GUJARAT ELECTRICITY REGULATORY COMMISSION



Mid-term Review of Business Plan

For

Gujarat Energy Transmission Corporation Limited (GETCO)

Case No. 1341 of 2013 29th April 2014

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GUJARAT ELECTRICITY REGULATORY COMMISSION (GERC)

GANDHINAGAR

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ABBREVIATIONS

A&G	Administration and General
ARR	Aggregate Revenue Requirement
CAPEX	Capital Expenditure
CERC	Central Electricity Regulatory Commission
Ckt. Km	Circuit Kilometre
Control Period	FY 2011-12 to FY 2015-16
CPP	Captive Power Plant
DGVCL	Dakshin Gujarat Vij Company Limited
DISCOM	Distribution Company
EA	Electricity Act, 2003
EHV	Extra High Voltage
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	Renovation and Modernisation
RLDC	Regional Load Despatch Centre
RoE	Return on Equity
SBI	State Bank of India
SLDC	State Load Despatch Centre
UGVCL	Uttar Gujarat Vij Company Limited
WRLDC	Western Regional Load Despatch Centre
Wt. Av.	Weighted Average





Before the Gujarat Electricity Regulatory Commission at Gandhinagar

Case No. 1341 of 2013

Date of the Order: 29/04/2014

CORAM

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

ORDER

1. Background and Brief History

1.1 Background

Section 16.2 of GERC (MYT) Regulations, 2011 of GERC provides for submission of Business Plan for each year of the Control Period by the Generating Company, Transmission Licensee, Distribution Wires Business and Retail Supply Business. Based on the Business Plan, the applicant shall submit the forecast of the Aggregate Revenue Requirement (ARR) for the entire control period and the expected revenue from the existing Tariffs for the first year of the control period, and the Commission shall determine the ARR for the entire control period and the tariff of the first year of the control period for the Generating Company, Transmission Licensee and Distribution Wires Business and Retail Supply Business.



Section 16.2 of the Regulations also provides that the Generating Company, Transmission Licensee and Distribution Licensee may seek a Mid-term Review of the Business Plan through an application filed three months prior to the filing of the Petition for truing up for the second year of the control period and tariff determination for the fourth year of the control period.

Regulation 17.2 of the Regulations, 2011, provides that in case of Mid-term Review of Business Plan under Regulation 16.2, the Petition shall comprise of modification of the ARR for the remaining years of the control period, if any, with adequate justification for the same.

Regulation 19.1 of GERC (MYT) Regulations, 2011 also provides that Mid-term Review of the Business Plan / Petition may be sought by the Generation Company Transmission Licensee and Distribution Licensee through an application filed three months prior to the specified date of filing of the Petition for truing up for the second year of the control period and tariff determination for the fourth year of the control period.

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.



Vide Notification dated 3rd October 2006, the Government of Gujarat 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.

The Commission issued the orders for the second control period on 31st March, 2011.

1.4 Petition of GETCO for Mid-term Review of the Business Plan

In accordance with Regulation 16.2 of GERC (MYT) Regulation, 2011, the Gujarat Energy Transmission Corporation Limited (GETCO) has filed the Petition for Midterm Review of the Business Plan and Revision of ARR for the remaining years of the control period, i.e. FY 2014-15 and FY 2015-16.

1.5 Admission of the Petition and the Public Hearing Process

The GETCO has submitted the current Petition for Mid-term Review of the Business Plan and Revision of ARR for balance years, i.e. FY 2014-15 and FY 2015-16, of the control period. The Commission admitted the above Petition (Case No. 1341/2013) on 06.09.2013.

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 Mid-



term Review Petition filed by it, was issued in the following newspapers on 30.10.2013.

SI. No.	Name of the Newspaper	Language	Date of publication
1	Indian Express	English	30.10.2013
2	Gujarat Samachar	Gujarati	30.10.2013

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 29.11.2013.

The Commission received objections / suggestions from four stakeholders. The Commission examined the objections / suggestions received and fixed the date for public hearing for the petition on 11th February, 2014 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 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	OPGS Power Gujarat Private Ltd.	No
2	Gujarat Vepari Mahamandal Sahakari Audyogik Vasahat Ltd.	No
3	The Institute of Indian Foundrymen	No
4	Ganpatbhai Lalubhai Suthar	No

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 responses, are briefly given in Chapter 3.

1.6 Contents of this order

The order is divided into five chapters, as under:

- 1. The **First Chapter** provides the background of the petitioner, the petition and details of the public hearing process.
- 2. The **Second Chapter** outlines the summary of GETCO's Mid-term Review 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 Loading of GETCO System and Capital Investment.
- 5. The **Fifth Chapter** deals with Mid-term Review of the Business Plan-Transmission Costs and Revision of ARR for FYs 2014-15 and 2015-16.



2. Summary of GETCO's Petition

The GETCO has projected its Revised Aggregate Revenue Requirement for FY 2014-15 and FY 2015-16 as part of Mid-term Review process for the remaining years of the control period.

2.1 Mid-term Review for FY 2014-15 and FY 2015-16

The comparison of revised projections for FY 2014-15 and FY 2015-16 in the Midterm Review vis-à-vis the costs approved by the Commission in the MYT Order dated 31st March, 2011 are given as below:

Table 2.1: Mid-term Review for FY 2014-15 and FY 2015-16

(Rs. Crore)

SI. No.	Particulars	FY 2014-15 (Approved)	FY 2014-15 (Projected)	FY 2015-16 (Approved)	FY 2015-16 (Projected)
1	Operations & Maintenance Expenses	977.24	936.94	1065.79	1018.07
2	Depreciation	803.41	749.26	901.73	871.43
3	Interest & Finance Charges	588.57	517.73	645.55	615.10
4	Interest on Working Capital	54.05	75.45	60.68	87.30
5	Return on Equity	634.66	548.38	717.08	649.58
6	Add: Contingency Reserve	-	67.92	-	79.86
7	Total fixed costs	3057.93	2895.67	3390.83	3321.34
8	Less: Expenses Capitalised	213.00	1	234.00	-
9	Add: Provision for Tax	15.37	109.72	15.37	129.97
10	Total Transmission charges	2860.30	3005.39	3172.20	3451.30
11	Less: Other Income	103.00	201.73	103.00	187.98
12	Aggregate Revenue Requirement	2757.30	2803.66	3069.20	3263.32

2.2 Proposed Transmission Tariff for FY 2014-15 and FY 2015-16

Based on the above proposal for revision in ARR for FY 2014-15 and FY 2015-16, GETCO has proposed to revise the Transmission Tariff for the remaining years, i.e., FY 2014-15 and FY 2015-16, of the control period, as indicated below:



Table 2.2: Mid-term Review Petition of GETCO

(Rs. Crore)

SI. No.	Particulars	FY 2014-15 (Approved)	FY 2014-15 (Projected)	FY 2015-16 (Approved)	FY 2015-16 (Projected)
1	Annual Transmission Charges (Rs. Crore)	2757	2804	3069	3263
2	Total MW Allocation	24939	21822	30749	25132
3	MUs Transferred at 80% PLF	174774	152927	215487	176610
4	Transmission Tariffs (Rs./MW/day)	3029	3520	2727	3557



3. Brief Outline of Objections raised, response from GETCO and Commission's view

3.1 Public Response to the Petition

In response to the public notice inviting objections/suggestions from stakeholders on the Petition filed by GETCO for Mid-term Review of Business Plan under GERC (MYT) Regulation, 2011, for the FY 2014-15 and FY 2015-16, four consumers / organisations filed their objections / suggestions. Details of consumers / organisations who filed their objections are provided in the Table below:

Table 3.1: List of Objectors

SI. No.	Name		
1	OPGS Power Gujarat Private Limited		
2	Gujarat Vepari Mahamandal Sahakari Audyogik Vasahat Limited		
3	The Institute of Indian Foundrymen		
4	Ganapatbhai Lalubhai Suthar		

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: OPGS Power Gujarat Private Limited

Objection 1: Proposed Capital Expenditure on a high side

The transmission licensee has proposed a more than 100% increase in the capital expenditure for FY 2015-16 over the amount approved in the MYT Order for the same year. As per GERC (Multi-Year Tariff) Regulations, 2011, (reproduced below), the detailed capital investment plan is required to be submitted as part of the Business Plan:

"68.1 The Transmission Licensee shall submit a detailed capital investment plan, financing plan and physical targets for each year of the Control Period for meeting the requirement of load growth, improvement in quality of supply, reliability, metering, reduction in congestion, etc., to the Commission for approval, as a part of the Business Plan:



Provided that the Capital Investment Plan shall be submitted for each year of the Control Period:

Provided further that the Capital investment Plan shall be accompanied by such information, particulars and documents as may be required including but not limited to the information such as number of bays, name, configuration and location of grid substations, substation capacity (MVA), transmission line length (ckt-km) showing the need for the proposed investments, alternatives considered, cost/benefit analysis and other aspects that may have a bearing on the transmission charges.

68.2 The Capital Investment Plan of the Transmission Licensee shall be consistent with the transmission system plan for the intra-State transmission system."

In view of the above requirement, the Commission is requested not to allow any increase in Capital Expenditure from the amount approved in the MYT Order, unless the cost benefit analysis, information stating the need for the proposed investment, transmission system plan for intra-state transmission system, envisaged improvement in quality of supply, reliability, reduction in congestion, etc. corresponding to the revised capital expenditure plan is made available to the Commission and to the other stakeholders in the power sector of the State.

If the Capital Investment Plan proposed by the Transmission Licensee for the rest of years of the control period contains the schemes which were to be implemented in the first three years of the control period, such investments shall only be approved after the Commission conducts a detailed analysis of the capital expenditure allowed and availed by the Transmission Licensee against the actual physical investment and schemes completed by the Licensee in each of the year of the control period. Expenses of only those schemes for which capital was not availed by the Transmission Licensee in the earlier years and are now again proposed for implementation in the rest of the years of the control period may be allowed.

For example, the capital expenditure approved for FY 2013-14 included Rs. 237 Crore towards construction of 400 KV substations, and the corresponding return on equity, interest charges, etc., were approved in the Transmission Tariff Order for FY 2013-14. However, as per the revised business plan, it is mentioned that only 90 Rs. Crore will be incurred for this scheme in FY 2013-14. However, against the approval for Rs. 27 Crore for this scheme in FY 2015-16, it has been proposed that an



expenditure of Rs. 328 Rs. Crore will be incurred. This indicates that execution of this scheme is delayed. However, the Commission may verify if capital has been drawn for this scheme in FY 2013-14 itself, in which case approval shall not be given a second time for the same expense in FY 2015-16.

Response of GETCO:

It is submitted that GETCO considers many projects in any particular year based on their priority. Project-wise description of projects under the proposed capital expenditure with information stating the need for the proposed investment, element wise transmission system planning for the proposed capital expenditure has been provided at Annexure 1 to the Petition. It is clarified that the revised Business Plan for FY 2014-15 to FY 2015-16 contains many new projects which were not planned at the time of submission of the MYT Petition in the FY 2010-11. Revision in Business Plan for FY 2014-15 to FY 2015-16 will definitely revise the capital expenditure for the stated period.

GETCO's proposal for increasing the capital expenditure in FY 2015-16 is not because of delay in execution of the planned activities, but is due the addition of new projects in FY 2015-16. The same has also been explained in Point No. 3.1.2 of GETCO's Petition, which is as under:

3.1.2. Investment plan approved by the Commission during MYT Order was based on the schemes approved by Board in FY 2010-11. Subsequently, looking at requirement of transmission network, further transmission lines and substations were planned and hence now GETCO is proposing higher capital expenditure for FY 2015-16.

Commission's View:

The GETCO has submitted the detailed capital investment plan for FY 2014-15 and FY 2015-16 in its Mid-term Petition and has also given the justification for the transmission lines and substations to be under taken to meet the Generation Plan, Load Demand, etc.

Objection 2: Contingency Reserve Projected is not justified

The Transmission Licensee has proposed to recover about 68 Rs. Crore in FY 2014-15 and about Rs. 80 Crore in FY 2015-16 under the head of contingency reserves.



Under the provisions of GERC (Multi-Year Tariff) Regulations, 2011, contingency reserves are provided for meet the following kind of expenses:

"71.7.2 The Contingency Reserve shall not be drawn upon during the term of the licence, except to meet such charges as may be approved by the Commission as being:

- (a) Expenses or loss of profits arising out of accidents, natural calamities or circumstances which the management could not have prevented;
- (b) Expenses on replacement or removal of plant or works other than expenses requisite for normal maintenance or renewal;
- (c) Compensation payable under any law for the time being in force and for which no other provision is made:

Provided that such drawal from Contingency Reserve shall be computed after making due adjustments for any other compensation that may have been received by the Licensee as part of an insurance cover."

The Transmission Licensee has not given any justification on the need for maintaining such a reserve. The Licensee may provide a list of annual expenses incurred by it in the past which come under the expenses, as provided in Clause 71.7.2 of the GERC (MYT) Regulations, 2011, so that the need for maintaining such a reserve can be ascertained.

Further, the Transmission Licensee has proposed these reserves as 0.5% of the cost of fixed assets. It may be noted that 0.5% is the maximum level allowed under the Regulations.

Therefore, even if the Commission feels that there is a need for creation of such a reserve, the same shall be maintained at a minimum possible level, and not at the ceiling level of 0.5% of the cost of fixed assets.

In the event of approval of contingency reserves by the Commission, it is requested that strict directives be explicitly provided to the Transmission Licensee to comply with Clause 71.7 of GERC (Multi-Year Tariff) Regulations, 2011, which stipulate that the amount 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 and that no



drawal from the reserve shall be made without prior approval of the Commission.

Response of GETCO:

It is submitted that GETCO is claiming its legitimate claim of contingency reserves of Rs. 67.92 Crore and Rs. 79.86 Crore for FYs 2014-15 and 2015-16 respectively as per Clause 71.7 of GERC (MYT) Regulations, 2011. GETCO was not able to claim the contingency reserves during MYT filing because of delay in issuance of the final GERC (Multi-Year Tariff) Regulations, 2011. The Transmission Licensee is eligible for 0.5% of the opening gross block of the respective year as per GERC (MYT) Regulations, 2011, hence it is to be allowed.

Commission's View:

Contingency reserve is required for any organisation to meet the expenses under unforeseen circumstances. The contingency reserve is allowed as per GERC Regulations.

Objection 3: Target Availability

The Transmission Licensee has not proposed any change in the target availability from the currently approved level of 98%. However, it is submitted that as the Midterm Petition has been filed to realign the projections of financial parameters in line with the current expectation, the performance targets may also be revised in line with the existing performance.

The Licensee has achieved an annual availability of 99.53% in FY 2011-12 and 99.46% in FY 2012-13. Considering this past performance, it may no longer be prudent to continue fixing a liberal target availability of 98% for the rest of the control period. Therefore, the Commission is requested to revise the trajectory for transmission system availability for FYs 2014-15 and 2015-16 from 98% to 99%.

Response of GETCO:

It is submitted that the Transmission licensee is proposing target availability expected from the system during the respective year, though GERC norms specify only 98%.

Commissions View:

The target availability is as per the GERC (MYT) Regulations, 2011.



Objection 4: Projected Transmission Losses

The Transmission Licensee has not proposed any change in the projection of transmission losses for the rest of the control period from the currently approved level of 4.10%. However, it is submitted that since the Mid-term Petition has been filed to realign the projections of financial parameters in line with the current expectation, the performance targets may also be revised in line with the existing performance.

The Licensee has claimed that it has incurred a transmission loss of 3.94% in FY 2011-12 and 3.89% in FY 2012-13. Considering this past performance, it may no longer be prudent to continue fixing a liberal transmission loss target of 4.10% for the rest of the control period.

Therefore, the Commission is requested to revise the projected transmission loss for FY 2014-15 and FY 2015-16 from 4.10% to 3.90%.

Response of GETCO:

It is submitted that transmission losses are purely of a technical nature and depend on many variable factors like Transmission voltage, Quantum of load, Type of consumer load, Agricultural load (inductive), Location of generating station with respect to load centre, changes in load flow profile, reactive power requirement, seasonal variation in demand pattern, system interruptions, equipment failure and line faults and availability of transmission elements, aged transmission elements, grid operation under sudden outage of power plant, long distance transmission lines and poor voltage regulation, no load losses of all voltage class transformers, Line Reactors and Bus Reactor losses, transmission line Losses, renewable energy integration at remote locations, etc. Considering the above variable factors, GETCO proposed to have same level of transmission losses of 4.10% in FYs 2014-15 and FY 2015-16.

GETCO has submitted a Report on Analysis of transmission losses in GETCO system as a separate Annexure to its petition.

Commissions View:

The transmission losses indicated in the Tariff Order are only indicative. As mentioned by GETCO, the losses are of technical nature and depend on various factors.



Objection 5: Income Tax

The Transmission Licensee has estimated income tax of about 110 Rs. Crore for FY 2014-15 and 130 Rs. Crore for FY 2015-16, based on the MAT rate of 20.008% on the return on equity.

In this regard, it may be noted that as per Clause 42.1 of GERC (Multi-Year Tariff) Regulations, 2011: "the Commission shall provisionally approve Income Tax payable for each year of the Control Period, if any, based on the actual income tax paid as per latest Audited Accounts available for the applicant, subject to prudence check".

The Transmission Licensee has paid income tax of about 11 Rs. Crore in FY 2010-11, 77 Rs. Crore in FY 2011-12 and has made a provision of 81 Rs. Crore towards tax in its audited accounts for FY 2012-13. Since the Regulations specify that income tax shall be approved as per actual taxes paid as per latest available Audited Accounts, the Commission is requested to approve projection for tax for the remaining years of the control period by taking an average of the actual tax paid in FYs 2010-11, 2011-12 and 2012-13.

Response of GETCO:

It is submitted that GETCO considered income tax of Rs. 110 Crore and Rs. 130 Crore for FYs 2014-15 and 2015-16 respectively, based on the MAT rate of 20.008% to have a realistic provision for income tax. As such, if the Commission decides, GETCO may take Income Tax payable based on the actual income tax paid as per latest Audited Accounts available, i.e. FY 2012-13.

As pointed out by the Respondent, considering the average of FY 2010-11 to FY 2012-13 would not be in accordance with Clause No. 42.1 of GERC (MYT) Regulations, 2011.

Commission's View:

The Commission allows the income tax based on the actual amount paid, as per Regulations.



Objection 6: Lesser Projection of Allocated Capacity in Comparison to the Values Approved in the MYT Order.

The Transmission Licensee has proposed a significant reduction in allocated capacity (12 to 18%) in comparison to the values approved in the MYT Order, without providing any justification.

	FY 2014-15 (Approved)	FY 2014-15 (Projected)	Variation	FY 2015-16 (Approved)	FY 2015-16 (Projected)	Variation
Total MW Allocation	24,939	21,822	-12%	30,749	25,132	-18 %

The Commission is requested not to approve any decrease in the allocated capacity from the approved values of MYT order, since no basis for the same has been provided by the Transmission Licensee.

Response of GETCO:

The allocated capacity of GETCO system is based on PPA signed with GUVNL and power plants likely to be commissioned in the control period.

Commissions View:

The response of GETCO is noted.

Objection 7: Evacuation Schemes

- **7.1.** In Annexure I of the Mid-term Review Petition of Transmission Licensee, major items of capital expenditure proposed for FY 2013-14 to FY 2015-16 are listed. These include evacuation schemes for various Generating Stations such as that for 1000 MW Adani Power Pvt. Ltd. (Mundra), 600 MW Bhavnagar Energy Co. Ltd. (Padva), 350 MW GSEG CCPP (Hazira), 400 KV D/C Essar Amreli line, etc. However, the Transmission Licensee has not specified the expenses that it will incur towards each of these schemes and the quantum of such expenses considered in the Business Plan.
- **7.2.** If costs towards evacuation scheme, such as the cost of line from the Generation station to the nearest GETCO substation, creation of bays at substation, etc., are borne by the Generation Company, the Commission may ascertain and verify that such costs are not charged from the consumers again by the Transmission Licensee through the Business Plan and ARR.



7.3. If the costs towards evacuation scheme, such as cost of line from the Generation station to the nearest GETCO substation, creation of bays at substation, etc., is to be incurred by the Transmission Licensee, and therefore has been claimed through Business Plan and ARR, the Transmission Licensee is requested to state the basis on which such costs are passed on to the consumers. It is humbly submitted that various power plants in the State such as that of the objector are incurring all the expenses on their own for their evacuation lines to the nearest GETCO substation capable of supporting the capacity and for the corresponding expenses incurred at the substation end. Therefore, the Transmission Licensee cannot discriminate by charging such expenses from some power plants, while incurring such costs on its own in the case of other power plants. The Commission is requested to ascertain and verify that the Transmission Licensee is acting in a fair manner as far as costs for evacuation scheme for power plants are concerned.

Response of GETCO:

In all the cases mentioned, i.e., Adani Power, BECL, GSEG and 400 KV Essar Amreli Line, the Transmission licensee is laying the lines as per the PPA signed between the generating company with GUVNL and same has been approved in the Business plan of GETCO. Moreover, details of all the expenses of each element, project-wise are given in Annexure-2 to the Petition.

<u>With respect to point No. 7.2, it</u> is stated that if the cost of transmission lines, bays, substation, etc., is borne by the generator, its cost is not claimed again by GETCO through the business plan or ARR.

With respect to point No. 7.3

GETCO is creating Infrastructure for the long-term beneficiaries as follows:

1. GETCO is developing transmission system for its long term Open Access users and is responsible for providing evacuation system to power plants having PPA with GUVNL and such PPAs are also approved by the Commission. All the Power Purchase Agreements (PPA) that are signed for supplying power within the state of Gujarat from any generating station located within Gujarat are governed by the approval granted by Commission. In all cases, whenever the PPA is approved by the Commission, the point of delivery is approved by GERC and, accordingly, GETCO is mandated to lay the transmission lines for



evacuation of power to the end beneficiaries from the point of delivery mentioned in the PPA to the end consumers within the state of Gujarat. The investment made by GETCO is thus approved by GERC in the ARR and recovered by the Long Term Open Access users.

2. In all other cases, whenever the Commission has issued orders, viz., Tariff determination of wind projects, Solar Projects and Bio mass projects, the Commission has clarified in each case about 'who shall lay the dedicated transmission lines up to the GETCO substation'.

Thus, in case of Merchant Power Plant, where no beneficiaries are identified, the cost of the dedicated line up to the GETCO substation will have to be borne by generating station mainly because such capital cost for laying the dedicated line from its generating station to GETCO substation cannot be borne by the Distribution Companies of Gujarat, who are paying 95% of the Transmission charges of GETCO.

Commission's View:

The Commission has noted the response of GETCO.

3.3 Objectors 2 & 3: Gujarat Vepari Mahamandal Sahakari Audyogik Vasahat Limited & The Institute of Indian Foundrymen

Objection 1: Contingency reserve not to be allowed

GETCO has considered contingency reserve of Rs. 67.92 Crore and Rs. 79.86 Crore for FY 2014-15 and 2015-16 respectively to derive ARR. Since the projected ARR is estimated to be more than that approved and revenue from transmission charges from STOA consumer has increased, it is requested that contingency reserve be not allowed.

Response of GETCO:

It is submitted that GETCO is claiming its legitimate claim of contingency reserves of Rs. 67.92 Crore and Rs. 79.86 Crore for FY 2014-15 & FY 2015-16 respectively, as per Clause 71.7 of GERC (MYT) Regulations, 2011. GETCO was not able to claim the contingency reserves during MYT filing because of delay in issuance of the final GERC (Multi-Year Tariff) Regulations, 2011. The Transmission Licensee is eligible for 0.5% of the opening gross block of the respective year as per GERC (MYT) Regulation 2011; hence this is to be allowed.



Commission's View:

Contingency reserve is required for any organisation to meet the expenses under unforeseen circumstances. The contingency reserve is allowed as per GERC Regulations.

Objection 2: Amendment of Regulations in regard to Transmission charges payable to STOA

As per OA notification No. 03 of 2011 of the Commission, transmission charges payable by STOA consumers are 1/4th of those payable by LTOA or MTOA consumers. The Petitioner has filed Petition No. 1303 of 2013 to amend the said Regulations and the Commission has ordered that the process for amending the Regulation be started. Once the Regulation is amended, the revenue of GETCO on this account would increase three times with same STOA MUs. As per data submitted by DISCOMs of GUVNL in their Tariff Petitions, on the account of power purchase through STOA by HT consumers, they considered a zero growth rate for HT sale MUs. Obviously; this will raise MW loading on transmission lines and revenue from transmission charges of GETCO. Hence, the net ARR needs to be reduced accordingly.

Response of GETCO:

It is submitted that the observation of three times increase in revenue of GETCO with same STOA MUs made by respondent is not valid as revenue from Short-Term Open Access is adjusted with LTOA & MTOA charges as a rebate to MTOA & LTOA consumers as per the Regulations.

As per GERC (MYT) Regulations, 2011, GETCO can recover revenue up to the tune of its approved aggregate revenue requirement (ARR). By making STOA charges same as LTOA or MTOA charges, the burden on LTOA or MTOA consumers will reduce, which will result in reduction of burden on consumers of Gujarat State.

Commission's View:

The response of GETCO is noted.



Objection 3: Revenue from Short-Term OA charges considering impact of amendment in the Draft Regulation

As per methodology for determination of monthly transmission tariff (TTC payable by long term and medium term transmission system users), revenue from Short-Term OA charges earned during previous yearly period is to be considered, provided that revenue from STOA charges for each yearly period of control period shall be taken to be the same as the one prevalent during the yearly period one year prior to the commencement of control period.

Adjustments due to variation in actual revenue are to be undertaken during the annual True-up.

The control period is of FY 11-12 to 15-16. OA picked up in last two years or so. There is tremendous variation in each consecutive year in revenue from STOA consumers. Further, as per the proposed draft amendment in OA Regulation 03 of 2011, STOA consumers have to pay the same transmission charges at par with LTOA and MTOA consumers. If it is approved, the scenario at the time of announcement of GERC (MYT) Regulations, 2011 will be changed drastically. Therefore, it is requested to consider revenue from Short-Term OA charges with escalation over the previous year's earning and taking into account the impact of amendment in draft regulation as above, if it is approved prior to deciding Tariff under this Petition.

Response of GETCO:

It is submitted that as per prevailing practice, STOA revenue is adjusted with LTOA & MTOA charges as a rebate to MTOA and LTOA consumers in the same month of operations. As correctly pointed out by the Respondent regarding huge variation in STOA applications in any given period of time, this revenue (STOA) is to be adjusted in billing only. It is not a general practice to consider STOA revenue in ARR and deduct the same from the approved ARR to arrive at the transmission tariff.

Commission's View:

The revenue from STOA is adjusted against the charges to be recovered from LTOA and MTOA consumers as per Regulations. This will reduce charges to LTOA and MTOA consumers.



Objection 4: The details of miscellaneous revenue at Rs. 71 Cr are not given

For FY 2014-15 and 15-16 each, GETCO has considered miscellaneous revenue of Rs. 71 Crore, but its details are not given. The Petitioner is requested to submit the detailed data of miscellaneous receipts.

Response of GETCO:

It is submitted that other income of Rs. 77.14 Crore is considered in the Tariff Petition No. 1375 of 2013. Details of the same are as under:

SI. No.	Particulars Particulars	Other Income FY 2012-13
1	Income from Trading -Stores, Scrap, etc.	8.35
2	Penalties received from suppliers and consumers	4.21
3	Revenue subsidy & grant	0.45
4	Miscellaneous Receipts.	64.13
5	Total	77.14

Commissions View:

The response of GETCO is noted.

Objection 5: True data of power purchased by OA customers

It is requested that data of power purchased by OA customers of Gujarat through STOA in current FY till Dec-2013 be made available.

Response of GETCO:

It is submitted that power purchase details do not pertain to GETCO.

Commission's View:

GETCO does not deal with Power Purchase.

3.4 Objector 4: Ganapatbhai Lalubhai Suthar

Objection 1: Transmission Charges from the Wind Farms

GETCO has increased the Transmission Tariff Rs./MW/Day to Rs. 2970 from 18-4-2013. For approval of Annual Revenue requirement (ARR) for the next year GETCO has demanded that the amount be increased to Rs. 3470/ MW/Day Wheeling.

In Gujarat, there is no any Wind direction and the Velocity is fixed. In Kutch site, so many changes are done on wind Velocity. Approximately, the plant load factors are less than 0.17%. For Example, if we Install 1.25 MW capacities Wind Mill, we will receive approximately only 1800000 Lakh units. Moreover, before 2012, the Transmission Losses were 4.0 % as per the Agreement. Now DISCOMs are



recovering 10% Transmission losses in wind Generation Units commissioning after 2012. As per the commercial circular dated 18-04-2013, transmission tariff are recovered by GETCO Company, which resulted in no any benefit for new wind mill installed after 2012. Transmission tariff is Rs. 1355062 annually for one Wind farm of 1.25 MW capacities.

It is also stated that only 10% losses are to be recovered. No transmission Tariff/MW/Day is to be recovered. As per Open Access tariff (ARM Daily Generation basis, it should be recovered by GETCO, instead of Installed Capacity of wind Mill.

Response of GETCO:

It is stated that the issue regarding recovery of transmission charges from the wind farms has been dealt in detail by the GERC in Wind Order No. 2 of 2012, while determining the tariff of the wind generator. The tariff control period under the said order is from 11.08.2012 to 31.03.2016 and therefore this issue may be taken up during tariff determination of wind generator for the next control period.

Commissions View:

The response of GETCO is noted.



4. Mid-term Review of Business Plan – Loading of GETCO System and Capital Investment

4.1 Loading of GETCO System

The Gujarat Energy Transmission Corporation Limited (GETCO) owns and operates the Transmission System in Gujarat. The Transmission System, capacity of the system, likely loading on the Transmission system and the proposed expansion/augmentation of the system to meet the load demand, availability of the system and transmission loss levels and the capital investment plan is discussed in the following Sections.

4.1.1 Transmission System

The Transmission System of GETCO comprises of 66 KV to 400 KV voltage levels. Details of the transmission lines and sub-stations in operation, as on 31st March, 2013, are given in the Table below:

Transmission lines in Ckm. SI. No. **Voltage Classes** No. of Sub-stations 400 KV 3602 11 15774 83 220 KV 3 132 KV 4938 50 4 66 KV 23589 1205 5 33 KV 69 6 Total 47972 1350

Table 4.1: Transmission System of GETCO as on 31.03.2013

The Transmission System mainly evacuates power from various Generating Stations of GSECL, IPPS, Input points from the Central Transmission System for drawal of Gujarat's share from the Central Generating Stations and also from Wind Farms and Solar Plants within the state and transmits this to various load centres in the state to meet the demand.

4.1.2 Load Handled by GETCO System during FY 2012-13

Details of the load handled by the GETCO System during FY 2012-13 and additional loading on the system during FY 2013-14 and the expected additional loading on the system during FY 2014-15 and FY 2015-16 from each of the sources, as provided by GETCO, are given in the Table below:



Table 4.2: Load Handled by GETCO System during FY 2012-13

		Rated	Aux	Gujarat	<u> </u>	Total MW on
SI. No.	Station	Capacity (MW)	Cons (%)	Share (MW)	Transmission Losses (%)	GETCO system(MW)
Α	GSECL Plants	(/	(70)	(11111)		- Cyclonium (mrv)
1	Ukai TPS	850	9.10	850		773
2	Ukai HPS	305	0.70	305		303
3	Gandhinagar TPS Units 1 to 4	660	10.27	660		592
4	Gandhinagar TPS Unit 5	210	9.00	210		191
5	Wanakbori TPS Units 1 to 6	1,260	9.00	1,260		1147
6	Wanakbori TPS Unit- 7	210	9.00	210		191
7	Sikka TPS	240	10.50	240		215
8	Kutch Lignite TPS	290	12.00	290		255
9	Kadana Hydro	242	1.19	242		239
10	Utran Gas-Based	135	4.00	135		130
11	Utran CCPP Extension	374	3.00	374		363
12	Dhuvaran Gas Based - Stage-I	107	3.00	107		104
13	Dhuvaran Gas Based - Stage-II	113	3.00	113		110
	Total GSECL Plants			4996		4611
В	IPPs					
1	GIPCL Stage-I	145	2.90	145		141
2	Essar	515	3.00	300		291
3	GPEC (CLP)	655	2.90	655		636
4	GIPCL Stage-II	165	2.90	165		160
5	GIPCL-SLPP	250	10.00	250		225
6	GIPCL-SLPP Extension	250	12.50	250		219
7	GSEG	156	2.90	156		151
8	GMDC - Akrimota	250	11.00	250		223
9	Adani, Mundra - Bid-01 (Units 1 to 4)	1,320	9.00	1,000		910
10	Adani, Mundra - Bid-02 (Units 5 & 6)	1,320	6.50	1,000		935
11	Essar, Vadinar (Salaya)	1,200	6.85	1,000		932
12	ACB Limited	270		200		200
13	Siddhivinayak Glass Industries, Hazira	17	-	17		17
	Total IPPs Plant			5,388		5,040
С	Share from Central Sector					
1	NPC - Tarapur 1& 2	320	10.00	160	5	136
2	NPC - Kakrapar	440	12.50	125	5	103
3	NPC - Tarapur 3 & 4	1,080	10.00	274	5	233
4	NTPC - Korba	2,100	7.21	360	5	316
5	NTPC - Korba Unit 7	500	6.50	96	5	85
6	NTPC - Vindhyachal-I	1,260	9.00	230	5	198
7	NTPC - Vindhyachal-II	1,000	6.50	239	5	212
8	NTPC - Vindhyachal-III	1,000	6.50	266	5	235
9	NTPC - Vindhyachal-IV (Unit 1)	500	6.50	120	5	106
10	NTPC - Kawas	656	3.00	187	5	172
11	NTPC - Jhanor	657	3.00	237	5	218
12	NTPC - Kahalgaon	1,500	6.50	141	5	125
13	NTPC - SIPAT-I	1,980	6.50	540	5	478
14	NTPC - SIPAT-II	1,000	6.50	273	5	242

SI. No.	Station	Rated Capacity (MW)	Aux Cons (%)	Gujarat Share (MW)	Transmission Losses (%)	Total MW on GETCO system(MW)
15	CGPL, Mundra (TATA UMPP)	4,150	9.00	1,971	5	1,794
16	SSNNL - Hydro	1,450	0.70	232	5	219
17	NTPC Mauda STPP State - 1 (Unit 1)	500	6.50	120	5	106
	Total Central Sector Share			5,571	5	4,977
	Total			15955		14628
	CPP Wheeling			168		168
	Wind Power capacity			3,093		3,093
	Solar Power capacity			857		857
	Bio-Mass Power capacity			31		31
	Tarini (Madhuban Dam), Mini Hydro			3		3
	Areva (Karjan Dam), Mini Hydro			3		3
	Total for FY 2012-13 (MW)			20,111		18,784

Table 4.3: Additional Load to be handled by GETCO System during FY 2013-14

SI. No.	Station	Rated Capacity	Aux Cons (%)	Gujarat Share	Transmission Losses (%)	Total MW on GETCO system
Α	GSECL Plants					_
1	Ukai TPS Unit 6	500	8.50	500		457.5
2	Dhuvaran CCPP-III	396	3.00	396		384
3	Sikka Units 3 & 4	500	8.50	500		458
	Total GSECL Plants			896		842
В	IPPs					
1	GPPC, Pipavav Unit-1	350	3.00	350		340
2	GSEG, Hazira extension	350	3.50	350		338
3	BECL, Padav, Bhavnagar (Unit 1)	250	11.00	250		223
4	OPG Power Gujarat Private Ltd	300		300		300
	Total IPPs Plant			1250		1200
С	Share from Central Sector					
1	NTPC Mauda STPP State - 1 (Unit 2)	500	6.50	120	5	112
2	NTPC - Vindhyachal-IV (Unit 2)	500	6.50	120	5	112
	Total Central Sector			240	5	224
	Share			240	ວ	224
	Total			2386		2266
	CPP Wheeling					
	Wind Farm Capacity			200		200
	Solar Project			25		25
	Mini Hydel Project					
	Bagasse Project					
	Total for FY 2013-14 (MW)			2611		2491



Table 4.4: Additional Load to be handled by GETCO System during FY 2014-15

SI. No.	Station	Rated Capacity	Aux Cons (%)	Gujarat Share	Transmission Losses (%)	Total MW on GETCO system
Α	GSECL Plants					
	Total GSECL Plants					
В	IPPs					
1	BECL, Padav, Bhavnagar (Unit-2)	250	11.00	250		223
	Total IPPs Plant			250		223
С	Share from Central					
C	Sector					
	Total Central Sector					
	Share					
	Total			250		223
	CPP Wheeling					
	Wind power Capacity			300		300
	Solar power Capacity			25		25
	Bio-Mass Power Capacity					
	Total for FY 2014-15 (MW)			575		548

Table 4.5: Additional Load to be handled by GETCO System during FY 2015-16

SI. No.	Station	Rated Capacity	Aux Cons (%)	Gujarat Share	Transmiss ion Losses (%)	Total MW on GETCO system
Α	GSECL Plants					
1	Wanakbori TPS Unit-8	800	8.5	800		732
	Total GSECL Plants			800		732
В	IPPs					
1	Essar Salaya Phase-II	1320	6.50	800		748
2	Shapoorji Pallonji Energy	1320	6.50	800		748
	Total IPPs Plant			1600		1496
С	Share from Central Sector					
1	Mauda Stage – II	1320	7	240	5	212
2	Lara	1600	7	140	5	124
3	Kakrapar Extension	1400	7	476	5	421
	Total Central Sector Share			856		758
	Total			3256		2986
	CPP Wheeling					
	Wind power Capacity			300		300
	Solar power Capacity			25		25
	Bio-Mass Power Capacity					
	Total for FY 2015-16 (MW)			3581		3311

4.1.3 Total loading of GETCO System in FY 12-13 to FY 15-16

The total loading of the GETCO transmission system for the period FY 2012-13 to FY 2015-16, as projected by GETCO in the Mid-term Review for evacuation of power from various sources, is summarised, as detailed in the Table below:



Table 4.6: Total loading for GETCO System in FY 2012-13 to FY 2015-16

SI. No.	Station	FY 2012-13 (Actual)	FY 2013-14 (Projected)	FY 2014-15 (Projected)	FY 2015-16 (Projected)
Α	GSECL Plants	4611	5453	5453	6185
В	IPPs	5040	6239	6462	7958
С	Share from Central Sector	4977	5201	5201	5959
D	CPP Wheeling	168	168	168	168
Е	Wind power Capacity	3093	3293	3593	3893
F	Solar power Capacity	857	882	907	932
G	Bio-Mass Power Capacity	31	31	31	31
Н	Mini Hydel	6	6	6	6
	Total Loading in MW	18784	21274	21822	25132

Commission's Analysis

GETCO has projected the additional loading on the transmission system during FY 2013-14 to FY 2015-16 at 2491 MW, 548 MW and 3311 MW respectively. In reply to the clarification sought by the Commission on the transmission loading during FY 2015-16, GETCO has clarified, vide its letter No 1963 dated 23.12.2013, that looking into the present situation, GUVNL has not considered 800 MW of Wanakbori TPS Unit 8, 800 MW of Essar Salaya Phase-II and 800 MW of Shapoorji Pallonji Energy. Hence, GETCO has submitted that the additional capacity of 2400 MW (2228 MW after auxiliary consumption) from above projects in FY 2015-16 be not considered. The capacity loading in FY 2015-16 has been reduced from 25132 MW to 22904 MW.

The revised total loading for GETCO system in FY 2012-13 to FY 2015-16, as considered by the Commission, is given in the Table below:

Table 4.7: Total Loading for GETCO system in FY 2014-15 to FY 2015-16 approved in MTR

(MW)

			(141 44)
SI. No.	Stations	FY 2014-15 (Approved)	FY 2015-16 (Approved)
1	GSECL Plants	5453	5453
2	IPPs	6462	6462
3	Share from Central Sector	5201	5959
4	CPP wheeling	168	168
5	Wind Farm Capacity	3593	3893
6	Solar Project	907	932
7	Bio Mass Project	31	31
8	Mini Hydel	6	6
9	Total Loading in MW	21822	22904



4.1.4 Availability of the Transmission System

GETCO has been maintaining a high level of availability of its transmission system. Vide its MYT Petition for the Second Control Period, GETCO has projected the following availability of its transmission system for the control period FY 2011-12 to FY 2015-16:

Table 4.8: Availability of GETCO Transmission System

(%)

SI. No.	Description	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
1	400 KV	99.56	99.56	99.57	99.58	99.58
2	220 KV	99.21	99.22	99.22	99.24	99.25
3	132 KV	99.48	99.48	99.49	99.49	99.50
4	66 KV	99.72	99.72	99.73	99.74	99.74
5	Sub-stations	99.83	99.89	99.83	99.83	99.83
6	GETCO System Availability	99.64	99.64	99.65	99.65	99.66

The Commission had noted the availability projected by GETCO for the control period and directed GETCO that the actual availability should be supported by detailed calculations, as per GERC (Multi-Year Tariff) Regulations, 2011, for verification.

The availability projected by the GETCO for the years FY 2014-15 and FY 2015-16 are given below:

Table 4.9: Availability of the GETCO Transmission System

SI.	Description	FY 2014-15	FY 2015-16
No.		(Projected in MTR)	(Projected in MTR)
1	GETCO System Availability	99.65%	99.66%

Commission's Analysis

The Commission maintains the same level of availability as per GERC (MYT) Regulations, 2011.

4.1.5 Transmission Losses

GETCO has projected the Transmission losses of its transmission system for the control period of FY 2011-12 to FY 2015-16, as given in the Table below:

Table 4.10: Projected Transmission Losses of GETCO System for FY 2014-15 and FY 2015-16

			(%)
SI. No.	Description	FY 2014-15	FY 2015-16
1	Transmission Losses	4.10	4.10



Commission's Analysis

The Commission approves the transmission losses (in %) for the FY 2014-15 and FY 2015-16 at the same as in the MYT Order.

Table 4.11: Approved Transmission Losses of GETCO System for FY 2014-15 and FY 2015-16

			(%)
SI. No.	Description	FY 2014-15	FY 2015-16
1	Transmission Losses	4.10	4.10

4.2 Capital Investment Plan of GETCO for FY 2013-14 to FY 2015-16

GETCO has proposed massive investments for construction of new transmission lines and sub-stations, along with augmentation of the network and R&M works, during the period FY 2013-14 to FY 2015-16 in the Mid-term Review of the Business Plan for FYs 2014-15 and 2015-16.

GETCO has submitted that the capital investment plan for the transmission network has been formulated, based on system studies carried out by it. The system has been formulated for evacuation of power from the additional generating units/stations coming up during FY 2013-14 to FY 2015-16 and augmentation/strengthening of the downstream system, based on the requirements of the Distribution Companies.

It has been further submitted by GETCO that the Commission had approved the investment plan for the MYT period in the MYT Order dated 31st March, 2011. Subsequently, looking at the requirement of the transmission network, further transmission lines and sub-stations are planned during FY 2014-15 and FY 2015-16.

The GETCO has explained the rationale for Capital Expenditure development of transmission network, as detailed below:

4.2.1 Rationale for Capital Expenditure

This capital expenditure is mainly for the establishment of new sub-stations, along with associated transmission network for evacuation of generated power, to take care of the existing and future load demand. In addition to the above, the capital expenditure is required for following purposes:

- To reduce the load on the existing sub-stations and transmission lines
- To meet the demand and load growth.
- To reduce the loading on connecting 11 kV feeders and to maintain % voltage



regulation and peak load within permissible limit.

- Due to erection of new sub-stations, 11 KV feeders get bifurcated. Hence, the length of the 11 KV lines and peak load on 11 KV feeders reduces considerably, which results in reduction of T&D losses.
- Augmentation of Lines and sub-stations.
- Some of the sub-station locations, where augmentation of sub- stations / transmission lines is not possible due to space constraints in the switch yard/ control room to meet the existing and additional load demand, the requisite infrastructure is required to be developed.
- 66 KV System is normally developed, based on the load requirement of DISCOMs, to support it, strengthening of 220 KV/400 KV sub-stations, along with the associated transmission network, has become essential.
- To tap the available power at 400 KV level, there is a strong need for creation of new 400/220 KV sub-stations at strategic locations, along with the associated 220 KV network, for strengthening the sub-transmission network.
- To ensure reliable system availability.

4.2.2 Rationale for R&M

In the GETCO network, majority of the sub-stations and lines are old, hence requiring significant R&M expenses. In addition, many of the equipments in service at various sub-stations are more than 15 years old and for these either spares are not available or they are of obsolete design. Therefore, these need to be replaced. Similarly, lines require strengthening to ensure continuous and uninterrupted power supply to DISCOMs and ultimately to the consumers. Apart from this, there is an urgent need to augment the existing infrastructure in the transmission network, considering the existing over-loading of the equipments and future increase in load demand.

GETCO has furnished the details of major schemes of transmission lines and substations proposed to be constructed in Annexures I and II of the Petition.

The Schemes proposed are briefly discussed below:

4.2.3 Additional 400 KV and 220 KV sub-stations

GETCO has submitted that according to the GETCO system and DISCOMs' requirement, GETCO has proposed to establish 4 Nos. of 400 KV sub-stations, 13 Nos. of 220 KV sub-stations, 7 Nos. 132 KV sub-stations and 296 Nos. of 66 KV sub-stations during FY 2013-14 to FY 2015-16.



It is also proposed to add 8288 ckms of transmission lines, which include 2236 ckms of 400 KV, 3257 Km of 220 KV, 206 ckms of 132 KV and 25901 ckms of 66 KV transmission lines in the said period.

GETCO has proposed the following 400 KV, 220 KV and 132 KV sub-stations for power evacuation from generation projects and strengthening of the network.

400 KV Sub-Stations Planned

- 1) 400/220 KV Halvada Sub-Station
- 2) 400 KV Keshod, Kalavad and Fedra Sub-Stations
- 3) 400 KV Sonkaher's Sub-Station
- 4) 400 KV Pipava, Chhara and Bligat Sub-Stations
- 5) 400 KV Aclhalia Sub-Station
- 6) 400 KV Pratis Sub-Station
- 7) 400 KV Chhavudi Sub-Station (near Sanend le)
- 8) 400 KV Shaper Sub-Station
- 9) 400 KV Chikhli Sub-Station (Dist Navasar)

220 KV Sub-Stations Planned

- 1) 220 KV Kerala Sub-Station
- 2) Upgradation of 132 KV Karjan Sub-Station to 220 KV
- 3) 220 KV Galyadher Sub-Station (Dist Amreli)
- 4) 220 KV Addasa Sub-Station (Dist Kutir)
- Upgradation of 66 KV Umaragaon Sub-Station to 220 KV level (Dist Valsad)
- 6) 220 KV Jasadon, Savla, Bhadta Sub-Station
- 7) 220 KV Jarod Sub-Station
- 8) 220 KV Bhestan and 220 KV Atual (Neveria) Sub-Station
- 9) 220 KV Suva (Dahej) Sub-Station

132 KV Sub-Stations Planned

- 1) 132 KV Chandkheda Sub-Station (Dist. Ahmedabad)
- 2) Upgradation of 132 KV Vallabhipur Sub-Station to 220 KV
- 3) Creation of 132 KV Vagasia and Mainkansar Sub-Stations (Dist. Rajkot)

GETCO has provided detailed justifications for establishment of the above 400 KV, 220 KV and 132 KV sub-stations.



4.2.4 Evacuation Schemes

1. Schemes for evacuation of power from various power projects are as follows:

SI. No.	Power Project	Capacity (MW)	Evacuation Scheme
1	Adani Power Plant Ltd. (APPL)	1000	 Adani-Zerda 400KV line Zerda 400/220KV, 315MVA
2	Lignite Power Plant of Bhavnagar Energy Corp Ltd. (BECL)	600	 220KV D/C line to Botad 220KV D/C to Palitana LILO of 220KV S/C Savarkundla- Vartej at Padva
3	Dhuvaran Combined Cycle Power Plant (CCPP)	368.8	 LILO at 220 KV Karnasad – Vartej section at Dhuvaran CCPP – III LILO of 220 KV Kasor – Vartej S/C line at Dhuvaran CCPP - III
4	Gujarat State Energy Corp CCPP, Hazira	350	 220 KV D/C line to Kosamba 220 KV D/C line to Mota
5	M/s. Essar Power Ltd at Vadinar	1000	 400 KV 2 X DC Essar Hadla 400 KV DC line Essar Amrelli
6	Wanakbori TPS unit 8 of GSECL	800	 400 KV D/C Wanakbori – Soja line 400 KV D/C Inter-connected between existing switchyard LILO at 400 KV S/C Wanakbori – Soja line at 400 KV Dehgam substation 400 KV D/C Soja Zerda line 400 KV feeder bays (2) at 400 KV Soja Zerda & Dehgram substation
7	M/s. Shaoorji Palloni Energy (Gujarat) Pvt Ltd Kodinar	800	400 KV D/C Shapoorji Pallonji generating station - to Amrelli line.
8	M/s. Essar Powr Gujarat Limited (EPGL), Khambhalia, Jamnagar	800	400 KV D/C EPGL generating station – Halvad line.

4.2.5 Strengthening and Up-gradation work

1. KV D/C Vataman - Kerala Line

To provide 220 KV inter connected line between PGCIL Vataman 400 KV substation to Kerala 220 KV Sub-Station.

2. D/C Kasor - Amreli Line

400 KV D/C Amreli line is proposed to strengthen and develop a new route for power flow from central Gujarat to Saurashtra and vice versa, when generation comes in Saurashtra on a large scale

3. 400 KV D/C Varsapur - Halvad Line

The line is proposed to transit power from Adani and Mundra projects to Halda (via Varsana) to link Kutch with North Gujarat areas mainly around Ahmedabad



and simultaneously give relief to 220 KV network in the Saurashtra region, which may get further overloaded by wind energy in the future.

4. Ring Main System and Second Source for Various 220 KV sub-stations

Presently, 220 KV Dhasa, Jamnagar and Dahej Sub-Stations are having radial 220 KV D/C line connectivity. To have a second source for stability and to cater for uninterrupted quality power, a ring main arrangement for these sub-stations is planned through:

- LILO of one circuit of 220 KV D/C Amreli Dhasa 220 KV line.
- LILO of one circuit of 220 KV Jamnagar Jetpur line.
- 220 KV Sura Dahej line and LILO of one circuit of 220 KV Haldara IPCL line at Suva

5. Connectivity of 590 MW Solar Park – 1 Solar Park with GETCO Grid

The power from the Solar Park is evacuated at 220 / 66 KV level. Looking at the quantum of 590 MW Solar Power from the Park, it is planned to evacuate at higher voltage level, i.e., 400 KV through the pooling station in the Solar Park. Accordingly, it is planned to create a 400 KV system at the Solar Park, along with the required 400 KV transmission line, for ensuring grid connectivity.

6. Composite System Strengthening Plan

To overcome constraints such as poor voltage profile, increasing agricultural load, line overloading and inadequate transmission capacity, mainly at the sub-station level and providing stable and reliable supply, and to have adequate transformation capacity up to 66 KV level, a composite system strengthening plan has been prepared, considering the following elements.

- Strengthening of the existing transmission lines and new sub-stations
- 220 KV D/C Visavadar Timbli line
- 220 KV D/C Chorania Botad line
- ➤ LILO of 220 KV Kangasiyali Nyara line at Hadala Sub-Station
- ➤ LILO of 220 KV S/C Vapi Bhilad line at Chikhli Sub-Station
- LILO of one ckt. Of 132 KV S/C Dhuvaran Vatwa line at Mahemdabad Sub-Station
- New 220 KV sub-stations, as below:
 - > 220 KV SS at Bagasara
 - 220 KV SS at Talaja
 - 220 KV SS at Modasa
- > 220 KV SS at Mogar



- 220 KV SS at Charadava
- > 220 KV SS at near Gondal to divert load from the existing sub-station
- 220 KV SS at Khambhalia

4.2.6 System Strengthening around Morbi Area

Due to enormous development in Morbi, Wankaner and Tankara areas, power demand has been multiplying and there is no redundancy during any system fault or eventuality.

Keeping in view the load forecasting and the present status of 66 KV network of Morbi, the need is felt for strengthening the transmission network around Morbi area and improve the reliability and capacity of the system.

A comprehensive plan for upgradation of the existing network and creation of new sub-stations and lines to meet further demand is planned as under:

- 220/66 KV sub-station at Sartanpur
- 220/66 KV sub-station at Shapar
- Connected 220 KV and 66 KV network

4.2.7 Rajkot City Development Plan

Rajkot, being one of the fastest developing cities of Gujarat State, due to its enormous industrial development, the power demand has been multiplying and there is no redundancy during any system fault or eventuality.

A comprehensive plan of the following new sub-stations and lines is planned to meet further demand:

- 132/60 KV sub-station at Padava
- 220/66 KV sub-station at Metoda
- 220/66 KV sub-station at Rajkot-II
- 220 KV D/C Hadala Rajkot-II line
- 66 KV interconnection line from 220 KV Metoda sub-station

4.2.8 Renovation and Modernisation System Improvement Scheme

GETCO has submitted that since Gujarat is a developing state, the load demand is drastically increasing due to growth of industries. In order to maintain uninterrupted quality power supply to the consumers, it is proposed to undertake system improvement, modernisation and replacement of over aged equipment in substations, replacement of conductors, insulators, hardware, etc., on transmission lines.



The R&M of sub-stations and transmission lines include the following:

Sub-stations

- Replacement of equipments of all voltage classes
- Providing of 132 KV & 66 KV receiving end breakers
- Modification of 11 KV breakers
- Augmentation of sub-station capacity
- Providing second transformers at sub-stations having single transformers
- Improvement of the earthing system
- Relay Protection
- Procurement of testing equipment
- PLCC equipment

Transmission lines

- Replacement of conductors, insulators, earth wire and line material, along with strengthening of the infrastructure
- · Enhancement of line capacity
- Link lines
- Maintenance of office buildings

4.2.9 Capital Expenditure

GETCO has estimated an investment of Rs. 2232 Crore and Rs. 2411 Crore during FY 2014-15 and FY 2015-16 respectively to carry out various works listed above. The Capital Expenditure proposed by GETCO for the second control period under Midterm Review of Business Plan for FY 2013-14 to FY 2015-16, as given below:

Table 4.12: Proposed Capital Expenditure for FY 2013-14 to FY 2014-15

SI. No.	Particulars	FY 2013-14 (Approved in MYT Order)	FY 2013-14 (Projected in MTR)	FY 2014-15 (Approved in MYT Order)	FY 2014-15 (Projected in MTR)	FY 2015-16 (Approved in MYT Order)	FY 2015-16 (Projected in MTR)
1	New Projects						
2	765 KV Sub-station	198	-	264	-	198	-
3	765 KV line	89	-	118	-	89	-
4	400 KV Sub-station	237	90	221	134	27	328
5	400 KV line	1181	287	1172	458	270	688
6	220 KV Sub-station	10	258	7	226	4	251
7	220 KV line	116	259	48	265	12	307
8	132 KV Sub-station	-	22	-	18	ı	33
9	132 KV line	-	10	-	15	ı	15
10	66 KV Sub-station	180	350	156	432	180	254
11	66 KV line	104	324	90	306	104	197



SI. No.	Particulars	FY 2013-14 (Approved in MYT Order)	FY 2013-14 (Projected in MTR)	FY 2014-15 (Approved in MYT Order)	FY 2014-15 (Projected in MTR)	FY 2015-16 (Approved in MYT Order)	FY 2015-16 (Projected in MTR)
12	Bus reactor	15	37	15	33	-	-
13	Transformer Bay	-	48	-	69	-	-
14	Total of New Projects	2130	1686	2092	1956	883	2073
15	R&M						
16	Renovation and Modernisation	298	133	281	146	281	144
17	Augmentation of Substation/Lines	-	317	-	69	-	136
18	Total of R&M	298	450	281	215	281	279
19	City Development Plan	-	28	-	24	-	-
20	Vadodara City Development Plan	-	40	-	30	1	30
21	OPGW	-	7	-	7	-	29
22	Total	2428	2211	2373	2232	1164	2411

Commission's Analysis

The Commission has examined the proposal of GETCO for capital investment during FY 2014-15 and FY 2015-16 in the Mid-term Review of the Business Plan for FYs 2014-15 and 2015-16.

The Capital Investment for the transmission system is under: i) Additional 400 KV and 220 KV sub-stations, ii) Evacuation of power from generation projects iii) System strengthening and upgradation iii) Renovation and Modernisation of sub-stations and transmission lines, etc.

GETCO has justified in detail the need for execution of the above works under various heads to meet the growing demand in the State.

On a clarification sought by the Commission on the proposed lines and sub-stations during FY 2014-15 and FY 2015-16, GETCO has submitted that, looking at the present situation, GUVNL has not considered 800 MW of Wanakbori, 800 MW of Essar Salaya Phase-II and Shapoorji Pallonji Energy 800 MW. Hence, the additional 2400 MW (2228 MW after auxiliary consumption) from above projects has not been considered.

It is observed from the proposed investments during FY 2014-15 and FY 2015-16 (Table 4.12) that there will be considerable investment to the extent of Rs. 738 Crore during FY 2014-15 and Rs. 451 Crore during FY 2015-16 on strengthening of 66 KV



system (lines and substations). GETCO has submitted that this is to meet the requirement of DISCOMs. In view of the fact that the power procured by DISCOMs is to meet the demand of consumers served at 66 KV and 11 KV, the 66 KV systems require to be adequately strengthened.

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 modernisation. Since the system is old, it requires strengthening, renovation and modernisation 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.



5. Mid-term Review of Business Plan

5.1 Capital Expenditure

GETCO has proposed the revised Capital Expenditure at Rs. 2211 Crore for FY 2013-14, Rs. 2232 Crore for FY 2014-15 and Rs. 2411 Crore for FY 2015-16 in the Mid-term Review Petition. The Capital Expenditure approved for these years in the MYT Order dated 31st March, 2011 and revised projection submitted by GETCO in the Mid-term Review are given in the Table below:

Table 5.1: Proposed Capital Expenditure for FY 2013-14 to FY 2015-16.

Particulars New Projects 765 KV Substations 765 KV Lines 400 KV substations 400 KV Lines	FY 2013-14 Approved in the MYT Order 198 89 237	FY 2013-14 Projected in the Mid-term Review	FY 2014-15 Approved in the MYT Order 264 118	FY 2014-15 Projected in the Mid-term Review	FY 2015-16 Approved in the MYT Order	FY 2015-16 Projected in the Mid-term Review
Particulars New Projects 765 KV Substations 765 KV Lines 400 KV substations 400 KV Lines	Approved in the MYT Order 198 89 237	Projected in the Mid-term Review	Approved in the MYT Order	Projected in the Mid-term Review	Approved in the MYT Order	Projected in the Mid-term
New Projects 765 KV Substations 765 KV Lines 400 KV substations 400 KV Lines	in the MYT Order 198 89 237	in the Mid-term Review - - - 90	in the MYT Order 264 118	in the Mid-term Review	in the MYT Order	in the Mid-term
765 KV Sub- stations 765 KV Lines 400 KV sub- stations 400 KV Lines	MYT Order 198 89 237	Mid-term Review 90	MYT Order 264 118	Mid-term Review	MYT Order	Mid-term
765 KV Sub- stations 765 KV Lines 400 KV sub- stations 400 KV Lines	198 89 237	- 90	Order 264 118	Review -	Order 198	
765 KV Sub- stations 765 KV Lines 400 KV sub- stations 400 KV Lines	198 89 237	- - 90	264 118	-	198	Review -
765 KV Sub- stations 765 KV Lines 400 KV sub- stations 400 KV Lines	89 237	90	118	-		-
stations 765 KV Lines 400 KV substations 400 KV Lines	89 237	90	118	-		_
765 KV Lines 400 KV sub- stations 400 KV Lines	89 237	90	118	-		
400 KV substations 400 KV Lines	237	90		-	20	
stations 400 KV Lines			221		09	-
400 KV Lines				134	27	328
	1181					
000 107 / - 1	I	287	1172	458	270	688
220 KV sub-	10	258	7	226	4	251
stations	_		-		•	
220 KV Lines	116	259	48	265	12	307
132 KV Lines	-	22	-	18	-	33
132 KV Sub-		10	1	15		15
station	-	10	-	15	-	15
66 KV Sub-	180	350	156	432	180	254
station	100		130	452		
66 KV Lines	104	324	90	306	104	197
Bus Reactor	15	37	15	33	-	
Transformer Bay	-	48	-	69	-	
Total of New	2130	1686	2092	1956	883	2073
Projects	2100	1000	2002	1300		2010
R&M						
Renovation and	298	133	281	146	281	144
modernisation	200	100	201		201	
Augmentation of	_	317	_	69	_	136
sub-station/ Lines						
Total of R&M	298	450	281	215	281	279
City Development Plan	-	28	-	24	-	-
Vadodara City						
Development	-	40	-	30	-	30
Plan						1
OPGW	-	7	-	7	-	29
Total	2428	2211	2373	2232	1164	2411



Petitioner's Submission

GETCO has submitted that it has now proposed massive Capital Expenditure towards new transmission lines and sub-stations, along with augmentation and R&M Work, for improving the transmission network availability and to strengthen the overall transmission network. GETCO has explained that the Investment plan approved in the MYT Order was based on schemes approved by the Board in FY 2010-11. Subsequently, looking at the requirement of transmission network, further transmission lines and sub-stations were planned and therefore GETCO has now proposed a higher Capital Expenditure for FY 2015-16.

Commission's Analysis

The Commission had approved the Capital Expenditure at Rs. 10723 Crore in the MYT Order for the control Period FY 2011-12 to FY 2015-16. GETCO had incurred a Capital Expenditure of Rs. 2084 Crore in FY 2011-12 and Rs. 2149 Crore during FY 2012-13 and projected Rs. 6854 Crore during FY 2013-14 to FY 2015-16 in the Midterm Review petition. Thus, the revised Capital Expenditure proposed for the Control Period in the MYT Order is Rs. 11087 Crore, as against Rs. 10723 Crore proposed and approved in the MYT Order. This is about 3% higher than what was approved in the MYT Order.

The Commission had determined the Transmission Tariff for FY 2013-14 in the Tariff order dated 28th March 2013. As such, the Commission is not revising the CAPEX for FY 2013-14.

The Commission approves the CAPEX at Rs. 2232 Crore for FY 2014-15 and Rs. 2411 Crore for FY 2015-16 in the Mid-term Review, as projected by GETCO.

5.2 Capitalisation

Petitioner's Submission

GETCO has submitted that taking into consideration the transmission lines programmed to be commissioned during FY 2013-14 to FY 2015-16, capitalisation is proposed to take place at 40% of the opening Capital Work in Progress (CWIP) and 60% of the CAPEX for each year of the remaining control period, as detailed in the Table below:



Table 5.2: Projected Capitalisation for FY 2013-14 to FY 2015-16

(Rs. Crore)

SI. No.	Particulars	FY 2013-14 Approved in the MYT	FY 2013-14 Projected in the	FY 2014-15 Approved in the MYT	FY 2014-15 Projected in the	FY 2015-16 Approved in the MYT	FY 2015-16 Projected in the
		Order	MTR	Order	MTR	Order	MTR
1	Opening Capital Work in Progress (Op. CWIP)	2088	2891	2224	2619	2283	2464
2	Capital Expenditure (CAPEX)	2428	2211	2373	2232	1164	2411
3	Capitalisation (40% of Op. CWIP + 60% of CAPEX)	2292	2483	2313	2387	1612	2433
4	Closing Capital Work in Progress (Cl. CWIP)	2224	2619	2283	2464	1836	2443

Commission's Analysis

The Commission has observed that the CAPEX approved in the MYT Order dated 31.03.2011 for FY 2011-12 and FY 2012-13 is not fully utilized by the GETCO. The actual capitalisation achieved versus CAPEX approved in these two years are as shown below:

Table 5.3: Approved CAPEX vs. Actual Capitalisation for FY 2011-12 and FY 2012-13

(Rs. Crore)

SI. No.	Particulars	FY 2011-12	FY 2012-13
1	Approved CAPEX in MYT Order	2480.89	2277.27
2	Actual capitalisation	1427.10	1634.17
3	Achievement in Percentage	57.52%	71.76%

From the above, it can be observed that, GETCO is capable to capitalise maximum 72% of total CAPEX approved. In order to avoid front loading of CAPEX into transmission charges, the Commission has decided to consider 72% of CAPEX proposed for FY 2014-15 and FY 2015-16 as amount for capitalisation for these years as shown below, however, actual capitalisation shall be allowed at the time of True-up of the corresponding years as per the Regulations, 2011.

Table 5.4: Approved CAPEX and capitalisation in the Mid-term Review (Rs. Crore)

SI. No.	Particulars	FY 2014-15	FY 2015-16
1	CAPEX	2232.00	2411.00
2	Capitalisation	1607.04	1735.92



Funding of CAPEX

GETCO has assumed the funding of CAPEX on normative basis with the debt equity ratio of 70:30. The details are given in the Table below:

Table 5.5: Projected Funding for FY 2013-14 to FY 2015-16

(Rs. Crore)

SI. No.	Particulars	FY 2013-14 Approved in the MYT Order	FY 2013-14 Projected in the MTR	FY 2014-15 Approved in the MYT Order	FY 2014-15 Projected in the MTR	FY 2015-16 Approved in the MYT Order	FY 2015-16 Projected in the MTR
1	CAPEX for the year	2428	2211	2373	2232	1164	2411
2	Capitalisation	2292	2483	2313	2387	1612	2433
3	Debt	1604	1738	1619	1671	1128	1703
4	Equity	687	745	694	716	484	730
5	Grants	-	-	-	-	-	-

Commission's Analysis

The Commission has analysed the funding submitted by GETCO. In the MYT Petition, GETCO did not submit details of Consumer Contributions / Grants / Subsidies and the funding was approved, as proposed by the GETCO in the MYT Order for the control period FY 2011-12 to FY 2015-16. As observed from Annual Accounts for FY 2011-12 and FY 2012-13, there are Consumer Contributions and Grants / Subsidies. The actual consumer contribution/grants are Rs. 369.45 Crore against capitalization of Rs. 1634.04 Crore during FY 2012-13 which worked out to 22.61%. The Commission considers the Consumer Contributions / Grants / Subsidies at 22.61% of the approved capitalization in the Mid-term Review.

The funding proposed by GETCO and as approved by the Commission in the Midterm Review is given in the Table below:

Table 5.6: Approved Funding of CAPEX in the Mid-term Review

SI. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
1	New Investment	2427.59	2232.00	2411.00
2	Investment Capitalised	2291.51	1607.04	1735.92
3	Less: Consumer contribution		363.35	392.49
4	Less: Grants		0.00	0.00
5	Balance capitalisation {2-(3+4)}		1243.69	1343.43
6	Debt @ 70%		870.58	940.40
7	Equity @ 30%		373.11	403.03



Gross Fixed Assets

The Commission has arrived at the opening and closing balance of GFA, taking into consideration the capitalisation approved in the above Para, as detailed in the Table below:

Table 5.7: Gross fixed Assets approved in the Mid-term Review

(Rs. Crore)

SI. No.	Particulars	Considered	Approved	in the MTR
31. INO.	Faiticulais	for FY 2013-14	FY 2014-15	FY 2015-16
1	Opening Balance	11170.96	13462.51	15069.55
2	Addition during the year	2291.55	1607.04	1735.92
3	Closing GFA	13462.51	15069.55	16805.47

The above gross fixed assets have been taken into consideration for computation of depreciation charges.

5.3 O&M Expenses

GETCO has projected the O&M Expenses at Rs. 937 Crore for FY 2014-15 and Rs. 1018 Crore for FY 2015-16 in the Mid-term Review Petition. The O&M expenses for the year in the MYT Order and now submitted by GETCO are as given in the Table below:

Table 5.8: O&M Expenses Proposed in the Mid-term Review

(Rs. Crore)

SI. No.	Particulars	FY 2014-15 Approved in the MYT Order	FY 2014-15 Projected in the MTR	FY 2015-16 Approved in the MYT Order	FY 2015-16 Projected in the MTR
1	Operations and Maintenance Expenses	977	937	1066	1018

Petitioner's Submission

GETCO has submitted that the O&M Expenses for the remaining control period have been computed on the basis of the provisional number of bays and ckt. Km of lines for FY 2012-13. The O&M Cost comprises of: Employee Cost, Administrative and General Expenses and Repairs and Maintenance Expenses. GETCO has further submitted that normative O&M Expenditure has been worked out, based on the addition of the proposed number of bays and ckt Km line for FY 2013-14 to FY 2015-16, as detailed in the Table below:

Table 5.9: Working of Normative O&M Expenses Submitted by GETCO

SI. No.	Particulars	Reference	FY 2012-13 Provisional	FY 2013-14 Projected	FY 2014-15 Projected	FY 2015-16 Projected
1	Based on No. of Bays			_	_	
	Opening No. of Bays	No.	8791	9034	9324	9598
	Addition During the Year	No.	485	580	549	580



SI.			FY	FY	FY	FY
No.	Particulars	Reference	2012-13	2013-14	2014-15	2015-16
NO.			Provisional	Projected	Projected	Projected
	Average No. of Bays During the Year	No.	9034	9324	9598	9888
	O&M Expenses Norm per Bay	Rs. Lakh			6.81	7.19
	Total O&M Expenses based on No. of bays	Rs. Crore			654	711
2	Based on No. of Transmission Lines					
	Opening Balance	Ckt. km	44500	46203	47438	48847
	Addition During the Year	Ckt. km	3406	2470	2818	3002
	Average lines' length During The year	No.	46203	47438	48847	50348
	O&M Expenses norm per ckt km	Rs. Lakh			0.58	0.61
	Total O&M Expenses based on No. of ckt km	Rs. Crore			283	307
3	Total O&M Expenses (as per norms)	Rs. Crore			937	1018

GETCO has further submitted that it has filed appeal to APTEL against the methodology adopted by the Commission and the matter is pending with APTEL. GETCO has requested that recovery of cost component be allowed, based on the methodology, as and when issued by Appellate Tribunal of Electricity, in Appeal No. 108 of 2013.

Commission's Analysis

GETCO has worked out the normative O&M Expenses in the Mid-term Review Petition for FY 2014-15 and FY 2015-16, taking into consideration, the actual number of bays and ckt. Km of lines achieved during FY 2012-13 and proposed to be added in FY 2013-14 to FY 2015-16. The Capital Expenditure proposed by GETCO in the Mid-term Review and the proposed sub-stations and lines have been discussed in Para 5.1 above. The Commission takes into consideration the number of bays and ckt km lines, as proposed by GETCO. The O&M Expenses are calculated in accordance with Regulation 71.5.1 of GERC (MYT) Regulations, 2011, as detailed in the Table below:

Table 5.10: Approved O&M Expenses in the Mid-term Review

SI. No.	Particulars	Reference	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
1	Based on No. of Bays					
	Opening No. of Bays	No.	8791	9380	9960	10509
	Addition during the year	No.	589	580	549	580
	Closing Bays	No.	9380	9960	10509	11089
	Average No. of bays during				10235	10799



SI.	Particulars	Deference	FY	FY	FY	FY
No.	Particulars	Reference	2012-13	2013-14	2014-15	2015-16
	the year					
	O&M Expenses norm per bay	Rs. Lakh			6.81	7.19
	Total O&M Expenses based on No. of bays	Rs. Crore			696.97	776.45
2	Based on No. of Transmission Lines					
	Opening Balance	ckt km	44500	47510	49980	52798
	Addition during the year	ckt km	3010	2470	2818	3002
	Closing Balance		47510	49980	52798	55800
	Average lines' length during the year	No.			51389	54299
	O&M Expenses norm per ckt km	Rs. Lakh			0.58	0.61
	Total O&M Expenses based on No. of ckt km	Rs. Crore			298.06	331.22
3	Total O&M Expenses (as per norms)	Rs. Crore			995.03	1107.67

The Commission approves the normative O&M Expenses at Rs. 995.03 Crore for FY 2014-15 and Rs. 1107.67 Crore for FY 2015-16 in the Mid-term Review.

5.4 Depreciation

GETCO has projected the depreciation at Rs. 749 Crore for FY 2014-15 and Rs. 871 Crore for FY 2015-16 in the Mid-term Review Petition. The depreciation approved for these years in the MYT Order dated 31st March, 2011 and now submitted by GETCO in the Mid-term Review are given in the Table below:

Table 5.11: Proposed Depreciation for FY 2014-15 and FY 2015-16

(Rs. Crore)

SI. No.	Particulars	FY 2014-15 Approved in the MYT Order	FY 2014-15 Projected in the MTR	FY 2015-16 Approved in the MYT Order	FY 2015-16 Projected in the MTR
1	Gross Block at the Beginning of the Year	14880	13585	17193	15972
2	Additions During the Year (Net)	2313	2387	1612	2433
3	Depreciation for the Year	803	749	902	871
4	Average Rate of Depreciation	5.01%	5.07%	5.01%	5.07%

Petitioner's Submission

GETCO has submitted that Gross Fixed Assets and Depreciation have been considered on the basis of provisional accounts of FY 2012-13. Depreciation for the year has been calculated, considering the CERC norms for various blocks of assets.

GETCO has further submitted that it has adopted the methodology approved by the Commission in working out the depreciation on the GFA, without reducing the



depreciation on assets created from grants. GETCO has filed an appeal to APTEL against this methodology and the matter is pending with APTEL. GETCO has requested to allow recovery of cost component based on the outcome of GETCO's Appeal No. 108 of 2013.

Commission's Analysis

GETCO has computed the depreciation, taking into consideration the opening GFA and the proposed capitalisation in the Mid-term Review, by adopting the weighted average rate of depreciation of 5.07% on the gross block of assets.

The Commission has taken into consideration the depreciation rate of 5.05 %, being the actual rate of depreciation worked out for FY 2012-13, based on the audited annual accounts. The opening block of assets and addition of assets on account of capitalisation of Capital Expenditure are considered, as approved in Para 5.2 above.

The Commission approves the depreciation charges in the Mid-term Review, as detailed in the Table below:

Table 5.12: Approved Depreciation in the Mid-term Review

(Rs. Crore)

				, ,
SI. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
1	Gross Block in Beginning of the year	11170.96	13462.51	15069.55
2	Additions during the year	2291.55	1607.04	1735.92
3	Closing GFA	13462.51	15069.55	16805.47
4	Average GFA		14266.03	15937.51
5	Average Rate of Depreciation		5.05%	5.05%
6	Depreciation for the Year		720.43	804.84

5.5 Interest and Finance Charges

GETCO has projected the interest and finance charges at Rs. 518 Crore for FY 2014-15 and Rs. 615 Crore for FY 2015-16 in the Mid-term Review Petition. The interest and finance charges approved for these years in the MYT Order dated 31st March, 2011 and now submitted by GETCO in the Mid-term Review are given in the Table below:

Table 5.13: Proposed Interest and Finance Charges for FY 2014-15 and FY 2015-16

SI. No.	Particulars	FY 2014-15 Approved in the MYT Order	FY 2014-15 Projected in the MTR	FY 2015-16 Approved in the MYT Order	FY 2015-16 Projected in the MTR
1	Opening Loans	5487	4167	6303	5088
2	Loan Additions During the Year	1619	1671	1128	1703
3	Repayment During the	803	749	902	871



SI. No.	Particulars	FY 2014-15 Approved in the MYT Order	FY 2014-15 Projected in the MTR	FY 2015-16 Approved in the MYT Order	FY 2015-16 Projected in the MTR
	Year				
4	Closing Loans	6303	5088	6529	5920
5	Average Loans	5895	4627	6416	5504
6	Interest on Loans	587	514	644	611
7	Others Charges	2	4	2	4
8	Total Interest and Finance Charges	589	518	646	615
9	Weighted Average Rate of Interest on Loan	9.95%	11.11%	10.03%	11.11%

Petitioner's Submission

GETCO has submitted that it has considered the interest rate of 11.11% in the Midterm Review, based on the provisional actual for FY 2012-13. The funding of the new capital expenditure has been assumed to have been undertaken at a normative debt equity ratio of 70:30.

GETCO has further submitted that it has adopted the methodology as approved by the Commission in considering the repayment of loan as equivalent to the depreciation approved. GETCO has filed an appeal to APTEL against the methodology adopted by the Commission. The matter is pending with APTEL. GETCO has requested to allow recovery of the cost component, based on the outcome of GETCO's Appeal No. 108 of 2013.

Commission's Analysis

The Commission has examined the interest and finance charges projected by GETCO in the Mid-term Review. The Commission has analysed the capitalisation of capital expenditure proposed by GETCO in the Mid-term Review and approved the capitalisation and the funding of the CAPEX in Para 5.2. The Commission has considered the weighted average rate of interest of 10.78%, based on the actual loan portfolio submitted by GETCO. The opening loan for FY 2013-14 has been taken, considering the closing loan as per annual accounts for FY 2012-13 and the addition of loans, as approved in Para 5.2 above for the Mid-term Review. The Depreciation approved is considered as repayment of loan in accordance with GERC (MYT) Regulations, 2011. The guarantee charges and other charges are considered at the level of actuals for FY 2012-13, as per audited annual accounts. The details are given in the Table below:



Table 5.14: Approved Interest and Finance Charges in the Mid-term Review

(Rs. Crore)

SI. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
1	Opening loan	3103.29	4019.31	4169.46
2	Loan addition during the year	1604.09	870.58	940.40
3	Less: Repayment during the year	688.07	720.43	804.84
4	Closing loan	4019.31	4169.46	4305.01
5	Average loan		4094.38	4237.24
6	Rate of Interest		10.78%	10.78%
7	Other Charges		3.61	3.61
7	Interest Charges		444.96	460.36

The Commission approves the interest and finance charges at Rs. 444.96 Crore for FY 2014-15 and Rs. 460.36 Crore for FY 2015-16 in the Mid-term Review.

5.6 Return on Equity

GETCO has projected the return on equity at Rs. 548 Crore for FY 2014-15 and Rs. 650 Crore for FY 2015-16 in the Mid-term Review. The return on equity approved for these years in the MYT Order dated 31st March, 2011 and now submitted by GETCO in the Mid-term Review are given in the Table below:

Table 5.15: Proposed Return on Equity for FY 2014-15 to FY 2015-16

(Rs. Crore)

SI. No.	Particulars	FY 2014-15 Approved in the MYT Order	FY 2014-15 Projected in the MTR	FY 2015-16 Approved in the MYT Order	FY 2015-16 Projected in the MTR
1	Opening Equity Capital	4186	3559	4880	4275
2	Equity Additions During the Year	694	716	484	730
3	Closing Equity	4880	4275	5364	5005
4	Average Equity	4533	3917	5122	4640
5	Rate of Return on the Equity	14%	14%	14%	14%
6	Return on Equity	635	548	717	650

Petitioner's Submission

GETCO has submitted that the return on equity for the remaining control period under MYT has been worked out, based on the actual equity position in the beginning of FY 2011-12 and subsequent additions to equity in FY 2012-13 to FY 2015-16, by adopting the rate of return of 14%.

Commission's Analysis

The return on equity is to be considered on normative basis on the opening balance of equity and approved equity addition during the respective years. The rate of return on equity, as per the GERC (MYT) Regulations, 2011, is 14% and GETCO has



claimed the same rate. The Commission has approved the capitalisation, debt and equity portions of its funding the CAPEX approved in Para 5.2 above. The closing equity for FY 2012-13 has been considered at Rs. 2834.72 Crore, based on the capitalisation as per audited annual accounts for FY 2012-13. The equity additions are considered as approved in Para 5.2 above. The Commission has computed the return on equity, as detailed in the Table below:

Table 5.16: Approved Return on Equity in the Mid-term Review

(Rs. Crore)

SI. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
1	Opening Equity Capital	2834.72	3522.19	3895.30
2	Additions during the year	687.47	373.11	403.03
3	Closing Equity	3522.19	3895.30	4298.33
4	Average Equity		3708.74	4096.81
5	Rate of Return on Equity		14.00%	14.00%
6	Return on Equity		519.22	573.55

The Commission approves the return on equity at Rs. 519.22 Crore for FY 2014-15 and Rs. 573.55 Crore for FY 2015-16 in the Mid-term Review.

5.7 Interest on Working Capital

GETCO has projected the interest on working capital at Rs. 75 Crore for FY 2014-15 and Rs. 87 Crore for FY 2015-16 in the Mid-term Review. The interest on working capital approved for these years in the MYT Order dated 31st March, 2011 and now submitted by GETCO in the Mid-term Review are given in the Table below:

Table 5.17: Proposed Interest on Working Capital for FY 2014-15 to FY 2015-16 (Rs. Crore)

SI. No.	Particulars	FY 2014-15 Approved in the MYT Order	FY 2014-15 Projected in the MTR	FY 2015-16 Approved in the MYT Order	FY 2015-16 Projected in the MTR
1	O&M Expenses (1 Month)	81	78	89	85
2	Maintenance Spares (1% of cost @ 6% Escalation)	149	210	172	247
3	Receivables (1 Months)	230	234	256	272
4	Total Working Capital	460	522	516	604
5	Rate of Interest on Working Capital	11.75%	14.45%	11.75%	14.45%
6	Interest on Working Capital	54	75	61	87

Petitioner's Submission

GETCO has submitted that interest on working capital has been worked out, based on the norms specified in the Regulations. Maintenance Spares requirement has been calculated, starting from FY 2005-06, along with the subsequent actual/proposed capitalisation from FY 2006-07 to FY 2015-16, with 6% escalation for every



years' opening GFA. The working of the maintenance spares is provided, as given in the Table below:

Table 5.18: Maintenance and Spares Opening Balance Calculation

(Rs. crore)

SI.	Particulars		2005-	2006-	2007-	2008-	2009-	2010-	2011-	2012-	2013-	2014-	2015-
No.	Farticulars		06	07	08	09	10	11	12	13	14	15	16
1	Opening Balance of GFA		4049.10	4433.73	4861.81	5453.70	6067.63	6762.26	8109.69	9536.79	11101.91	13584.95	15971.81
	SLDC		3.36	3.36	3.36	3.36	3.36	6.90	6.86	7.58	7.58	7.58	7.58
2	Additions during the year (net)		384.63	428.08	591.89	613.93	694.63	1347.43	1427.10	1565.12	2483.04	2386.86	2432.51
	SLDC						3.54	(0.04)	0.72				
3	Closing Balance of GFA		4433.73	4861.81	5453.70	6067.63	6762.26	8109.69	9536.79	11101.91	13584.95	15971.81	18404.32
	SLDC		3.36	3.36	3.36	3.36	6.90	6.86	7.58	7.58	7.58	7.58	7.58
4	Average GFA for the Year		4241.42	4647.77	5157.76	5760.67	6414.95	7435.98	8823.24	10319.35	12343.43	14778.38	17188.06
5	Spares as a % of Capital Cost	1%											
	Escalation (y-o-y)	6%											
6	Maintenance Spares												
	Opening Balance of Assets		40.49	42.92	45.50	48.23	51.12	54.19	57.44	60.88	64.54	68.41	72.51
	(i.e., as on 31 st March, 2005)		10.15			10.23	31.12				01.51		
	Assets Capitalised during FY 2005-06		3.84	4.08	4.32	4.58	4.86	5.15	5.46	5.78	6.13	6.50	6.89
	Assets Capitalised during FY 2006-07			4.28	4.54	4.81	5.10	5.40	5.73			6.82	
	Assets Capitalised during FY 2007-08				5.92	6.27	6.65	7.05	7.47	7.92	8.40	8.90	
	Assets Capitalised during FY 2008-09					6.14	6.54	6.90	7.31	7.75	8.22	8.71	9.23
	Assets Capitalised during FY 2009-10						6.95	7.36	7.80	8.27	8.77	9.30	9.85
	Assets Capitalised during FY 2010-11							13.47	14.28	15.14	16.05	17.01	18.03
	Assets Capitalised during FY 2011-12								14.27	15.13	13.03	17.00	18.02
	Assets Capitalised during FY 2012-13									15.65	16.59	17.59	18.64
	Assets Capitalised during FY 2013-14										24.83	26.32	27.90
	Assets Capitalised during FY 2014-15											23.87	25.30
	Assets Capitalised during FY 2015-16												24.33
	Total		44.33	51.28	60.27	70.03	81.18	99.52	119.77	142.60	175.99	210.42	247.37

GETCO has adopted the SBAR as on 1st April, 2013, which was 14.45%, for working out the interest on working capital.

Commission's Analysis

The Commission, while approving the truing up for FY 2011-12 in the Tariff Order for FY 2013-14, decided to consider the rate of SBAR prevailing on 1st April of the financial year concerned. In the Mid-term Review, GETCO has taken into consideration the SBAR of 14.45% as on 1st April, 2013 for the remaining years of the control period. This is justified.

Regarding 1% maintenance spares, Regulation 4.2 (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 and machinery and 1% spares are to be considered on the historical cost of plant and machinery only instead of on 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 the maintenance spares at 1% of the opening GFA (Historical Costs as there is substantial increase in GFA year-on-year).

The Commission has computed the working capital and interest thereon, as detailed in the Table below:

Table 5.19: Interest on Working Capital Approved in the Mid-term Review (Rs. Crore)

SI. No.	Particulars	FY 2014-15	FY 2015-16
1	O&M Expenses (1 Month)	82.92	92.31
2	Maintenance Spares (1% of GFA)	134.63	168.05
3	Receivables (1 Months)	206.12	231.00
4	Total Working Capital	423.66	491.36
5	Rate of Interest on Working Capital	14.45%	14.45%
6	Interest on Working Capital	61.22	71.00

The Commission approves the interest on working capital in the Mid-term Review, as Rs. 61.22 Cr. and Rs. 71.00 Cr. for FY 2014-15 and FY 2015-16 respectively.

5.8 Expenses Capitalised

GETCO has not submitted any capitalisation of expenses in the Mid-term Review. The Petitioner has mentioned that GETCO has filed an appeal to APTEL against the methodology adopted by the Commission and requested to allow recovery of the cost component based on the outcome of Appeal No. 108 of 2013.

Commission's Analysis

The Commission had approved the expenses capitalised at Rs. 213 Crore for FY 2014-15 and Rs. 234 Crore for FY 2015-16, as projected by GETCO in the MYT Order dated 31st March, 2011. There is no justification for not considering the other expenses capitalized, on the plea that the O&M expenses are approved on normative basis.

The capitalised O&M Expenses will be included in the 'works in progress' and thereon to the GFA through asset capitalisation. Thus, the capital expenditure capitalised would be funded through debt and equity - attracting interest on debt and return on equity. The consumers cannot be burdened with the entire normative expenses and interest and return on equity on the capitalised O&M Expenditure



included in the capital works in progress in the first instance and later in the GFA on capitalisation from CWIP.

The Commission considered the O&M expenses capitalised at the level of actuals for FY 2012-13, i.e., Rs. 212.13 Crore, as per audited annual accounts for the remaining years of the control period in the Mid-term Review, as detailed in the Table below:

Table 5.20: Capitalisation of O&M Expenses in the Mid-term Review

(Rs. Crore)

		· ·	(
SI. No.	Particulars	FY 2014-15	FY 2015-16
1	1 Expenses Capitalised		212.13

The Commission approves the O&M Expenses capitalised at Rs. 212.13 Crore for each year in the Mid-term Review.

5.9 Income Tax

GETCO has projected the Income Tax at Rs. 109.72 Crore for FY 2014-15 and Rs. 129.97 Crore for FY 2015-16 in the Mid-term Review. The Income Tax approved for these years in the MYT Order dated 31st March, 2011 and now submitted by GETCO in the Mid-term Review are given in the Table below:

Table 5.21: Income Tax Projected in the Mid-term Review

(Rs. Crore)

SI. No.	Particulars	FY 2014-15 Approved in the MYT Order	FY 2014-15 Projected in the MTR	FY 2015-16 Approved in the MYT Order	FY 2015-16 Projected in the MTR
1	Tax on Income	15.37	109.72	15.37	129.97

Petitioner's Submission

GETCO has submitted that it has estimated income tax and other taxes for FY 2014-15 and FY 2015-16, in line with return on equity proposed for the respective years. GETCO has considered MAT of 20.008%.

Commission's Analysis

GETCO has claimed income tax at MAT rate of 20.008%, including other taxes on the return on equity projected for the respective years. As per the audited annual accounts, the actual income tax was Rs. 81 Crore for FY 2012-13. Regulation 42 of GERC (MYT) Regulations, 2011, specifies that the Commission shall provisionally approve income tax paid as per latest audited annual accounts available for the applicant, subject to prudence check. The Income Tax, as per the audited accounts for FY 2012-13, is Rs. 79.40 Crore. The Commission considers the income tax at the



same level for FY 2014-15 and FY 2015-16 in the Mid-term Review, as detailed below:

Table 5.22: Income Tax Approved in the Mid-term Review

(Rs. Crore)

SI. No.	Particulars	FY 2014-15	FY 2015-16
1	Income Tax	79.40	79.40

5.10 Contingency Reserve

GETCO has projected the contingency reserve at Rs. 67.92 Crore for FY 2014-15 and Rs. 79.86 Crore for FY 2015-16 in the Mid-term Review, as detailed in the Table below:

Table 5.23: Contingency Projected in the Mid-term Review

(Rs. Crore)

					/	•.•.•
SI.			FY 2014-15	FY 2014-15	FY 2015-16	FY 2015-16
		Particulars	Approved in	Projected	Approved in	Projected
	No.		the MYT Order	in the MTR	the MYT Order	in the MTR
	1	Contingency Reserve	-	67.92	-	79.86

Petitioner's Submission

The petitioner has submitted that GETCO was not able to claim the contingency reserve during MYT filing, because of delay in issuance of the final GERC (MYT) Regulations, 2011. In the Mid-term Review, GETCO has proposed the contingency reserve at 0.5% of the opening GFA for the respective year.

Commission's Analysis

GETCO's reasoning for not claiming contingency reserve in the MYT petition, because of delay in issuance of final GERC (MYT) Regulations, 2011 is not tenable, since the MYT Petition was filed by the utility.

Regulation 71.7.1 of GERC (MYT) Regulations, 2011, specifies that a sum of not more than 0.5 percent of the original cost of fixed assets shall be allowed annually towards such appropriation in the calculation of ARR.

The contingency reserve is, accordingly, computed at 0.5% of the opening GFA, as detailed in the Table below:

Table 5.24: Contingency Reserve Approved in the Mid-term Review

(Rs. Crore)

			(113. 01010)
SI. No.	Particulars	FY 2014-15	FY 2015-16
1	Contingency Reserve	67.31	75.35

The Commission approves the contingency reserve at Rs. 67.31 Crore for FY 2014-15 and Rs. 75.35 Crore for FY 2015-16 in the Mid-term Review.



5.11 Non-Tariff Income

GETCO has estimated the other income at Rs. 202 Crore for FY 2014-15 and Rs. 188 Crore for FY 2015-16 in the Mid-term Review. The Non-Tariff Income approved for these years in the MYT Order dated 31st March, 2011 and now submitted by GETCO in the Mid-term Review are given in the Table below:

Table 5.25: Proposed Revenue from 'Other Income' for FY 2014-15 to FY 2015-16 (Rs. Crore)

SI. No.	Particulars	FY 2014-15 Approved in the MYT Order	FY 2014-15 Projected in the MTR	FY 2015-16 Approved in the MYT Order	FY 2015-16 Projected in the MTR
1	Interest on Staff Loans and Advances		1		1
2	Income from Investments Deposits		0		0
3	Interest on Advances to Others		-		-
4	Interest from banks (Other Than on Fixed Deposits)		-		-
5	Income from Trading- Stores, Scrap, etc.		8		8
6	Penalties Received from supplies and consumers		4		4
7	Revenue Subsidy and Grants		0		0
8	Miscellaneous Receipts		71		71
9	Contribution and Grants towards Cost of Capital Assets		117		103
10	Total Revenue from 'Other Income'	103	202	103	188

Petitioner's Submission

GETCO has submitted that it has projected all components of "Other Income" at the same level as FY 2012-13, except the contribution and grant towards cost of capital assets, where a gradual reduction of 11.75% is proposed. GETCO has further submitted that it has adopted the methodology as approved by the Commission in working out 'other income', where the contribution and grants towards cost of capital assets, as part of 'other income', has been considered. GETCO has filed an appeal to APTEL against the methodology and requested to allow recovery of cost component based the outcome of Appeal No. 180 of 2013.

Commission's Analysis

The Commission considers the revenue from other income, as projected by GETCO in the Mid-term Review, which is detailed in the Table below:



Table 5.26: Approved Revenue from 'Other Income' in the Mid-term Review (Rs. Crore)

SI. No.	Particulars	FY 2014-15	FY 2015-16
1	Other Income	202	188

5.12 Annual Transmission Charges

The Annual Transmission charges projected in the Mid-term Review for FY 2014-15 and FY 2015-16 and the annual transmission charges approved in the Mid-term Review are summarised in the Table below:

Table 5.27: Annual Transmission Charges

SI.	Particulars	Approved in the MYT Order		Projected in the MTR		Approved in the MTR	
No.	Faiticulais	FY	FY	FY	FY	FY	FY
		2014-15	2015-16	2014-15	2015-16	2014-15	2015-16
1	Operations and Maintenance Expenses	977.24	1,065.79	936.94	1018.07	995.03	1107.67
2	Depreciation	803.41	901.73	749.26	871.43	720.43	804.84
3	Interest and Finance Charges	588.57	645.55	517.73	615.10	444.96	460.36
4	Interest on Working Capital	54.05	60.68	75.45	87.30	61.22	71.00
5	Return on Equity	634.66	717.08	548.38	649.58	519.22	573.55
6	Add: Contingency Reserve	0	0	67.92	79.86	67.31	75.35
7	Total Fixed Costs	3,057.92	3,390.83	2,895.67	3,321.34	2,808.18	3092.78
8	Less: Expenses Capitalised	213.00	234.00	1	-	212.13	212.13
9	Add: Provision for Tax	15.37	15.37	109.72	129.97	79.4	79.4
10	Total Transmission Charges	2,860.29	3,172.20	3005.39	3451.30	2675.45	2960.05
11	Less: 'Other Income'	103.00	103.00	201.73	187.98	202	188
12	Aggregate Revenue Requirement	2,757.29	3,069.20	2803.66	3263.32	2,473.45	2,772.05



COMMISSION'S ORDER

The Commission approves the revised Annual Transmission Charges for GETCO in the Mid-term Review for FY 2014-15 and FY 2015-16, as shown in the Tables below:

Annual Transmission Charges for FY 2014-15 & FY 2015-16

(Rs. Crore)

			(IV3. OIOIC)
SI.	Particulars	FY	FY
No.		2014-15	2015-16
1	Operations and Maintenance Expenses	995.03	1107.67
2	Depreciation	720.43	804.84
3	Interest and Finance Charges	444.96	460.36
4	Interest on Working Capital	61.22	71.00
5	Return on Equity	519.22	573.55
6	Add: Contingency Reserve	67.31	75.35
7	Total Fixed Costs	2,808.18	3092.78
8	Less: Expenses Capitalised	212.13	212.13
9	Add: Provision for Tax	79.4	79.4
10	Total Transmission Charges	2675.45	2960.05
11	Less: 'Other Income'	202	188
12	Aggregate Revenue Requirement	2,473.45	2,772.05

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

Place: Gandhinagar Date: 29/04/2014

