - Amreli line (2x95=190 CKm) (Additional Budget for 20KM Approved vide BR no. 95.2/1502 dated 24.06.14) (conductor configuration changed from ACSR Quad Moose to Twin AL-59 vide BR. No. 109.16/1816 dated 27.10.16)	190	0
25	400	400 kV D/C Bhachunda – Varsana line (Twin AL-59)	264	7
26	400	LILO of BOTH CIRCUITS OF 400kV D/C FEDRA (PACHCHHAM) – DHOLERA SIR 'AA' LINE TO DHOLERA SOLAR PARK S/S - 9.666 KM	0	0
27	400	400kV D/C Fedra (Pachchham) - Dholera 'AA' line with Twin AL-59 conductor at 220kV voltage class	0	0
28	400	LIL O of one Ckt of proposed 400 kV D/C Wanakbori - Soja line at Prantij s/s	28	11
29	400	400kV D/C Veloda - Prantij line (2 x150 = 300KM)	125	14
30	400	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	39	0



Sl. No.	Voltage Class	Name of Project	Length of line in CKm	FY 2024- 25 (Rs Cr.)
		Pooling Substation (400 kV M/C with AL-59 conductor) and Termination of line on 400 KV switchyard which is initially terminated at 220 KV system		
31	400	400KV D/C FEDRA (PACHCHHAM) - DHOLERA 'AA' LINE	66	0
32	400	400 KV D/C BHOGAT - KALAVAD LINE*	125	8
33	400	LILO of one 400 KV D/C Essar - Hadala line at Kalavad substation	16	0
34	400	400kV D/C KALAWAD - KESHOD LINE (2 x 120 = 240Ckm)	240	0
35	400	400kV D/C Shapar-Chharodi line (2x90=180km)	90	19
36	400	400 KV D/C Shapar – Pachham (Fedra) line (Twin AL-59)	197	30
		TOTAL 400 KV LINE	4812	250
1	220	INTERCONNECTION OF 220KV D/C HALVAD-SADLA LINE & 220KV D/C HADALA-SARTANPUR LINE	0	0
2	220	220kV D/C Chorania-Salejada line	136	4
3	220	220kV D/C Botad-Chorania line	102	9
4	220	220KV KALAVAD - KANGASIALI LINE (P)	114	1
5	220	220 KV D/C BECL- BOTAD	189	6
6	220	220 kV D/C Gavasad - Salejda line	194	6
7	220	LILO of BOTH CKT OF 220KV D/C JAMBUVA - KARAMSAD LINE AT DHUVARAN CCPP (BY USING EXISTING LILO PORTION AND THROUGH 220KV D/C PACHHAM - KASOR LINE) AND 4 NOS OF FB EXTENSION AT 220 KV DHUVARAN	80	8
8	220	2 NOS OF 220 KV FB AT 400 KV SANAND GIS	0	4
9	220	220 kV D/C Wanakbori TPS - Zalod line along with one circuit LILO at Savdasna Muvada (Lunawada) & 2 nos of FB at 220 kV Savdasana Muvada	3	0
10	220	LILO of one circuit of 220 kV D/C Kasor - Gavasad line at 220 kV Gotri substation and 2 nos of 220 kV FB at 220 kV Gotri S/s	43	10
11	220	LILO of 220 kV Haldarwa - Dahej line at 220 kV Wagra substation along with 2 nos of AIS bays at 220 kV Wagra substation	10	13
12	220	LILO of BOTH CIRCUIT OF 220 KV D/C TAPPAR – SHIVLAKHA LINE AT SHIVLAKHA (400 KV) SUBSTATION (M/C TOWER AL-59)	20	14
13	220	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)	3	0
14	220	LILO OF BOTH CIRCUIT OF 220 KV D/C HALDARWA - RELIANCE (IPCL) LINE AT 220 KV RAHIYAD (SUVA) SUBSTATION (M/C TOWER) ALONG WITH 4 NOS OF 220 KV HYBRID LINE BAYS AT SUVA SUBSTATION	4	8
15	220	LILO of 220 kV S/C Kosamba – Ichchhapore line at GSEG along with other miscellaneous work (High Ampacity Conductor)	16	4
16	220	LILO OF 220 KV S/C CHIKHLI - ATUL - VAPI LINE (ATUL - VAPI SECTION) AT VAPI-II SUBSTATION	33	17
17	220	LILO of 220 kV S/C CHIKHLI - VAPI LINE AT ATUL SUBSTATION	10	5
18	220	LILO of both circuits of 220 kV D/C KAPP - Vapi line (ISTS line) at 400 kV Vapi - II substation of ISTS	10	4
19	220	INTERCONNECTION AT LILO POINT OF VAV-NAVSARI LILO AT TALANGPORE FOR VAV-POPADA 2ND CIRCUIT AND TALANGPORE / 765 kV substation - NAVSARI 2ND CIRCUIT LINE	1	17
20	220	LILO of 220 kV S/C HALDARWA - DAHEJ LINE AND 220 kV S/C WAGRA-DAHEJ LINE AT 400 kV SAYKHA (BOTH CKT ON M/C TOWER)	4	0



Sl. No.	Voltage Class	Name of Project	Length of line in CKm	FY 2024- 25 (Rs Cr.)
21	220	220 kV D/C Navsari (765 kV) - Talangpore line	44	14
22	220	220 kV D/C Saykha-Suva line on M/C Tower	10	1
23	220	LILO of 220 kV Talangpore (Sachin) - Navsari and 220 kV Talangpore (Sachin) - Vav line at 765 kV Navsari (new) substation of ISTS	28	13
24	220	LILO of 220 kV S/c Navsari - Atul line at Chikhli substation	1	1
25	220	LILO of BOTH CKT OF 220KV D/C KAWAS - HALDARWA AT ANKLESHWAR BY USING EXISTING ROW OF 132KV D/C ANKLESHWAR - BHARUCH LINE (4 x 10 = 40CKM)	40	0
26	220	LILO of both Ckt of 220kV S/C Bhimasar - Morbi and 220kV S/C Bhimasar - Sartanpar at Padana S/s (4 x 5 = 20CKM on M/C towers)	20	2
27	220	LILO of BOTH OF 220kV S/C ANJAR - WELSPUN AND 220kV S/C SHIVLAKHA - WELSPUN AT PADANA S/S (2 x 1.5KM, 1200SQ. Mm)	18	4
28	220	220 KV D/C Kosamba - Balethi line AL - 59 conductor	70	2
29	220	LILO of one circuit of 220 kV D/C Ukai (Th) - Achhalia line (which is not to be LILO at 220 kV Virpore) at 220 kV Balethi substation	30	1
30	220	LILO of 220 kV Jamnagar-Hadala line at Bangavadi	53	7
31	220	220 kV D/C Prantij - Agiyol Line	17	2
32	220	LILO of both circuits of 220 kV D/C Mansar-Sadla line at Bhalgamda	30	6
33	220	220 kV D/C Prantij - Dhansura line (AP-59)	26	3
34	220	LILO OF BOTH CIRCUITS OF 220 KV D/C GANDHINAGAR TPS - RANASAN LINE AT BHAT SUBSTATION BY USING EXISTING ROW OF 66 KV RANASAN-BHAT OR 132 KV RANASAN-PRL LINE	32	0
35	220	220 KV S/C (400 KV) JETPUR - BHESAN LINE (SPARE S/C LINE OF D/C TOWER TO BE USED IN JETPUR)	16	6
36	220	LILO of 220 KV S/C JETPUR - VISAVADAR LINE AT 220 KV BHESAN SUBSTATION	5	0
37	220	LILO of both circuit of 220kV D/C Kansari-Deodar at 220kV Bhildi	10	6
38	220	LILO OF BOTH CKT OF 220 KV D/C BECL - BOTAD LINE AT AVANIYA S/S (4 x 15 = 60 CKM on M/C Tower)	60	0
39	220	LILO of both circuit of 220kV D/C Ukai (Hy) - Achhalia line at 220 kV Umarpada (Chikda)	60	0
40	220	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	20	0
41	220	LILO OF BOTH CIRCUITS OF 220 KV D/C GANDHINAGAR TPS - SOJA LINE AT CHILODA SUBSTATION	60	0
42	220	220 KV D/C Dhama - Bechraji line (AL-59)	45	6
43	220	220kV LILO AT DHANK S/s FROM EXISTING 220kV MOTIPANELI-RANAVAV LINE ON DC & MC TOWERS. (DC ON SAME MC TOWERS: 04 KM) & (ON DC TOWERS: 02 KM.)	12	0
44	220	LILO of 220 kV D/C Motipaneli-Sardargadh line at Dhank	8	1
45	220	LILO of 220 kV S/C GSEG - TALANPORE (SACHIN) LINE AT 220 kV DUMAS	6	0
46	220	LILO of 220 kV S/C ICHHAPORE - TALANGPORE (SACHIN) LINE AT 220 kV DUMAS	6	0
47	220	LILO of 220 kV Amreli-Botad & Dhasa-Botad line at Gadhada	25	4
48	220	LILO of Both circuit of 220 kV D/C Visavadar - Timbdi line at 400 kV Keshod substation	24	1
49	220	220 KV D/C Keshod (400 KV) - Keshod line	50	1
50	220	LILO оf вотн Скт.	85	15



Sl. No.	Voltage Class	Name of Project	Length of line in CKm	FY 2024- 25 (Rs Cr.)
		of 220 kV D/C Nakhatrana-Nanikhakhar + 220 kV D/C Bhachunda - Gadhsisa line		
51	220	220 KV D/C KESHOD (400 KV) - VERAVAL LINE	90	5
52	220	LILO of both circuit of 220kV D/C Tharad-Dhanera at 220kV Rah S/S	24	2
53	220	220 KV D/C GHIYAVAD - SHAPAR (400 KV s/s) LINE (AL-59)	85	1
54	220	220кV D/C Motigop - Gondal II (Gomta) (2 x 125 = 250Скм)	250	0
55	220	220 кV D/C Babra - Gomta (Gondal-II)	160	0
56	220	LILO of 220KV Akrimota-Nakhatrana and 220KV Akrimota-Bhachunda lines at 220KV Hajipir/Dhordo Substation—220KV M/C line	123	6
57	220	220 KV D/C LILO of Vyankatpura - PGCIL line no.1 at 220KV Halol	30	1
58	220	LILO of one circuit of 220 kV D/C Chandrapura - Godhara line at 220 kV Halol	3	1
59	220	LILO of 220 kV D/C Babara-Shapar line at Hathsani	25	2
60	220	220 kV D/C Saykha-Jambusar line (AL-59 conductor)	60	0
61	220	LILO OF BOTH CIRCUIT OF 220 KV D/C AMOD-GAVASAD AT 220 KV JAMBUSAR DRUG PARK SUBSTATION (220 KV M/C LINE - AL-59 CONDUCTOR WITH OPGW)	80	0
62	220	LILO of both Ckt. Of 220 kV Jamla - Kheralu line at new 220 kV Jantral ss	25	4
63	220	LILO OF EXISTING 220 KV NAVSARI-ATUL AND 220 KV CHIKLI - VAPI LINES (AFTER COMPLETE PLANNED SCHEME LILO OF BOTH CIRCUIT OF 220 KV D/C CHIKHLI - ATUL LINE) AT 220 KV KANKWADI / DANTI SUBSTATION (220 KV M/C LINE - AL-59 CONDUCTOR WITH OPGW)	60	0
64	220	220 KV DEHGAM - KANBHA LINE	50	4
65	220	LILO of both circuit of 220kV D/C Nyara-Thebda line at Kalawad S/s	5	0
66	220	220KV Bhatia - Kalavad line (P)	238	1
67	220	LILO of one circuit of 220 kV D/C Ranasan - Karamsad line at Kanbha substation	2	0
68	220	LILO of 220 kV S/C ICHHAPORE – TALANGPORE LINE AT PROPOSED 220 kV KHAJOD SUBSTATION	2	1
69	220	LILO of BOTH CKT OF 220 KV D/C KAWAS - NAVSARI(PG) LINE AT 220 KV KHAJOD S/S	9	2
70	220	220 kV D/C NAVSARI (765 kV) - KHAJOD (PROPOSED S/S) LINE	10	3
71	220	LILO of 220 KV D/C Kansari-Thavar at Khimat	20	1
72	220	LILO of 220 kV Agiyol-Mathasur (Bhutiya) & 220 kV Dhansura - Agiyol line at 220 kV Kheradi	70	10
73	220	LILO OF BOTH CIRCUITS OF 220 KV GSEG – KOSAMBA LINE AT 220 KV KUDIYANA (OLPAD) WITH PILE FOUNDATION	70	2
74	220	LILO of 220 kV D/C Ranavav-Motipaneli line at Kutiyana	55	4
75	220	LILO of 220 kV D/C Bhatia - Kalavad line at Kuwadiya	55	3
76	220	LILO of 220 kV S/C Vallabhipur - Vartej line at 220 kV Maglana substation	10	0
77	220	220 KV D/C Maglana - Pachchham line (AL-59) on M/C line to have reconfigurations to establish 220 kV D/C Botad - Kasor line	360	11
78	220	LILO of both circuit of 220 KV D/C Sagapara - Talaja line at Maglana substation (M/C tower AL-59)	140	11
79	220	220 KV D/C Sevalia - Mahudha & 220 KV D/C Kheda (prop) - Mahudha	90	9
80	220	LILO of BOTH CIRCUITS OF 220 KV D/C MOTA - CHIKHLI (AMBHETA) LINE AT MAHUVA	80	5



81		Name of Project	line in CKm	25 (Rs Cr.)
	220	LILO of 220 KV S/C Sartanpar - Wankaner line at 220 KV Makansar substation	1	1
82	220	220 kV D/C Chharodi (400 kV) - Mandali line	120	0
83	220	LILO of 220kV S/C Mitha - Soja line at 220 kV Mandali	30	0
84	220	LILO of 220 kV D/C GPPC-Otha line at Mandan	25	2
85	220	220 kV Bhogat - Bhatia line	26	0
86	220	220 KV D/C BHOGAT - RANAVAV LINE & 2 NOS OF FB AT RANAVAV	70	4
87	220	220 KV D/C BHOGAT (400 KV) - MOTI GOP LINE	70	6
88	220	LILO OF BOTH CKT OF 220 KV D/C ASOJ - MOGAR LINE AT MANJUSAR WITH UG CABLE	6	0
89	220	LILO of one circuit of 220kV D/C Tharad-Deodar at 220kV Mera S/S	39	2
90	220	LILO of One CKT of 220kV D/C Amreli-Dhasa line at 220kV Gariyadhar S/S	78	10
91	220	LILO OF 220KV SAVARKUNDLA - SAGAPARA LINE AT 220KV GARIYADHAR S/S with ACSR Zebra condu. & OPGW	15	0
92	220	LILO OF 220 KV S/C JETPUR-RAJKOT LINE AT METODA SUBSTATION	3	0
93	220	220 KV D/C Dhama - Munjpur line (AL-59)	60	4
94	220	LILO of 220 KV D/C Munjpur - Mehsana line (by using existing 220 kV Sankhari - Mehsana & Veloda - Mehsana line)	60	4
95	220	LILO of 220 kV D/C Nakhatrana-Varsana line at Nagor	30	2
96	220	LILO of both circuits of 220 KV D/C Jamanvada – Varsana line at 220 KV Bhachunda (AL-59) M/C line	41	0
97	220	LILO of one circuit of 220 KV D/C Akrimota – Nakhatrana line at Bhachunda	26	0
98	220	LILO OF BOTH CKT. OF 220 KV THARAD THAVAR LINE AT NEW 220 KV SS NEAR THAVAR	30	4
99	220	LILO of BOTH CKT OF $220$ kV D/C BHIMASAR - CHARADVA AT VANKDA (NICHIMANDAL) (4 x $10 = 40$ Ckm)	0	0
100	220	LILO of one circuit of 220 KV D/C GPPC - SAVARKUNDLA LINE AT 220 KV RAJULA SUBSTATION	10	0
101	220	220 kV D/C Pipavav - Rajula line	12	0
102	220	220 KV D/C PIPAVAV - OTHA LINE	130	0
103	220	220 kV D/C Pipavav - Bagasara line	150	0
104	220	LILO of 220 kV S/C Savarkundla - Visavadar at Bagasara s/s	16	0
105	220	220KV LILO OF 220KV VAPI - TARAPUR LINE AT 220KV SARIGAM S/S ON M/C TOWERS with AL-59 condu. & OPGW	13	0
106	220	LILO of one circuit of 220kV D/C Ukai (Hydro) - Umarpada (Chikda) at 220 kV Sarvala with AL-59 conductor (With OPGW) (70 RKM)	140	0
107	220	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	23	4
108	220	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)	48	11
109	220	LILO of Both circuits of 220 KV D/C Otha (Mahuva) – Sagapara (Palitana) line at Talaja (2 X 15 RKM)	30	0
110	220	66 kV interconnection lines and its 66 kV FB for 220 kV Vansda (Limzer) substation	60	0
111	220	LILO OF BOTH CKT OF 220KV D/C NAVSARI - NASIK LINE AT 220KV LIMZER S/S (4 x 30 = 120CKM)	120	0



Sl. No.	Voltage Class	Name of Project	Length of line in CKm	FY 2024- 25 (Rs Cr.)
112	220	LILO OF BOTH CKT OF 220KV MOTI GOP-KALAVAD LINE AT 220KV BABARZAR S/S	45	8
113	220	LILO OF BOTH CIRCUIT OF PLANNED 220 KV D/C NAVSARI (NEW) (UNDER CONSTRUCTION POWERGRID SUBSTATION) - KHAJOD LINES AT 220 KV VANSI / BORSI SUBSTATION (220 KV M/C LINE - AL-59 CONDUCTOR WITH OPGW)	60	0
114	220	LILO of 220kV S/C GSEG - Kim and S/C GSEG - Mora - Kim at Velanja (4 x 10=40Ckm)	40	1
115	220	LILO of 220 kV S/C Keshod - Timbdi line at 220 kV Veraval	37	5
116	220	LILO OF BOTH CIRCUITS OF 220 KV D/C SHAPAR - BABARA LINE AT 220 KV KAMLAPUR SUBSTATION (AL-59)	21	2
117	220	220KV LILO AT 220KV KAMLAPUR FROM 220KV GONDAL - SADLA LINE	45	3
118	220	LILO of one circuit of 220 kV Amreli - Babara line at 220 kV Patkhilori	44	0
119	220	TERMINATION OF 220 KV D/C GPEC - HALDARWA LINE AT ACHHALIA (400 KV) INSTEAD OF HALDARWA S/S (ZEBRA)	180	0
120	220	LILO of 220 kV D/C Ukai (Th) - Achhalia line at 400 kV Achhalia	20	0
121	220	220 kV D/C Suva - Achhalia (400 kV) line	140	0
122	220	LILO OF BOTH CIRCUIT OF 220 KV D/C KALAVAD - KANGASHIYALI LINE AT SIDDHESHWAR SUBSTATION	22	7
		TOTAL 220 KV LINE	6299	400
1	132	132kV LILO AT PADVALA SS FROM EXSI. 132kV GONDAL (220KV) - VIKRAM LINE	2	0
2	132	LILO OF CIRCUIT OF 132 KV S/C GONDAL - HARIPUR LINE AT 220 KV VISAVADAR SUBSTATION (WITH OPGW)	39	0
3	132	132 kV S/C Sankhari (400 kV) - Deesa line	40	2
4	132	LILO of circuit of 132 kV D/C Mehsana - Patan line at 400 kV Sankhari substation with AL-59	50	1
5	132	132 KV NADIAD - MAHEMDAVAD LINE	10	0
6	132	132 kV Karamsad - Nadiad line	10	2
7	132	LILO OF BOTH CIRCUIT OF 132 KV D/C SIKKA-JAMNAGAR LINE AT 132 KV KANSUMARA SUBSTATION	16	2
8	132	LILO of 132 kV Mehsana-Sidhpur line at Unjha ss	20	10
9	132	LILO of one circuit of 132 kV D/C Achhalia – Ankleshwar line at Valia substation	30	0
10	132	132 kV 800 Sq.mm u/g cable from Bhat to Chandkheda by using already available 1.9 Km cable planned for LILO of Ranasan-Sabarmati line at Chandkheda	11	0
11	132	LILO OF 132KV S/C RANASAN - VIJAPUR LINE AT 132KV CHILODA S/S	4	0
12	132	132kV LILO AT 220kV DHANK S/s FROM EXISTING 132kV RANAVAV-BHAYAVADAR LINE.	28	1
13	132	132 KV SIKKA-BHUMIYAVADHAR LILO AT KUWADIYA	2	0
		TOTAL 132 KV LINE	262	18
		SUB TOTAL EHV	12092	688
1		66 KV of associated substations		717
2		66 KV under KSY		835
		TOTAL 66 KV LINE		1552
		GRAND TOTAL		2240



### Supply of LDMS System & OPGW (Rs. CRORE)

Name of Transmission Element	FY 2024-25
Installation of OPGW on existing line	20.31
Supply of LDMS System with Firewall and Router	-

