GUJARAT ELECTRICITY REGULATORY COMMISSION



Tariff Order

Truing up for FY 2013-14 and Determination of Tariff for FY 2015-16

For

Gujarat Energy Transmission Corporation Limited (GETCO)

Case No. 1461 of 2014 31st March, 2015

6th Floor, GIFT ONE, Road 5C, GIFT City Gandhinagar-382 335 (Gujarat), INDIA Phone: +91-79-23602000 Fax: +91-79-23602054/55 E-mail: gerc@gercin.org : Website www.gercin.org



GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)

GANDHINAGAR

Tariff Order

Truing up for FY 2013-14 and Determination of Tariff for FY 2015-16

For

Gujarat Energy Transmission Corporation Limited (GETCO)

Case No. 1461 of 2014 31st March, 2015

CONTENTS

1. Background and Brief History	1
1.1 Background	1
1.2 Gujarat Energy Transmission Corporation Limited (GETCO)	2
1.3 Commission's Order for the Second Control Period	2
1.4 Commission's Orders for Mid-term Review of Business plan for GETCO	3
1.5 Admission of the current petition and the public hearing process	3
1.6 Contents of this Order	5
1.7 Approach of this order	5
2. A Summary of GETCO's Petition	7
2.1 Actuals for FY 2013-14 submitted by GETCO	7
2.2 Proposed Transmission Charges for FY 2015-16	7
2.3 Request of GETCO:	8
3. Brief outline of objections raised, response from GETCC	and the
Commission's View	9
	_
3.1 Public Response to Petition	9
3.1 Public Response to Petition 4. Truing up for FY 2013-14	
4. Truing up for FY 2013-14	27
4. Truing up for FY 2013-14	2 7
4. Truing up for FY 2013-14	27
4. Truing up for FY 2013-14	272727
4. Truing up for FY 2013-14 4.1 Introduction 4.2 Operations and Maintenance Expenses for FY 2013-14 4.3 Capital Expenditure and Capitalization for FY 2013-14	2727273233
4. Truing up for FY 2013-14	27273233
4. Truing up for FY 2013-14 4.1 Introduction 4.2 Operations and Maintenance Expenses for FY 2013-14 4.3 Capital Expenditure and Capitalization for FY 2013-14 4.4 Depreciation for FY 2013-14 4.5 Interest and Finance Charges for FY 2013-14	2727323336
4. Truing up for FY 2013-14 4.1 Introduction 4.2 Operations and Maintenance Expenses for FY 2013-14 4.3 Capital Expenditure and Capitalization for FY 2013-14 4.4 Depreciation for FY 2013-14 4.5 Interest and Finance Charges for FY 2013-14 4.6 Return on Equity (ROE) for FY 2013-14	272732333639
4. Truing up for FY 2013-14 4.1 Introduction 4.2 Operations and Maintenance Expenses for FY 2013-14 4.3 Capital Expenditure and Capitalization for FY 2013-14 4.4 Depreciation for FY 2013-14 4.5 Interest and Finance Charges for FY 2013-14 4.6 Return on Equity (ROE) for FY 2013-14 4.7 Capitalisation of Expenses for FY 2013-14	27273233363940
4. Truing up for FY 2013-14 4.1 Introduction 4.2 Operations and Maintenance Expenses for FY 2013-14 4.3 Capital Expenditure and Capitalization for FY 2013-14 4.4 Depreciation for FY 2013-14 4.5 Interest and Finance Charges for FY 2013-14 4.6 Return on Equity (ROE) for FY 2013-14 4.7 Capitalisation of Expenses for FY 2013-14 4.8 Income Tax for FY 2013-14	2727323336394042
4. Truing up for FY 2013-14 4.1 Introduction 4.2 Operations and Maintenance Expenses for FY 2013-14 4.3 Capital Expenditure and Capitalization for FY 2013-14 4.4 Depreciation for FY 2013-14 4.5 Interest and Finance Charges for FY 2013-14 4.6 Return on Equity (ROE) for FY 2013-14 4.7 Capitalisation of Expenses for FY 2013-14 4.8 Income Tax for FY 2013-14 4.9 Contribution to Contingency Reserve for FY 2013-14	272732333639404243
4. Truing up for FY 2013-14 4.1 Introduction. 4.2 Operations and Maintenance Expenses for FY 2013-14. 4.3 Capital Expenditure and Capitalization for FY 2013-14. 4.4 Depreciation for FY 2013-14. 4.5 Interest and Finance Charges for FY 2013-14. 4.6 Return on Equity (ROE) for FY 2013-14. 4.7 Capitalisation of Expenses for FY 2013-14. 4.8 Income Tax for FY 2013-14. 4.9 Contribution to Contingency Reserve for FY 2013-14. 4.10 Revenue from other Income for FY 2013-14.	272732333639404243
4. Truing up for FY 2013-14 4.1 Introduction 4.2 Operations and Maintenance Expenses for FY 2013-14 4.3 Capital Expenditure and Capitalization for FY 2013-14 4.4 Depreciation for FY 2013-14 4.5 Interest and Finance Charges for FY 2013-14 4.6 Return on Equity (ROE) for FY 2013-14 4.7 Capitalisation of Expenses for FY 2013-14 4.8 Income Tax for FY 2013-14 4.9 Contribution to Contingency Reserve for FY 2013-14 4.10 Revenue from other Income for FY 2013-14 4.11 Interest on working capital for FY 2013-14	2727323336394042434445



5. Determination of Transmission Charges for FY 2015-16	54
5.1 Introduction	54
5.2 Determination of Transmission Tariff for FY 2015-16	54
6. Compliance of Directives	56
6.1 Compliance of Directives issued by the Commission	56
6.2 Compliance of Directives	56
6.3 New Directives	59
COMMISSION'S ORDER	60
Annexure-A: Cost Benefit Analysis for Transmission Projects	61



LIST OF TABLES

Table 2.1: Actuals Claimed by GETCO for FY 2013-14	7
Table 2.2: Proposed Transmission Tariff/Charges for FY 2015-16	7
Table 3.1: List of Objectors	9
Table 4.1: O&M Expenses (Normative / Actuals) for FY 2013-14	27
Table 4.2: Net O&M Expenses (as per audited accounts) for FY 2013-14	28
Table 4.3: Gains / (Losses) claimed from O&M Expenses	29
Table 4.4: Network addition of GETCO during FY 2013-14	29
Table 4.5: O&M Expenses Normative in Truing up for FY 2013-14	30
Table 4.6: Break-up of CSR Expenses	30
Table 4.7: O&M Expenses Approved in Truing up for FY 2013-14	31
Table 4.8: O&M Expenses and Gains/(Losses) Approved in Truing up for FY 2013-14	32
Table 4.9: Actual Funding of CAPEX	32
Table 4.10: Capital Expenditure and Capitalisation approved in the Truing up for FY 2013-14	33
Table 4.11: Depreciation claimed for FY 2013-14	33
Table 4.12: Gains/(Losses) claimed on Depreciation in the Truing up for FY 2013-14	34
Table 4.13: Depreciation approved in the Truing up for FY 2013-14	35
Table 4.14: Gains / (Losses) due to Depreciation in the Truing up for FY 2013-14	36
Table 4.15: Interest and Finance Charges Claimed by GETCO	36
Table 4.16: Interest and Finance Charges claimed by GETCO	37
Table 4.17: Gains/ (Losses) claimed from Interest and Finance Charges	37
Table 4.18: Approved Interest and Finance Charges in Truing up for FY 2013-14	38
Table 4.19: Approved Gains/(Losses) in Interest & Finance Charges in Truing up for FY 2013-14	38
Table 4.20: Return on Equity claimed by GETCO for FY 2013-14	39
Table 4.21: Return on Equity claimed by GETCO for FY 2013-14	39
Table 4.22: Approved Return on Equity in the truing up for FY 2013-14	40
Table 4.23: Gains / (Losses) in Return on Equity approved in the Truing up	40
Table 4.24: O&M expenses capitalized during FY 2013-14	41
Table 4.25: Gains / (Losses) in O&M expenses capitalized approved in the Truing up	41
Table 4.26: Income tax claimed by GETCO	42
Table 4.27: Gains / (Losses) approved in the Truing up for FY 2013-14	42
Table 4.28: Contingency Reserve claimed by GETCO	43
Table 4.29: Gains / (Losses) on Contingency Reserve approved in the Truing up for FY 2013-14	44
Table 4.30: Non-Tariff Income claimed by GETCO for FY 2013-14	44
Table 4.31: Gains / (Losses) on Non-Tariff income approved in the Truing up for FY 2013-14	45
Table 4.32: Interest on working capital claimed by GETCO	46
Table 4.33: Calculation sheet for Maintenance Spares till FY 2013-14	46
Table 4.34: Interest on Working Capital and Gains / (Losses) claimed in Truing up	47



Table 4.35: Interest on Working Capital approved in Truing up for FY 2013-14	48
Table 4.36: Gains/(Losses) in Interest on Working Capital Approved in Truing up for FY 2013-14	48
Table 4.37: Incentive for Target Availability claimed by GETCO	48
Table 4.38: Incentive Claimed for Higher Availability	49
Table 4.39: Incentive approved for higher availability	49
Table 4.40: Gains / (Losses) approved on the Incentive in the Truing up	50
Table 4.41: Approved in Truing up Order for FY 2013-14	50
Table 4.42: Revenue (Gap) / Surplus for FY 2013-14	53
Table 5.1: Approved ARR for 2015-16	54
Table 5.2: Transmission Tariff for FY 2015-16	55



ABBREVIATIONS

A&G	Administration and General Expenses
ARR	Aggregate Revenue Requirement
CAPEX	Capital Expenditure
CERC	Central Electricity Regulatory Commission
Control Period	FY 2011-12 to FY 2015-16
DGVCL	Dakshin Gujarat Vij Company Limited
DISCOM	Distribution Company
EA	Electricity Act, 2003
EHV	Extra High Voltage
FPPPA	Fuel and Power Purchase Price Adjustment
FY	Financial Year
GEB	Gujarat Electricity Board
GERC	Gujarat Electricity Regulatory Commission
GETCO	Gujarat Energy Transmission Corporation Limited
GFA	Gross Fixed Assets
GoG	Government of Gujarat
GSECL	Gujarat State Electricity Corporation Limited
GUVNL	Gujarat Urja Vikas Nigam Limited
HT	High Tension
JGY	Jyoti Gram Yojna
kV	Kilo Volt
kVA	Kilo Volt Ampere
kVAh	Kilo Volt Ampere Hour
kWh	Kilo Watt Hour
LT	Low Tension Power
MGVCL	Madhya Gujarat Vij Company Limited
MTR	Mid-term Review
MU	Million Units (Million kWh)
MW	Mega Watt
MYT	Multi-Year Tariff
O&M	Operations & Maintenance
PF	Power Factor
PGCIL	Power Grid Corporation of India Limited
PGVCL	Paschim Gujarat Vij Company Limited
PPA	Power Purchase Agreement
R&M	Repair and Maintenance
RLDC	Regional Load Despatch Centre
SBI	State Bank of India
SLDC	State Load Despatch Centre
UGVCL	Uttar Gujarat Vij Company Limited
WRLDC	Western Regional Load Despatch Centre





Before the Gujarat Electricity Regulatory Commission at Gandhinagar

Case No. 1461 of 2014

Date of the Order: 31/03/2015

CORAM

Shri Pravinbhai Patel, Chairman Dr. M.K. Iyer, Member Shri K.M. Shringarpure, Member

ORDER

1. Background and Brief History

1.1 Background

The Gujarat Energy Transmission Corporation Limited (hereinafter referred to as "GETCO" or the "Petitioner") has on 28th November, 2014 filed a Petition under Section 62 of the Electricity Act, 2003, read in conjunction with Gujarat Electricity Regulatory Commission GERC (MYT) Regulations, 2011, for the Truing up of FY 2013-14 and for determination of transmission charges for the FY 2015-16. The Commission admitted the Petition on 8th December, 2014.



1.2 Gujarat Energy Transmission Corporation Limited (GETCO)

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

- i. Gujarat State Electricity Corporation Limited (GSECL) A Generation Company
- ii. Gujarat Energy Transmission Corporation Limited (GETCO) A Transmission Company

Four Distribution Companies, namely:

- iii. Dakshin Gujarat Vij Company Limited (DGVCL)
- iv. Madhya Gujarat Vij Company Limited (MGVCL)
- v. Uttar Gujarat Vij Company Limited (UGVCL)
- vi. Paschim Gujarat Vij Company Limited (PGVCL); and
- vii. Gujarat Urja Vikas Nigam Limited (GUVNL) A Holding Company and is also responsible for purchase of electricity from various sources and supply to Distribution Companies.

The Government of Gujarat, vide notification dated 3rd October 2006, notified the final opening balance sheets of the transferee companies as on 1st April, 2005, containing the value of assets and liabilities, which stand transferred from the erstwhile Gujarat Electricity Board to the transferee companies, including Gujarat Energy Transmission Corporation Limited (GETCO). Assets and liabilities (gross block, loans and equity) as on the date mentioned in the Notification have been considered by the Commission in line with the Financial Restructuring Plan (FRP), as approved by Government of Gujarat.

1.3 Commission's Order for the Second Control Period

Gujarat Energy Transmission Corporation Limited filed its Petition under the Multi-Year Tariff framework for the FY 2011-12 to FY 2015-16, on 30th December 2010, in accordance with the Gujarat Electricity Regulatory Commission (Multi-Year Tariff Framework) Regulations, 2007, notified by GERC.

The Commission issued the new MYT Regulations, notified as GERC (Multi-Year Tariff) Regulations, 2011, on 22nd March, 2011.



Regulation 1.4 (a) of GERC (Multi-Year Tariff) Regulations, 2011 reads as under: "These Regulations shall be applicable for determination of tariff in all cases covered under these Regulations from 1st April, 2011 and onwards."

The Commission, in exercise of the powers vested in it under Sections 61, 62 and 64 of the Electricity Act, 2003, and all other powers enabling it in this behalf and after taking into consideration the submissions made by GETCO, the objections by various stakeholders, response of GETCO, issues raised during the public hearing and all other relevant material, issued the Multi-Year Tariff Order on 31st March, 2011 for the control period comprising FY 2011-12, FY 2012-13, FY 2013-14, FY 2014-15 and FY 2015-16, based on the GERC (MYT) Regulations, 2011.

1.4 Commission's Orders for Mid-term Review of Business plan for GETCO

The GETCO filed its Petition for Mid-term Review of Business Plan and revision of ARR for balance years for FY 2014-15 and FY 2015-16 of the control period in terms of Regulation 16.2(i) of GERC (MYT) Regulations, 2011.

The Commission in exercise of the powers vested in it under section 61, 62 and 64 of the Electricity Act, 2003 and all other powers enabling it on the behalf and after taking into consideration the submission made by GETCO, the objections by various stakeholders, response of GETCO, issues raised during public hearing and all other relevant material, approved the revised ARR for FY 2014-15 and FY 2015-16 in the Mid-term Review of Business Plan for GETCO on 29th April, 2014.

The Commission issued the order for truing up for FY 2012-13 and determination of Tariff for FY 2014-15 on 29th April, 2014.

1.5 Admission of the current petition and the public hearing process

The Petitioner submitted the current Petition for "Truing-up" of FY 2013-14, and determination of tariff for FY 2015-16 on 28th November, 2014. The Commission admitted the above Petition (Case No. 1461/2014) on 8th December, 2014.

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



The Public Notice, inviting objections / suggestions from its stakeholders on the ARR petition filed by it, was issued in the following newspapers on 13th December, 2014.

SI. No.	Name of the Newspaper	Language	Date of publication
1	Indian Express	English	13/12/2014
2	Sandesh	Gujarati	13/12/2014

The petitioner also placed the public notice and the Petition on the website (www.getcogujarat.com), for inviting objections and suggestions on its Petition. The interested parties/stakeholders were asked to file their objections / suggestions on the petition on or before 12th January, 2015.

Some of the consumers/consumer organisations requested for extension of last date for submission of objections. The Commission granted extension of time up to 25th January, 2015.

The Commission received objections / suggestions from 6 consumer / consumer organizations. The Commission examined the objections / suggestions received and fixed the date for public hearing for the petition on 10th February, 2015 at the Commission's Office, Gandhinagar, and subsequently a communication was sent to the objectors to take part in the public hearing process for presenting their views in person before the Commission. The public hearing was conducted in the Commission's Office in Gandhinagar as scheduled on the above date.

The names of the stakeholders who filed their objections and the objectors who participated in the public hearing for presenting their objections are given below:

SI. No.	Name of Stakeholders	Participated in the Public Hearing
1	Laghu Udyog Bharati - Gujarat	Yes
2	Federation of Gujarat Industries (FGI)	Yes
3	Indian Captive Power Producers Association (ICPPA)	Yes
4	Ahmedabad Textile Mills' Association (ATMA)	No
5	Gujarat Wind Farms Ltd.	No
6	Utilities Users' Welfare Association (UUWA)	Yes

A short note on the main issues raised by the objectors in the submissions in respect to 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 six chapters, as under:

- 1. 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.
- 2. The **Second Chapter** outlines the summary of GETCO's Truing up Petition.
- 3. 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.
- 4. The Fourth Chapter deals with the "Truing up" for FY 2013-14.
- 5. The **Fifth Chapter** deals with the determination of Transmission charges for FY 2015-16.
- 6. The **Sixth Chapter** deals with the compliance of directives.

1.7 Approach of this order

The GERC (MYT) Regulations, 2011, provide for "Truing up" of the previous year and determination of tariff for the ensuing year. The Commission has approved ARR for five years of the control period of FY 2011-12 to FY 2015-16 in the MYT Order and the revised ARR for FY 2014-15 and FY 2015-16, based on Mid-term Review of the Business Plan.

The GETCO has approached the Commission with the present Petition for "Truing up" of the FY 2013-14, i.e., the third year of the control period FY 2011-12 to FY 2015-16 and determination of the tariff for the FY 2015-16.

In this Order, the Commission has considered the "Truing up" for the FY 2013-14, as per GERC (MYT) Regulations, 2011, and the determination of tariff for the FY 2015-16, based on the revised ARR approved for FY 2015-16 in the Mid-term Review.

The Commission has undertaken "Truing up" for the FY 2013-14, based on the submissions of the Petitioner. The Commission has undertaken the computation of gains and losses for the FY 2013-14, based on the audited annual accounts.

While truing up of FY 2013-14, the Commission has been primarily guided by the following principles:



- Controllable parameters have been considered at the level approved as per the MYT Order, unless the Commission considers that there are valid reasons for revision of the same.
- 2. Uncontrollable parameters have been revised, based on the actual performance observed.
- 3. The Truing up for the FY 2013-14 has been considered, based on the GERC (MYT) Regulations, 2011. For the determination of the Transmission Tariff for FY 2015-16, the Commission has considered the revised ARR for FY 2015-16, based on the Mid-term Review of the Business Plan Order issued by the Commission.



2. A Summary of GETCO's Petition

2.1 Actuals for FY 2013-14 submitted by GETCO

The Gujarat Energy Transmission Corporation Limited (GETCO) submitted the Petition seeking approval of Truing up for Aggregate Revenue Requirement of FY 2013-14 and determination of transmission charges for the FY 2015-16. The transmission charges are to be recovered from the transmission system users, as per the GERC (MYT) Regulations, 2011.

GETCO submitted the details of expenses under various heads as given in Table below:

Table 2.1: Actuals Claimed by GETCO for FY 2013-14

(Rs. Crore)

SI. No.	Particulars	Approved for FY 2013-14 in MYT Order	Actuals / Normative for FY 2013-14
1	Operations & Maintenance Expenses *	697.17	642.76
2	Depreciation	688.07	513.35
3	Interest & Finance Charges	495.38	372.59
4	Interest on Working Capital	46.78	59.34
5	Return on Equity	537.97	423.43
6	Contingency Reserve	•	60.00
7	Total Fixed Charges	2465.37	2071.47
8	Add: Provision for Tax	15.37	69.27
9	Total Transmission Charges	2480.74	2140.74
10	Less: Other Income	103.00	67.75
11	Add: Incentive for Target Availability	-	31.79
12	Total Revenue Requirement	2377.74	2104.78

^{*} Net O&M Expenses approved for FY 2013-14 in MYT Order dated 31st March, 2011 is Rs. 697 Crore (Rs. 890 Crore – Rs. 193 Crore).

2.2 Proposed Transmission Charges for FY 2015-16

The proposed transmission charges per MW per day, based on the capacity to be handled, would be as under:

Table 2.2: Proposed Transmission Tariff/Charges for FY 2015-16

SI. No.	Transmission Tariff	Unit	Amount
1	ARR approved in the Mid-term Review of Business plan for FY 2015-16	Rs. Crore	2772.05
2	Add: Revenue Gap / (Surplus) for FY 2013-14 Computed in this Petition	Rs. Crore	101.13
3	ARR After Considering Gaps of Previous Years (1-2)	Rs. Crore	2670.92
4	Total MW Allocation	MW	22904.00
5	Transmission Tariff	Rs/MW/day	3194.90



2.3 Request of GETCO:

- 1. To admit this True-up for FY 2013-14 and Tariff for FY 2015-16.
- 2. To approve the gains/losses for the True-up for FY 2013-14 and allow sharing of such gains/losses as prescribed in the MYT Regulations, 2011.
- 3. To approve Tariff for FY 2015-16.
- 4. To approve incentive on availability as prayed.
- 5. To allow recovery of cost components based on methodology allowed in Order as and when issued by the Appellate Tribunal of Electricity against appeal no. 108 of 2013 and appeal no. 171 & 172 of 2014.
- 6. To grant any other relief as the Commission may consider appropriate.
- 7. The petitioner craves leave of the Commission to allow further submissions, addition and alteration to this Petition as may be necessary from time to time.
- 8. Pass any other Order as the Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.



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

3.1 Public Response to Petition

In response to the public notice inviting objections/suggestions from stakeholders on the Petition filed by GETCO for Truing up of FY 2013-14 and determination of Tariff for FY 2015-16 under GERC (MYT) Regulations, 2011, six consumers / organisations filed their objections / suggestions. Details of consumers / organisations who have filed their objections are provided in the Table below:

Table 3.1: List of Objectors

SI. No.	Name
1	Laghu Udyog Bharati - Gujarat
2	Federation of Gujarat Industries (FGI)
3	Indian Captive Power Producers Association (ICPPA)
4	Ahmedabad Textile Mills' Association (ATMA)
5	Gujarat Wind Farms Ltd.
6	Utilities Users' Welfare Association (UUWA)

The Commission considered the objections/suggestions and the issues presented before the Commission and the response by GETCO on the same.

The details of the submissions made by the objector, response of the Petitioner and the views of the Commission are summarised in the following Section.

3.2 Objector 1: Laghu Udyog Bharati

Objection 1: Return on equity

Laghu Udyog Bharati, Gujarat has stated that the return on equity on the shareholding of Rs. 543.36 Cr @ 14% should be considered as Rs. 76.07 Cr instead of Rs. 423.43 Cr as shown in Table 29 of the petition. A credit of Rs. 347.35 Cr is to be given credit to ARR of FY 2013-14 and for FY 2015-16, it must be calculated on the basis of actual share capital.

Response of GETCO

Return on equity allowed by the Commission is normative based equity capital determined as per GERC (MYT) Regulations, 2011 and not as per actual share capital. Average equity addition during the year is 30% of the net capitalisation i.e. capitalization after deducting grants. Further 14% return on equity is allowed on



average equity for FY 2013-14 and calculating 14% on shareholding of Rs. 543.36 Cr is not correct.

Commission' view

Return on equity is allowed as per GERC Regulations.

Objection 2: Giving Credit of Reserve and Surplus in ARR of FY 2013-14

Laghu Udyog Bharati has stated that reserve and surplus of Rs. 2834.25 Cr must be given credit in ARR of FY 2013-14 and for FY 2015-16, it should be calculated on proportionate basis.

Response of GETCO

Components of tariff determination process is mentioned in clause 71.1 of GERC (MYT) Regulations, 2011 and reserve and surplus is not a component of tariff determination. Reserve and surplus of Rs. 2834.25 Cr is shareholder's fund and it is an accumulation since inception of GETCO and providing credit of reserve and surplus in ARR is not valid.

Commission's View

Response of GETCO is noted.

Objection 3: Deferred Government Grants, Subsidies and consumer contribution

Laghu Udyog Bharati stated that deferred Government grants, subsidies and consumer contribution of Rs. 1412.63 Cr must be given credit in ARR of FY 2013-14 and for FY 2015-16 it should be calculated on proportionate basis.

Response of GETCO

As per Commission methodology, deferred income from Government grant, subsidies and consumer contribution is treated as other income and reduced from total transmission charges to derive ARR of FY 2013-14. The total government grants, subsidies and consumer contributions up to 31.03.2013 were Rs. 1663.17 Cr which is an accumulation since inception of GETCO and addition during FY 2013-14 were Rs. 421.7 Cr. In view of this, providing credit of deferred government grants, subsidies and consumer contribution in ARR is not valid.



Commission's View

The treatment of deferred income from Govt. Grants & Subsidies and consumer contribution is done as per GETCO's balance sheet.

Objection 4: Giving Credit of Current Assets in FY 2013-14

Laghu Udyog Bharati stated that the amount of current assets of Rs. 844.13 Cr must be given credit in ARR of FY 2013-14 and for FY 2015-16 it should be calculated on pro-rata basis.

Response of GETCO

The current assets are not part of tariff determination process but are part of balance sheet item, which include inventories, trade receivables, short-term loans and advances. Hence providing of credit of Rs. 844.13 Cr ARR for current assets in ARR is not valid.

Commission's View

Response of GETCO is noted.

Objection 5: Surplus in FY 2013-14

Laghu Udyog Bharati has stated that as per Annual Report for FY 2013-14, revenue from operations is Rs. 2251.91 Cr as against ARR requirement of Rs. 2104.78 Cr. The expenses (excluding higher RoE) are Rs. 1843.11 Cr. Hence there is a surplus of Rs. 413.80 Cr.

Response of GETCO

It is a statement of fact i.e. what is considered for true-up for FY 2013-14 and what is actual as per annual report.

Commission's View

Response of GETCO is noted.

Objection 6: Recoveries from GUVNL on account of T&D losses

Laghu Udyog Bharati has stated that the ARR proposal does not show recoveries from GUVNL on account of T&D losses and system usage charges as seen from Annual Report of GETCO / GUVNL or ARR of FY 2015-16 of GETCO.



Response of GETCO

Recovery from GUVNL on account of T&D loss do not pertain to GETCO. GETCO only recovers transmission charges from GUVNL on behalf of Discoms.

Commission's View

Response of GETCO is noted.

Objection 7: Cost benefit analysis for FY 2015-16

Laghu Udyog Bharati has stated that the cost benefit analysis of 10% for ARR FY 2015-16 is considered as Rs. 292 Cr, which is above 14% of return on share capital of Rs. 76.04 Cr.

Response of GETCO

Cost benefit analysis for FY 2015-16 is envisaged based on additional MUs catered through the transmission system in FY 2015-16. Considering 10% profit is just a conservative approach for reference to calculate the benefit of transmission system. Relating the same with 14% return on share capital is not valid.

Commission's comments

Response of GETCO is noted.

3.3 Objector 2: Federation of Gujarat Industries (FGI)

Objection 1: Capital expenses - comparison of approved amounts with actual expenses during FY 2013-14

Federation of Gujarat Industries has stated that;

For FY 2012-13, against approved capital expenditure of Rs. 1076 Cr for 400 KV lines, only Rs. 181 Cr was actually incurred and for 220 KV lines, against approved expenditure of Rs. 244 Cr, Rs. 143 Cr has been incurred. In case of 66 KV SS, against Rs. 180 Cr, Rs. 545 Cr and for 66 KV lines against Rs. 179 Cr approved Rs. 522 Cr was spent. This is affecting not only quality of supply but also increased cost of supply.



- 2. For FY 2013-14, against approved Rs. 1181 Cr, for 400 KV system lines, hardly 16% could be spent and hence no material network has been added for 400 KV system. This has resulted in transmission capacity shortages and power plant could not be operated as per merit order resulting in additional costs to all consumers of Gujarat by way of steep rise in FPPPA charges. The power system is operated violating Gujarat Grid code, directives / norms resulting in security threat to the power system.
- 3. To meet short-term and long-term power, system network development fund allocations are approved by the competent authority. Due to inordinate delay in execution of planned network, the allocated funds could not be utilised.
- 4. It seems that funds of CAPEX get diverted to meet O&M expenses which is improper and not permissible.

Response of GETCO

- The Capital expenditure for FY 2012-13 cannot be compared as the Commission has already approved the true-up for FY 2012-13 in Petition No. 1375 of 2013 in order dated 29.04.2014.
- 2. The Capital expenditure for FY 2013-14 was approved in MYT tariff order dated 31.03.2011 as per the priority of network in the FY 2010-11. These projections have been revised in the Mid-term Review of Business Plan for the FY 2014-15 and 2015-16 wherein the capex for FY 2013-14 for 400 KV transmission has been reduced to Rs. 287 Cr. from earlier approved expenditure of Rs. 1181 Cr. Similarly, in Mid-term Review petition of business plan, the GETCO increased the CAPEX of 220 KV sub-station and transmission lines from Rs. 10 Cr to Rs. 258 Cr and from Rs. 116 Cr to Rs. 259 Cr respectively, against which GETCO has incurred actual expenditure of Rs. 321 Cr and Rs. 221 Cr. respectively. The reasons for such large reduction are:
 - a. There was no progress in the generation project for which GUVNL / distribution companies have Power Purchase Agreement, namely Shapoorji Pallonji, EPGL Salaya Phase II. Further, 800 MW units of Wanakbori TPS was also considered in FY 2013-14 but it is awarded only now. It was prudent on the part of GETCO not to block the capital investment for these generating



stations as well as associated lines. These coastal projects have no relevance to capacity shortage and power plant operation as per merit order.

- b. Regarding Capital works for 400 KV transmission lines, GETCO faces very severe constraint of Right of Way (RoW) and forest clearance, which results in delay in execution of transmission line.
- GETCO develops transmission network to meet long term open access requirement. The status of transmission elements under execution is submitted on monthly basis to the Commission.

Sustained load on important segments are uploaded and regularly updated in GETCO website.

4. The statement of FGI regarding diversion of CAPEX into O&M expenses is not valid as O&M expenses approved is sufficient to meet the requirement of actual O&M expenditure incurred by GETCO

Commission's View

GETCO has clarified the issued raised by the objector FGI. However, efforts should be made by GETCO to adhere to the approved capex as far as possible. GETCO has to plan their network to avoid transmission constraints.

Objection 2: Power System Studies and Development of Network

Federation of Gujarat Industries has stated that:

- i. Large number of elements have recorded sustained load much higher than the rated capacity, thereby damaging equipment and increasing losses.
- ii. It could not be ascertained whether the sustained load is attributed to any system outage of transmission network and generation planning / forced outages.
- iii. Calculation sheet for maintenance spares shows 100% increase in assets capitalized during last three years but in performance there is no similar improvement.
- iv. Denial of open access applications has been resorted to stating large number of transmission elements getting overloaded.



In view of the above, it is necessary to direct the GETCO to consider the following as a part of its prime function and duty as per provisions of Electricity Act, 2003 and the Commission may exercise due vigil over compliance:

- Actions and performance with respect to functions under Electricity Act, 2003
- > System study and action to meet the deficiencies.
- Planning to develop / expand / strengthen network and achievement
- > Furnishing list of spill over schemes

Response of GETCO

Observation on designed capacity and related matter is not subject matter of tariff petition.

Maintenance spares calculated in true-up of FY 2013-14 under working capital was computed based on norms provided in MYT Regulations, 2011. For computation of maintenance spares, 1% of opening GFA (as on 01.04.2005) with 6% yearly escalation and 1% of the average yearly addition from FY 2005-06 till FY 2013-14 with 6% yearly escalation is considered.

Further, the FGI suggested the Commission to exercise due diligence which is already taken care by the Commission in its tariff determination process.

Commission's View

The ARR mainly consists of capex and O&M for the designed capacity of the transmission network. It is important that the network is designed to ensure appropriate technical compliance.

The ARR and transmission charges proposed by the GETCO are approved by the Commission after due verification and prudence check.

Objection 3: Biased attitude towards industrial consumers using open access

Federation of Gujarat Industries has stated that GETCO has not been taking any effective measures to ensure system security margins and averting overloading of the system elements overlooking system security threats.



In case of applications for permitting open access to industrial consumers, GETCO raises all issues using all Jargons without demonstrating any material data on record.

Response of GETCO

Observation on system security, spare capacity utilization for open access is not subject matter of tariff petition. However, GETCO recover transmission charges from open access beneficiaries as per provisions stated in regulations.

Commission's View

The Commission will look into the issue raised by FGI and will take appropriate action if necessary.

Objection 4: Capacity available and utilization

Federation of Gujarat Industries has stated that spare capacity available is not being utilized fully and open access users are restricted up to their contract demand and in spite of this, open access charges are being recovered which is a duplication of recovery towards transmission / wheeling charges.

Response of GETCO

Observation on system security, spare capacity utilization for open access is not a subject matter of tariff petition. GETCO recovers transmission charges from open access beneficiaries as provided in Regulations.

Commission's View

Noted.

Objection 5: Income from Interstate Transmission by IEX / PXIL

Federation of Gujarat Industries has stated that detailed information such as income from open access users, income from collections like supervision charges of 15% on deposit works etc. are not covered in the petition Information. The same needs to be furnished and accounted for.

Response of GETCO

Income from open access users by IEX / PXIL is other income for GETCO, which is adjusted as per regulations in transmission charges.



Collection of 15% supervision charges on deposit work is part of other income and is deducted from total transmission charges to arrive at ARR for GETCO.

Commission's View

GETCO has provided the income on various accounts in the petition.

Objection 6: Impact of tariff proposals on Respondents/Objections

Federation of Gujarat Industries and Indian Captive Power Producers Association have stated that transmission charges are proposed to be increased from Rs. 2721/MW/day to Rs. 3194.90/MW/Day i.e. an increase of 17% without commensurate increase in transmission network services made available as also the CAPEX is on the rise leading to diversion of funds to meet O&M expenses.

Response of GETCO

The fund under capital expenditure is not diverted to meet O&M expenses as O&M expenditure approved is sufficient to meet the requirement.

The rise in transmission charges is legitimate. During the year GETCO incurred CAPEX of Rs. 2497.36 Cr, which is 16.2% higher than last year of Rs. 2149 Cr. Existing capacity of i.e. 68730 MVA is also increased by 9.8% from last year and transmission losses are reduced from 3.89% to 3.57% in FY 2012-13. GETCO maintained transmission availability of 99.48% in FY 2013-14 which is higher than the target fixed by the Commission i.e. 98%. In view of the above, the proposal to increase tariff by 17% is valid and legitimate.

Commission's View

Response of the Petitioner is noted.

Objection 7: Carrying out of detailed system studies

Federation of Gujarat Industries has stated that for filing ARR for MYT period of 5 years, GETCO should carry out detailed system studies for all 5 years and plan the required transmission network and scheme.



GETCO should appraise the consumers as to how so many constrains are not resolved in the network even at 400 and 220 KV level and implementation of Merit Order Dispatch (MOD) and open access suffered in spite of GETCO and SLDC having state of the art software (PSS / E) for carrying out system studies.

Response of GETCO

GETCO carries out detailed system study before implementing any transmission schemes. The CAPEX under MYT Tariff Order was also derived based on system study and subsequent approval from GETCO Board. The observation of FGI is in line with the schedule for construction of transmission scheme which takes 36 to 40 months. But ground realities pertaining to ROW, public / farmers protest and a long delay in statutory clearance by forest and environment department are also to be considered. In the case of work in Surendranagar District, the High Court directed to take-up the work only after order from collector for police protection and the relevant procedure takes 3 to 4 months to complete. For example, GETCO is yet to get forest clearance for 400 KV Mundra – Zerda line even after vigorous follow up since 3 years. But good planning of transmission network well in advance has led to development of robust-transmission network.

Commission's View

Response of the Petitioner is noted. The Petitioner shall take all possible steps to obtain the clearance and complete the transmission lines as scheduled.

3.4 Objector 3: Indian Captive Power Producers Association Objection 1: O&M expenses for FY 2013-14

Indian Captive Power Producers Association has stated that;

- a. As per the petition the normative actual expense of Rs. 901 Cr is the gross normative O&M expenses whereas the rest of the figures refer to net O&M expenses. As per the tariff order of FY 2013-14, the gross O&M expenses was Rs. 890 Cr and as per audited accounts, the actual O&M expenses of GETCO for FY 2013-14 was Rs. 919 Cr. A comparison shall be made only on the gross O&M expenses as approved and normative O&M expenses.
- The addition in number of bays and line length in FY 2013-14 claimed by GETCO be approved only after due certification by the Electrical Inspector.



Response of GETCO

a. O&M expenses of Rs. 901 Cr is normative and computed based on the norms (per bay and per ckt. km. of transmission line) provided in GERC (MYT) Regulations, 2011.

The approved and audited O&M expenses are considered after deducting expenses capitalized. As the normative O&M expense is to be allowed, the actual expenditure incurred by the petitioner or its accounting treatment need not be considered while allowing normative O&M expenditure. The principle is under appeal nos. 108 of 2013 and 171 & 172 of 2014 in APTEL and the judgment will be binding on GETCO.

b. The Commission may consider addition of bays and ckt. Km. of transmission line after due verification of the electrical inspector's certificates.

Commission's View

The Commission takes into consideration the actual bays and ckt. Km. of transmission lines connected during the year based on the addition of bays and CKT Km of transmission lines after due verification of electrical Inspector's certificates and the O&M expenses are considered on the normative basis as per GERC MYT Regulations.

Objection 2: Interest and finance charges for FY 2013-14

Indian Captive Power Producers Association has stated that in spite of explicit provision in MYT Regulations, GETCO has proposed a lesser repayment than the allowable depreciation which cannot be allowed.

Response of GETCO

The normative loan of petitioner is considerably less than actual term loans. The normative opening balance of term loan is Rs. 3119.19 Cr as against actual balance of term loan of Rs. 5623.19 Cr as on 31.03.2013. The normative loan by GETCO is around Rs. 2500 Cr less than the actual term loan. By calculating the repayment of loans equivalent to depreciation (as per GERC (MYT) Regulations, 2011) it would cause a severe financial crunch to GETCO. The Commission is requested to



consider petitioner's methodology of considering normative repayments proportionately to the normative loan as against actual loan. This principle is under Appeal with APTEL in case No. 108 of 2013 and 171 &172 of 2014 and it will be binding on GETCO.

Commission' view

The Commission has considered the depreciation allowed towards repayment of loan and the interest on loan as specified in Regulation 39.3 of GERC (MYT) Regulation, 2011.

Objection 3: Contribution to contingency reserve for FY 2013-14

Indian Captive Power Producers Association has stated that the audited accounts refer to creation of a separate contingency reserve fund and does not specify if the amount is deposited in securities authorized under Indian Trusts Act, 1882 within a period of six months of the close of the financial year and if the same is done the revenue from such securities ought to have been considered. The Commission is requested not to approve any contribution to contingency reserve for FY 2013-14.

Response of GETCO

GETCO created a separate contingency reserve and invested in securities authorized under Indian Trust Act, 1882 as per GERC (MYT) Regulation, 2011 and any income received from such securities will be considered in subsequent true-up and treated as other income.

Commission' view

The response of GETCO is noted.

Objection 4: Other Income from FY 2013-14

Indian Captive Power Producers Association has stated that the transmission licensee claimed revenue from other income for FY 2013-14 of only Rs. 68 Cr. whereas as per audited accounts it is Rs. 310 Cr. Hence, Rs. 310 Cr. should be taken as other income. Further detailed break-up be provided for items. "Income towards grants / subsidies", "Miscellaneous Revenue", Other Miscellaneous receipts and "Miscellaneous Charges from Consumers".



Response of GETCO

GETCO proposed other income of Rs. 68 Cr. considering the principle of not including deferred income in other income but at the same time not including depreciation on assets developed from Government grants, subsidy and consumer contribution. Further interest on staff loans and advances are not part of other income and the same is also considered by the Commission in its tariff orders.

GETCO considered only Rs. 1.92 Cr as miscellaneous charges from consumers out of a total of Rs. 22.45 Cr and the rest of Rs. 20.53 Cr is of SLDC. Parallel operation charges are treated as per GERC order dated 01.06.2011.

Detailed break-up of miscellaneous revenue, miscellaneous charges from consumers and other miscellaneous receipts is furnished in Annexure A to the petition

Commission's View

GETCO has clarified the issues raised by the objector.

Objection 5: Certification of transmission system availability by SLDC

Indian Captive Power Producers Association has stated that the Transmission Licensee has claimed that it has achieved system availability of 99.46% for FY 2012-13 and as per clause 70 of GERC (MYT) Regulations, 2011, this should be certified by the SLDC. It should be ascertained whether this has been done.

Response of GETCO

Transmission system availability duly certified by the SLDC has been submitted to the Commission.

Commission's View

Transmission system availability is certified by SLDC.

Objection 6: Income Tax for FY 2013-14

Indian Captive Power Producers Association has stated that the Petitioner has claimed income tax of Rs. 69 Cr for FY 2013-14. Documentary proof in support of payment is to be obtained as per 42 of GERC (MYT) Regulations, 2011 and true-up of tax should be only based on documentary evidence.



Response of GETCO

Documentary proof such as challans / receipts etc. for income tax claimed have been submitted to the Commission.

Commission's View

GETCO has submitted required documents

Objection 7: Revenue from Transmission charges for FY 2013-14

Indian Captive Power Producers Association has stated that the petitioner provided Rs. 1922 Cr as revenue from transmission charges as in note 22 of audited accounts but no break-up for this is provided. The break-up under various categories, such as transmission charges from DISCOMS, LTOA / MTOA / STOA consumer is to be obtained. It is estimated that the GETCO has made excess recovery of transmission charges of Rs. 436 Cr in FY 2013-14 and this excess recovery is to be adjusted while determining tariff for FY 2015-16.

Response of GETCO

The amount of Rs. 1922 Cr is recovered towards transmission charges from all beneficiaries who are availing transmission service from GETCO, as per approved tariff orders of the Commission. None of the parameters are ignored while determining transmission tariff. Any excess recovery by the petitioner is adjusted in true-up process of a particular year.

Commission's comments

The Commission undertakes true-up as per the GERC (MYT) Regulations, 2011 and any excess recovery is adjusted in the ARR for FY 2015-16.

3.5 Objector 4: Ahmedabad Textile Mills Association and Gujarat Wind Farms Limited

Objection 1: Difficulty in comprehending Commercial, Technical, operational and financial issues in petition.

Ahmedabad Textile Mills Association and Gujarat wind farms Ltd have stated that it is difficult to comprehend commercial, technical, operational and financial issues in the petition.



Response of GETCO

GETCO submitted that it is mere observation.

Commission's View

The Commission determines the tariff for GETCO as per the GERC (MYT) Regulations, 2011 and prudence check.

3.6 Objector 5: Utility Users' Welfare Association

Objection 1: Loading capacity of GETCO

Utility Users' Association has stated that GETCO has loading capacity of 19776 MW against the demand of 21177 MW and hence there is a deficit of 1401 MW.

Response of GETCO

GETCO System is capable to handle 19776 MW of power in FY 2013-14 whereas peak load catered was 12577 MW. Observation of load capacity deficit is not valid

Commission's View

Response of GETCO is noted.

Objection 2: Surplus in FY 2013-14

Utility Users' Welfare Association has stated that there is a surplus of Rs. 257 Cr in FY 2013-14 is a good sign.

Response of GETCO

The surplus of Rs. 257 Cr is gain on account of controllable factors i.e. particularly difference between normative O&M expenses and actual O&M expenses as per audited accounts.

Commission's View

Response of GETCO is noted.

Objection 3: Installation of DC transmission lines

Utility Users' Welfare Association has stated that GETCO has not installed DC transmission lines which is now possible with the latest technology even for short distance and less MW, particularly for wind and solar generators.



Response of GETCO

The suggestion of adopting HVDC transmission system for short distance and less MW, particularly for wind and solar generator is welcome but HVDC system is not economical for short distance with less quantum of power to be transmitted.

Commission's View

The response of GETCO is noted.

Objection 4: Parallel Operation Charges (POC)

Utility Users' Welfare Association has stated that GETCO is not successful in getting POC charges and cross subsidy as the private generators are asking for waiver of these charges, particularly ESSAR. If these charges are collected, the tariff can be reduced to that extent.

Response of GETCO

Parallel Operation Charges (POC) are collected as per GERC order dated 01.06.2011. There are several POC related petitions under adjudication before the Commission and other higher forums where CPPs have demanded refund of POC already collected between 2006 and 2011. However, it is to be stated that cross subsidy charges are not collected by GETCO.

Commission's View

The Commission has considered the POC charges in other income.

Objection 5: Investment during MYT Period

Utility Users' Welfare Association has stated that GETCO invested Rs. 1920.87 Cr against Rs. 2130 Cr approved and that for R&M of the system, Rs. 565 Cr has been invested which is a good thing.

Response of Petitioner

Observation made by UUWA is a statement of fact.

Commission's View

Noted.



Objection 6: Revenue of GETCO for FY 2013-14

Utility Users' Welfare Association has stated that the total revenue of GETCO for FY 2013-14 is Rs. 2255.91 Cr whereas ARR is Rs. 2104.78 Cr and profit after tax is Rs. 320.59 Cr and surplus for FY 2013-14 shown is Rs. 257 Cr only.

The difference in surplus is to be clarified. GETCO has not shown revenue earned in the truing up chapter.

Response of GETCO

Rs. 2255.91 Cr is total revenue and Rs. 320.59 Cr is net profit as per Profit & Loss Account whereas Rs. 2104.78 Cr is actual submitted by GETCO in the petition for truing up for FY 2013-14 surplus of Rs. 257 Cr as stated is net gain / (loss) on account of controllable factors.

Commission's View

The response of GETCO is noted.

Objection 7: ARR for FY 2015-16

Utility Users' Welfare Association has stated that for ARR of FY 2015-16, GETCO has worked out Rs. 2670.92 Cr. However, projected revenue has not been mentioned.

Response of Petitioner

Total ARR is Rs. 2670.92 Cr, which is derived after adjustment of revenue gap from true-up of FY 2013-14 in approved ARR of FY 2015-16. The methodology is as per GERC (MYT) Regulations, 2011. GETCO will recover Rs. 2670.92 Cr from open access beneficiaries as revenue of GETCO.

Commission's View

Response of GETCO is noted

Objection 8: Transmission Loss

Utility Users' Welfare Association has stated that the transmission loss of 4.99% with 824.94 MW which is higher and GETCO should manage to reduce the loss.



Response of GETCO

The transmission loss of 4.99% in cost benefit analysis of FY 2014-15 is based on system study considering anticipated generation capacity addition and planned transmission elements for FY 2014-15. It includes entire Gujarat network including that of interstate transmission lines up to the connecting point

Actual transmission losses of GETCO in FY 2012-13 and FY 2013-14 are 3.89% and 3.57% respectively.

Commission's View

Response of GETCO is noted.

Objection 9: Proposed Tariff

Utility Users' Welfare Association has stated that the tariff proposed by GETCO is Rs. 3194.90 per MW per day, which is more than the last tariff and when GETCO is making profit, tariff should be reduced so that open access consumers will be benefited.

Response of GETCO

During the year, GETCO incurred CAPEX of Rs. 2497.36 Cr which is 16.2% higher than last year of Rs. 2149 Cr. Existing Capacity of GETCO i.e. 68730 MVA is also increased by 9.8% from last year. Transmission losses of GETCO are also reduced to 3.57% from 3.89% in FY 2012-13. GETCO maintained transmission availability of 99.48% in FY 2013-14 which is higher than the target of 98% set by the Commission. Considering the above performance and technical parameters rise in transmission tariff is valid and legitimate.

Commission's View

Transmission charges are worked out as per Regulations after prudence check of expenses.



4. Truing up for FY 2013-14

4.1 Introduction

This chapter deals with the Truing up of FY 2013-14 of GETCO.

While doing 'Truing up' of various components of ARR for FY 2013-14, the actuals for FY 2013-14 are compared with the approved ARR, as per MYT Order issued on 31st March, 2011.

The Commission has analysed each of the components of the Annual Revenue Requirement (ARR) in the following sections.

4.2 Operations and Maintenance Expenses for FY 2013-14

GETCO has claimed Rs. 901 Crore towards O&M expenses in the Truing up for FY 2013-14, as against Rs. 890 Crore approved in the MYT order dated 31st March 2011. The O&M expenses approved for FY 2013-14 by the Commission in the MYT order for FY 2011-16 and claimed by GETCO as are given in Table below:

Table 4.1: O&M Expenses (Normative / Actuals) for FY 2013-14

SI. No.	Particulars	Unit	FY 2013-14 (Approved)	FY 2013-14 (Actual)
1	Based on No. of Bays			
	Average No. of bays during the year	No.	9155	9806
	O&M Expenses per bay	Rs. Lakh	6.44	6.44
	Total O&M Expenses based on no. of bays	Rs. Crore	590	631
2	Based on no. of Transmission lines			
	Average lines length during the year	No.	54653	48916
	O&M Exp norm per ckt Km	Rs. Lakh	0.55	0.55
	Total O&M Expenses based on no. of ckt km	Rs. Crore	301	269
3	Total O&M Expenses (as per Norms)	Rs. Crore	890	901

Petitioner's Submission

GETCO has submitted that it has considered O&M Expenses, net of expenses capitalised for FY 2013-14, for working of Gains / (Losses) as there is no separate head provided for expenses capitalised in GERC (MYT) Regulations, 2011. GETCO has computed the normative O&M Expenses, based on the length of transmission lines and no. of bays for FY 2013-14.



GETCO has further submitted that the net O&M Cost, as per audited accounts for FY 2013-14 are Rs. 642.76 Crore, as detailed in the Table below:

Table 4.2: Net O&M Expenses (as per audited accounts) for FY 2013-14

(Rs. Crore)

SI. No.	Particulars	FY 2013-14 (Actual)
1	Employee Costs	379.92
2	R&M Expenses	211.72
3	A&G Expenses	51.12
4	Net O&M Expenses	642.76

GETCO has further submitted that it has not considered expenses capitalised for FY 2013-14, since O&M expenses have been computed, based on the norms provided in GERC (MYT) Regulations, 2011.

Based on audit observation, GETCO has reversed capitalisation of expenditure of previous years created under head Corporate Social Responsibilities (CSR) and treated it as revenue expenditure for FY 2013-14. Hence A&G expenses for FY 2013-14 comprise of expenses for CSR of FY 2013-14 & past periods (FY 2010-11, FY 2011-12 & FY 2012-13), which were already disallowed by the Commission in previous year true-ups. The Commission has disallowed expenses of CSR in past true-ups but did not reduce expenses capitalised by same amount as 100% CSR expenses were getting capitalised in the same year. Hence, GETCO was penalised twice on CSR by the Commission. It is requested not to disallow CSR of previous years claimed in true-up for FY 2013-14 as they were already disallowed once.

O&M Expenses are controllable in nature, under Regulation 23 of MYT Regulations, 2011. However, as per the methodology adopted by the Commission, the variance in the O&M expenses as approved in MYT Order and the 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. Net O&M expenses approved for FY 2013-14 in MYT Order dated 31st March, 2011 is Rs. 697.17 Crore (Rs. 890.17 Crore – Rs. 193 Crore). The O&M expenses and gain/(losses)considered in the Truing up for FY 2013-14 are summarised in the Table below. GETCO has arrived at a controllable gain of Rs. 257.75 Crore and uncontrollable loss of Rs. 203.34 Crore, as detailed in the Table below:



Table 4.3: Gains / (Losses) claimed from O&M Expenses

(Rs. Crore)

SI. No.	Particulars	FY 2013-14 (Approved)	FY 2013-14 (Normative / Actuals)	FY 2013-14 (as per audited accounts)	Gains / (Losses) due to controllable factor	Gains / (Losses) due to uncontrollabl e factor
1	Operations & Maintenance Expenses	697.17	900.51	642.76	257.75	(203.34)

Commission's Analysis

GETCO has arrived at the O&M expenses for FY 2013-14, by applying the normative expenses over the actual numbers of bays, as mentioned above, and the actual length of lines and compared it with the approved O&M expenses for the computation of Gains/Losses. Further, GETCO has compared the normative actual O&M expenses that it has computed at Rs. 900.51 Crore with net of capitalised expenses at Rs. 642.76 Crore, instead of the gross O&M expenses of Rs. 890.17 Crore approved for FY 2013-14 in the MYT Order dated 31st March 2011. GETCO should have compared the O&M expenses approved in the MYT Order with actual O&M expenses on normative basis, or the comparison should have been on the net of capitalisation on both sides.

GETCO has submitted the addition of Transmission lines and substations added during FY 2013-14 as detailed below:

Table 4.4: Network addition of GETCO during FY 2013-14

SI. No.	Voltage class	Substation (Nos.)	Transmission line (in CKM)
1	400 KV	0	304
2	220 KV	5	502
3	132 KV	1	65
4	66 KV	114	1288
	Total	120	2160

GETCO has further submitted that the addition of transmission lines at 2811 CKM has been considered for the purpose of calculation of O&M Expenses as certified by SLDC while certifying the transmission system availability calculation for FY 2013-14. The actual addition of transmission is given as 2160 CKM in the above Table.

The Commission has verified the copies of certificate issued by the Electrical Inspector and considered a total of 887 no. of bays and 2010 ckt. km. line additions for FY 2013-14 based on date of inspection mentioned in the certificates. The



normative O&M expenses are worked out to Rs. 899.47 Crore, as against Rs. 890.17 Crore approved for FY 2013-14 in the MYT order, as detailed in the Table below:

Table 4.5: O&M Expenses Normative in Truing up for FY 2013-14

(Rs. Crore)

Particulars	Lines (Ckt/km)	Bays (Nos.)	Total
At the beginning of the year	47510	9380	
Additions during the year	2010	887	
At the end of the year	49520	10267	
Average	48515	9823.5	
Rate (Rs. Lakh)	0.55	6.44	·
O&M expenses (Rs. Crore)	266.8325	632.6334	899.47

The Commission approves the normative O&M expenses at Rs. 899.47 Crore in the Truing up for FY 2013-14 against Rs. 890.17 Crore approved in the MYT order.

The O&M expenses, as per audited annual accounts, are Rs. 918.65 Crore for FY 2013-14. These O&M expenses, as per accounts, are inclusive of SLDC expenses. The O&M expenses of GETCO, excluding SLDC expenses, are Rs. 895.86 (918.65-22.79) Crore. The employee cost is Rs. 596.71 Crore and the R&M Expenses are Rs. 211.84 Crore. The A&G expenses, as per annual accounts, are Rs. 87.31 Crore, which include Rs. 5.54 Crore towards expenses on Corporate Social Responsibilities (CSR).

On a query from the Commission, GETCO vide its letter dated 18.02.2015 submitted the break-up of CSR expenses related to previous years. GETCO has also confirmed that in the previous year's CSR expenses were shown under head of contribution and charity in the Annual Accounts. GETCO has further confirmed that in previous years CSR expenses were capitalised wrongly. The details of year-wise CSR expense and the amount capitalised in the respective year as submitted by GETCO is as per the table below.

Table 4.6: Break-up of CSR Expenses

(Rs. Lakh)

FY	CSR Expense as reported by GETCO in FY 2013-14	CSR Exp. considered under the head of Contribution and Charity in the Annual Accounts of respective year	CSR Exp. Capitalized
2010-11	43.72	68.85	
2011-12	31.64	338.49	52.30
2012-13	361.25	408.71	336.73
2013-14	117.74	0	
TOTAL	554.34	816.05	389.03



Thus, it is clear from the above that the CSR expenses for FY 2013-14 is Rs. 1.18 Crore out of total Rs. 5.54 Crore appearing in the Annual Accounts of FY 2013-14. Rest of the amount i.e. Rs. 4.36 Crore (Rs. 5.54 Crore – Rs. 1.18 Crore) pertain to previous years, which have already been deducted from the A&G expenses in the earlier years being the amount related to contribution and charity.

Accordingly, the Commission approves Rs. 86.13 Crore as A&G expenses excluding A&G expenses pertaining to SLDC and CSR expenses.

The Commission has further adjusted the amount of Rs. 3.89 Crore which was wrongly capitalised in the previous years against amount capitalised in FY 2013-14 so as to correct the RoE, interest & finance charges and interest on working capital to that extent.

The Commission accordingly, approves the O&M expenses in truing up at Rs. 894.66 Crore, as detailed in the Table below:

Table 4.7: O&M Expenses Approved in Truing up for FY 2013-14

(Rs. Crore)

SI. No.	Particulars	As per audited accounts of GETCO	As per audited accounts of SLDC	Approved in Truing up for GETCO
1	Employee Cost	606.63	9.92	596.71
2	R&M Expenses	222.48	10.64	211.84
3	A&G Expenses	88.36	2.23	86.13
4	Total	917.47	22.79	894.68
5	Less: Contribution and charities			0.02
6	Net O&M Expenses			894.66

O&M expenses are controllable in nature, under Regulation 23 of GERC (MYT) Regulations, 2011. However, the Commission is of the view that the variance in the O&M expenses, as approved in the MYT Order and the normative O&M expense, as per actual performance during the year, is considered as uncontrollable. The O&M expenses and Gains / (Losses) considered in the Truing up for FY 2013-14 are summarised in the Table below:



Table 4.8: O&M Expenses and Gains/(Losses) Approved in Truing up for FY 2013-14

Particulars	Approved for FY 2013- 14in MYT order	Normative Approved in Truing up	Approved as per audited accounts in Truing up	Deviation +/(-)	Gains / (Losses) due to controllable factor	Gains / (Losses) due to uncontrollable factor
1	2	3	4	5 = (2-4)	6 = (3-4)	7 = (2-3)
O&M Expenses	890.17	898.72	894.66	(4.49)	4.06	(8.55)

4.3 Capital Expenditure and Capitalization for FY 2013-14

GETCO has furnished the actual capital expenditure at Rs. 2497.36 Crore for FY 2013-14, as against Rs. 2428 Crore approved for the year in MYT order dated 31st March 2011.

Petitioner's Submission

The Petitioner has submitted that GETCO had spent significant amount of capital expenditure for construction of transmission lines and substation during FY 2013-14. GETCO has incurred a capital expenditure of Rs. 2497.36 crore against Rs. 2428 crore approved for the year FY 2013-14 in the MYT Order.

Funding of CAPEX

GETCO has submitted that Capital Expenditure has been funded through internal accruals (Equity) generated by GETCO. The remaining expenditure incurred during FY 2013-14 has been funded through debt, as detailed in the Table below:

Table 4.9: Actual Funding of CAPEX

(Rs. Crore)

SI. No.	Particulars	FY 2013-14 (Actual)
1	CAPEX for the year	2497.36
2	Capitalization	1686.79
3	Debt	885.56
4	Equity	379.53
5	Grants	421.70

Commission's Analysis

The Commission has noted the capital expenditure, as given in the petition by GETCO, and verified the capitalisation from the Audited Annual Accounts for FY 2013-14. The actual capitalization as per Audited Annual Accounts for FY 2013-14 is Rs. 1686.79 Crore. As mentioned in para 4.2 above, after adjusting the wrongly capitalized amount of previous years, the capitalization considered for FY 2013-14 is



Rs. 1682.90 Crore (Rs. 1686.79 Crore of FY 2013-14 – Rs. 3.89 Crore of previous years). The actual capital expenditure, approved capitalisation and the normative debt and equity for the FY 2013-14 are given in the Table below:

Table 4.10: Capital Expenditure and Capitalisation approved in the Truing up for FY 2013-14

(Rs. Crore)

Particulars	FY 2013-14
CAPEX during FY 2013-14	2497.36
Capitalization approved for FY 2013-14	1682.90
Less: Grants	421.70
Balance Capitalization	1261.20
Debt (70%)	882.84
Equity (30%)	378.36

The addition of loan and equity during FY 2013-14 will be considered for computation of interest and return on equity.

4.4 Depreciation for FY 2013-14

GETCO has claimed Rs. 513.35 Crore towards actual depreciation for FY 2013-14, as against Rs. 688.07 Crore approved for the year in the MYT Order dated 31st March, 2011. The depreciation charges approved for FY 2013-14 in the MYT Order and claimed by GETCO in the Truing up are given in the Table below:

Table 4.11: Depreciation claimed for FY 2013-14

(Rs. Crore)

SI. No.	Particulars	FY 2013-14 Approved in the MYT Order	FY 2013-14 claimed in Truing up	Deviation +/(-)
1	Gross Block at the beginning of the year	12588.15	11170.83	
2	Additions during the year (Net)	2291.55	1686.79	
3	Total Depreciation for the year	688.07	608.22	79.85
4	Average rate of Depreciation	5.01%	5.06%	
5	Less: Depreciation on Assets funded by Govt. Grants / Consumer Contributions / Subsidies not considered		94.87	
6	Total Depreciation claimed for FY 2013-14	688.07	513.35	174.72

Petitioner's Submission

GETCO has submitted that the actual depreciation charge for FY 2013-14 was Rs. 608.22 Crore including prior period short depreciation expenses of Rs. 12.58 Crore, as against Rs. 688.07 Crore approved in the MYT Order, and worked out the weighted average rate of depreciation as 5.06%. GETCO has explained that it has



been booking @ 11.75% of the closing grants, consumer contribution and subsidies towards acquisition of Fixed Assets as income during the year. GETCO has computed depreciation of Rs. 94.87 Crore on the asset funded, by way of Govt. Grant / Consumer Contribution at depreciation rate of 5.06%.

Accordingly, GETCO has claimed a deprecation of Rs. 513.35 (608.22 - 94.87) Crore and arrived at a gain of Rs. 174.72 Crore, as detailed in the Table below:

Table 4.12: Gains/(Losses) claimed on Depreciation in the Truing up for FY 2013-14 (Rs. Crore)

Particulars	Approved	Claimed in	Gains / (Losses)	Gains / (Losses)
	for FY 2013-	Truing up	due to	due to
	14 in MYT	for FY 2013-	Controllable	Uncontrollable
	order	14	Factor	Factor
Depreciation	688.07	513.35	-	174.72

Commission's Analysis

GETCO has computed the depreciation on the assets funded by Grants / Consumer Contributions and Subsidies towards acquisition of Fixed Assets at Rs. 94.87 Crore with the weighted average rate of 5.06% and subtracted this amount from Rs. 608.22 Crore of depreciation charged to P&L accounts and claimed the depreciation at Rs. 513.35 Crore in the Truing up.

The amount of Govt. Grants / Consumer Contribution / Subsidies, as on 31st March 2013, was Rs. 1663.17 Crore and the additions during the year was Rs. 421.70 Crore. The depreciation on the assets funded by way of Govt. Grants / Consumers Contribution / subsidies worked out to Rs. 94.87 Crore on the average rate of depreciation of 5.06% and this amount has been deducted from the depreciation amount charged to P&L accounts for FY 2013-14 and GETCO has claimed Rs. 513.35 Crore against Rs. 596.08 Crore as per P&L statement of Audited Annual Accounts. While deducting depreciation computed on the grants / Consumer Contribution for the depreciation claim for the year, GETCO has not considered that portion of Consumer Contribution / Grants depicted in the Non-Tariff income, for deduction in the ARR. The Commission has noted in Para 4.4 of the Tariff Order dated 28th March 2013, as given below:

"The Commission has followed the policy of considering portion of grants as Non-Tariff income for all the licensees and any change in this behalf affects the parameters considered in the MYT order for FY 2011-12 to FY 2015-16."



Further, as mentioned in para 4.2 above, the Commission has deducted depreciation @ avg. rate of depreciation for FY 2013-14 against the amount wrongly capitalized in the previous years while allowing depreciation for FY 2013-14.

The net depreciation, as verified from the Note 12 of the audited annual accounts for FY 2013-14, is Rs. 597.28 Crore. This includes depreciation of Rs. 0.44 Crore relating to SLDC. The depreciation has been provided on straight-line basis, as per the rates prescribed by GERC, as notified vide Note 1 (4) (i) of the annual accounts.

The Commission has computed the allowable depreciation for FY 2013-14, as detailed in the Table below:

Table 4.13: Depreciation approved in the Truing up for FY 2013-14

(Rs. Crore)

	<u> </u>	(1.6. 6.6.6)
	Claimed in Truing	Approved in the
Particulars	up for	Truing up for
	FY 2013-14	FY 2013-14
GFA in the Beginning of the year	11170.83	11170.83
Additions during the year (Net)	1686.79	1686.79
Depreciation for the year	608.22	596.84
Average Rate of Depreciation	5.06%	4.97%
Less: Depreciation on Assets funded by		
Govt. Grants / Consumer Contributions /	94.87	0.00
Subsidies not considered		
Total Depreciation for the year 2013-14	513.35	596.84
Less: Depreciation of the amount wrongly		
capitalised in previous years @ Avg. rate		
of depreciation for FY 2013-14 i.e. Sl. No.		
3 above		0.19
Depreciation approved for FY 2013-14		596.65

The Commission, accordingly, approves the depreciation at Rs. 596.65 Crore excluding Rs. 0.44 Crore of SLDC in the Truing up, as per audited accounts for FY 2013-14.

With regard to the computation of Gains / (Losses), Regulation 23.2 considers variation in capitalisation on account of time and/or cost overruns / efficiencies in the implementation of capital expenditure project, not attributable to an approved change in scope of such project, change in statutory levies or force majeure events, as a controllable factor. If the gain is on account of lesser capital expenditure and capitalisation, it cannot be attributed to the efficiency of the utility to allow one-third of gain to 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. And hence, the Commission considered the variation in capitalization as uncontrollable. This applies to debt and equity in allowing Gains / (Losses) on account of interest and return on equity also.

The Commission, accordingly, approves the Gains / (Losses) on account of depreciation, attributing the same to uncontrollable factors in the Truing up for FY 2013-14, as detailed in the Table below:

Table 4.14: Gains / (Losses) due to Depreciation in the Truing up for FY 2013-14

					(
Particulars	Approved for FY 2013-14 in MYT Order	Approved in Truing up	Deviation +/(-)	Gains / (Losses) due to controllable factors	Gains / (Losses) due to uncontrollable factors
Depreciation	688.07	596.65	91.42	0.00	91.42

4.5 Interest and Finance Charges for FY 2013-14

GETCO has claimed Rs. 372.59 Crore towards interest and finance charges in the Truing up for FY 2013-14, as against Rs. 495.38 Crore approved for the year in the MYT order dated 31st March, 2011. The interest and finance charges approved in the MYT order and claimed by GETCO in the Truing up are as given in the Table below:

Table 4.15: Interest and Finance Charges Claimed by GETCO

(Rs. Crore)

		(1101 01010)
Particulars	Approved for FY 2013-14 in MYT order	Claimed in Truing up for FY 2013-14
Interest and Finance Charges	495.38	372.59

Petitioner's Submission

GETCO has submitted that depreciation for the year has been taken as repayment - in line with GERC (MYT) Regulations, 2011. However, as the normative loan is considerably lower than actual term loans of the company, the repayment was taken proportionally, to arrive at the average normative loan. GETCO has proposed to consider normative repayments proportionate to the normative loans, as against the actual loans, as detailed in Table below:



Table 4.16: Interest and Finance Charges claimed by GETCO

(Rs. Crore)

SI. No.	Particulars	FY 2013-14 (Approved)	FY 2013-14 (Actuals)	Deviation + / (-)
1	Opening Loans	4571.31	3119.19	
2	Loan Additions during the year	1604.09	885.56	
3	Repayment during the year	688.07	325.26	
4	Closing Normative Loan	5487.33	3679.49	
5	Average Loans	5029.32	3399.34	
6	Interest on Loan	493.38	368.49	
7	Guarantee Charges	2.00	4.11	
8	Total Interest & Financial Charges	495.38	372.59	122.79
9	Weighted Average Rate of Loan	9.81%	10.84%	

GETCO has claimed Rs. 122.79 Crore as gain from interest and finance charges due to uncontrollable factors, as detailed in Table below:

Table 4.17: Gains/ (Losses) claimed from Interest and Finance Charges

(Rs. Crore)

				(1101 01010)
Particulars	FY 2013-14 (Approved)	FY 2013-14 (Actuals)	Gains / (Losses) due to controllable factors	Gains / (Losses) due to uncontrollable factors
Interest & Finance Charges	495.38	372.59	-	122.79

Commission's Analysis

The Commission has examined the submission of GETCO. The Closing balance of Rs. 3119.19 Crore of the previous year FY 2012-13 is considered as the opening loan for FY 2013-14. The Commission has verified the capitalisation of assets during the FY 2013-14 from the Audited Annual Accounts and approved the asset addition of Rs. 1686.79 (1687.22 - 0.43) Crore. The Commission has deducted the Consumer Contribution and Govt. Grant of Rs. 421.70 Crore from capitalisation and approved the normative debt of Rs. 885.56 Crore for FY 2013-14 as per prevailing practice. GETCO has not taken into consideration the repayment of loan equivalent to the depreciation for the year. GETCO has made a plea to consider normative repayments proportionate to the normative loans, as against the actual loan outstanding. This is not in accordance with Regulation 39.3 of GERC (MYT) Regulations, 2011. GETCO has submitted the weighted average rate of interest as 10.84%. As per Regulation 39.5 of GERC (MYT) Regulations, 2011, the weighted average rate of interest is to be calculated on the basis of the actual loan portfolio at the beginning of each year to the transmission company. On a query from the Commission, GETCO submitted details of loans showing opening balance as on 01.04.2013 and applicable rate of interest on each loan portfolio for FY 2013-14. The



Commission has worked out the weighted average interest rate as 10.84% and applied the same on the normative loan amount. The other finance charges of Rs. 4.11 Crore claimed as actuals have been verified from the Audited Annual Accounts and found that the other interest charges, including the guarantee charges, are Rs. 4.11 Crore. Based on the actual capitalisation achieved by GETCO during FY 2013-14 and the approved normative borrowings considering the interest rate of 10.84%, the Commission has computed the interest on normative loans, as detailed in the Table below:

Table 4.18: Approved Interest and Finance Charges in Truing up for FY 2013-14

(Rs. Crore)

Particulars	Claimed in Truing up for FY 2013-14	Approved in Truing up for FY 2013-14
Opening Normative Loan	3119.19	3119.19
Loan Addition during the year	885.56	882.84
Repayment during the year	325.26	596.65
Closing loan	3679.49	3405.39
Average Loan	3399.34	3262.29
Weighted average rate of interest	10.84%	10.84%
Interest on loan	368.49	353.63
Other finance charges	4.11	4.11
Total Interest and Finance Charges	372.59	357.74

The Commission accordingly, approves Interest and Financial charges for FY 2013-14 as Rs. 357.74 Crore.

As noted in Para 4.4 above, the Commission is of the view that the parameters which impact interest and finance charges should be treated as uncontrollable. The Commission, accordingly, approves the Gains / (Losses) on account of interest and finance charges in the Truing up for FY 2013-14, as detailed in the Table below:

Table 4.19: Approved Gains/(Losses) in Interest & Finance Charges in Truing up for FY 2013-14

(Rs. Crore)

Particulars	Approved for FY 2013-14 in MYT order	Approved in Truing up	Deviation +/(-)	Gains/ (Losses) Controllable factor	Gains/ (Losses) Uncontrollable factor
Interest and Finance Charges	495.38	357.74	137.64	0.00	137.64

The Commission accordingly approves gains/(losses) on account of uncontrollable factor as Rs. 137.64 Crore.



4.6 Return on Equity (ROE) for FY 2013-14

GETCO has claimed Rs. 423.43 Crore towards return on equity in the Truing up for FY 2013-14, as against Rs. 537.97 Crore approved for the year in the MYT Order dated 31st March, 2011. The ROE approved for FY 2013-14 in the MYT Order and claimed by GETCO in the Truing up are given in the Table below:

Table 4.20: Return on Equity claimed by GETCO for FY 2013-14

(Rs. Crore)

Particulars	Approved for FY 2013-14 in MYT order	Claimed in Truing up for FY 2013-14
Return on Equity	537.97	423.43

Petitioner's Submission

GETCO has submitted that Return on Equity has been computed at 14%, based on the closing equity for FY 2012-13 and the normative equity addition during FY 2013-14. GETCO has further submitted that the comparison between the actual value of Return on Equity for FY 2013-14 with the value approved by the Commission has resulted in the uncontrollable gain of Rs. 114.54 Crore, as detailed in the Table below:

Table 4.21: Return on Equity claimed by GETCO for FY 2013-14

(Rs. Crore)

SI. No.	Particulars	FY 2013-14	FY 2013-14	Deviation	
SI. NO.	Faiticulais	(Approved)	(Approved) (Actuals)		
1	Opening Equity Capital	3498.88	2834.72		
2	Equity Additions during the year	687.47	379.53		
3	Closing Equity	4186.35	3214.25		
4	Average Equity	3842.62	3024.48		
5	Rate of Return on the Equity	14%	14%	-	
6	Return on Equity	537.97	423.43	114.54	

Commission's Analysis

The Commission has examined the submission of GETCO. The Return on Equity is being allowed on a normative basis and the quantum of equity addition in the year depends upon the capitalisation achieved during the year. The closing equity of the previous year, i.e., 2012-13 is considered as the opening equity for FY 2013-14. The Commission has approved the normative equity addition at Rs. 378.36 Crore in Para 4.3 above. Based on the actual capitalisation achieved by GETCO during FY 2013-14 and the approved normative equity, the Commission has computed the Return on Equity for FY 2013-14, as detailed in the Table below:



Table 4.22: Approved Return on Equity in the truing up for FY 2013-14

(Rs. Crore)

Particulars	Claimed in Truing up for FY 2013-14	Approved in Truing up
Opening Equity	2834.72	2834.72
Equity addition during the year	379.53	378.36
Closing Equity	3214.25	3213.08
Average Equity	3024.48	3023.90
Rate of Return on Equity	14%	14%
Return of Equity	423.43	423.35

The Commission approves the Return on Equity at Rs. 423.35 Crore in the Truing up for FY 2013-14.

The Commission is of the view that the Return on Equity depends on the amount of capitalisation during the financial year and that the parameters impacting the capitalisation are uncontrollable in nature. As noted in Para 4.4 above, the factors impacting the Return on Equity are considered as uncontrollable. The Commission, accordingly, approves the gains and losses on account of Return on Equity in the Truing up for FY 2013-14, as detailed in the Table below:

Table 4.23: Gains / (Losses) in Return on Equity approved in the Truing up (Rs. Crore)

					, ,
Particulars	Approved for FY 2013-14 in MYT order	Approved in Truing up for FY 2013- 14	Deviation +/(-)	Gains / (Losses) due to Controllable factor	Gains / (Losses) due to Uncontrollable actor
Return on Equity	537.97	423.35	114.62	0	114.62

4.7 Capitalisation of Expenses for FY 2013-14

GETCO has not shown any capitalisation of expenses in the Truing up for FY 2013-14. The capitalisation of expenses approved for the year in MYT Order was Rs. 193 Crore.

Petitioner's Submission

GETCO has submitted that O&M Expenses have been taken, based on the norms provided in GERC (MYT) Regulations, 2011, and, therefore, expenses capitalised during FY 2013-14 have not been considered as these expenses are incurred in the implementation of the projects. GETCO has further submitted that the Commission had upheld GETCO's appeal against the Order dated 31st March 2010 in the Order



dated 3rd February, 2011 in the matter of deducting interest capitalised from the ARR and hence GETCO has not shown expenses capitalised for FY 2013-14.

Commission's Analysis

The capitalisation of expenses consists of two elements: (i) capitalisation of interest, and (ii) capitalisation of O&M expenses. As far as capitalisation of interest is concerned, the same is not deducted from the ARR, since the capitalisation is considered for debt-equity and for normative computation of interest on loan. As far as capitalisation of O&M expense is concerned, the same is required to be deducted from the ARR, since this amount has already been included in the approved capitalisation of assets. 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 expenses capitalised during the control period were approved in the MYT Order as projected by the petitioner and they need to be trued up as per the audited accounts.

The actual O&M Expenses capitalised as per audited accounts are Rs. 253.09, as detailed below:

Table 4.24: O&M expenses capitalized during FY 2013-14

		(IVS. CIOIE)
SI. No.	Particulars	Amount
1	Employee Cost	216.79
2	R&M expenses	0.11
3	A&G expenses	36.19
	Total	253.09

The Commission, accordingly, approves the capitalisation of O&M expenses at Rs. 253.09 Crore, as per the audited annual accounts in the Truing up for FY 2013-14. The Commission considers the capitalisation of O&M expenses as uncontrollable.

Table 4.25: Gains / (Losses) in O&M expenses capitalized approved in the Truing up
(Rs. Crore)

Particulars	Approved for FY 2013-14 in MYT order	Approved in Truing up	Deviation + / (-)	Gains/ (Losses) Controllable factor	Gains/ (Losses) Uncontrollable factor	
O&M Expenses capitalised	D&M Expenses 193.00		(60.09)	-	(60.09)	



4.8 Income Tax for FY 2013-14

GETCO has furnished the actual tax at Rs. 69.27 Crore in the Truing up for FY 2013-14, as against Rs. 15.37 Crore approved for the year in MYT Order dated 31st March 2011. The provision for tax approved in the MYT Order and actual claimed by GETCO are as given in detail in the Table below:

Table 4.26: Income tax claimed by GETCO

(Rs. Crore)

Particulars Approved for FY 2013-14 in MYT order		Claimed in Truing up for FY 2013-14	Deviation + / (-)
Income Tax	15.37	69.27	(53.90)

Petitioner's Submission

GETCO has submitted that the actual tax paid is Rs. 69.27 Crore, as against the approved tax of Rs. 15.37 Crore, resulting in an uncontrollable loss of Rs. 53.90 Crore.

Commission's Analysis

The Commission has, on verification from the audited accounts for FY 2013-14, found that the tax Provision is Rs. 85.32 Crore. In reply to a query from the Commission, GETCO submitted that the GETCO has actually paid Rs. 73.62 Crore towards income tax. GETCO has submitted the copies of challans as documentary evidence in support of the claim. The tax paid includes Rs. 4.35 Crore apportioned to SLDC.

The Commission, accordingly, approves the income tax at Rs. 69.27 (73.62-4.35) Crore in the Truing up for FY 2013-14.

As regards the computation of Gains / (Losses), Regulation 23.1 (g) considers variation in taxes on income as uncontrollable.

The Commission, accordingly, approves the Gains / (Losses) on account of tax on income in the Truing up for FY 2013-14, as detailed in Table below:

Table 4.27: Gains / (Losses) approved in the Truing up for FY 2013-14

(Rs. Crore)

Particulars	Approved for FY 2013-14 in MYT Order	Approved in Truing up for FY 2013- 14	Deviation +/(-)	Gains / (Losses) due to Controllable factors	Gains / (Losses) due to Uncontrollable Factors
Income Tax	15.37	69.27	(53.90)	-	(53.90)



4.9 Contribution to Contingency Reserve for FY 2013-14

GETCO has claimed Rs. 60 Crore towards contingency reserve as per audited accounts in the Truing up for FY 2013-14 as detailed in the Table below:

Table 4.28: Contingency Reserve claimed by GETCO

(Rs. Crore)

Particulars	Approved for FY 2013-14 in MYT order	Claimed in Truing up for FY 2013-14	
Contingency Reserve	-	60.00	

Petitioner's Submission

GETCO has submitted that it was not able to claim contribution to contingency reserve at the time of MYT Petition because MYT Petition was filed on 30th December, 2010 based on GERC (Terms and Conditions of Tariff) Regulations, 2005 and GERC (Multi Year Tariff) Regulations, 2007 and as the MYT Regulations, 2011 were issued on 22nd March, 2011. GETCO has further submitted that it has provided Rs. 60 Crore towards contribution to contingency reserve in the Annual Accounts for FY 2013-14 and these were invested in securities approved under trust act as per MYT Regulations, 2011.

Commission's Analysis

GETCO had not projected any contingency reserve in the MYT Petition and explained the reasons for not doing so in the Truing Up petition now.

Regulation 71.7 specified that where the Transmission Licensee has made an appropriation to the contingency reserve not more than 0.5 percent of the original cost of fixed assets shall be allowed annually towards such appropriation in the calculation of aggregate revenue requirement. The gross fixed assets at the beginning of the year as allowed by the Commission in the Truing up for FY 2013-14 is Rs. 11170.83 Crore and 0.5% of it works out to Rs. 55.85 Crore.

The Commission accordingly approves the contingency reserve at Rs. 55.85 Crore in the Truing up for FY 2013-14.

GETCO has claimed uncontrollable losses of Rs. 60.00 Crore in the truing up for FY 2013-14. The Commission considers the deviation on account of contingency reserve as a loss and approved the loss due to uncontrollable factor in the Truing Up for FY 2013-14.



Table 4.29: Gains / (Losses) on Contingency Reserve approved in the Truing up for FY 2013-14

(Rs. Crore)

Particulars	Approved for FY 2013-14 in MYT Order	Approved in Truing up for FY 2013- 14	Deviation +/(-)	Gains / (Losses) due to Controllable factors	Gains / (Losses) due to Uncontrollable Factors	
Contingency Reserve	-	55.85	(55.85)	-	(55.85)	

4.10 Revenue from other Income for FY 2013-14

GETCO has claimed the actual "other income" at Rs. 67.75 Crore in the Truing up for FY 2013-14, as against Rs. 103.00 Crore approved for the year in MYT Order dated 31st March, 2011. The details are given in detail in Table below:

Table 4.30: Non-Tariff Income claimed by GETCO for FY 2013-14

(Rs. Crore)

Particulars	order		Deviation + / (-)
Non-Tariff Income	103.00	67.75	(35.25)

Petitioner's Submission

GETCO has submitted that, as per the accounting policy of GETCO, the depreciation on assets which are financed by grants, subsidies and Consumer Contribution are considered while computing the depreciation in the Annual Accounts. GETCO is recovering Consumer Contribution on pro-rata basis towards contribution to cost of upstream strengthening of capital assets as pro-rata charges. GETCO has booked income towards Govt. Grants / Subsidies towards cost of capital assets (deferred) of Rs. 188.08 Crore, GETCO has reiterated that depreciation is a source of funding of the assets which have been financed by grants and consumer contribution that need to be replaced after their estimated useful life. In view of this, GETCO has not considered it as non- tariff income and it has been subtracted from the total 'other income' shown in the Annual Accounts. GETCO has also not considered depreciation on the assets acquired from Govt. Grants / Subsidies and requested that the same be approved.

GETCO has further submitted that income from interest on staff loan income from investment will not be part of other income, since the Commission is not allowing expenses of interest on staff deposits.



Commission's Analysis

The Commission has verified and found the actual 'other income', including the interest on staff loans and advance of Rs. 4.17 Crore, is Rs. 310.62 Crore. The balance 'other income', after deducting interest on staff loans, is Rs. 306.45 Crore, which includes Rs. 188.08 Crore pertaining to the income towards grants / subsidies towards cost of capital assets (Deferred amount) and Rs. 29.04 Crore income from parallel operation charges. GETCO has not considered the Rs. 188.08 Crore and Rs. 29.04 Crore as Non-Tariff income. The net Non-Tariff income of GETCO is Rs. 285.02 crore after deducting the non-tariff income of Rs. 21.44 Crore relating to SLDC for FY 2013-14.

The Commission has allowed depreciation on all the assets, including those created through grants and Consumer Contribution. It is, therefore, required that the amount of Rs. 188.08 Crore being the income pertaining to grants and subsidies be considered as part of other income, as per the prevailing practice.

The Commission, accordingly, approves the other income at Rs. 285.02 (306.45-21.44) Crore as actual, as per the audited annual accounts in the Truing up for FY 2013-14.

The Commission considers the other income as uncontrollable and, accordingly, approves the Gains / (Losses) on Non- Tariff income in the Truing up for FY 2013-14, as detailed in the Table below:

Table 4.31: Gains / (Losses) on Non-Tariff income approved in the Truing up for FY 2013-14

(Rs. Crore)

Particulars	Approved for FY 2013-14 in MYT Order	Approved in Truing up for FY 2013- 14	Deviation +/(-)	Gains / (Losses) due to Controllable factors	Gains / (Losses) due to Uncontrollable factors	
Non-Tariff Income	103	285.02	(182.02)	0.00	(182.02)	

4.11 Interest on working capital for FY 2013-14

GETCO has claimed Rs. 59.34 core towards interest on working capital in the Truing up for FY 2013-14, as against Rs. 46.78 core approved for the year in the MYT Order for FY 2011-16. The amount of interest on working capital approved for FY 2013-14



in the MYT Order and claimed by GETCO in the Truing up are given in the Table below:

Table 4.32: Interest on working capital claimed by GETCO

(Rs. Crore)

Particulars	Approved for FY 2013-14 in MYT Order	Claimed in Truing up for FY 2013-14	
Interest on Working Capital	46.78	59.34	

Petitioner's Submission

GETCO has submitted that working capital was computed, based on the norms provided in GERC (MYT) Regulations, 2011, and for computation of spares, 1% of the opening GFA. i.e., GFA as on 1st April 2005, with 6% yearly escalation, and 1 % of the average yearly additions from FY 2005-06 till FY 2013-14, with 6% yearly escalation considered, as detailed in the Table below:

Table 4.33: Calculation sheet for Maintenance Spares till FY 2013-14

(Rs. Crore)

SI. No.	Particulars		2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
1	Opening Balance of GFA		4049.10	4433.73	4861.81	5453.70	6067.63	6762.26	8109.69	9536.79	11170.83
	SLDC		3.36	3.36	3.36	3.36	3.36	6.90	6.86	7.58	7.71
2	Addition during the year		384.63	428.08	591.89	613.93	694.63	1347.43	1427.10	1634.04	1686.79
	SLDC						3.54	(0.04)	0.72		0.42
3	Closing balance of GFA		4433.73	4861.81	5453.70	6067.63	6762.26	8109.69	9536.79	11170.83	12857.62
	SLDC		3.36	3.36	3.36	3.36	6.90	6.86	7.58	7.58	8.13
4	Average GFA of the year		4241.42	4647.77	5157.76	5760.67	6414.95	7435.98	8823.24	10353.81	12014.22
5	Spares as % of capital cost	1%									
	Escalation (y-o-y)	6%									
	Maintenance Spares										
	Opening Balance of Assets (i.e. as on March 31, 2005)		40.46	42.88	45.46	48.19	51.08	54.14	57.39	60.83	64.48
	Assets capitalised during FY 2005-06		3.85	4.08	4.32	4.58	4.86	5.15	5.46	5.78	6.13
	Assets capitalised during FY 2006-07			4.28	4.54	4.81	5.10	5.40	5.73	6.07	6.44
	Assets capitalised during FY 2007-08				5.92	6.27	6.65	7.05	7.47	7.92	8.40
	Assets capitalised during FY 2008-09					6.14	6.51	6.90	7.31	7.75	8.22
	Assets capitalised during FY 2009-10						6.91	7.33	7.80	8.23	8.72
	Assets capitalised during FY 2010-11							13.47	14.28	15.14	16.05
	Assets capitalised during FY 2011-12								14.27	15.12	16.03
	Assets capitalised during FY 2012-13									16.34	17.32
	Assets capitalised during FY 2013-14										8.43
	Total		44.30	51.24	60.24	69.99	81.10	99.44	119.67	143.19	160.21

GETCO has further submitted it has considered the State Bank Advance Rate (SBAR) as on 1st of April 2013, i.e., 14.45% and that comparison of actual value of interest on working capital, based on the above methodology, and the value approved by the Commission for the year in MYT Order resulted in an uncontrollable loss of Rs. 12.55 Crore, as detailed in the Table below:



Table 4.34: Interest on Working Capital and Gains / (Losses) claimed in Truing up (Rs. Crore)

SI. No.	Particulars	FY 2013-14 Approved in the MYT Order	FY 2013-14 Claimed in Truing up	Deviation + / (-)
1	O&M Expenses (1 Month)	74.18	75.04	
2	Maintenance Spares (1% of opening GFA with 6% escalation)	125.88	160.21	
3	Receivables (2 Month)	198.11	175.40	
4	Total Working Capital	398.17	410.65	
5	Rate of Interest on Working Capital	11.75%	14.45%	
	Interest on Working Capital	46.78	59.34	(12.55)

Commission's Analysis

The Commission has examined the computation of normative working capital and interest thereon under GERC (MYT) Regulations, 2011. Regulation 41.2 (b) specifies that interest shall be allowed at a rate equal to the State Bank Advance Rate (SBAR) as on 1st April of the Financial year in which the Petition is filed.

Regarding 1% Maintenance spares, Regulation 41.2 (a) (ii) of GERC (MYT) Regulations, 2011, specifies maintenance spares as 1% of the historical cost, escalated at 6% from the date of commercial operation. The spares are required for plant machinery and the 1% spares are to be considered on the historical cost of plant and machinery only, instead of the entire GFA. However, the Commission has been considering the maintenance spares at 1% of the opening GFA for the respective year, since it is difficult to keep track of the dates of commercial operation of transmission lines and sub-stations and keep a watch on the requirement of spares escalation. The Commission has, therefore, been considering maintenance spares at 1% of the opening GFA (Historical cost), since there is substantial increase in GFA year on year. Also, the Commission has considered less opening GFA amount to the extent of Rs. 3.89 Crore which was wrongly capitalized in previous years as mentioned in para 4.2 above.

While truing up for FY 2011-12 in the Tariff order for FY 2012-13, the Commission had decided, to consider the rate of SBAR prevailing as on 1st April of the Financial Year for which truing up is being done.

The SBAR as on 1st April 2013 was 14.45%. The Commission, accordingly, takes into consideration the SBAR of 14.45% for computation of Interest in Working Capital for FY 2013-14.



The Commission has computed the Working Capital and interest thereon, as detailed in the Table below:

Table 4.35: Interest on Working Capital approved in Truing up for FY 2013-14

(Rs. Crore)

Particulars	Approved in Truing up for FY 2013-14
O&M Expenses (1 Month)	74.56
Maintenance Spares (1% of opening GFA)	111.67
Receivable (1 Month)	159.11
Total Working Capital	345.33
Rate of Interest	14.45%
Interest on Working Capital	49.90

The Commission, accordingly, approves the interest on working capital at Rs. 49.90 Crore in the Truing up for FY 2013-14.

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 Gains / (Losses) on account of interest on Working Capital in the Truing up for FY 2013-14, as detailed in the Table below:

Table 4.36: Gains/(Losses) in Interest on Working Capital Approved in Truing up for FY 2013-14

(Rs. Crore)

Particulars	Approved for FY 2013-14 in MYT Order	Approved in Truing up for FY 2013-14	Deviation + / (-)	Gains / (Losses) due to Controllabl e factors	Gains / (Losses) due to Uncontroll able factors	
Interest on Working Capital	46.78	49.90	(3.12)	0.00	(3.12)	

4.12 Incentive for Target availability for FY 2013-14

GETCO has claimed incentive for target availability at Rs. 31.79 Crore in the Truing up for FY 2013-14. The details are given in the Table below:

Table 4.37: Incentive for Target Availability claimed by GETCO

(Rs. Crore)

Particulars	Approved for FY 2013- 14 in MYT order	Claimed in Truing up for FY 2013-14
Incentive for Target Availability	-	31.79



Petitioner's Submission

The Petitioner has submitted that GETCO had achieved an availability of 99.48% for its transmission network during FY 2013-14. It has further submitted that GETCO has computed the incentive on higher availability based on the target availability of 98%, in accordance with Regulation 75.1 of the GERC (MYT) Regulations, 2011. The details are given in the Table below:

Table 4.38: Incentive Claimed for Higher Availability

(Rs. Crore)

		(/
SI. No.	Particulars	FY 2013-14
1	Target Availability as per MYT Regulations (%)	98.00%
2	Actual Availability (%)	99.48%
3	Aggregate Revenue Requirement	2105
4	Incentive for Transmission System Availability	31.79

Commission's Analysis

The Incentive claimed by GETCO for increase in annual availability beyond the target availability is in accordance with the provisions of Regulation 75 of GERC (MYT) Regulations, 2011. Incentive has to be given as per the formula mentioned in Regulation 75.1 of the GERC (MYT) Regulations, 2011, as shown below:

Where;

ATC= Annual Transmission Charges determined by the Commission....."

The Commission has computed the incentive, based on the trued up ARR for FY 2013-14, as detailed in the Table below:

Table 4.39: Incentive approved for higher availability

(Rs. Crore)

SI. No.	Particulars Particulars	FY 2013-14
1	Target Availability (%)	98.00%
2	Actual Availability (%)	99.48%
3	Aggregate Revenue Requirement	1909.31
4	Incentive for Transmission system availability	28.26

The Commission, accordingly, approves the incentive for achieving higher availability at Rs. 28.26 Crore in the Truing up for FY 2013-14.

The Commission considers the incentive for Target Availability as uncontrollable and, accordingly, approves the Gains/(Losses), as detailed in Table below:



Table 4.40: Gains / (Losses) approved on the Incentive in the Truing up

(Rs. Crore)

Particulars	Approved for FY 2013-14 in MYT order	Approved in Truing up for FY 2013- 14	Deviation + / (-)	Gains / (Losses) due to Controllable Factors	Gains / (Losses) due to Uncontrollable Factors
Incentive for Target Availability	0	28.26	(28.26)	0.00	(28.26)

4.13 Gains / (Losses) under "Truing up"

The Commission reviewed the performance of GETCO under Regulation 22 of GERC (MYT) Regulations, 2011, with reference to the Audited Annual Accounts for FY 2013-14.

The Commission has computed the sharing of Gains and (Losses) for FY 2013-14, based on the Truing up for each of the components discussed in the above Paragraphs.

The fixed charges approved for FY 2013-14 in the MYT Order dated 31st March 2011, claimed by GETCO in Truing up (Gains / (Losses)), computed in accordance with GERC (MYT) Regulations, 2011 are given in the Table below:

Table 4.41: Approved in Truing up Order for FY 2013-14

(Rs. Crore)

SI. No.	Fixed charges	Approved for FY 2013-14 in the MYT Order	Actual claimed in Truing up for FY 2013-14	Approve d in Truing up for FY 2013-14	Deviation + / (-)	Gains/ (Losses) due to Controlla ble Factors	Gains/ (Losses) due to Uncontroll able Factors
1	2	3	4	5	6=3-5	7	8
1	Operations & Maintenance Expenses	890.17	872.07	894.66	(4.49)	4.06	(8.55)
2	Depreciation	688.07	513.35	596.65	91.42	0.00	91.42
3	Interest & Finance Charges	495.38	372.59	357.74	137.64	0.00	137.64
4	Interest on Working Capital	46.78	59.34	49.90	(3.12)	0.00	(3.12)
5	Return on Equity	537.97	423.43	423.35	114.62	0.00	114.62
6	Contingency Reserve	0.00	60.00	55.85	(55.85)	0.00	(55.85)
7	Total Fixed Costs	2658.37	2300.78	2378.15	280.22	4.06	276.16



SI. No.	Fixed charges	Approved for FY 2013-14 in the MYT Order	Actual claimed in Truing up for FY 2013-14	Approve d in Truing up for FY 2013-14	Deviation + / (-)	Gains/ (Losses) due to Controlla ble Factors	Gains/ (Losses) due to Uncontroll able Factors
8	Less: Expenses Capitalised	193.00	0.00	253.09	(60.09)	0.00	(60.09)
9	Add: Provision for Tax	15.37	69.27	69.27	(53.90)	0.00	(53.90)
10	Total Transmission Charges	2480.74	2370.05	2194.33	286.41	4.06	282.35
11	Less: Other Income	103.00	67.75	285.02	(182.02)	0.00	(182.02)
12	Aggregate Revenue Requirement	2377.74	2302.30	1909.31	468.43	4.06	464.37
13	Add: Incentive for Achieving Target Availability	0.00	31.79	28.26	(28.26)	0.00	(28.26)
14	Total Revenue Requirement	2377.74	2334.09	1937.57	440.17	4.06	436.11

Table 4.40 indicates a controllable gain of Rs. 4.06 Crore and an uncontrollable gain of Rs. 436.11 Crore.

4.14 Sharing of Gains / (Losses) for FY 2013-14

The Commission has analysed the Gains / (Losses) on account of controllable and uncontrollable factors.

The relevant Regulations are extracted below:

"Regulation 24. Mechanism for pass-through of Gains or Losses on account of uncontrollable factors

- 24.1 The approved aggregate gain or loss to the Generating Company or Transmission Licensee 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 Distribution Licensee over such period as may be specified in the Order of the Commission passed under these Regulations.
- 24.2 The Generating Company, or Transmission Licensee or Distribution Licensee shall submit such details of the variation between expenses incurred and revenue



earned and figures approved by the Commission, in the prescribed format to the Commission, along with detailed computations and supporting documents as may be required for verification by the Commission.

24.3 Nothing contained in this Regulation 24 shall apply in respect of any gain or loss arising out of variations in the price of fuel and power purchase which shall be dealt with as specified by the Commission from time to time.

Regulation 25. Mechanism for sharing of Gains or Losses on account of controllable factors

25.1 The approved aggregate gain to the Generating Company or Transmission Licensee 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 specified in the Order of the Commission under Regulation 22.6;
- 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 Distribution Licensee.

25.2 The approved aggregate loss to the Generating Company or Transmission Licensee 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 specified in the Order of the Commission under Regulation 22.6; and
- b. The balance amount, which will amount to two-thirds of such loss, shall be absorbed by the Generating Company or Transmission Licensee or Distribution Licensee."

The revenue gap, based on the true-up ARR and the Gains / (Losses) approved in the Truing up for FY 2013-14, is summarised in the Table below:



Table 4.42: Revenue (Gap) / Surplus for FY 2013-14

(Rs. Crore)

SI. No.	Particulars	FY 2013-14
1	ARR approved in the MYT Order on 31.03.2011 for FY 2013-14	2377.74
2	Less: Gain on Account of Uncontrollable Factors to be Passed on to the Consumers	436.11
3	Less:Gain on Account of Controllable Factors to be Passed on to the Consumers (1/3 rd of Rs. 5.69 Crore)	1.35
4	Revised ARR for FY 2013-14	1940.27
5	Net (Gap) / Surplus	437.47

The Truing up Exercise carried out indicates a revenue surplus of Rs. 437.47 Crore, as against ARR of Rs. 2377.74 Crore approved for FY 2013-14 in the MYT Order dated 31st March, 2011.

The Commission has arrived at a surplus of Rs. 437.47 Crore in truing up for FY 2013-14. This surplus is carried forward to ARR of FY 2015-16 for determination of transmission charges.



5. Determination of Transmission Charges for FY 2015-16

5.1 Introduction

This chapter deals with the determination of transmission charges for the FY 2015-16 for GETCO. The Commission has considered the Revised ARR approved for the FY 2015-16 in the Mid-term Review and the adjustment on account of truing up for FY 2013-14, while determining the transmission Tariff for FY 2015-16.

5.2 Determination of Transmission Tariff for FY 2015-16

The table below summarises the Annual Revenue Requirement, as approved by the Commission for the FY 2015-16 in the Mid-term Review. Detailed analysis of each expense head has already been provided in the Mid-term Review.

The ARR approved for FY 2015-16 in the MYT order projected by GETCO in the Midterm Review and approved by the Commission in the Mid-term Review are given in the Table below:

Table 5.1: Approved ARR for 2015-16

(Rs. Crore)

			FY 2015-16	
SI. No.	Particulars	Approved in the MYT order	Projected in the Mid- term Review	Approved in the Mid-term Review
1	Operations & Maintenance Expenses	1065.79	1018.07	1107.67
2	Depreciation	901.73	871.43	804.84
3	Interest and Finance Charges	645.55	615.10	460.36
4	Interest on Working Capital	60.68	87.30	71.00
5	Return on Equity	717.08	649.58	573.55
6	Add: Contingency Reserve	0.00	79.86	75.35
7	Total Fixed Costs	3390.83	3321.34	3092.78
8	Less: Expenses Capitalised	234.00	-	212.13
9	Add: Provision for Tax	15.37	129.97	79.40
10	Total Transmission Charges	3172.20	3451.30	2960.05
11	Less: Other Income	103.00	187.98	188.00
12	Aggregate Revenue Requirement	3069.20	3263.32	2772.05

The Petitioner has submitted Transmission Tariff for FY 2015-16, based on the proposed truing up of FY 2013-14. Accordingly, the Commission has determined the revenue gap/surplus, based on the truing up of FY 2013-14. The Petitioner's proposal and the Commission's approved transmission Tariff for FY 2015-16 are given in Table below:



Table 5.2: Transmission Tariff for FY 2015-16

(Rs. Crore)

SI. No.	Particulars	Unit	FY 2015-16 (Proposed)	FY 2015-16 (Approved)
1	Approved ARR for FY 2015-16, as per the Mid-term Review Order	Rs. Crore	2772.05	2772.05
2	Less: Revenue Surplus/(Gap) for FY 2013-14	Rs. Crore	101.13	437.47
3	ARR for FY 2015-16, including adjustment for the Truing up for FY 2013-14	Rs. Crore	2670.92	2334.58
4	Total MW Allocation, as per Midterm Review Order	MW	22904	22904
5	Transmission Tariff	Rs./MW/Day	3194.9	2785

The Commission, accordingly, approves the Annual Tariff for Transmission for FY 2015-16, as mentioned above.



6. Compliance of Directives

6.1 Compliance of Directives issued by the Commission

The Commission in its Tariff Order dated 29th March, 2014 had issued certain directives. 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:

6.2 Compliance of Directives

Directive 1: Transmission System Availability

(Page 56 of Tariff Order No. 1262 of 2012, dated 28th March, 2013)

GETCO has furnished the transmission system availability figures in its ARR and Tariff petition for Truing up for FY 2009-10 and Performance Review for FY 2010-11. The availability is required to be supported by detailed calculations as required by GERC Regulations, 2005. The detailed calculation for the availability of transmission system for FY 2009-10 and FY 2010-11 shall be furnished by April 2011. The claim of incentive for FY 2011-12 to FY 2015-16 shall be supported by detailed calculation as per GERC (MYT) Regulations, 2011. These calculations shall be submitted to the Commission within three months after the end of the relevant year.

Compliance:

The Commission specified the methodology to be adopted for calculating Transmission System Availability (TSA) as per Annexure-II of GERC (MYT) Regulations, 2011, Clause 70: Norms of operation.

GETCO has computed the TSA as per GERC MYT Regulations, 2011 and submitted to SLDC for validation. Same is validated and verified as "Transmission System Availability" for GETCO network for the FY 2013-14 is 99.48%.

Commission's Comments

Action taken is noted by the Commission.

Directive 2: Reactive Compensation

(Page 58 of GERC Tariff Order No. 1262 of 2012 dated 28th March 2013 and further direction vide Tariff Order no 1375 of 2013 dated 29th April, 2014)



The Commission has taken note of the submission made by the Petitioner. The Commission observes that the pace of installation of 11 kV capacitors is slow. The Commission therefore directs the Petitioner to expedite this work and to submit a status report on the work in progress (quarterly).

Compliance

Installation of 233 Nos. (630 MVAR) and 72 Nos. (180 MVAR) of 11 KV capacitor bank is completed. Details of the above work are as under:

SI. No.	Work Planned	Current Status
1	Planning & Progress of installation of 233 Nos. (630 MVAR) of 11 KV Capacitor Bank	The entire work is completed on 08.03.2013
2	Installation of 72 Nos. 11 KV capacitor Banks (180 MVAR)	The entire work is completed on 20.12.2013

After installation of above capacitor banks, there has been good voltage profile in the main transmission system (400 KV) and sub transmission system (220 KV to 66 KV). It is also highlighted that GETCO is following prescribed voltage limit as per GERC Grid Code Notification: No. 5 of 2004.

Commission's Comments

Action taken is noted by the Commission.

Directive 3: Cost Benefit Analysis for the Transmission projects for the control period FY 2014-15 to FY 2015-16

GETCO has proposed considerable investment of Rs. 215 Crore and Rs. 281 Crore during FY 2014-15 and FY 2015-16 respectively for renovation and modernization. Since the system is old, it requires strengthening, renovation and modernization to maintain uninterrupted power supply to all consumers.

GETCO has furnished the details of various works being executed with justification. The Commission notes the submission of the petitioner and will deal with it in Chapter-5 of this order of Mid-term review of Business Plan.

GETCO is directed to provide the cost-benefit analysis for each of the schemes, or group of schemes, other than those required for evacuation of



power from generating stations, for approval of the Commission.

Compliance/Action taken/initiated

GETCO has submitted its Transmission Plan for FY 2014-15 to 2015-16 in the Midterm Review petition. The Plan comprises of the following vital schemes/projects:

- i. New class KV wise Sub-stations & EHV lines,
- ii. Power evacuation Projects/schemes.
- iii. System strengthening schemes.
- iv. Renovation & Modernization schemes
- v. City Development Plan and others.

All the above elements covered under Transmission Plan are vital to build robust, reliable and optimum transmission system to maintain the system availability and to minimize the Transmission losses in the forthcoming changing scenario in the state of Gujarat and in the western Region.

Cost benefit analysis based on reduction in system losses and increase in business quantum & profit to justify such massive investment is attached as Annexure A of the petition.

Other benefits

- I. To facilitate the evacuation of power from up-coming power stations,
- II. System strengthening schemes for further transfer of power to the load centres in urban and industrial areas,
- III. To meet the load growth expected in Gujarat,
- IV. Creation of 66 KV substations to reduce the length of 11 KV feeders thereby reducing the losses of distribution,
- V. Adequate transformation capacity at 400 KV, 220 KV, 132 KV & 66 KV level.
- VI. Uniform spread of transmission network throughout Gujarat resulting in good voltage profile, reactive power management and optimize transmission losses.
- VII. Integration of renewable energy i.e. wind / solar power.

Commission's Comments

Compliance of the directive is noted. Cost Benefit Analysis submitted with the petition by GETCO is attached as Annexure A.



Directive 4: Provision of Contingency Reserves:

GETCO has to make a provision for contingency reserve as per MYT Regulations, 2011 and the same shall be invested in securities authorised under the Indian Trusts Act, 1882 within a period of six months of the close of the financial year i.e. on or before 30th September.

Compliance/Action taken/initiated

GETCO has complied with the directive of the Commission by making a provision for Contingency reserves in the accounts for the FY 2013-14 and invested the same in Government Securities as authorised under the Indian Trust Act, 1882, within the stipulated time frame.

Commission's Comments

Compliance of the directive is noted.

6.3 New Directives

Directive 1:

It is observed that there is consistent deviation in the capitalization as against the capital expenditure approved by the Commission. GETCO should make efforts to adhere to the approved capex as far as possible.

Directive 2:

It is observed that there has been instances of transmission constraints in the GETCO system. GETCO has to plan their network to avoid such transmission constraints. A report in this regard may be submitted by 30.09.2015.

Directive 3:

GETCO shall submit a quarterly report on the average as well as peak loading of various 220 KV, 132 KV and 66 KV SS in the Gujarat system, within 1 month of completion of the quarter.



COMMISSION'S ORDER

The Commission approves the components of transmission charges and the Transmission tariff for GETCO for FY 2015-16, as shown in the Tables below:

(Rs. Crore)

		(KS. CIOIE)
SI. No.	Particulars	FY 2015-16
1	Operations and Maintenance Expenses	1107.67
2	Depreciation	804.84
3	Interest and Finance Charges	460.36
4	Interest on Working Capital	71.00
5	Return on Equity	573.55
6	Add: Contingency Reserve	75.35
7	Total Fixed Costs	3092.78
8	Less: Expenses Capitalised	212.13
9	Add: Provision for Tax	79.40
10	Total Transmission Charges	2960.05
11	Less: Other Income	188.00
12	Aggregate Revenue Requirement	2772.05
13	Add. Incentive for Target Availability	
14	Total Revenue Requirement	2772.05
15	Less: Revenue Surplus for FY 2013-14	437.47
16	ARR for FY 2015-16 including adjustment for FY 2013-14	2334.58

Transmission Tariff

SI. No.	Particulars	Unit	FY 2015-16
1	Transmission Tariff	Rs./MW/day	2785

This order shall come into force with effect from 1st April, 2015.

Sd/-	Sd/-	Sd/-	
SHRI K.M. SHRINGARPURE Member	DR. M.K. IYER Member	SHRI PRAVINBHAI PATEL Chairman	

Place: Gandhinagar Date: 31/03/2015



Annexure-A: Cost Benefit Analysis for the Transmission Projects

Calculation of projected Transmission Losses for FY 2014-15

1) Transmission Losses:

➤ The projected transmission losses for the year 2014-15 as per system study is 4.99%.

The summary of the system study for the year 2014-15 is reproduced below:

Summary of results:

Total Real Power Generation : 16511.61 MW

Total Real Power Load : 15686.62 MW

Total Reactive Power Load : 4401.10 MVAR

Load pf : 0.963

Total Real Power Loss : 824.94 MW

Percentage Real Loss : 4.99 %

The above projected transmission loss for the year 2014-15 is based on the system study considering anticipated generation capacity addition and planned transmission elements for the year 2014-15.

2) Cost benefit analysis:

Cost benefit based on reduction in system losses:

System studies have been carried out under peak load condition for year 2014-15. The study results reveal that there is a reduction in overall transmission losses by 25.93 MW (due to system strengthening schemes only). The cost benefit analysis reveals that the pay-back period is around 6.89 years as shown below:

Sr. No.	Particulars		
1	Reduction in loss		25930 KW
2	Savings in units per annum	Sr. No. (1) x 8760 Hours	227146800 KWh
3	Revenue earned in Rs.	Sr. No. (2) x	Rs. 976731240/-
	considering Rs. 4.30 per unit	Rs. 4.30/-	110.070701210/
4	Project cost (without inflation)		Rs. 6738400000/-
5	Pay-back period	Sr. No. (4) ÷ Sr. No. (3)	6.89 years



Cost benefit analysis for various groups of planned transmission schemes is shown at Annexure-1(A) &1(B).

> Cost benefit based on increase in business quantum and profit thereon:

Considering energy handling capacity of 94603 MUs by year 2014-15, from that of 86221 MUs for year 2013-14, the proposed evacuation and system strengthening schemes would be capable of catering additional about 8382 MUs energy in the system thereby increasing the business quantum of DISCOM. Considering only 10% of the total revenue earned by catering above additional load as profit for DISCOM, the cost benefit by way of profit is worked out as under:

Sr. No.	Particulars		Energy Catered in FY 2014-15
1	Energy Catered (MUs)	In MUs	94603
2	Additional Energy catered in MUS	In MUs	8382
3	Additional energy catered in units	In KWh	8382000000 KWh
4	Revenue earned per annum in Rs. considering Rs. 4.30 per unit	Sr. No. (3) x Rs. 4.30/-	Rs. 36042600000/-
5	Assuming 10% as profit	Sr. No. (4) x 0.10	Rs. 3604260000/-
Say Rs			360 Crore



Annexure-1(A)

March-2014 condition

Total Generation - 12306 MW

Wind Installation - 3219 MW (20% injection) Solar Installation - 733 MW (20% injection)

DGVCL	MGVCL	UGVCL	PGVCL	SEC + AEC	Gujarat Total	Export + DD+DNH	Grand Total	Loss	Loss + Load
2235	1466	2382	3929	1573	11586	190	11776	530	12306

March-2015 condition

[1] GSECL, SIKKA - (2X250) MW

(220/132 KV, 2 x 150 MVA ICTs at Sikka + 220KV LILO of single ckt of D/C Jamnagar - Jetpur at Sikka+ 220KV Sikka - Motipaneli

Other STU lines associated with power evacuation:

[1] 400 KV D/C Adani - Zerda line

[2] 220 KV D/C pooling station – Jangral line (AL-59) with 2 Nos. of 220 KV feeder bays at Jangral substation

Other CTU network addition in Gujarat:

Nil

Total Generation - 16476 MW

Wind Installation - 3219 MW (25% injection)

Solar Installation - 720 MW (inclusive of 250 MW in Solar Park) (25% injection)

DCVCI	MGVCL	HCVCI	PGVCL	SEC +	Gujarat	Export+	Grand	Loop	Loss +
DGVCL	MGVCL	UGVCL	PGVCL	AEC	Total	DD+DNH	Total	Loss	Load
2503.44	160E 760	2700.02	4E4E 00	1790.57	13145.7	2470 402	15625.2	850.9	16476
4	1635.763	2700.92	4515.02	67	237	2479.492	2	14	16476



Case	Description	Total Loss (MW)	Reduct ion in Loss (MW)
1	March-2014 - Basecase	850.91	-
Case-1	In basecase, [1] 400KV S/C Adani-Hadala LILO at Halvad [2] 220 KV D/C Halvad (400 KV) - Sarla line	843.47	7.44
Case-2	In Case-1, [1] LILO of one circuit of 400 KV D/C APL Mundra - Zerda line at Varsana [2] 400/220 KV, 315 MVA X'mer - 1 No. at Zerda	841.99	1.48
Case-3	In Case-2, 400/220 KV, 1 x 315 MVA OR 1 x 500 MVA ICT (Asoj, Kosamba, Varsana)	838.79	3.20
Case-4	In Case-3, [1] 400KV D/C Kosamba - Choraniya	833.83	4.96
Case-5	In Case-4, [1] 220/66 KV, 2 x 100 MVA ICTs at Jambuva [2] LILO of one circuit of 220 KV D/C SLPP Mangrol - Gavasad line at Karjan substation [3] Termination of one D/C line of 220 KV 2 x D/C Achhalia - Jambuva lines at Jarod	830.18	3.65
Case-6	In Case-5, [1] 220/66 KV Suva s/s: 220/66 KV, 2x100 MVA ICT [2] LILO of one circuit of 220 KV D/C Kosamba - Mobha line at Suva substation [3] 220/66 KV Navera (Atul) s/s: 220/66 KV, 2x100 MVA ICT [4] LILO of 220 KV S/C Navsari - Bhilad line at Navera	827.83	2.35
Case-7	In Case-6, [1] 132/66 KV Chandkheda: (132/66 KV, 2X50 MVA Transformer) [2] LILO of one circuit of 132 KV D/C Ranasan - Sabarmati line at Chandkheda substation	827.65	0.19



	Total reduction in losses (MW)					
	substation					
	[3] LILO of 132 KV S/C Lalpar - Wankaner line at 220 KV Sartanpar					
10	substation	024.90	0.80			
Case-	[2] LILO of 220 KV S/C Bhimasar - Lalpar line at 220 KV Sartanpar	824.98	0.80			
	[1] 220 KV Sartanpar : (220/132 KV 2X100 MVA Transformers)					
	In Case-9,					
Case-9	[1] 220/66 KV, 2 x 100 MVA ICTs at Kasor	023.70	1.13			
Case-9	In Case-8,	825.78	1.13			
	at Vallabhipur substation					
Case-8	MVA Transformer)[2] LILO of 220 KV S/C Dhuvaran - Fedra - Botad line	826.91	0.74			
	In Case-7,[1] 220/66 KV Vallabhipur substation : (220/132 KV, 2X100					

DGVCL	MCVCI	UGVCL	PGVCL	SEC +	Gujarat	Export +	Grand	Logo	Loss +
DGVCL	MGVCL	UGVCL	PGVCL	AEC	Total	DD+DNH	Total	Loss	Load 16511.6
2514.06	1644.78	2710.19	4541.33	1793.45	13203.82	2482.81	15686.6	824.982	16511.6
2314.00	1044.78	2710.19	4541.55	1793.43	13203.02	2402.01	3	024.902	1



Annexure-1 (B)

Payback period calculation - Proposed projects for year 2014-15

Sr. No.	Transmission Elements	Loss Reduction (KW)	Savings in Rs. (Rs.4.30/- per unit) per Annum	Project cost (without inflation) in Rs.	Payback period (Year)
1	[1] 400KV S/C Adani-Hadala LILO at Halvad	7440.6	280272521	799400000	2.85
	[2] 220 KV D/C Halvad (400 KV) - Sarla line				
2	[1] LILO of one circuit of 400 KV D/C APL Mundra - Zerda line at Varsana [2] 400/220 KV, 315 MVA X'mer - 1 No. at Zerda	1481.8	55816442.4	172100000	3.08
3	400/220 KV, 1 x 315 MVA OR 1 x 500 MVA ICT (Asoj, Kosamba, Varsana)	3197.7	120450964	722500000	6.00
4	[1] 400KV D/C Kosamba - Choraniya	4960.3	186844580	2016000000	10.79
5	[1] 220/66 KV, 2 x 100 MVA ICTs at Jambuva [2] LILO of one circuit of 220 KV D/C SLPP Mangrol - Gavasad line at Karjan substation [3] Termination of one D/C line of 220 KV 2 x D/C Achhalia - Jambuva lines at Jarod	3648.7	137439232	525800000	3.83
6	[1] 220/66 KV Suva s/s: 220/66 KV, 2x100 MVA ICT [2] LILO of one circuit of 220 KV D/C Kosamba - Mobha line at Suva substation [3] 220/66 KV Navera (Atul) s/s: 220/66 KV, 2x100 MVA ICT [4] LILO of 220 KV S/C Navsari - Bhilad line at Navera	2351.8	88587602.4	888000000	10.02



	Total	25931.9	976802809	6738400000	6.898
	substation				
	Wankaner line at 220 KV Sartanpar				1
	[3] LILO of 132 KV S/C Lalpar -				
10	substation	131.3	30040230	32000000	17.00
10	Lalpar line at 220 KV Sartanpar	797.5	30040230	528800000	17.60
	[2] LILO of 220 KV S/C Bhimasar -				
	2X100 MVA Transformers)				
	[1] 220 KV Sartanpar : (220/132 KV				
9	Kasor	ZÖ.	42493270.8	314400000	7.40
	[1] 220/66 KV, 2 x 100 MVA ICTs at	1128.1	42402270.9	214400000	7.40
9	substation				
	Fedra - Botad line at Vallabhipur				
8	[2] LILO of 220 KV S/C Dhuvaran -	739.8	27866786.4	551900000	19.80
	(220/132 KV, 2X100 MVA Transformer)				
	[1] 220/66 KV Vallabhipur substation :				
	Chandkheda substation				
	Ranasan - Sabarmati line at				
7	[2] LILO of one circuit of 132 KV D/C	185.6	6991180.8	219500000	31.40
	2X50 MVA Transformer)				
	[1] 132/66 KV Chandkheda : (132/66 KV,				



Calculation of projected Transmission Losses for FY 2015-16

1) Transmission Losses:

The projected transmission losses for the year 2015-16 as per system study is 4.81 %.

The summary of the system study for the year 2015-16 is reproduced below:

Summary of results:

Total Real Power Generation : 17859.86 MW

Total Real Power Load : 17000.25 MW

Total Reactive Power Load : 4412.50 MVAR

Load pf : 0.968

Total Real Power Loss : 859.56 MW

Percentage Real Loss : 4.81 %

The above projected transmission loss for the year 2015-16 is based on the system study considering anticipated generation capacity addition and planned transmission elements for the year 2015-16.

2) Cost benefit analysis:

Cost benefit based on reduction in system losses:

System studies have been carried out under peak load condition for year 2015-16. The study results reveal that there is a reduction in overall transmission losses by 20.52 MW (due to system strengthening schemes only). The cost benefit analysis reveals that the pay-back period is around 9.36 years as shown below:

Sr. No.	Particulars		
1	Reduction in loss		20520 KW
2	Savings in units per annum	Sr. No. (1) x 8760 Hours	179755200 KWh
3	Revenue earned in Rs. considering Rs. 4.30 per unit	Sr. No. (2) x Rs. 4.30/-	Rs. 772947360 /-
4	Project cost (without inflation)		Rs. 7234900000 /-
5	Pay-back period	Sr. No. (4) ÷ Sr. No. (3)	9.36 Years



Gujarat Electricity Regulatory Commission

Cost benefit analysis for various groups of planned transmission schemes is shown at Annexure-2(A) & 2(B).

> Cost benefit based on increase in business quantum and profit thereon:

Considering energy handling capacity of 101409 MUs by year 2015-16, from that of 94603 MUs for year 2014-15, the proposed evacuation and system strengthening schemes would be capable of catering additional about 6806 MUs energy in the system thereby increasing the business quantum of DISCOM. Considering only 10% of the total revenue earned by catering above additional load as profit for DISCOM, the cost benefit by way of profit is worked out as under:

Sr. No.	Particulars		Energy Catered in FY 2015-16
1	Energy Catered (MUs)	In MUs	101409
2	Additional Energy catered in MUS	In MUs	6806
3	Additional energy catered in units	In KWh	6806000000 KWh
4	Revenue earned per annum in Rs. considering Rs. 4.30 per unit	Sr. No. (3) x Rs. 4.30/-	Rs. 29265800000/-
5	Assuming 10% as profit	Sr. No. (4) x 0.10	Rs. 2926580000/-
	Say Rs	292 Crore	



Annexure-2 (A)

March-2015 condition

Total Generation - 16511.61 MW

Wind Installation - 3219 MW (25% injection) Solar Installation - 733 MW (25% injection)

DGVCL	MGVCL	UGVCL	PGVCL	SEC + AEC	Gujarat Total	Export+ DD+DNH	Grand Total	Loss	Loss + Load
2514.06	1644.78	2710.19	4541.33	1793.45	13203.82	2482.81	15686.626	824.982	16511.61

March-2016 condition

[1] GSEG, Hazira (Extn), 350 MW 220 KV GSEG, Hazira - Mota

[2] BECL, Padva, (2x300 MW)

220 KV D/C Padva – Botad LILO of one circuit of 220 KV D/C BECL - Botad line at Vallabhipur substation

[3] Adani Project, Mundra - Bid -II (1000 MW)

400 KV D/C Adani - Zerda line-2

[4] Charanka Solar Park

400/220 KV switchyard along with 2x315 MVA ICTs at Solar Park
400 KV D/C pooling station – Sankhari (proposed) line (Twin Moose) with 2 Nos. of 400 KV

feeder bays at 400 KV Sankhari substation

Other STU lines associated with power evacuation:

[1] 400KV D/C Essar-Amreli line

Other CTU network addition in Gujarat:

Nil

Total Generation - 17781 MW

Wind Installation - 3219 MW (30% injection)

Solar Installation - 720 MW (inclusive of 250 MW in Solar Park) (30% injection)

DGVCI	MGVCL	UGVCL	PGVCL	SEC+A	Gujarat	Export +	Grand	Loce	Loss +
DGVCL	MGVCL	UGVCL	FGVCL	EC	Total	DD+DNH	Total Loss	Load	
2737.91	1804.13	2944.69	5035.18	1898.54	14420.45	2480.55	16901.00	880.14	17781.14



Case	Description	Total Loss (MW)	Reducti on in Loss (MW)
1	March-2014 - Basecase	880.14	-
Case-1	In basecase, [1] LILO of one circuit of 220 KV D/C Nanikhakhar - Tappar line at Mokha [2] 220 KV D/C Varsana - Mokha line	878.94	1.19
Case-2	In Case-1, [1] 220/66 KV, 2 x 100 MVA ICTs at Bhatia [2] 220 KV D/C Bhatia - Kalavad line and 220 KV D/C Kalavad - Kangasyali)	876.18	2.77
Case-3	In Case-2, [1] 400 KV D/C Varsana - Halvad line	873.81	2.37
Case-4	In Case-3, [1] 400 KV D/C Amreli - Kasor line	866.23	7.58
Case-5	In Case-4, [1] 132 KV S/C Achhalia - Tilakwada line (ACSR Panther) [2] 132 KV S/C Tilakwada - Chhotaudepur line (ACSR Panther)	865.19	1.04
Case-6	In Case-5, [1] 220/66 KV Charadava s/s: (220/66 KV, 2X100 MVA Transformers) [2] Termination of LILO of one circuit of 220 KV D/C Halvad - Bhimasar (PG) at Charadava substation	863.84	1.35
Case-7	In Case-6, [1] 220/66 KV Shapar s/s: (220/66 KV s/s with 2x100 MVA Transformer) [2] LILO of 220 KV S/C Chorania - Sarla and Sarla - Gondal lines (due to LILO of 220 KV S/C Chorania - Gondal line at Sarla substation) at Shapar substation	862.91	0.93
Case-8	In Case-7, [1] LILO one circuit of 220 KV D/C Amreli - Dhasa line at 220 KV Botad S/S	862.60	0.31



	Total reduction in losses	(MW)	20.52
	substation		
	[4] LILO of 132 KV S/C Sartanpar - Wankaner line at Vaghasia		
	[3] 132/66 & 132/11 KV Vaghasia s/s		
Case-9	S/s	859.62	2.99
	[2] LILO of 132 KV S/C Sartanpar - Wankaner line at Makansar		
	[1] 132/66 & 132/11 KV Makansar s/s		
	In Case-8,		

DGVCL	MGVCL	UGVCL	PGVCL	SEC+A	Gujarat	Export+	Grand	Loop	Loss +	
				EC	Total	DD+DNH	Total	Loss	Load	
2747	10	1812.79	2963.94	5090.75	1902.53	14517.11	2483.142	17000.253	859.62	17859.87



Annexure-2 (B)

Payback period calculation - Proposed projects for year 2015-16

Sr. No.	Transmission Elements	Loss Reduction (KW)	Savings in Rs. (Rs.4.30/- per unit) per Annum	Project cost (without inflation) in Rs.	Payback period (Year)
1	In basecase, [1] LILO of one circuit of 220 KV D/C Nanikhakhar - Tappar line at Mokha [2] 220 KV D/C Varsana - Mokha line	1191.1	44866354.8	68700000	1.53
2	In Case-1, [1] 220/66 KV, 2 x 100 MVA ICTs at Bhatia [2] 220 KV D/C Bhatia - Kalavad line and 220 KV D/C Kalavad - Kangasyali)	2765.5	104170854	1652800000	15.87
3	In Case-2, [1] 400 KV D/C Varsana - Halvad line	2366.8	89152622.4	1162200000	13.04
4	In Case-3, [1] 400 KV D/C Amreli - Kasor line	7582.4	285613843.2	2299700000	8.05
5	In Case-4, [1] 132 KV S/C Achhalia - Tilakwada line (ACSR Panther) [2] 132 KV S/C Tilakwada - Chhotaudepur line (ACSR Panther)	1038.6	39121984.8	191500000	4.89
6	In Case-5, [1] 220/66 KV Charadava s/s: (220/66 KV, 2X100 MVA Transformers) [2] Termination of LILO of one circuit of 220 KV D/C Halvad - Bhimasar (PG) at Charadava substation	1346.2	50708661.6	532800000	10.51
7	In Case-6, [1] 220/66 KV Shapar s/s: (220/66 KV s/s with 2x100 MVA Transformer) [2] LILO of 220 KV S/C Chorania - Sarla and Sarla - Gondal lines (due to	932.4	35121643.2	616700000	17.56



	Total	20519.5	772928526	7234900000	9.360
	Wankaner line at Vaghasia substation				
	[4] LILO of 132 KV S/C Sartanpar -			452000000	
	[3] 132/66 & 132/11 KV Vaghasia s/s				4.02
9	Wankaner line at Makansar S/s	2985.6	112461580.8		
	[2] LILO of 132 KV S/C Sartanpar -				
	[1] 132/66 & 132/11 KV Makansar s/s				
	In Case-8,				
	S/S		11710981.2	258500000	22.07
8	Amreli - Dhasa line at 220 KV Botad	310.9			
	[1] LILO one circuit of 220 KV D/C	310.9			
	In Case-7,				
	substation				
	line at Sarla substation) at Shapar				
	LILO of 220 KV S/C Chorania - Gondal				

