

GUJARAT ELECTRICITY REGULATORY COMMISSION



**Annual Performance Review for FY 2008-09
&
Aggregate Revenue Requirement for FY 2009-10**

For

Gujarat Energy Transmission Corporation Limited

Case No. 975/2009

14 December 2009

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(GERC)**

AHMEDABAD

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ABBREVIATION

| | | |
|-----|----------------|--|
| 1. | APR | Annual Performance Review |
| 2. | ARR | Aggregate Revenue Requirement |
| 3. | A&G | Administration and General |
| 4. | CAPEX | Capital Expenditure |
| 5. | CERC | Central Electricity Regulatory Commission |
| 6. | Ckt-Km | Circuit Kilometer |
| 7. | Control Period | FY 2008-09, FY 2009-10, FY 2010-11 |
| 8. | DGVCL | Dakshin Gujarat Vij Company Limited |
| 9. | DD & DNH | Diu & Daman and Dadara Nagar Haveli |
| 10. | FY | Financial Year |
| 11. | GEB | Gujarat Electricity Board |
| 12. | GERC | Gujarat Electricity Regulatory Commission |
| 13. | GETCO | Gujarat Energy Transmission Corporation Limited |
| 14. | GoG | Government of Gujarat |
| 15. | GSECL | Gujarat State Electricity Corporation Limited |
| 16. | GUVNL | Gujarat Urja Vikas Nigam Limited |
| 17. | kWh | Kilo Watt Hour |
| 18. | HVDC | High Voltage Direct Current |
| 19. | IPTC | Independent Power Transmission Company |
| 20. | kV | Kilo Volt |
| 21. | kVA | Kilo Volt Ampere |
| 22. | kVAh | Kilo Volt Ampere Hour |
| 23. | MGVCL | Madhya Gujarat Vij Company Limited |
| 24. | MU | Million Units |
| 25. | MW | Mega Watt |
| 26. | MYT | Multi Year Tariff |
| 27. | O&M | Operations & Maintenance |
| 28. | PGCIL | Power Grid Corporation of India Limited |
| 29. | PGVCL | Paschim Gujarat Vij Company Limited |
| 30. | SBI | State Bank of India |
| 31. | S/S | Sub-station |
| 32. | R E | Revised Estimates |
| 33. | ROE | Return on Equity |
| 34. | R&M | Repairs and Maintenance |
| 35. | T&C | GERC (Terms & Conditions of Tariff) Regulation, 2005 |
| 36. | UGVCL | Uttar Gujarat Vij Company Limited |



| | | |
|-----|------|----------------------------------|
| 37. | UT | Union Territory |
| 38. | WREB | Western Region Electricity Board |
| 39. | WRPC | Western Region Power Committee |



BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION AT AHMEDABAD

Case No. 975 / 2009

Date of Order 14.12.2009

CORAM

Dr. P. K. Mishra, Chairman

Shri Pravinbhai Patel, Member

ORDER

1. Background & brief history

1.1 Background

The Gujarat Energy Transmission Corporation Limited (hereinafter referred to as 'GETCO' or 'petitioner') has filed its petition under Section 62 of the Electricity Act, 2003 read with Gujarat Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2005 (hereinafter referred to as 'Terms & Conditions of Tariff') and Gujarat Electricity Regulatory Commission (Multi-Year-Tariff Framework) Regulations, 2007 (hereinafter referred to as 'MYT Regulations') on 21st August 2009 for annual performance review (APR) of FY 2008-09 and Aggregate Revenue Requirement (ARR) for FY 2009-10 for transmission business, under MYT Control Period FY2008-09 to FY2010-11(herein referred to as 'control period'). Subsequent to the submission, the Commission did a technical validation of the petition and admitted the petition on 4th September 2009.

1.2 Gujarat Electricity 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:

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

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

1.3 Commission's Order for the first control period

Gujarat Energy Transmission Corporation Limited filed its petition under the Multi Year Tariff framework for the FY 2008-09, FY 2009-10 and FY 2010-11 on 31st July 2008 in accordance with the Gujarat Electricity Regulatory Commission (Multi-Year-Tariff Framework) Regulations, 2007 notified by GERC. The Commission, in exercise of the powers vested in it under Sections 61 and 62 of the Electricity Act 2003 and all other powers enabling it in this behalf and after taking into consideration the submissions made by GETCO, the objections by various stakeholders, response of GETCO, issues raised during the public hearing and all other relevant material, issued the Multi Year Tariff order on 17th January 2009 for the control period comprising FY 2008-09, FY 2009-10 and FY 2010-11.

1.4 Admission of current petition and public hearing process



The Commission undertook a technical validation of the petition submitted by GETCO and admitted the current petition of GETCO for annual performance review (APR) of FY2008-09 and approval of Aggregate Revenue Requirement (ARR) for FY2009-10 for transmission business (Case No 975 of 2009) on 4th September 2009.

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 was published in the following newspapers on 11th September 2009 inviting objections / suggestions from its stakeholders on the ARR petition filed by it.

1. Indian Express – in English
2. Gujarat Samachar – in Gujarati
3. Divya Bhaskar – in Gujarati

The petitioner also placed the public notice and the petition on its website (www.getcogujarat.com) for inviting objections and suggestions on its petition.

The interested parties/stakeholders were asked to file their objections and suggestions on the petition on or before 12th October 2009. Subsequently, the Commission received representations from a few stakeholders for extending the time for filing their objections / suggestions. The Commission sent individual communication to these stakeholders informing them that the Commission does not propose to extend the last date for submission of objections / suggestions. However the Commission suggested that those stakeholders who are unable to submit their objections / suggestions within the prescribed time could make their submissions during the course of public hearing.

Commission received objections/suggestions from 21 respondents for all petitions. Some of the objections / suggestions received after the last date but prior to the date of public hearing have also been considered by the Commission.

The Commission thereafter fixed the date of public hearing for GETCO and other licensees on 29th October 2009 and 30th October 2009 and sent communication to the objectors inviting them to take part in the public hearing process for presenting their views on the petition before the Commission.

The issues and concerns voiced by various stakeholders during the course of the public hearing as well as the written submission have been carefully examined by the Commission. The details the organizations and individuals who filed their objections / suggestions on petitions are given in Annexure 1.1



1.5 Contents of the Order

The order is arranged into **six** chapters as under:

1. The first chapter provides a background regarding the petitioner, petition and details of the public hearing process.
2. The second chapter provides detailed account of the public hearing process, including the objections raised by various stakeholders, GETCO responses and the Commission's views on the responses.
3. The third chapter outlines the performance of the GETCO.
4. The fourth chapter deals with the annual performance review for FY 2008-09
5. The fifth chapter details with the aggregate revenue requirement for FY 2009-10.
6. The sixth chapter deals with the compliance of directives.

1.6 Approach of this Order

In this order the Commission has analyzed the petition with regard to the annual performance review for FY 2008-09 and the determination of aggregate revenue requirement for FY 2009-10. Under the MYT Framework, the Commission has projected the ARR for the petitioner for each year of the control period in the MYT Order issued on 17th January, 2009. The Regulations provide for annual performance review based on the actual expenses incurred by the petitioner compared with the trajectories approved under the MYT Order.

At the time of issue of this order, the first year of the Control Period i.e. FY 2008-09 has passed. However, the audited financial statements for the petitioner are not available. The petitioner has submitted provisional financial statements. Considering this background the Commission has undertaken a provisional annual performance review for FY 2008-09. Based on the provisional annual performance review the Commission has computed the gains / losses as stipulated under the MYT Regulations. However, the effect of these gains / losses shall be passed on to next year based on its verification from the audited accounts of the petitioner. The Commission therefore directs the petitioner to submit the audited accounts for FY 2008-09 at the earliest.

In regard to the annual tariff determination for FY 2009-10, the Commission has observed that a major portion of the FY 2009-10 has already elapsed. Also, in the absence of audited accounts, the gains / losses computed for FY 2008-09, as a result of annual performance review, are provisional in nature. Therefore, the Commission has only reviewed the submission of the petitioner for FY 2009-10. The Commission has not considered any revision in the transmission charges to be recovered from the grid users for FY 2009-10.

1.6.1 Approach for APR for the FY 2008-09



Regulation 9.1 of the MYT Regulations provides that where the aggregate revenue requirement of a generating company or a licensee is covered under a multi year tariff framework, such licensee shall be subject to an Annual Performance Review (APR) during the control period. With regard to the scope of the APR, Regulation 9.3 of the MYT Regulations provide that the scope of APR shall include a comparison of the audited performance of the generating company or the licensee with the approved forecast of aggregate revenue requirement and expected revenue from tariff and charges.

Regulation 9.6 further provides that subsequent to APR, the Commission shall attribute and classify any variation in performance to either on account of controllable parameters or uncontrollable parameters. Components of controllable factors and uncontrollable factors have accordingly been provided in the MYT Regulations. Subsequent to classification of the variations on account of uncontrollable and controllable parameters, Regulation 10 provides the mechanism for pass through of gains and losses on account of uncontrollable parameters and Regulation 11 provides the mechanism for sharing of gains and losses on account of controllable parameters.

For the purpose APR for the FY 2008-09, the Commission has considered the above approach and has undertaken a comparison of the actual performance (based on provisional accounts) with the projections approved in the MYT Order. The Commission has thereafter computed the variance considering the classification of uncontrollable and controllable parameters and has considered the treatment as provided in Regulation 10 and Regulation 11 of the MYT Regulations. In the absence of audited accounts, the Commission has considered the above variance (gains / losses) as provisional. The Commission shall adjust the gains / losses after verifying it from the audited accounts when submitted by the petitioner.

1.6.2 Approach for ARR for the FY 2009-10

FY 2009-10 is the second year of the first control period. A major portion of FY 2009-10 has already elapsed. The petitioner has now approached the Commission for annual determination of tariff for FY 2009-10 based on the APR of FY 2008-09.

The Commission has observed that a major portion of the FY 2009-10 has elapsed with less than four months left in the FY 2009-10. The Commission has also observed that the time line for tariff determination for FY 2010-11 has already arrived.

Further, the Commission has noticed that the gains / losses computed for FY 2008-09 based on the APR cannot be passed on to FY 2009-10 since the APR is provisional in nature.

The Commission is therefore of the view that it shall provisionally determine the gains / losses based on the APR of FY 2008-09. However, the impact of these gains / losses shall be considered in the order for tariff determination of FY 2010-11. In this regard the Commission has noted that the stipulated date for submission of petition



for determination of tariff for FY 2010-11 is 15th December 2009. In regard to FY 2009-10, the Commission is of the opinion that it shall consider the gains / losses at the time of Annual Performance Review.

The Commission has therefore concluded that it shall await the submission of the petition for tariff determination for FY 2010-11. The petitioner is therefore directed to submit the petition for FY 2010-11 along with the audited accounts of FY 2008-09 within the stipulated time.



2. Response from Stakeholders

2.1. Background

In response to the public notice inviting objections / suggestions from stakeholders on the petition filed by GETCO and other utilities for annual performance review (APR) of FY2008-09 and annual revenue requirement (ARR) for FY2009-10 for transmission business, under MYT Control Period FY2008-09 to FY2010-11, 21 consumers / consumer organizations have filed their objections / suggestions in writing. Out of 21 objectors those who filed objections / suggestions 16 stakeholders have participated in the public hearings. These 21 consumers / consumer organizations have filed objections for various utilities which are subsidiaries of GUVNL. One of these objectors has also submitted objections related to GETCO.

The issue presented before the Commission, response of GETCO and the views of the Commission are presented below:

2.2. Installation of substation

Objections:

A stakeholder has submitted that the petitioner has not undertaken planned installation of sub-stations in the PGVCL distribution area. The objector has further submitted that the installations of the petitioner are not equipped with lightning arrestors.

GETCO's Response:

The petitioner has submitted that it endeavors to ensure reliable supply of electricity. In FY 2007-08, GETCO had set up fifty 66 KV substations and out of those twenty five new 66 KV substations were established in the PGVCL area. During the FY 2008-09 GETCO has installed thirty five new 66 KV substations in the PGVCL area. The petitioner has further submitted that it has installed lightening arrestor for all of the key installations.

Commission's view:

The Commission has taken note of the submissions made by the petitioner. The Commission is of the view that the petitioner should undertake suitable investment in transmission infrastructure commensurate with load growth.



3. Transmission system of GETCO and its performance

3.1. Introduction

The petitioner has submitted information on the performance of the transmission system for FY 2008-09 and FY 2009-10. In this regard, the petitioner has submitted information on transmission capacity, loading of the transmission system, availability of the transmission system and transmission loss levels. These performance parameters have been discussed in the following sections.

3.2. Transmission system capacity during FY 2008-09

Petitioner's Submission

The petitioner has submitted that the transmission system capacity of its network during FY 2008-09 was 47,817 MVA. The petitioner has submitted that it operates EHV Transmission system comprising 66kV to 400 kV network. The voltage level wise capacity in terms of the transmission lines and the sub-stations for FY 2008-09 is summarized in Table 1.

Table 1: Transmission capacity of GETCO for FY 2008-09

| Sl. No | Voltage | EHV lines (Ckt km) | Sub-Station (Nos.) |
|--------|---------------|--------------------|--------------------|
| 1 | 400 KV | 1,912 | 9 |
| 2 | 220 KV | 12,214 | 71 |
| 3 | 132 KV | 4,581 | 48 |
| 4 | 66 KV | 18,639 | 861 |
| 5 | 33 KV | 69 | 1 |
| | Totals | 37,415 | 990 |

The petitioner has submitted that in FY 2008-09, the 66 KV voltage network has been augmented by 792.5 MVA. The circle wise physical augmentation undertaken by the petitioner is summarized in Table 2:

Table 2 : Physical Augmentation of GETCO for FY 2008-09

| Name of Circle | FY 2008-09 (MVA) |
|----------------|------------------|
| Navsari | 30 |
| Bharuch | 15 |
| Jambuva | 67 |
| Nadiad | 32 |
| Mehsana | 42 |
| Palanpur | 175 |
| Anjar | 70 |
| Amreli | 85 |



| Name of Circle | FY 2008-09 (MVA) |
|----------------|---------------------|
| Gondal | 165 |
| Junagadh | 80 |
| Surendranagar | 30 |
| Chorania | 0 |
| Asoj | 0 |
| Total | 792 |

Based on the above additions made to the transmission capacity, the voltage-wise capacity levels submitted by the petitioner are summarized in Table 3.

Table 3 : Voltage-wise capacity of GETCO for FY 2008-09

| Name of Circle | Voltage class (Capacity in MVA) | | | | |
|----------------|---------------------------------|-----------------|-----------------|----------------|----------------|
| | 400 KV (MVA) | 220 KV (MVA) | 132 KV (MVA) | 66 KV (MVA) | TOTAL (MVA) |
| Navsari | 0 | 2650 | 295 | 1997 | 4942 |
| Bharuch | 0 | 1050 | 350 | 872 | 2272 |
| Jambuva | 1630 | 1600 | 1605 | 1744 | 6579 |
| Nadiad | 0 | 1150 | 740 | 1716 | 3606 |
| Mehsana | 1630 | 1850 | 250 | 1789 | 5519 |
| Palanpur | 945 | 1750 | 410 | 2610 | 5715 |
| Anjar | 0 | 1150 | 380 | 1215 | 2745 |
| Amreli | 630 | 1650 | 288 | 1737 | 4305 |
| Gondal | 1575 | 1600 | 1078 | 2008 | 6260 |
| Junagadh | 0 | 900 | 310 | 1468 | 2678 |
| Surrendranagar | 1000 | 950 | 213 | 1035 | 3198 |
| Total | 7410 | 16300 | 5918 | 18190 | 47817 |

The petitioner has submitted that during FY 2008-09, 1027.3 Ckt-km have been added to the transmission network, and the total transmission network stands at 37,415 Ckt-km by the end of FY 2008-09. The details of the network additions which have been made by the petitioner is summarized in Table 4.

Table 4 : Addition to the transmission lines of GETCO for FY 2008-09

| Voltage Class | Lines as on 1 st April 2008 (Ckt-Km) | Lines Added during FY 2008-09 (Ckt-Km) | Total Lines as on 31st March 2009 (Ckt-Km) |
|---------------|---|--|--|
| 400 KV | 1,911.50 | 0.46 | 1911.96 |
| 220 KV | 12,019.70 | 194.40 | 12214.10 |
| 132 KV | 4,553.20 | 28.07 | 4581.27 |
| 66 KV | 17,834.50 | 804.37 | 18638.87 |
| 33 KV | 69.00 | 0.00 | 69.00 |
| Total | 36,387.90 | 1,027.30 | 37,415.20 |



The petitioner has submitted that during FY 2008-09, sixty (60) substations have been added. The voltage-wise details of the substations added during FY 2008-09 are given in Table 5.

Table 5: Total substations added by GETCO for FY 2008-09

| Voltage Class | Substations as on 1 st April 2008 (Nos.) | Substations Added during FY 2008-09 Nos./MVA | Total Substations as on 31st March 2009 (Nos.) |
|---------------|---|--|--|
| 400 KV | 9 | 0 | 9 |
| 220 KV | 67 | 4 /300 MVA | 71 |
| 132 KV | 48 | 0 | 48 |
| 66 KV | 805 | 56/560 MVA | 861 |
| 33 KV | 1 | 0 | 1 |
| Total | 930 | 60 | 990 |

Commission's Analysis:

The Commission has reviewed the submissions made by the petitioner. The Commission has observed that the capacity addition submitted by the petitioner for the 66 KV category for FY 2008-09 is higher than the capacity addition approved by the Commission in its MYT Order. Under the MYT Order the Commission has approved a total capacity of 17,632 MVA for 66 KV category. However, the petitioner has actually achieved a higher capacity addition of 18,190 MVA for FY 2008-09.

In regard to the network addition, the Commission has observed from the MYT Order that for FY 2008-09 it has approved total addition of 1,841 Ckt-km comprising 240 Ckt-km for 400 KV category, 758 Ckt- km for 220 KV category and 843 Ckt-km for 66 KV category. Compared to this, the actual network additions for FY 2008-09 made to each voltage category has been lower than the network addition approved under the MYT Order.

Based on the submissions of the petitioner, the Commission now takes note of the capacity additions made by the petitioner for FY 2008-09. The total transmission capacity at the end of FY 2008-09 is indicated in Table 6.

Table 6: Total transmission capacity for FY 2008-09

| Voltage Class | Capacity (MVA) | Network length (Ckt Km) | Substations (Nos.) |
|---------------|----------------|-------------------------|--------------------|
| 400 KV | 7,410 | 1911.96 | 9 |
| 220 KV | 16,300 | 12214.10 | 71 |
| 132 KV | 5,917 | 4581.27 | 48 |
| 66 KV | 18,190 | 18638.87 | 861 |
| 33 KV | - | 69.00 | 1 |
| Total | 47,817 | 37,415.20 | 990 |



3.3. Loading of the transmission system

Petitioner's submission

The petitioner has submitted that the GETCO system is connected to the following sources of power supply:

- Gujarat State Electricity Company Limited (GSECL) plants
- Independent Power Producers (IPPs)
- Central sector Power Stations (PGCIL input points)
- Captive Power Plants
- Diu, Daman and Dadra Nagar Haveli capacity (DD and DNH)
- Captive Power Plants (CPP) wheeling
- Wind energy

With regard to DD and DNH the petitioner has submitted that DD and DNH gets allocation of power from central sector generating stations which is routed / transmitted through the GETCO system and hence the capacity needs to be added to the GETCO system for loading calculations.

The petitioner has further submitted that the power injected into the GETCO system from various generating stations / sources is supplied to GUVNL (for supply to the four distribution companies, TPL and Kandla Port Trust) and captive power users. The power allocated to DD and DNH from central generating stations is partly transmitted and delivered through the GETCO system. The petitioner has submitted a total loading of 10,981 MW for FY 2008-09 in its system from all the sources which is summarized in Table 7.

Table 7: Loading of GETCO's transmission system for FY 2008-09

(in MW)

| Sr. No | Station | Rated Capacity MW | Aux Cons (%) | Gujarat Share | Transmission Losses (%) | Total MW on GETCO System |
|----------|-----------------------------|-------------------|--------------|---------------|-------------------------|--------------------------|
| A | GSECL Plants | | | | | |
| 1 | Ukai TPS | 850 | 9 | 850 | 0 | 774 |
| 2 | Ukai HPS | 305 | 0.56 | 305 | 0 | 303 |
| 3 | Gandhinagar TPS Unit 1 to 4 | 660 | 11 | 660 | 0 | 587 |
| 4 | Gandhinagar TPS Unit – 5 | 210 | 8 | 210 | 0 | 192 |
| 5 | Wanakbori TPS Unit 1 to 6 | 1260 | 9 | 1260 | 0 | 1147 |
| 6 | Wanakbori TPS Unit – 7 | 210 | 8 | 210 | 0 | 192 |
| 7 | Sikka TPS | 240 | 10 | 240 | 0 | 214 |
| 8 | Kutch Lignite TPS | 215 | 12 | 215 | 0 | 189 |
| 9 | Dhuvaran TPS – Old | 220 | 11 | 220 | 0 | 195 |
| 10 | Kadana Hydro | 242 | 1 | 242 | 0 | 239 |
| 11 | Utran Gas Based | 135 | 4 | 135 | 0 | 128 |



| Sr. No | Station | Rated Capacity MW | Aux Cons (%) | Gujarat Share | Transmission Losses (%) | Total MW on GETCO System |
|--------|----------------------------------|-------------------|--------------|---------------|-------------------------|--------------------------|
| 12 | Dhuvaran Gas Based - Stage-I | 107 | 4 | 107 | 0 | 101 |
| 13 | Dhuvaran Gas Based - Stage-II | 113 | 4. | 113 | | 108 |
| | Total GSECL Plants | | | 4767 | | 4370 |
| B | IPPs | | | | | |
| 1 | GIPCL Stage-I | 145 | 2 | 145 | 0 | 142 |
| 2 | ESSAR | 300 | 2 | 300 | 0 | 292 |
| 3 | GPEC | 655 | 2 | 655 | 0 | 636 |
| 4 | GIPCL Stage-II | 165 | 2 | 165 | 0 | 160 |
| 5 | GIPCL-SLPP | 250 | 10 | 250 | 0 | 225 |
| 6 | GSEG | 156 | 2 | 156 | 0 | 151 |
| 7 | GMDC – Akrimota | 250 | 10 | 250 | 0 | 225 |
| | Total IPPs Plant | | | 1921 | | 1831 |
| C | Share from Central Sector | | | | | |
| 1 | NPC - Tarapur 1and 2 | 320 | 10 | 160 | 5 | 137 |
| 2 | NPC - Kakrapar | 440 | 12 | 131 | 5 | 109 |
| 3 | NPC - Tarapur 3and4 | 1080 | 10 | 290 | 5 | 248 |
| 4 | NTPC – Korba | 2100 | 7 | 385 | 5 | 337 |
| 5 | NTPC - Vindhyachal-I | 1260 | 9 | 248 | 5 | 214 |
| 6 | NTPC - Vindhyachal-II | 1000 | 7 | 254 | 5 | 223 |
| 7 | NTPC - Vindhyachal-III | 1000 | 7. | 281 | 5 | 247 |
| 8 | NTPC – Kawas | 656 | 3 | 197 | 5 | 181 |
| 9 | NTPC – Jhanor | 657 | 3 | 247 | 5 | 227 |
| 10 | NTPC – Kahalgaon | 1000 | 7 | 94 | 8 | 80 |
| 11 | NTPC - Sipat – II | 1000 | 7 | 288 | 5 | 253 |
| 12 | SSNNL – Hydro | 1450 | 0.50 | 232 | 5 | 219 |
| | Total Central Sector Share | | | 2805 | | 2475 |
| | TOTAL | | | 9,493 | | 8676 |
| | Firm Captive Capacity | | | | | 0 |
| | Share of DD and DNH | | | | | 0 |
| | CPP Wheeling | | | | | 820 |
| | Wind Farm Capacity* | | | | | 1485 |
| | Total for FY 2008-09 (MW) | | | 9,493 | | 10,981 |

Commission's Analysis

The Commission has examined the system loading of the petitioner for FY 2008-09. The Commission has observed that as per the MYT order, projected loading for the system for FY 2008-09 was 11,776 MW whereas the actual loading submitted by the petitioner is 10,981 MW. The Commission has thereafter analyzed the actual loading for FY 2007-08 and FY 2008-09 which is summarized in Table 8.



Table 8: Historical trend in loading of the GETCO system

(in MW)

| Sr. No. | Stations | FY 2006-07 Actual | FY 2007-08 Actual | FY 2008-09 MYT Approved | FY 2008-09 Actual |
|---------|----------------------------|----------------------|----------------------|-------------------------------|----------------------|
| A | GSECL Plants | 4,603 | 4,370 | 4,435 | 4,370 |
| B | IPPs | 1,828 | 1,825 | 1,940 | 1,831 |
| C | Share from Central Sector | 1,956 | 2,042 | 2,745 | 2,475 |
| D | Firm Captive Capacity | 25 | 33 | 33 | - |
| E | DD and DNH Loading | 520 | 527 | 527 | - |
| F | CPP Wheeling | 530 | 721 | 711 | 820 |
| G | Wind Farm Capacity | | 1,185 | 1,385 | 1,485 |
| | Total Loading in MW | 9,461 | 9,981 | 11,776 | 10,981 |

The Commission has observed the growth in the actual loading of the GETCO system during FY 2007-08 was 5.5% over the loading levels of FY 2006-07. The MYT Order has considered an increase of 18% for FY 2008-09 over FY 2007-08. However, the actual system loading for FY 2008-09 submitted by the petitioner is lower than the system loading approved under the MYT order. The Commission has noted that the loading from GSECL plants has reduced due to the non-commissioning of the Kutch Lignite TPS plant. There has been reduction in loading from IPPs. Further, there has been delay in commissioning of the GIPCL SLPP Extension plant. Also, the DD and DNH requirement which was earlier being fed by the GETCO system is now being directly fed by the PGCIL network.

Based on the above observation, the Commission takes note of the actual system loading of 10,981 MW for FY 2008-09 by GETCO which is summarized in Table 9.

Table 9: Actual system loading for FY 2008-09 considered by the Commission

(in MW)

| Sr. No. | Stations | MYT Approved | FY 2008-09 Actual |
|---------|----------------------------|-----------------|----------------------|
| A | GSECL Plants | 4,435 | 4,370 |
| B | IPPs | 1,940 | 1,831 |
| C | Share from Central Sector | 2,745 | 2,475 |
| D | Firm Captive Capacity | 33 | - |
| E | DD and DNH Loading | 527 | - |
| F | CPP Wheeling | 711 | 820 |
| G | Wind Farm Capacity | 1,385 | 1,485 |
| | Total Loading in MW | 11,776 | 10,981 |

3.4. Energy Balance

Petitioner's submission



The petitioner has submitted the details of the energy transaction which has been undertaken through the GETCO's system during FY 2008-09. The details of the energy which has been received by the GETCO system are summarized in Table 10.

Table 10 : Energy received in GETCO system for FY 2008-09

| Generating Plants | MUs Received |
|---------------------------------|---------------|
| GEB – GESCL | 25,946 |
| IPP | 11,395 |
| CPP | 768 |
| Central Sector Projects | 17,400 |
| Non Conventional Energy Sources | 2,219 |
| Total Energy Received | 57,728 |

The petitioner has also submitted the details of the energy sent out during FY 2008-09 from the GETCO system which is summarized in Table 11.

Table 11 : Energy sent out from GETCO system for FY 2008-09

| Procured by | MUs Sent out |
|------------------------------|---------------|
| GUVNL | 4,660 |
| DGVCL | 9,916 |
| MGVCL | 7,065 |
| UGVCL | 13,134 |
| PGVCL | 18,298 |
| DD and DNH | 2,163 |
| Auxiliary Consumption | 11 |
| Total Energy Sent Out | 55,247 |

Commission's Analysis

The Commission has examined the petitioner's submission of the energy received and sent out by the GETCO system during FY 2008-09. The Commission takes note of the energy balance maintained by GETCO during FY 2008-09 as shown in Table 12.

Table 12: Energy balance as noted by Commission for FY 2008-09

| Generating Plants | MUs Received | Procured by | MUs Sent |
|---------------------------------|---------------|------------------------------|---------------|
| GEB - GESCL | 25,946 | GUVNL | 4,660 |
| IPP | 11,395 | DGVCL | 9,916 |
| CPP | 768 | MGVCL | 7,065 |
| Central Sector Projects | 17,400 | UGVCL | 13,134 |
| Non Conventional Energy Sources | 2,219 | PGVCL | 18,298 |
| | | DDand DNH | 2,163 |
| | | Auxiliary Consumption | 11 |
| Total Energy Received | 57,728 | Total Energy Sent Out | 55,247 |



3.5. Availability of the transmission system in FY 2008-09

Petitioner's submission

The petitioner has submitted that during FY 2008-09, the availability of the transmission system has been over 99.56%. The details of the voltage-wise availability of the transmission system submitted by the petitioner are summarized in Table 13.

Table 13 : Transmission system availability of GETCO for FY 2008-09

(%)

| Sr. No. | Description | MYT Approved | GETCO Actual |
|---------|----------------------------------|--------------|--------------|
| 1 | 400 KV | 99.38 | 99.69 |
| 2 | 220 KV | 98.87 | 99.03 |
| 3 | 132 KV | 98.81 | 98.95 |
| 4 | 66 KV | 99.62 | 99.52 |
| 5 | Substations | 99.87 | 99.77 |
| | GETCO System Availability | 99.33 | 99.56 |

The petitioner has further stated that during the FY 2008-09, the availability of the transmission system has been higher than the normative level prescribed under the regulations i.e. 98%.

Commission's Analysis:

The Commission has examined the submission of the petitioner for the availability of the transmission system during FY 2008-09. The Commission has further reviewed the historical trend in the availability of the transmission system since FY 2001-02. The historical trends in the availability of the transmission system are summarized in Table 14.

Table 14 : Actual transmission system availability for last 7 years

(%)

| Sr. No. | Description | 2001-02 | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 |
|---------|---------------------------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 400 KV | 98.99 | 98.70 | 99.04 | 99.10 | 99.05 | 99.35 | 99.75 |
| 2 | 220 KV | 98.46 | 97.89 | 98.73 | 98.90 | 98.86 | 98.72 | 99.17 |
| 3 | 132 KV | 98.83 | 98.56 | 98.98 | 99.24 | 98.79 | 98.85 | 99.32 |
| 4 | 66 KV | 99.18 | 98.98 | 99.51 | 99.67 | 99.57 | 99.56 | 99.56 |
| 5 | Substations | 99.61 | 99.21 | 99.84 | 99.84 | 99.67 | 99.81 | 99.81 |
| 6 | GETCO System Availability | 99.01 | 98.67 | 99.22 | 99.35 | 99.195 | 99.26 | 99.61 |



The Commission has observed that since FY 2001-02, the availability of the transmission system has remained above 98.5%. The Commission has taken note of the transmission availability level submitted by the petitioner for FY 2008-09 as indicated in Table 15.

Table 15 : Transmission system availability approved for FY 2008-09

(%)

| sr. No. | Description | MYT Approved | Actual |
|---------|---------------------------|--------------|--------|
| 1 | GETCO System Availability | 99.33 | 99.56 |

3.6. Transmission Loss

Petitioner's submission

The petitioner has submitted that the transmission loss for FY 2008-09 was 4.30%. The details of the transmission loss submitted by the petitioner for FY 2008-09 are summarized in Table 16.

Table 16 : Transmission loss stated by GETCO for FY 2008-09

| Particulars | Revised Estimate |
|-----------------------------|------------------|
| Total energy received (MUs) | 57,728 |
| Total energy sent out (MUs) | 55,247 |
| Transmission Loss (MUs) | 2,481 |
| Transmission Loss (%) | 4.30 |

The petitioner has explained that for FY 2008-09, the transmission loss levels have been higher in comparison to the previous years because of lower drawal of power from the GETCO's system in South Gujarat. The petitioner has further submitted that on an average the Union Territory (UT) region of DD and DNH were supplied with 350 MUs from the GETCO grid of 220 KV and 66 KV. However, since June 2008, the 220 KV double circuit transmission lines of PGCIL has started carrying load to the UT region resulting in lower usage of GETCO system for DD and DNH. Therefore, there has been a reduction of approximately 180 MUs per month in power fed through the GETCO's system since June 2008.

The petitioner has further submitted that it has also undertaken a detailed analysis of the energy balance in its system to ascertain the reasons for increased loss level. The petitioner has undertaken a comparison of the monthly and quarterly transmission losses from June 2008 with that of the corresponding month and quarter from June 2007 and has observed an increase in the transmission loss during FY 2008-09. On an average the monthly losses during FY 2007-08 were 3.85% and the same increased to 4.25% during FY 2008-09.

The petitioner has also computed the monthly transmission losses, which has been calculated as the difference between generation received in MUs from various



generating stations (GSECL, IPP and share from the Central Sector) and consumption of power by various DISCOM (MGVCL, DGVCL, UGVCL and PGVCL) and UT. The submission of the petitioner is summarized in Table 17.

Table 17: Estimation of monthly transmission loss by GETCO

| Discom: | May 2008 | | | | November 2008 | | | |
|---------|------------|-------------|------------|--------------|---------------|-------------|-------------|--------------|
| | Generation | Consumption | Difference | % Difference | Generation | Consumption | Difference | % Difference |
| DGVCL | 1,876,850 | 1,477,103 | 399,747 | 21 | 1,657,141 | 1,100,582 | 556,559 | 34 |
| MGVCL | 2,098,695 | 648,211 | 1,450,484 | 69 | 2,039,769 | 564,984 | 1,474,785 | 72 |
| PGVCL | 602,105 | 1,581,835 | (979,730) | (163) | 440,169 | 1,747,439 | (1,307,270) | (297) |
| UGVCL | 768,233 | 1,434,464 | (666,231) | (87) | 796,265 | 1,304,413 | (508,148) | (64) |
| Total | 5,345,883 | 5,141,612 | 204,271 | 3.82 | 4,933,343 | 4,717,418 | | 4.38 |

Commission's analysis

The Commission has examined the transmission loss levels for the GETCO system submitted by the petitioner. In its MYT order, the Commission had assessed the historical transmission loss levels of the petitioner and had permitted a transmission loss level of 4.09% for FY 2008-9 which is higher than the actual loss level observed for FY 2007-08. In the MYT order, the Commission had approved a higher loss level as projected by GETCO and had accepted the reasons for the increased loss level. The Commission had in the order directed GETCO to submit monthly data on energy received and delivered to establish the actual cause of the higher transmission loss levels.

The Commission has reviewed the data submitted by the petitioner for the higher loss level and on the basis of the same considers the transmission loss level of 4.30% as submitted by the petitioner for FY 2008-09. The transmission loss level now approved by the Commission is indicated in Table 18.

Table 18: Transmission loss for GETCO for FY 2008-09

| Particulars | MYT Approved | Now Approved |
|-----------------------|--------------|--------------|
| Transmission Loss (%) | 4.09 | 4.30 |



3.7. Availability of the transmission system for FY 2009-10

Petitioner's Submission

The petitioner has estimated that during FY 2009-10, the overall system availability would be at 99.61%. The availability of the transmission system projected by the petitioner for FY 2009-10 is summarized in Table 19.

Table 19 : Estimated availability of transmission system for FY 2009-10

(%)

| Sr.No. | Description | Approved as per MYT order for FY 2009-10 | Revised estimate by GETCO for FY 2009-10 |
|--------|----------------------------------|--|--|
| 1 | 400 KV | 99.39 | 99.54 |
| 2 | 220 KV | 98.94 | 98.95 |
| 3 | 132 KV | 98.94 | 99.32 |
| 4 | 66 KV | 99.66 | 99.70 |
| 5 | Substations | 99.89 | 99.82 |
| 6 | GETCO System Availability | 99.36 | 99.61 |

The petitioner has further submitted that the system availability estimated for FY 2009-10 is higher than the level considered by the Commission under the MYT order.

Commission's analysis

The Commission has reviewed the projection submitted by the petitioner in regard to the availability of the transmission system for FY 2009-10. The Commission has observed that the petitioner has historically maintained higher system availability when compared to the approved target level. The Commission approves the overall transmission system availability level of 99.61% for FY 2009-10 as projected by the petitioner. The approved availability for transmission system for FY 2009-10 is indicated in Table 20.

Table 20: Availability of the transmission system for FY 2009-10

(%)

| Sr. No. | Description | MYT Approved | Revised estimate by GETCO | Revised Approved for FY 2009-10 |
|---------|----------------------------------|--------------|---------------------------|---------------------------------|
| 1 | 400 KV | 99.39 | 99.54 | 99.54 |
| 2 | 220 KV | 98.94 | 98.95 | 98.95 |
| 3 | 132 KV | 98.94 | 99.32 | 99.32 |
| 4 | 66 KV | 99.66 | 99.70 | 99.70 |
| 5 | Substations | 99.89 | 99.82 | 99.82 |
| 6 | GETCO System Availability | 99.36 | 99.61 | 99.61 |

3.8. Loading of the transmission system for FY 2009-10

Petitioner's Submission



The petitioner has submitted that the GETCO system is connected to the following sources of power supply:

- Gujarat State Electricity Company Limited (GSECL) plants
- Independent Power Producers (IPPs)
- Central sector Power Stations (PGCIL input points)
- Captive Power Plants
- Diu, Daman and Dadra Nagar Haveli capacity
- Captive Power Plants (CPP) wheeling
- Wind energy

The petitioner has submitted that during FY 2009-10, it expects additional loading of 1,117 MW from central, state and private generation stations. The petitioner has therefore projected a total system loading for FY 2009-10 at 12,098 MW. The details of the additional system loading projected by the petitioner for FY 2009-10 are summarized in Table 21.

Table 21 : Additional system loading estimated by GETCO for FY 2009-10

(MW)

| Sr. No. | Station | Rated Capacity MW | Aux Cons (%) | Gujarat Share | Transmission Losses (%) | Total MW on GETCO System |
|----------|--|-------------------|--------------|---------------|-------------------------|--------------------------|
| A | GSECL Plants | | | | | |
| 1 | Lignite Base Extension Unit No. 4, Kutch | 75 | 12 | 75 | | 66 |
| 2 | Gas based CCPP at Uttran | 374 | 4 | 374 | | 356 |
| | Total GSECL Plants | | | 449 | | 422 |
| B | IPPs | | | | | |
| 1 | GIPCL Expansion | 250 | 9 | 250 | | 226 |
| | Total IPPs Plant | | | 250 | | 226 |
| C | Share from Central Sector | | | | | |
| 1 | NTPC - Kahalgaon | 500 | 7 | 47 | 8 | 40 |
| 2 | NTPC - Sipat - II | 1980 | 7 | 360 | 5 | 316 |
| | Total Central Sector Share | | | 407 | | 356 |
| | TOTAL | | | 1,106 | | 1,005 |
| | Wind Farm Capacity | | | | | 112 |
| | Total for FY 2009-10 (MW) | | | 1,106 | | 1,117 |

The total loading of the GETCO system estimated by the petitioner for FY 2009-10 is summarized in Table 22.



Table 22 : Total system loading estimated by GETCO for FY 2009-10

(MW)

| Sr. No. | Stations | Approved as per MYT order for FY 2009-10 | Revised estimate by GETCO for FY 2009-10 |
|---------|--------------------------------|--|--|
| A | GSECL Plants | 4,791 | 4,792 |
| B | IPPs | 3,153 | 2,058 |
| C | Share from Central Sector | 2,903 | 2,831 |
| D | Firm Captive Capacity | 33 | 0 |
| E | DD and DNH Loading | 527 | 0 |
| F | CPP Wheeling | 711 | 820 |
| G | Wind Farm Capacity (wheeling)* | 1,585 | 1,597 |
| | Total Loading in MW | 13,704 | 12,098 |

The petitioner has estimated the total loading on the transmission system for FY 2009-10 at 12,098 MW.

Commission's Analysis

The Commission has observed that under the MYT order the Commission had projected a total loading of 13,704 MW for FY 2009-10. The Commission has further observed that the loading levels for FY 2009-10 projected by the petitioner is lower than the system loading approved under the MYT Order.

The Commission has also observed that the actual system loading for FY 2008-09 has been lower than the system loading level approved under the MYT Order. Considering this background, the Commission now revises the system loading for FY 2009-10 and approves the system loading levels as estimated by the petitioner for FY 2009-10. The approved system load level is summarized in Table 23.

Table 23: Total loading of the transmission system approved for FY 2009-10

| Sr. No. | Stations | MYT Approved | Revised Estimate by GETCO | Revised Approved |
|---------|--------------------------------|---------------|---------------------------|------------------|
| A | GSECL Plants | 4,791 | 4,792 | 4,792 |
| B | IPPs | 3,153 | 2,058 | 2,058 |
| C | Share from Central Sector | 2,903 | 2,831 | 2,831 |
| D | Firm Captive Capacity | 33 | 0 | 0 |
| E | DD and DNH Loading | 527 | 0 | 0 |
| F | CPP Wheeling | 711 | 820 | 820 |
| G | Wind Farm Capacity (wheeling)* | 1,585 | 1,597 | 1,597 |
| | Total Loading in MW | 13,704 | 12,098 | 12,098 |

3.9. Transmission Loss

Petitioner's Submission



The petitioner has estimated a transmission loss level of 4.50% for FY 2009-10. The details of the petitioner's submission are indicated in Table 24.

Table 24: Transmission loss estimated by GETCO for FY 2009-10

| Particulars | Approved as per MYT order for FY 2009-10 | Revised estimate by GETCO for FY 2009-10 |
|-----------------------|--|--|
| Transmission loss (%) | 4.04 | 4.50 |

The petitioner has submitted that it has estimated a higher transmission loss levels during FY 2009-10 due to change in the load feeding pattern. The petitioner has explained that with the commissioning of the SUGEN power plant by Torrent Power Ltd, the load for Surat region is being directly fed from SUGEN and this led to lower drawal of power from its system in South Gujarat. The petitioner has further submitted that the load for the regions of DDandDNH is being directly fed from the PGCIL network. These reasons have contributed to lower usage of its system in South Gujarat. Therefore, the power has to travel over longer distances from South Gujarat to North Gujarat which increases transmission loss.

Commission's Analysis

The Commission has approved a transmission loss level of 4.04% for GETCO for FY 2009-10 under the MYT Order. The Commission has taken note of the reasons stated by the petitioner for the higher loss levels that have been estimated for FY 2009-10. In the MYT order, the Commission had directed the petitioner to submit monthly data on energy received and delivered to establish the actual cause of the higher transmission loss levels. The petitioner has shared monthly data of the energy balance by GETCO system.

The Commission observes that for FY 2008-09 the transmission loss has been higher than the loss level approved under the MYT Order. The Commission is of the view that continued increase in transmission loss level cannot be permitted. The petitioner should undertake system analysis and identify measures to restrict any further increase in the transmission losses. Also, the Commission has noted that in line with the MYT trajectory of reducing loss levels by 0.05% each year, the transmission loss levels should be reduced from the FY 2008-09 levels of 4.30% to 4.25% by the end of FY 2009-10.

Based on this approach the Commission is of the view that the transmission loss level for FY 2009-10 should be brought below the actual loss level of FY 2008-09.

Based on the review for FY 2008-09 and the approach in the previous paragraph, the Commission now provisionally revises the loss levels for FY 2009-10 to 4.25% which is summarized in Table 25.



Table 25 : Transmission loss for FY 2009-10

| Particulars | Approved as per MYT order for FY 2009-10 | Revised estimate by GETCO for FY 2009-10 | Revised Approved for FY 2009-10 |
|-----------------------|--|--|---------------------------------|
| Transmission loss (%) | 4.04 | 4.50 | 4.25 |



4. Annual Performance Review for FY 2008-09

4.1. Background

The Gujarat Electricity Regulatory Commission (Multi Year Tariff Framework) Regulations, 2007 (referred to as 'MYT Regulations') has been notified on 20th December 2007. Under the provisions of this Regulation, GERC notified the first Multi- Year-Tariff (MYT) control period as the three year period comprising FY 2008-09, FY 2009-10 and FY2010-11. Under the MYT regulations, for the specified control period, GETCO submitted the projected Aggregate Revenue Requirement (ARR) for each year of the control period. The Commission undertook an analysis of the submissions made by the petitioner and approved an ARR for each year of the Control Period along with the tariff for the FY 2008-09 vide its Tariff Order dated 17th January 2009. Now, the first year of the MYT Control period has elapsed and the provisional accounts of the petitioner are available. The petitioner has therefore approached the Commission for annual performance review for the FY 2008-09 and aggregate revenue requirement for the FY 2009-10.

This chapter of the order deals with the Annual Performance Review for FY 2008-09 for GETCO. The Commission has analyzed each of the components of the ARR for the FY 2008-09 in the following sections.

4.2. Operations and Maintenance expenses

Petitioner's submission

The petitioner has submitted the actual Operations and Maintenance (O & M) cost for FY 2008-09. The petitioner has claimed O&M expenses under the following heads:

- Employee cost
- Repair and maintenance (R&M)expenses
- Administration and General (A & G) expenses

The details of the O&M expenses submitted by the petitioner for FY 2008-09 are summarized in Table 26

Table 26 : O&M costs submitted by GETCO for FY 2008-09

(Rs in crores)

| Sr. No | Particulars | MYT Approved | FY 2008-09 Revised Estimate |
|--------|--|---------------|-----------------------------|
| 1 | Employee cost | 291.23 | 390.74 |
| 2 | Repair & Maintenance | 91.85 | 122.14 |
| 3 | Administration & General Expenses | 45.85 | 59.08 |
| | Operations & Maintenance Expenses | 428.83 | 571.96 |



The petitioner has submitted higher O&M expense compared to the O & M expenses approved under the MYT order. The total O&M expense claimed by the petitioner is 33% higher than the amount approved under the MYT Order. The category-wise details submitted by the petitioner and analysis of the Commission are presented in the following paragraphs.

Employee costs

Petitioner's submission

The petitioner has submitted Rs 390.74 crores towards employee cost for FY 2008-09. The details of the employee costs claimed by the petitioner for FY 2008-09 are presented in Table 27.

Table 27 : Employee cost submitted by GETCO for FY 2008-09

(Rs in crores)

| Sr. No | Particulars | MYT Approved | FY 2008-09 Revised Estimate |
|--------|--|---------------|-----------------------------|
| 1 | Employee cost | 246.00 | 270.13 |
| 2 | Employee cost on account of provisions for sixth pay commission for FY 2007-08 | 45.23 | 45.23 |
| 3 | Employee Cost on account of provisions for Sixth pay commission for FY 2008-09 | - | 75.38 |
| | Total costs | 291.23 | 390.74 |

The petitioner has considered an increase of 10% in the employee costs over the approved estimates of Rs 246 crores. Additionally, the petitioner has also made provision of Rs 120.61 crores for payments towards Sixth Pay Commission for FY 2007-08 and for FY 2008-09. Out of the provision for Rs 120.61 crores, Rs 45.23 crores is a provision for payments due for FY 2007-08 and Rs 75.38 crores for FY 2008-09 due to implementation of the Sixth Pay Commission.

Commission's Analysis

The Commission has examined the employee cost approved under the MYT order and has reviewed the provisional accounts submitted by the petitioner for FY 2008-09. As per the provisional accounts, the employee cost incurred by the petitioner for FY 2008-09 is Rs 371.44 crores. The Commission has observed that this is an increase of 28% over the employee cost of Rs 291.23 crores approved under the MYT Order. While projecting the employee costs under the MYT Order, the Commission had considered employee costs incurred for FY 2007-08 i.e. Rs 232.08 crores as base for the control period. The employee expense approved under the MYT order was inclusive of an increase of 6% over the cost incurred in FY 2007-08.

The Commission has further analyzed the provisions made by the petitioner for the payments to be made against the 6th Pay Commission of Rs 45.23 for FY 2007-08 crores and Rs 75.38 crores for FY 2008-09. The Commission has observed that



under the MYT order, it had been assumed that payment of the arrears which accrue due to the 6th Pay Commission may not be actually paid out during FY 2008-09. Therefore, under the MYT order, the Commission had directed the petitioner to provide 60% of the total amount of Rs 75.38 crores (amount to Rs 45.23 crores) during FY 2008-09 and the balance 40% (Rs 30.15 crores) in FY 2009-10. The summary of the expenses approved by the Commission under the MYT Order is presented in Table 28.

Table 28 : Employee cost approved as per the MYT order

(Rs in crores)

| Financial Year | MYT Approved | Calculations |
|----------------|--------------|----------------------|
| FY 2008-09 | 291.23 | (232.08x1.06)+45.23 |
| FY 2009-10 | 290.92 | (246.00X1.06)+30.15 |
| FY 2010-11 | 276.42 | 260.77X1.06 |

The petitioner has requested for the treatment of the parameters for variations in the employee cost over the MYT approved estimates as an uncontrollable. With regard to the employee cost, the Commission considers it as a controllable expense which is in line with the MYT Regulations. However, with respect to the expense on account of implementation of Sixth Pay Commission, the Commission considers it as an uncontrollable expense. Accordingly, the Commission considers the parameters impacting the gains/losses on annual performance review of employee expenses as controllable except for the impact of sixth pay commission which is considered as uncontrollable.

Based on the above approach, the Commission provisionally approves the employee expenses for FY 2008-09 as indicated in Table 29.

Table 29 : Approved employee costs for FY 2008-09

(Rs in crores)

| Sr. No | Particulars | MYT Approved | Revised Estimates as per provisional accounts FY 2008-09 | Provisionally considered for APR FY 2008-09 | Gains/(Losses) due to controllable factor | Gains/(Losses) due to uncontrollable factor |
|--------|--|--------------|--|---|---|---|
| 1 | Employee cost | 246.00 | 250.83 | 250.83 | (4.83) | - |
| 2 | Employee cost on account of provisions for sixth pay commission for FY 2007-08 | 45.23 | 45.23 | 45.23 | - | - |
| 3 | Employee Cost on account of provisions for sixth pay commission for | - | 75.38 | 75.38 | - | (75.38) |



| | | | | | | |
|--|--------------|---------------|---------------|---------------|---------------|----------------|
| | FY 2008-09 | | | | | |
| | Total | 291.23 | 371.44 | 371.44 | (4.83) | (75.38) |

Repair and maintenance (R&M) expenses

Petitioner's submission

The petitioner has submitted a total R&M expense of Rs 122.14 crores for FY 2008-09. The R&M expense submitted by the petitioner for FY 2008-09 is summarized in Table 30.

Table 30 : R&M expense submitted by GETCO for FY 2008-09

(Rs in crores)

| Sr. No. | Particulars | MYT Approved | FY 2008-09 Revised Estimate |
|---------|----------------------|--------------|-----------------------------|
| 1 | Repair & Maintenance | 91.85 | 122.14 |

The petitioner has submitted that the parameters impacting the R&M expenses should be considered as uncontrollable in nature. On the basis of this the comparison of the revised estimates of the R&M expenses with the amount approved under the MYT order, the petitioner has submitted a loss of Rs 30.29 crores.

Commission's Analysis

The Commission has examined the submissions made by the petitioner for FY 2008-09. The Commission has observed that as per the provisional accounts for FY 2008-09, the R&M expense is Rs 132.27 crores which is higher by 13% over the estimates of FY 2007-08.

The Commission is of the opinion that parameters impacting R&M expense are controllable in nature, therefore any variation in the R&M expense over the amount approved under the MYT Order should be treated as controllable. Based on this approach, the Commission provisionally approves the R&M expense for FY 2008-09 which is summarized in Table 31.

Table 31 : Approved R&M expenses for FY 2008-09

(Rs in crores)

| Sr. No. | Particulars | MYT Approved | Revised Estimates as per accounts FY 2008-09 | Provisionally considered for APR FY 2008-09 | Gains/(Losses) due to controllable factor |
|---------|-------------|--------------|--|---|---|
|---------|-------------|--------------|--|---|---|



| | | | | | |
|---|----------------------|--------------|---------------|---------------|----------------|
| 1 | Repair & Maintenance | 91.85 | 132.27 | 132.27 | (40.42) |
| | Total | 91.85 | 132.27 | 132.27 | (40.42) |

Administrative & General (A& G) expenses

Petitioner's submission

The petitioner submitted that during FY 2008-09, Rs.59.08 crores were incurred towards A&G expense. A&G expense submitted by the petitioner is summarized in Table 32.

Table 32 : A&G expenses expense submitted by GETCO for FY 2008-09

| (Rs in Crores) | | | |
|----------------|-----------------------------------|--------------|-----------------------------|
| Sr. No. | Particulars | MYT Approved | FY 2008-09 Revised Estimate |
| 1 | Administration & General Expenses | 45.85 | 59.08 |

The petitioner has further submitted that the A&G expenses for FY 2008-09 are inclusive of GETCO's contribution towards E-urja expenses of Rs 11.40 crores.

Commission's Analysis

The Commission has compared the expense approved in the MYT order with the provisional accounts submitted by the petitioner for FY 2008-09. The Commission in the MYT order had approved Rs 45.85 crores towards A&G expense for FY 2008-09. The A&G expense approved by the Commission also includes E-Urja charges of Rs 11.40 crores per annum. As per the provisional audited accounts submitted by the petitioner, the actual expense incurred towards A&G expenses during FY 2008-09 was Rs 47.37 crores. The Commission has therefore considered the amount of A&G expense as indicated in the provisional accounts.

The Commission is of the opinion that parameters impacting A&G expense are controllable in nature, therefore any variation in the A&G expense over the amount approved under the MYT Order should be treated as controllable. Based on this approach, the Commission approves the A&G expense for FY 2008-09 which are summarized Table 33.

Table 33 : A&G expenses approved and gains/losses for FY 2008-09

| (Rs in Crores) | | | | | |
|----------------|----------------|--------------|--|---|---|
| Sr. No. | Particulars | MYT Approved | Revised Estimates as per accounts FY 2008-09 | Provisionally considered for APR FY 2008-09 | Gains/(Losses) due to controllable factor |
| 1 | Administration | 45.85 | 47.37 | 47.37 | (1.52) |



| | | | | | |
|--|-------------------|--------------|--------------|--------------|---------------|
| | & General Charges | | | | |
| | Total | 45.85 | 47.37 | 47.37 | (1.52) |

4.3. Summary of Commission's analysis of the O&M expenses

On the basis of the Commission's analysis of each of the items, presented in the above sections, the provisionally approved O&M expenses by the Commission and the gains & losses are represented in Table 34.

Table 34 : O&M expenses approved and gains and losses for FY 2008-09

(Rs in Crores)

| Sr. No. | Operations & Maintenance Expenses | MYT Approved | Provisionally considered for APR FY 2008-09 | Gain/(Loss) due to Controllable Factor | Gain/(Loss) due to Uncontrollable Factor |
|---------|-----------------------------------|---------------|---|--|--|
| 1 | Employee Cost | 291.23 | 371.44 | (4.83) | (75.38) |
| 2 | Repair & Maintenance | 91.85 | 132.27 | (40.42) | |
| 3 | Administration & General Charges | 45.85 | 47.37 | (1.52) | |
| | Total O&M | 428.93 | 551.07 | (46.77) | (75.38) |

4.4. Unified Load Dispatch Charges for FY 2008-09

Petitioner's submission

The petitioner has submitted the ULDC expenses for FY 2008-09 at Rs 6.38 crores. ULDC charges are the charges to be paid for 15 years at the rate of Rs. 1.28 crores per month to Power Grid Corporation India Limited (PGCIL) for participation in the Unified Load Dispatch Scheme executed by PGCIL. These charges are effective from FY 2005-06 and are determined by CERC. The details of the ULDC charges claimed by the petitioner are indicated in Table 35.

Table 35: ULDC charges submitted by GETCO for FY 2008-09

(Rs in Crores)

| Sr. No. | Particulars | MYT Approved | FY 2008-09 Revised Estimate |
|---------|--------------|--------------|-----------------------------|
| 1 | ULDC Charges | 15.36 | 6.38 |



The petitioner has submitted that the actual amount of ULDC charges paid during FY 2008-09 is less than the amount approved under the MYT order and accordingly there is a gain of Rs 8.98 crores. The petitioner has however stated that the variation in the charges is on account of controllable factors and therein, a gain of Rs 8.98 lakhs has been stated for Y 2008-09.

Commission's analysis

The Commission has examined the submission for the ULDC charges. The Commission has noted that the petitioner is required to make payments for ULDC charges as determined by the CERC. Therefore, any variation to the ULDC charges is also determined by the CERC and is outside the control of the petitioner. Accordingly, the Commission is of the view that parameters governing ULDC charges should be considered as uncontrollable.

The Commission has also examined the provisional accounts submitted by the petitioner to ascertain the actual payments towards ULDC charges. Accordingly, based on the submission of the petitioner the Commission approves the payment of ULDC charges at Rs. 6.38 crores and considers the variance as arising out of uncontrollable parameters. The summary of ULDC expenses now approved by the Commission for FY 2008-09 is summarized in

Table 36.

Table 36 : Approved ULDC charges for FY 2008-09

(Rs in Crores)

| Sr. No | Particulars | MYT Approved | Revised Estimates as per accounts FY 2008-09 | Provisionally considered for APR FY 2008-09 | Gains/(Losses due to Uncontrollable Factor |
|--------|--------------|--------------|--|---|--|
| 1 | ULDC Charges | 15.36 | 6.38 | 6.38 | 8.98 |

4.5. Capital expenditure for FY 2008-09

Petitioner's submission

The petitioner has submitted that it has incurred Rs 813.08 crores as capital expenditure during FY 2008-09. The details of the capital expenditure submitted by the petitioner for FY2008-09 are summarized in Table 37.

Table 37 : Capital expenditure submitted by GETCO for FY 2008-09

(Rs in Crores)

| Sr. No | Particulars | MYT Approved | FY 2008-09 Revised Estimate |
|--------|---------------------|--------------|-----------------------------|
| | New Projects | | |
| 1 | 400 KV Substations | 24.24 | 10.58 |
| 2 | 400 KV Lines | 60.82 | 122.78 |
| 3 | 220 KV Substation | 15.96 | 101.51 |



| Sr. No | Particulars | MYT Approved | FY 2008-09 Revised Estimate |
|--------|------------------------------------|---------------|-----------------------------|
| 4 | 220 KV Lines | 116.44 | 104.31 |
| 5 | 132 KV Lines | 5.89 | 5.14 |
| 6 | 132 KV Substation | - | 11.80 |
| 7 | 66 KV Substation | 164.46 | 190.90 |
| 8 | 66 KV Lines | 70.76 | 97.16 |
| 9 | Bus Reactor (80 & 125 MVA) | - | 2.64 |
| 10 | Transformer Bay | 115.84 | - |
| 11 | Shunt Capacitor | 4.96 | - |
| | Sub Total of New Projects | 579.37 | 646.81 |
| | R&M | | |
| 1 | Renovation and Modernization | 110.40 | 93.73 |
| 2 | Augmentation of sub-station/ Lines | 66.30 | 72.53 |
| | Sub Total of R&M | 176.70 | 166.27 |
| | Total | 756.07 | 813.08 |

The petitioner has further submitted that the capital expenditure has been incurred mainly for establishment of new sub-stations along with associated transmission network.

Commission's Analysis:

The Commission has examined the capital expenditure claimed by the petitioner for FY 2008-09. The Commission has also examined the addition to assets made by the petitioner at the end of FY 2008-09 as stated in the provisional accounts. For FY 2008-09, under the MYT order an amount of Rs 756.07 crores was approved against which the petitioner has submitted an expenditure of Rs 813.08 crores. The Commission has noted that the increase in the capital expenditure, as stated by the petitioner, has been on account of augmentation of the existing capacity to meet the current and future load demand, for undertaking renovation and for modernization works.

The Commission has thereafter analysed the provisional accounts for FY 2008-09 to estimate the total capitalization for the FY 2008-09. The Commission has observed that the net addition to the assets made by the end of FY 2008-09 is Rs 560 crores.

Based on the above observation the Commission approves the total capitalisation of Rs 570 crores for FY 2008-09 which is summarized in Table 38.

Table 38 : Approved Capitalization for FY 2008-09

(Rs in Crores)

| Particulars | MYT Approved | Revised Estimates as per accounts FY 2008-09 | Provisionally considered for APR FY 2008-09 |
|----------------------------------|--------------|--|---|
| Capital expenditure for the Year | 756.06 | - | - |
| Capitalization | - | 560.00 | 560.00 |



4.6. Funding of capital expenditure for FY 2008-09

Petitioner's submission

The petitioner has submitted that the capital expenditure for FY 2008-09 has been funded through consumer contribution, internal accruals and by raising debt. The break up of the capital expenditure funding submitted by the petitioner is given in Table 39.

Table 39 : Funding of capital expenditure submitted by the GETCO for FY 2008-09

(Rs in Crores)

| Particulars | MYT Approved | FY 2008-09 Revised Estimate |
|----------------------------------|--------------|-----------------------------|
| Capital expenditure for the Year | 756.06 | 813.08 |
| Debt | 217.82 | 604.78 |
| Equity | 508.24 | 82.24 |
| Grants | 30.00 | 34.96 |
| Consumer Contribution | - | 91.10 |

The petitioner has considered grants from two sources viz. from the TASP scheme and a Sagarkedu grant while determining the various sources of funding for its capital expenditure.

Commission's Analysis:

The Commission has examined the submission of the petitioner with regard to the sources of funding for the capital expenditure for FY 2008-09. The Commission has examined the provisional accounts for FY 2008-09 and has noted that the actual capitalisation for the year was Rs 560 crores. The Commission has also noted based on the provisional accounts that the petitioner received grants and contributions of Rs 115 crores during the year. On the basis of the debt-equity ratio of 88:12 submitted by the petitioner, the Commission provisionally approves the source of funding as summarized in Table 40.

Table 40 : Funding of capitalized assets for FY 2008-09

(Rs in Crores)

| Particulars | MYT Approved | FY 2008-09 Revised Estimate | Provisionally considered for APR FY 2008-09 |
|----------------------------------|--------------|-----------------------------|---|
| Capital expenditure for the Year | 756.06 | 813.08 | 560.00 |
| Capitalization | - | - | 560.00 |
| Debt | 217.82 | 604.78 | 392.25 |
| Equity | 508.24 | 82.24 | 53.49 |
| Grants | 30.00 | 34.96 | 115.00 |



| | | | |
|-----------------------|---|-------|--|
| Consumer Contribution | - | 91.10 | |
|-----------------------|---|-------|--|

4.7. Depreciation for FY 2008-09

Petitioner's submission

The petitioner has submitted a total depreciation expense of Rs 208.26 crores for FY 2008-09. The details of the submission of the petitioner are summarized in Table 41.

Table 41: Depreciation expenses submitted by GETCO for FY 2008-09

(Rs in Crores)

| Sr. No. | Particulars | MYT Approved | FY 2008-09 Revised Estimate |
|----------|--------------------------------------|-----------------|--------------------------------|
| 1 | Gross Block in Beginning of the year | 5,457.06 | 5,457.06 |
| 2 | Additions during the Year (Net) | 345.08 | 599.98 |
| 3 | Depreciation for the Year | 179.02 | 208.26 |
| 4 | Average Rate of Depreciation | 3.18% | 3.62% |

The petitioner has computed depreciation on the opening gross block of fixed assets of Rs 5,457.06 crores for FY 2008-09 and has estimated a net addition of assets of Rs 599.98 crores during the year. Further, the rate of depreciation has been considered as per the CERC norms. On the basis of this, the weighted average depreciation rate of 3.62% has been considered by the petitioner during FY 2008-09.

Commission's analysis

The Commission has observed that the petitioner has estimated a depreciation expense of Rs 208.26 crores for FY 2008-09. The Commission has thereafter examined the Gross Fixed Assets (GFA) and additions made to the assets during FY 2008-09 based the provisional accounts for FY 2008-09. As per the provisional accounts, the actual depreciation expenditure incurred during FY 2008-09 is Rs 189.02 crores, which is marginally higher than the amount of Rs 179.02 crores approved under the MYT Order.

The Commission has further observed that the net addition to assets as per provisional accounts at the end of FY 2008-09 is Rs 570 crores which is lower than the amount estimated by the petitioner in its submission.

In regard to the computation of gains / losses the Commission has observed that the regulation 9.6.2(e) of MYT Regulation considers depreciation as a controllable expense. In this regard the Commission is of the view that amount of depreciation is dependent on the amount of capitalization. Therefore, any variance in the amount of capitalization, rate of depreciation or the disposal of existing assets would have impact on the amount of depreciation. In light of this the Commission is of the view that the parameters which impact depreciation should be treated as uncontrollable.

Based on the above principle the Commission approves the depreciation for FY 2008-09. For the computation of gains or losses too, the Commission is guided by the same principle of treating depreciation expense as an uncontrollable expense,



and has computed the gain or loss accordingly. The amount of depreciation provisionally approved for FY 2008-09 is summarized in Table 42.

Table 42 : Approved depreciation expenses for FY 2008-09

(Rs in Crores)

| Sr. No. | Particulars | MYT Approved | Revised Estimates as per accounts FY 2008-09 | Provisionally considered for APR FY 2008-09 | Gains/(Losses) due to uncontrollable factor |
|---------|--------------------------------------|---------------|--|---|---|
| 1 | Gross Block in Beginning of the year | 5,457.06 | 5,457.06 | 5,457.06 | |
| 2 | Additions during the Year (Net) | 345.08 | 570.00 | 570.00 | |
| 3 | Depreciation for the Year | 179.02 | 189.02 | 189.02 | (10.00) |
| 3 | Depreciation for the Year | 179.02 | 189.02 | 189.02 | (10.00) |

4.8. Advance against Depreciation for FY 2008-09

Petitioner's submission

The petitioner has submitted an amount of Rs 13.25 crores towards advance against depreciation (AAD) for FY 2008-09. The details of the AAD charges as submitted by the petitioner are indicated in Table 43.

Table 43 : AAD expenses submitted by GETCO for FY 2008-09

(Rs in Crores)

| Sr. No. | Particulars | MYT Approved | FY 2008-09 Revised Estimate |
|---------|-------------------------------------|--------------|-----------------------------|
| 1 | 1/10th of the Loan(s) | 212.86 | 221.51 |
| 2 | Repayment of the Loan(s) | 229.92 | 964.74 |
| 3 | Minimum of Above | 212.86 | 221.51 |
| 4 | Depreciation during the Year | 179.02 | 208.26 |
| 5 | Advance Against Depreciation | 33.84 | 13.25 |

Commission's analysis

The Commission has examined the submission of the petitioner with regard to AAD. The Commission in its MYT order had approved an AAD amount of Rs 33.84 crores after taking into consideration loan repayment of Rs 212.86 crores, and a depreciation value of Rs 179.02 crores. The Commission has verified the loan estimate and loan repayment assumed by the petitioner for FY 2008-09. The Commission has observed that the components of AAD have changed during the FY 2008-09 compared to the projection considered during the MYT Order.



The Commission is of the view that the parameters impacting the variance in the AAD should be considered as uncontrollable which is in line with the view considered for depreciation.

Based on the above approach the Commission approves advance against depreciation as indicated in Table 44.

Table 44 : Approved AAD and gains/losses for FY 2008-09

(Rs in Crores)

| Particulars | FY 2008-09 MYT Approved | Revised Estimates as per accounts FY 2008-09 | Provisionally considered for APR FY 2008-09 | Gains/(Losses) due to uncontrollable factor |
|------------------------------|-------------------------------|--|--|--|
| Advance Against Depreciation | 33.84 | 13.25 | 13.25 | 20.59 |

4.9. Interest and Finance charges for FY 2008-09

Petitioner's submission

The petitioner has submitted that it has incurred interest and finance charges of Rs 248.08 crores for FY 2008-09 which is higher than the amount of Rs 219.07 crores approved under the MYT order. The details of the interest and finance charges estimated by the petitioner are presented in

Table 45.

Table 45 : Interest and Finance charges submitted by GETCO for FY 2008-09

(Rs in Crores)

| Sr. No. | Particulars | MYT Approved | FY 2008-09 Revised Estimate |
|----------|---|-----------------|--------------------------------|
| 1 | Opening Loans | 2,128.64 | 2,215.13 |
| 2 | Loan Additions during the Year | 508.24 | 1190.89 |
| 3 | Repayment during the Year | 229.92 | 964.74 |
| 4 | Closing Loans | 2,406.96 | 2,441.28 |
| 5 | Average Loans | 2,267.80 | 2,328.20 |
| 6 | Interest on Loan | 212.27 | 244.40 |
| 7 | Guarantee Charges | 6.80 | 3.68 |
| 8 | Total Interest & Financial Charges | 219.07 | 248.08 |
| 9 | Cost of addition loan | 10.75% | |
| 10 | Weighted Average Rate of Interest on Loan | 9.36% | 10.50% |



The petitioner has estimated the interest and finance charges on opening loan of Rs 2,215 crores for FY 2008-09 and has assumed an additional loan of Rs 1,190 crores being raised during FY 2008-09. The petitioner has assumed an average tenure of the loan as 10 years.

Commission's analysis

The Commission has examined the submission of the petitioner with regard to the amount of loan and interest repayment. The Commission has also reviewed the actual payments made as interest and finance charges as per the provisional accounts for FY 2008-09. The Commission has observed that the interest & finance charges claimed by the petitioner of Rs 248.08 crores are higher than the amount of Rs 219.07 crores approved under the MYT order. The Commission has also noted that as per the provisional accounts, the interest and finance charges actually paid for FY 2008-09 are Rs 239.67 crores.

The Commission has further computed the interest and finance charges based on the actual capitalization and the funding pattern given in the provisional accounts. The interest and finance charges so computed by the Commission are stated in the Table 46

Table 46: Interest and finance charges computed by Commission for FY 2008-09

(Rs in Crores)

| Sr. No. | Particulars | Estimates as per computation based on provisional accounts or FY 2008-09 |
|----------|---|--|
| 1 | Opening Loans | 2215.13 |
| 2 | Loan Additions during the Year | 392.26 |
| 3 | Repayment during the Year | 964.74 |
| 4 | Closing Loans | 1642.65 |
| 5 | Average Loans | 1928.89 |
| 6 | Interest on Loan | 202.49 |
| 7 | Guarantee Charges | 3.68 |
| 8 | Total Interest & Financial Charges | 198.81 |
| 9 | Weighted Average Rate of Interest on Loan | 10.50% |

The Commission has observed that on the basis of assuming the capitalization value of Rs 560 crores for FY 2008-09, and after considering the amount received in the form of grants verified from the provisional accounts as Rs 115 crores, the debt computed on a normative basis is Rs 392 crores. Based on these estimates, the interest and finance charges computed by the Commission for FY 2008-09 are Rs 198.81 crores. This amount is lower than the amount claimed by the petitioner.



The Commission has observed that the interest and finance charges as per the provisional accounts are Rs 239.67 crores. The Commission on verification of the accounts has noted that a component of interest on working capital of Rs 166.19 crores has also been included in the total computation of the interest and finance charges. The Commission therefore directed the petitioner during the course of the analysis to clarify the variance in the petition and the provisional accounts. The Commission further asked the petitioner to explain the inclusion of interest on working capital in the computation of interest and finance charges. The petitioner has provided the explanation that, raising of funds to finance capital expenditure for it is undertaken by two agencies, viz. GETCO and GUVNL. The petitioner has further explained that the amount of Rs 166.19 crores stated as interest on borrowings for working capital is inclusive of the interest on short term/temporary borrowing of GUVNL for capital expenditure for GETCO. The Commission has made note of this explanation.

The Commission has further observed that Regulation 9.6.2(e) of the MYT Regulations considers parameters which impact the variance in interest and finance charges as controllable. However, the Commission is of the view that interest and finance charges are directly linked to the amount of borrowing. Further, the amount of borrowing is directly linked to the amount of capital expenditure which the petitioner undertakes. Finally, the amount interest and finance charge is directly dependent on the amount of capitalization undertaken during a financial year. In light of this the Commission is of the view that the parameters which impact interest & finance charges should be treated as uncontrollable.

Based on this approach and the clarification made by the petitioner on the variances, the Commission has undertaken the provisional annual performance review for FY 2008-09. The Commission has however noted that the interest and finance charges as per the provisional accounts do have an element of interest on working capital charges. In order to avoid double counting, the Commission has excluded the revised estimate of interest on working capital charges of Rs 24.23 crores computed and approved by the Commission for FY 2008-09 from the total interest and finance charges Rs 239.67 crores.

Accordingly, the Commission provisionally approves the amount of interest and finance charges of Rs. 215.43 crores. The Commission also provisionally approves the amount of Rs. 10.48 crores as gains for the FY 2008-09. The amount of interest and finance charges and the losses provisionally approved by the Commission for FY 2008-09 are indicated in Table 47

Table 47 : Approved Interest and Finance charges for FY 2008-09

(Rs in Crores)

| Sr. No. | Particulars | FY 2008-09 MYT | Revised Estimates as | Provisionally considered for | Gains/(Losses) due to |
|---------|-------------|----------------|----------------------|------------------------------|-----------------------|
|---------|-------------|----------------|----------------------|------------------------------|-----------------------|



| | | Approved | per accounts FY 2008-09 | APR FY 2008-09 | uncontrollable factor |
|---|-------------------------------|----------|----------------------------|-------------------|--------------------------|
| 1 | Interest & Finance Charges | 219.07 | 239.67 | 215.43 | 3.63 |

4.10. Return on Equity for FY 2008-09

Petitioner's submission

The petitioner has submitted a return on equity of Rs 233.08 crores for FY 2008-09. The details of the submission made by the petitioner are summarized in Table 48.

Table 48: ROE submitted by GETCO for FY 2008-09

(Rs in Crores)

| Sr. No. | Particulars | MYT Approved | FY 2008-09 Revised Estimate |
|---------|----------------------------------|-----------------|-----------------------------------|
| 1 | Opening Equity Capital | 1,772 | 1,623 |
| 2 | Equity Additions during the Year | 217 | 82 |
| 3 | Closing Equity | 1,990 | 1,705 |
| 4 | Average Equity | 1,881 | 1,664 |
| 5 | Rate of Return on the Equity | 14% | 14% |
| | Return on Equity | 263.36 | 233.08 |

Commission's analysis

The Commission has examined that the return on equity submitted by the petitioner is lower than the amount approved under the MYT Order. The Commission further observes that the Regulation 9.6.2(e) of the MYT regulations considers the parameters impacting the variance in the return on equity as controllable. However, the Commission is of the view that the return on equity depends on the amount of capitalization as well as the debt to equity ratio considered during the financial year and these parameters are uncontrollable in nature. Accordingly, the gains arising on account of the variance in the amount of return on equity submitted by the petitioner and the amount approved under the MYT Order should be treated as uncontrollable. The Commission has also observed that the variance in return on equity is not on account of any of the actions of the petitioner which could have been undertaken to bring efficiency in its operations.

Based on the above approach the Commission has computed the permissible return on equity for FY 2008-09. Accordingly, the Commission has computed the return on equity based on the actual capitalization made during the year. The Commission has on the basis of the provisional accounts estimated that the actual capitalization at Rs 560 crores during FY 2008-09. The consumer contribution received by the petitioner during the year has been computed at Rs 115 crores based on the provisional accounts. After considering the contributions and grants received, the Commission has computed the equity addition on the capitalized amount at Rs 53.49 crores. At a



14% rate of return, the return on equity computed by the Commission is at Rs 231.15 crores. Based on this, the Commission has computed the gains at Rs 32.21 crores. Commission's computation is summarized in the **Table 49**

Table 49: ROE estimated by the Commission for FY 2008-09

(Rs in Crores)

| Sr. No. | Particulars | Estimates as per computation based on provisional accounts or FY 2008-09 |
|---------|----------------------------------|--|
| 1 | Opening Equity Capital | 1,623 |
| 2 | Equity Additions during the Year | 53.49 |
| 3 | Less Equity of SLDC | 2.33 |
| 4 | Closing Equity | 1,677 |
| 5 | Average Equity | 1,650 |
| | Rate of Return on the Equity | 14% |
| | Return on Equity | 231.07 |

Based on the above observation the Commission provisionally approves Rs. 231.07 crores towards return on equity for FY 2008-09. The return on equity and the gains /losses provisionally approved for FY 2008-09 by the Commission are indicated in Table 50.

Table 50: Approved ROE for FY 2008-09

(Rs in Crores)

| Sr. No. | Particulars | FY 2008-09 MYT Approved | Revised Estimates as per accounts FY 2008-09 | Provisionally considered for APR FY 2008-09 | Gains/(Losses) due to uncontrollable factor |
|---------|------------------|-------------------------|--|---|---|
| 1 | Return on Equity | 263.36 | 230.90 | 230.90 | 32.29 |

4.11. Interest on Working Capital for FY 2008-09

Petitioner's submission

The petitioner has claimed Rs. 31.08 Crores towards interest on working capital compared to the Rs 27.78 crores approved under the MYT order for FY 2008-09. The petitioner has stated that the interest on working capital has been calculated based on the normative principles as provided under the GERC Terms and Conditions of Tariff Regulations, 2005. The details of interest on working capital charges submitted by the petitioner are presented in Table 51.

Table 51: Interest on working capital submitted by GETCO for FY 2008-09

(Rs in Crores)

| Sr. No. | Particulars | MYT Approved | FY 2008-09 Revised Estimate |
|---------|-------------|--------------|-----------------------------|
|---------|-------------|--------------|-----------------------------|



| | | | |
|---|--|--------------|--------------|
| 1 | O & M expenses (1 Month) | 35.74 | 48.19 |
| 2 | Maintenance Spares (1% of Cost @ 6 % Escalation) | 61.86 | 66.70 |
| 3 | Receivables (2 Months) | 173.47 | 188.33 |
| 4 | Total Working Capital | 271.07 | 303.22 |
| 5 | Rate of Interest on Working Capital | 10.25% | 10.25% |
| | Interest on Working Capital | 27.78 | 31.08 |

Commission's analysis

The Commission has examined the submission of the petitioner. The Commission has observed that the interest on working capital claimed by the petitioner is higher than the amount approved under the MYT Order. The Commission has computed the interest on working capital based on the approved estimates of O&M and normative computation of maintenance spares and receivables. The summary of the computation is shown in Table 52.

Table 52: Interest on working capital computed by Commission for FY 2008-09

(Rs in Crores)

| Sr. No. | Particulars | Estimates as per computation based on provisional accounts or FY 2008-09 |
|---------|-------------------------------------|--|
| 1 | O & M expenses (1 Month) | 45.92 |
| 2 | Maintenance Spares (1% of Cost) | 54.55 |
| 3 | Receivables (2 Months) | 135.96 |
| 4 | Total Working Capital | 236.43 |
| 5 | Rate of Interest on Working Capital | 10.25% |
| | Interest on Working Capital | 24.23 |

Further, the Commission has observed that the petitioner has considered the parameters affecting the variance in the interest on working capital as uncontrollable. The Commission is however of the opinion that Interest on working capital is to be treated as a controllable expense. Based on the above approach, the Commission provisionally approves the interest on working capital estimated on the basis of the provisional accounts for FY 2008-09. The details of the interest on working capital charges provisionally approved are indicated in Table 53.

Table 53: Approved Interest on working capital for FY 2008-09

(Rs in Crores)

| Particulars | FY 2008-09 MYT Approved | Revised Estimates as per accounts FY 2008-09 | Provisionally considered for APR FY 2008-09 | Gains/(Losses) due to uncontrollable factor |
|------------------------------------|-------------------------|--|---|---|
| Interest on Working Capital | 27.78 | 24.23 | 24.23 | 3.55 |



4.12. Income from other sources for FY 2008-09

Petitioner's submission

The petitioner has estimated an amount of Rs 64.87 crores for FY 2008-09 as income from other sources which is higher than the amount of Rs 45.01 crores projected under the MYT order. The details of revenue from other income submitted by the petitioner for FY 2008-09 are provided in Table 54.

Table 54: Other Income as submitted by GETCO for FY 2008-09

(Rs in Crores)

| Sr. No. | Particulars | MYT Approved | FY 2008-09 Revised Estimate |
|---------|--|--------------|-----------------------------|
| 1 | Interest on Staff Loans and Advances. | 1.77 | 1.39 |
| 2 | Income from Investments deposits. | - | - |
| 3 | Interest on Advances to Others. | 0.03 | 0.00 |
| 4 | Interest from Banks | - | - |
| 5 | Income from Trading -Stores, Scrap etc. | 2.70 | 4.11 |
| 6 | Income from Staff Welfare Activities. | - | - |
| 7 | Gain on sale of Fixed Assets | 3.65 | 3.10 |
| 8 | Miscellaneous Receipts. | 26.87 | 44.45 |
| 9 | Contribution and Grants towards cost of capital assets | 10.00 | 11.81 |
| 10 | Net Other Income | 45.01 | 64.87 |

Commission's analysis

The Commission has reviewed the revenue from other income submitted by the petitioner for FY 2008-09. As per the MYT order, the Commission had approved a non-tariff income of Rs 45.01 Crores. The Commission has further examined the provisional accounts of the petitioner and has found that the revenue from other income provided in the provisional accounts is Rs 78.06 crores.

The Commission has noted that under the MYT Regulations the parameters impacting the revenue from other income are categorized as controllable. However, the Commission is of the opinion that since the revenue from other income largely comprises of interest income on loans and advances and other miscellaneous income, the variations in the same is governed by uncontrollable factors. Therefore, the Commission considers the reasons for variance in revenue from other income as uncontrollable.

Based on the above approach the Commission provisionally approves the revenue from other income as per the provisional accounts of the petitioner for FY 2008-09 which is summarized in Table 55.



Table 55: Approved Revenue from other Income for FY 2008-09

(Rs in Crores)

| Sr. No. | Particulars | FY 2008-09 MYT Approved | Revised Estimates as per accounts FY 2008-09 | Provisionally considered for APR FY 2008-09 | Gains/(Losses) due to uncontrollable factor |
|---------|------------------|-------------------------|--|---|---|
| 1 | Net Other Income | 45.01 | 78.06 | 78.06 | 33.05 |

4.13. Sharing of gains/losses and entitlement for FY 2008-09

Based on the annual performance review for each of the component in the previous section, the Commission has now computed the sharing of gains / losses for FY 2008-09. The gains/losses computed by the commission have been separately done for the controllable parameters and uncontrollable parameters. Gains / losses on account of controllable parameters are outlined in Table 56.

Table 56: Sharing of gains or losses for controllable factors for FY 2008-09

(Rs in Crores)

| Sr. No. | Particulars | FY 2008-09 MYT Approved | Revised Estimates as per accounts FY 2008-09 | Gain/(Loss) due to Controllable Factor |
|---------|--|-------------------------|--|--|
| 1 | Operations & Maintenance Expenses | | | |
| 1.1 | <i>Employee Cost excluding impact on account of provisions of 6th Pay Commission</i> | 246 | 250.83 | (4.83) |
| 1.2 | <i>Repair & Maintenance</i> | 91.85 | 132.27 | (40.42) |
| 1.3 | <i>Administration & General Charges</i> | 45.85 | 47.37 | (1.52) |
| 2. | <i>Interest on working capital</i> | 27.78 | 24.86 | 3.55 |
| | Total | 383.70 | 430.47 | (43.22) |

The Commission has further analyzed the gains / losses arising on account of uncontrollable parameters which are indicated in Table 57.

Table 57: Sharing of gains or losses for uncontrollable factors for FY 2008-09

(Rs in Crores)

| Sr. No. | Particulars | FY 2008-09 MYT Approved | Revised Estimates as per accounts FY 2008-09 | Gain/(Loss) due to Uncontrollable Factor |
|---------|--|-------------------------|--|--|
| 1 | Employee expenses for sixth pay commission | 45.23 | 120.61 | (75.38) |
| 2 | ULDC Charges | 15.36 | 6.38 | 8.98 |
| 3 | Depreciation | 179.02 | 189.02 | (10.00) |
| 4 | Advance Against Depreciation | 33.84 | 13.25 | 20.59 |
| 5 | Interest & Finance Charges | 219.07 | 239.67 | 3.63 |
| 6 | Return on Equity | 263.36 | 231.15 | 32.29 |
| 7 | Capitalized expenses | 86.32 | 99.77 | 13.45 |
| 8 | Other Income | 45.01 | 78.06 | 33.05 |



| | | | | |
|--|--------------|---------------|---------------|--------------|
| | Total | 783.66 | 824.94 | 26.61 |
|--|--------------|---------------|---------------|--------------|

For the purpose of computation of gains / losses to be shared due to controllable and uncontrollable parameters the Commission has considered the provisions of MYT regulations as indicated below:

➤ **Controllable parameters:**

- The Commission has considered the provision of Regulation 11.1 for sharing of gain to the transmission or licensee company. The said regulation provides that the transmission or licensee company shall be entitled to retain one third (1/3) of aggregate gain.
- The Commission has considered the provision of Regulation 11.2 for sharing of losses. The said regulation provides that one third of the amount of such loss **may be** passed on as additional charges in tariffs over such period as specified by the Commission. The balance amount of loss shall be absorbed by the transmission or licensee Company.

➤ **Uncontrollable parameters:** The Commission has considered the provisions as contained in regulations 10.1 of MYT regulations which provide that the approved aggregate gain or loss to the generating company on account of uncontrollable parameters shall be passed through as an adjustment in the tariff of the transmission or licensee company.

Based on the above principles for sharing of gains/losses on account of controllable and uncontrollable parameters, the Commission has now computed the Aggregate Revenue Requirement for the petitioner for FY 2008-09 which is indicated in Table 58.

Table 58: ARR for FY 2008-09 after annual performance review

(Rs in Crores)

| Sr. No. | Particulars | FY 2008-09 MYT Approved | Revised Estimates as per accounts FY 2008-09 | Provisionally considered for APR FY 2008-09 | Gain/(Loss) due to Controllable Factor | Gain/(Loss) due to Uncontrollable Factor |
|---------|--|-------------------------|--|---|--|--|
| 1 | Operations & Maintenance Expenses | 428.93 | 551.07 | 551.07 | | - |
| 1.1 | <i>Employee Cost incl. impact on account of provisions of 6th Pay Commission for FY 2007-08 & FY 2008-09</i> | 291.23 | 371.44 | 371.44 | (4.83) | (75.38) |
| 1.2 | <i>Repair & Maintenance</i> | 91.85 | 132.27 | 132.27 | (40.42) | |
| 1.3 | <i>Administration & General Charges</i> | 45.85 | 47.37 | 47.37 | (1.51) | |
| 2 | ULDC Charges | 15.36 | 6.38 | 6.38 | | 8.98 |
| 3 | Depreciation | 179.02 | 189.02 | 189.02 | | (10.00) |
| 4 | Advance Against Depreciation | 33.84 | 13.25 | 13.25 | | 20.59 |
| 5 | Interest & Finance Charges | 219.07 | 239.67 | 215.43 | | 3.63 |
| 6 | Interest on Working Capital | 27.78 | - | 24.23 | 3.55 | |
| 7 | Return on Equity | 263.36 | 231.07 | 231.07 | | 32.29 |



| Sr. No. | Particulars | FY 2008-09 MYT Approved | Revised Estimates as per accounts FY 2008-09 | Provisionally considered for APR FY 2008-09 | Gain/(Loss) due to Controllable Factor | Gain/(Loss) due to Uncontrollable Factor |
|---------|--------------------------------------|-------------------------|--|---|--|--|
| 8 | Total Fixed Costs | 1,167.36 | 1,230.46 | 1,230.46 | (43.22) | (19.89) |
| 9 | Less: Expenses Capitalized | 86.32 | 99.77 | 99.77 | | 13.45 |
| 10 | Total Transmission Charges | 1,081.04 | 1,130.68 | 1,130.68 | | |
| 11 | Less: Other Income | 45.01 | 78.06 | 78.06 | | 33.05 |
| 12 | Aggregate Revenue Requirement | 1,036.03 | 1,052.62 | 1052.62 | (43.22) | 26.62 |

The amount of losses arising out of controllable parameters has been computed at Rs 43.22 crores for FY 2008-09. Of this, the 1/3 rd share of Rs 14.40 crores may be passed on as additional charges in tariffs as per the MYT Regulations. The amount of gains arising out of uncontrollable parameters has been computed at Rs 26.61 crores, which is to be fully passed as per the MYT Regulations. Based on the above computation the Commission provisionally approves the amount of gains as indicated in Table 59.

Table 59: Approved gains / (losses) for FY 2008-09

(Rs. Crore)

| Particulars | Amount of Gains/(Losses) provisionally approved for FY 2008-09 |
|---|--|
| Gains / (losses) on account of Controllable parameters | (14.40) |
| Gains / (losses) on account of Uncontrollable parameters | 26.62 |
| Provisionally approved Gains / (Losses) for FY 2008-09 | 12.22 |

The Commission is of the view that the above gain for FY 2008-09 is provisional in nature and shall be approved based on its verification from the audited accounts of the petitioner.



5. Determination of Aggregate Revenue Requirement for FY 2009-10

5.1. Approach for FY 2009-10

This section deals with the revision of aggregate revenue requirement for FY 2009-10. Regulation 9.7 of the MYT Regulations provides that the Commission shall, subsequent to the annual performance review, revise the forecast for the remaining period of the control period. Accordingly, after undertaking the annual performance review for FY 2008-09, the Commission has considered the revision of ARR for the FY 2009-10. In this regard the Commission has reviewed the submission of the petitioner.

The Commission has noted that for FY 2009-10, SLDC expenses are to be considered separately and not to be included in the estimates of the petitioner, GETCO. The Commission has also noted that ARR for SLDC for FY 2009-10 is being undertaken separately. The Commission has also observed that the MYT approved estimates for FY 2009-10 were also inclusive of estimates applicable for SLDC. Therein, to avoid duplication, the Commission has excluded the estimates of SLDC from the earlier MYT order approved estimates for FY 2009-10. The net approved MYT estimates have then been compared with the revised estimates of the petitioner for FY 2009-10 for the ARR of FY 2009-10.

In regard to the review of the components of ARR, the Commission is of the view that controllable items should be considered as per the level approved under the MYT Framework, unless there are justifiable reasons to revise the same. Reasons for revision of the controllable parameters would be analyzed within the framework of Regulation 9.6 of the MYT Regulations.

In regard to the uncontrollable parameters the Commission is of the view that such parameters shall be revised based on the analysis and verification of the submissions made by the petitioner and the provisional annual performance review undertaken for FY 2008-09.

The subsequent sections deal with review of each component of the ARR for FY 2009-10

5.2. Operations and Maintenance Expenses for FY 2009-10

Petitioner's submission

The petitioner has estimated Rs 591.70 crores towards Operations and Maintenance expenditure for FY 2009-10. The O&M cost comprises of expenditure on employee cost, Administration and General Expenses and Repair and Maintenance expenses.



The petitioner has submitted that the estimated O&M expenses for FY 2009-10 are based on the revised estimates for FY 2008-09. The submission of the petitioner is summarized in Table 60.

Table 60: O&M expense estimated by GETCO for FY 2009-10

(Rs in Crores)

| Sr. No. | Operations & Maintenance Expenses | Approved as per MYT order for FY 2009-10 | Revised Estimates as submitted by GETCO for FY 2009-10 |
|---------|-----------------------------------|--|--|
| 1 | Employee Cost | 290.92 | 398.91 |
| 2 | Repair & Maintenance | 97.36 | 134.24 |
| 3 | Administration & General expenses | 47.57 | 58.55 |
| | Total O&M | 435.85 | 591.70 |

The petitioner has stated that it has estimated the O&M expense for FY 2009-10 by escalating the employee cost by 8%, the R&M expense by 10% and A&G expense by 8%. The petitioner has stated that the employee expenses estimated are inclusive of provision of Rs 30.15 crores for FY 2007-08 and additionally a provision of Rs 80.45 crores as increases in employee costs due to implementation of the sixth pay commission.

Commission's Analysis

The Commission has examined the submission of the petitioner and has observed that a major portion of the FY 2009-10 has already elapsed. Further, O&M Expense is considered as controllable expense. Therefore, the Commission is of the view that there is no merit in revising the O&M expense at this stage. The Commission shall examine the O&M expense at the time of the annual performance review for FY 2009-10 based on the audited accounts.

Based on the above approach the Commission approves the O&M expense for FY 2009-10 at the same level as approved under the MYT Order. The amount of O&M expense approved for FY 2009-10 is summarized in Table 61.

Table 61 : Approved O&M expense for FY 2009-10

(Rs in crores)

| Sr. No. | Operation & Maintenance Expenses | Approved as per MYT | Approved for SLDC for FY 2009-10 | Net MYT approved | Revised estimates submitted by GETCO | Revised Approved |
|---------|----------------------------------|---------------------|----------------------------------|------------------|--------------------------------------|------------------|
| 1 | Employee Cost | 290.92 | 5.53 | 285.39 | 398.91 | 290.92 |
| 2 | Repair & Maintenance | 97.36 | 0.11 | 97.25 | 134.24 | 97.25 |
| 3 | Administration & General Charges | 47.57 | 3.45 | 44.11 | 58.55 | 44.11 |



| | | | | | | |
|--|----------------------|---------------|-------------|---------------|---------------|---------------|
| | Total O&M | 435.85 | 9.09 | 426.76 | 591.70 | 432.28 |
|--|----------------------|---------------|-------------|---------------|---------------|---------------|

5.3. ULDC charges for FY 2009-10

Petitioner's submission

The petitioner has estimated Rs.6.38 Crores towards ULDC charges for FY 2009-10 compared to Rs. 15.36 crores approved under the MYT Order. The petitioner has further submitted that from FY 2009-10 the ULDC charges are to be claimed separately as part of the ARR for SLDC. Accordingly, the petitioner has submitted that it is not claiming the ULDC charges for FY 2009-10.

The ULDC charges estimated by the petitioner are summarized in Table 62.

Table 62 : ULDC expense estimated by GETCO for FY 2009-10

(Rs in crores)

| Sr. No. | Particulars | Approved as per MYT order for FY 2009-10 | Revised Estimates as submitted by GETCO for FY 2009-10 |
|---------|--------------|--|--|
| 1 | ULDC Charges | 15.36 | 6.38 |

Commission's Analysis

The Commission has observed that as per its directive, separate ARR has been filed for SLDC. Accordingly, ULDC charges shall form part of the submission of SLDC. In light of this, the Commission has excluded the ULDC charges as part of the expenses to be claimed under ARR for FY 2009-10 of GETCO. The amount now disallowed from the ARR of the petitioner is indicated in Table 63.

Table 63 : Revised ULDC charges for FY 2009-10

(Rs in crores)

| Sr. No. | Particulars | Approved as per MYT order for FY 2009-10 | Revised Estimates as submitted by GETCO for FY 2009-10 | Revised approved |
|---------|--------------|--|--|------------------|
| 1 | ULDC Charges | 15.36 | 6.38 | - |

5.4. Capital expenditure, capitalisation and funding for FY 2009-10

Petitioner's Submission

The petitioner has estimated a capital expenditure of Rs 1,393.55 crores for FY 2009-10 compared to Rs 1,610.37 crores approved under the MYT order. The details of the capital expenditure estimated by the petitioner for FY 2009-10 are given in Table 64.



Table 64 : Capital works planned by GETCO for FY 2009-10

(Rs

crores)

| Particulars | Approved as per MYT order for FY 2009-10 | Revised Estimates as submitted by GETCO for FY 2009-10 |
|---|--|--|
| New Projects | | |
| 400 KV Substations | 89.03 | 65.84 |
| 400 KV Lines* | 462.14 | 457.16 |
| 220 KV Substation | 68.61 | 176.58 |
| 220 KV Lines* | 202.59 | 205.46 |
| 132 KV Lines | 140.80 | 8.03 |
| 132 KV Substation | 6.05 | - |
| 66 KV Substation | 140.80 | 145.18 |
| 66 KV Lines | 61.32 | 115.42 |
| Bus Reactor (80 & 125 MVA) | 22.00 | 47.69 |
| Shunt Capacitors | 21.65 | - |
| 400/220 kV (315 MVA), 220/66 kV (50 MVA) Transformer bay along with 400kV & 220kV Feeder / Transformer bays | 136.59 | - |
| Future projects anticipated | 22.00 | |
| Transmission lines for evacuation of Wind energy Generation and SEZ development | 200.00 | - |
| Sub Total of New Projects | 1,432.8 | 1,221.35 |
| R&M | | |
| Renovation and Modernization | 88.70 | 117.20 |
| Rejuvenation & Refurbishment | 6.00 | - |
| Augmentation of sub-station/ Lines | 77.50 | 55.00 |
| Sub Total of R&M | 172.1 | 172.20 |
| Total | 1610.3 | 1,393.55 |
| *Incl of IPTC | | |

The petitioner has also submitted the amount of capital expenditure approved under the MYT order for FY 2009-10 which is summarized in Table 65.

Table 65 : Capital expenditure estimated by GETCO for FY 2009-10

(Rs in crores)

| Sr. No | Particulars | Approved as per MYT order for FY 2009-10 | Revised Estimates as submitted by GETCO for FY 2009-10 |
|--------|---------------------|--|--|
| 1 | Capital expenditure | 1,610.37 | 1,393.55 |

In its submission, the petitioner has considered a debt equity ratio of 70:30 after considering for grants under the TASP scheme of Rs 130 crores. Break up of source of funding and capitalization is summarized in Table 66.



Table 66 : Capitalization and sources of funding estimated by GETCO for FY 2009-10

(Rs. in crores)

| Particulars | Approved as per MYT order for FY 2009-10 | Revised Estimates as submitted by GETCO for FY 2009-10 |
|---------------------|--|--|
| Capital expenditure | 1,610.37 | 1,393.55 |
| Capitalisation | - | 1,393.55 |
| Debt % | 70% | 70% |
| Debt | 1,127.26 | 884.48 |
| Equity | 483.11 | 379.06 |
| Grant (TASP Scheme) | - | 130.00 |

Commission's Analysis

The Commission has examined the submission of the petitioner with regard to capital expenditure for FY 2009-10. The Commission has observed that the capital expenditure projected by the petitioner for FY 2009-10 is lower than the amount of Rs 1,610.37 crores approved under the MYT order.

The Commission thereafter directed the petitioner to provide details on the capital works and the reason for the lower capital expenditure compared to the amount approved under the MYT Order. The petitioner has clarified that some of the capital works which were originally planned to be undertaken for FY 2009-10 have been deferred to a later time period lowering the overall capital expenditure for FY 2009-10.

The Commission is of the view that Capital Expenditure should be considered based on the expenditure incurred by the petitioner. Since a major portion of FY 2009-10 has already elapsed, the Commission is of the view that the amount of capital expenditure approved under the MYT Order should be revised based on the submission of the petitioner. The Commission is of the view that the revised submission of the petitioner would reflect the scenario which would be closer to the actual capital expenditure.

With regard to capitalization, the Commission had asked the petitioner for details on the actual extent of capitalization for the ongoing projects. The petitioner has clarified that as per the provisional accounts, at the end of FY 2008-09 the capital works in progress were estimated to be Rs 673 crores which is expected to be capitalized in FY 2009-10. In addition to this, the petitioner estimates that there would be a capitalization of Rs 720 crores out of the fresh capital expenditure undertaken in FY 2009-10. Therefore the actual capitalization during FY 2009-10 has been computed to be Rs 1,393 crores.



It is also to be noted here that while analyzing the capital expenditure estimated to be undertaken during the control period, the Commission has in the MYT Order dated 17th January 2009, provisionally disallowed the expenditure related to transmission lines for evacuation of power from the generating stations being set up by Adani Power Pvt Ltd (APPL) and Essar Power Limited (EPOL) due to deviation in evacuation point (delivery point) than the approved bid documents.

Subsequently, the GUVNL has filed petition (No. 962 of 2009) requesting for approval of change in delivery point for evacuation of power from aforesaid generating stations. The Commission has through order dated 17th November 2009 in the said matter, adopted the recommendation made by the Bid Evaluation committee and allowed the GUVNL to change the delivery point in the PPAs. In view of this, the Commission now allows the capital expenditure proposed by GETCO in this regard.

Based on the above observation the Commission approves Rs 1,393 crores towards capitalization for FY 2009-10.

In regard to the source of financing, the Commission has observed that the petitioner has considered grants of Rs 130 crores from the TASP scheme which was not considered during the MYT order. The Commission directed the petitioner to provide explanation on the inclusion of grants from this scheme. The petitioner has clarified that the grant from TASP scheme may vary on from one year to another. For FY 2009-10, it is estimated that grants of Rs 130 crores would be available.

Based on the above observation, the Commission provisionally approves the amount of capitalization and the source of funding as summarized in Table 67.

Table 67 : Revised capitalization and sources of financing for FY 2009-10

(Rs. in crores)

| Particulars | Approved as per MYT order for FY 2009-10 | Approved for SLDC for FY 2009-10 | Net MYT approved | Revised Estimates as submitted by GETCO for FY 2009-10 | Revised approved for FY 2009-10 |
|---------------------|--|----------------------------------|------------------|--|---------------------------------|
| Capital expenditure | 1,610.37 | 6.30 | 1,604.07 | 1,393.55 | 1,393.55 |
| Capitalisation | - | - | - | 1,393.55 | 1,393.55 |
| Debt % | 70% | 70% | 70% | 70% | 70% |
| Debt | 1,127.26 | 4.41 | 1122.85 | 884.48 | 884.48 |
| Equity | 483.11 | 1.89 | 481.22 | 379.06 | 379.06 |
| Grant (TASP Scheme) | - | - | - | 130.00 | 130.00 |



5.5. Depreciation for FY 2009-10

Petitioner's submission

The petitioner has estimated depreciation charges of Rs 333.96 crores for FY 2009-10. The petitioner has stated that the projections have been based upon the asset base provided under the provisional accounts FY 2008-09. The depreciation charges projected by the petitioner are summarized in the Table 68.

Table 68 : Depreciation charges estimated by GETCO for FY 2009-10

(Rs in crores)

| Sr. No. | Particulars | Approved as per MYT order for FY 2009-10 | Revised Estimates as submitted by GETCO for FY 2009-10 |
|----------|--------------------------------------|--|--|
| 1 | Gross Block in Beginning of the year | 5,802.14 | 6,050.37 |
| 2 | Additions during the Year (Net) | 595.47 | 1,076.40 |
| 3 | Depreciation for the Year | 193.98 | 333.96 |
| 4 | Average Rate of Depreciation | 3.18% | 5.07% |

The petitioner has further submitted that it has considered the new rate of depreciation as per the revised CERC Guidelines.

Commission's Analysis

The Commission has examined the submission of the petitioner. The Commission has computed the opening and closing GFA for FY 2009-10 based on the closing GFA of FY 2008-09 and the capitalization for FY 2009-10 which is summarized in Table 69.

Table 69: Opening and closing GFA for FY2009-10

(Rs. in crores)

| Gross Block as on 31.03.2009 | Addition to Gross Block during 2009-10 | Gross Block as on 31.03.2010 |
|------------------------------|--|------------------------------|
| 6011.13 | 1,393 | 7,404 |

The Commission has observed that the petitioner has computed the depreciation for FY 2009-10 using CERC depreciation rates on different categories of assets like plant & machinery, buildings, cables, etc as permitted by GERC Terms & Conditions of Tariff Regulations, 2005. Accordingly, the Commission has computed the actual depreciation expense for FY 2009-10 by employing the weighted average depreciation rate of 5.07% considered by the petitioner.

Based on the above approach, the Commission approves depreciation amount of Rs. 343 crores for FY 2009-10. Further, the Commission shall consider any variation in depreciation during the annual performance review for FY 2009-10. The summary for depreciation expense is outlined in Table 70.



Table 70: Approved Depreciation for FY 2009-10

(Rs. in crores)

| Particulars | Approved as per MYT order for FY 2009-10 | Approved for SLDC for FY 2009-10 | Net MYT approved | Revised Estimates as submitted by GETCO for FY 2009-10 | Revised Approved for FY 2009-10 |
|--------------|--|----------------------------------|------------------|--|---------------------------------|
| Depreciation | 193.98 | 0.43 | 193.55 | 333.96 | 340.07 |

5.6. Advance Against Depreciation for FY 2009-10**Petitioner's submission**

The petitioner has submitted that it is considering depreciation at the rates now revised by the CERC. Accordingly, it is not considering any AAD for the FY 2009-10.

Commission's Analysis

The Commission has examined the submission of the petitioner. The Commission has observed that the petitioner has not considered any AAD as it has considered the revised depreciation rates provided by the CERC. The Commission has observed that under the revised CERC guidelines, AAD is no longer permissible. Accordingly, the Commission approves the submission of the petitioner.

5.7. Interest and Finance charges for FY 2009-10**Petitioner's submission**

The petitioner has estimated an amount of Rs 274.70 crores towards total interest and finance charges for FY 2009-10 which is lower than Rs 281.48 crores approved under the MYT order. The details of the interest and finance charges estimated by the petitioner for FY 2009-10 are presented in Table 71.

Table 71 : Interest and finance charges estimated by GETCO for FY 2009-10

(Rs in crores)

| Sr. No. | Particulars | Approved as per MYT order for FY 2009-10 | Revised Estimates as submitted by GETCO for FY 2009-10 |
|---------|--------------------------------|--|--|
| 1 | Opening Loans | 2,406.96 | 2,437.78 |
| 2 | Loan Additions during the Year | 1,127.26 | 784.48 |
| 3 | Repayment during the Year | 289.36 | 269.53 |
| 4 | Closing Loans | 3,244.86 | 2,952.74 |
| 5 | Average Loans | 2,825.91 | 2,695.26 |



| | | | |
|---|---|---------------|---------------|
| 6 | Interest on Loan | 274.68 | 282.95 |
| 7 | Guarantee Charges | 6.80 | 2.00 |
| 8 | Total Interest & Financial Charges | 281.48 | 274.70 |
| 9 | Weighted Average Rate of Interest on Loan | 9.72% | 10.50% |

Commission's Analysis

The Commission has examined the interest and finance charges estimated by the petitioner for FY 2009-10. The Commission has observed that for loan up to FY 2008-09 the petitioner has considered the weighted average rate of interest for the respective plants. For additional loans the petitioner has considered an interest rate of 10.50%.

On the basis of the capital funding provisionally approved by the Commission, the new loans for FY 2009-10 have been estimated to be at Rs 884 crores and the corresponding interest and finance charges have been computed as indicated in Table 74.

Table 72: Interest and finance charges computed by Commission for FY 2009-10

(Rs in crores)

| Sr. No. | Particulars | Revised estimates as per provisional accounts of FY 2008-09 and estimates of FY 2009-10 |
|---------|---|---|
| 1 | Opening Loans | 1639.15 |
| 2 | Loan Additions during the Year | 884.00 |
| 3 | Repayment during the Year | 269.01 |
| 4 | Closing Loans | 2257.65 |
| 5 | Average Loans | 1950.15 |
| 6 | Interest on Loan | 204.73 |
| 7 | Guarantee Charges | 2.00 |
| 8 | Total Interest & Financial Charges | 206.73 |
| | Weighted Average Rate of Interest on Loan | 10.50% |

Based on the above estimation the Commission approves the interest and finance charges of Rs. 206.73 crores for FY 2009-10. The interest and finance charges approved for FY 2009-10 is summarized in Table 73.

Table 73 : Interest and finance expense provisionally approved for FY 2009-10

(Rs in crores)

| Sr. No | Particulars | Approved as per MYT | Approved for SLDC for FY | Net MYT approved | Revised Estimates as | Revised Approve |
|--------|-------------|---------------------|--------------------------|------------------|----------------------|-----------------|
|--------|-------------|---------------------|--------------------------|------------------|----------------------|-----------------|



| | | order for FY 2009-10 | 2009-10 | | submitted by GETCO for FY 2009-10 | d for FY 2009-10 |
|---|----------------------------------|-------------------------|---------|--------|---|---------------------|
| 1 | Interest & Finance Charges | 281.48 | 0.56 | 280.92 | 272.70 | 206.73 |

5.8. Return on Equity for FY 2009-10

Petitioner's submission

The petitioner has revised the estimate for return on equity on the basis of revision in closing equity for FY 2008-09 and revised capitalization for FY 2009-10. The petitioner has considered equity addition for the year at a normative level of 30% of the capital addition during the year. Further, the petitioner has considered the rate of return on equity at 14%. The submission of the petitioner is summarized in Table 74.

Table 74 : Return on equity estimated by GETCO for FY 2009-10

(Rs in crores)

| Sr. No. | Particulars | Approved as per MYT order for FY 2009-10 | Revised Estimates as submitted by GETCO for FY 2009-10 |
|---------|----------------------------------|--|---|
| 1 | Opening Equity Capital | 2,017.02 | 1,703.64 |
| 2 | Equity Additions during the Year | 483.11 | 379.06 |
| 3 | Closing Equity | 2,500.13 | 2,082.71 |
| 4 | Average Equity | 2,258.58 | 1,893.18 |
| 5 | Rate of Return on the Equity | 14% | 14% |
| 6 | Return on Equity | 316.20 | 265.04 |

Commission's Analysis

The Commission has examined the submission made by the petitioner. The Commission has observed that the petitioner has estimated a lower return on equity for FY 2009-10 compared to the amount approved under the MYT Order. The Commission has further computed return on equity on a normative basis using the opening equity for FY 2009-10 (equal to closing equity of FY 2008-09 which is already approved) and equity addition for FY 2009-10 (at 30% of approved capitalization) which is indicated in Table 75.

Table 75: Return on Equity for FY 2009-10 computed by Commission

(Rs. in crores)

| Particulars | Computed by Commission for FY 2009-10 |
|---------------------------------|--|
| Opening equity | 1674.90 |
| Equity addition during the year | 379.06 |



| | |
|--------------------------------|---------------|
| Closing equity | 2053.96 |
| Average equity | 1864.43 |
| Rate of Return on Equity @ 14% | 14% |
| Return on Equity | 261.02 |

Since capital expenditure has been considered as uncontrollable the Commission has treated return on equity as uncontrollable. Any variation in return on equity will be considered during the annual performance review for FY 2009-10. The summary of return on equity for FY 2009-10 is provided in Table 76.

Table 76: Return on equity approved for FY 2009-10

(Rs. in
crores)

| Particulars | Approved as per MYT order for FY 2009-10 | Approved for SLDC for FY 2009-10 | Net MYT approved | Revised Estimates as submitted by GETCO for FY 2009-10 | Revised Approved for FY 2009-10 |
|------------------|--|----------------------------------|------------------|--|---------------------------------|
| Return on equity | 316.20 | 0.46 | 315.74 | 265.04 | 261.02 |

5.8.1. Interest on working capital for FY 2009-10

Petitioner's submission

The petitioner has revised the interest on working capital charges at Rs 38.72 crores for FY 2009-10. The petitioner has estimated the interest on working capital by assuming one month's O&M expense for FY 2009-10 at Rs 49.31 crores, the expense on Maintenance spares at Rs 81.46 crores and has accounted for two month's receivables at Rs 246.97 crores. The interest charges projected by the petitioner for FY 2009-10 are summarized in Table 77.

Table 77 : Interest on working capital estimated by GETCO for FY 2009-10

(Rs in crores)

| Sr. No. | Particulars | Approved as per MYT order for FY 2009-10 | Revised Estimates as submitted by GETCO for FY 2009-10 |
|---------|--|--|--|
| 1 | O & M expenses (1 Month) | 36.32 | 49.31 |
| 2 | Maintenance Spares (1% of Cost @ 6 % Escalation) | 67.82 | 81.46 |
| 3 | Receivables (2 Months) | 203.94 | 246.97 |
| 4 | Total Working Capital | 308.08 | 377.74 |
| 5 | Rate of Interest on Working Capital | 10.25% | 10.25% |
| 6 | Interest on Working Capital | 31.58 | 38.72 |



The petitioner has also submitted that the interest on the working capital has been assumed at the normative rates. The petitioner has considered the interest rate at 10.25% which is based on the short term prime lending rate of the SBI.

Commission's Analysis

The Commission has analysed the interest on working capital estimated by the petitioner for FY 2009-10. The Commission is of the opinion that the interest on working capital is derived from a combination of controllable and uncontrollable parameters and hence it would be necessary to compute the same on the basis of the components which have now been revised for FY 2009-10. Accordingly, the Commission has recomputed the interest on working capital on a normative basis using the revised approved values for FY 2009-10. Details of the computation are indicated in Table 78.

Table 78: Interest on Working Capital as computed by Commission for FY 2009-10

(Rs. in crores)

| Sr. No. | Particulars | Computed by Commission on a normative basis using revised approved values |
|---------|-------------------------------------|---|
| 1 | O&M Expenses for 1 month | 42.73 |
| 2 | 1% of GFA for maintenance spares | 60.11 |
| 3 | Receivables equivalent to 2 months | 246.97 |
| 4 | Working Capital | 349.81 |
| | Rate of Interest on Working Capital | 10.25% |
| | Interest on Working Capital | 35.86 |

The Commission accordingly approves the interest on working capital based on the above computation. Any variation in actual interest on working capital will be considered during the annual performance review for FY 2009-10. The summary of interest on working capital now approved for FY 2009-10 is provided in Table 79.

Table 79 : Interest on working capital provisionally approved for FY 2009-10

(Rs in crores)

| Sr. No. | Particulars | Approved as per MYT order for FY 2009-10 | Approved for SLDC for FY 2009-10 | Net MYT approved | Revised Estimates as submitted by GETCO for FY 2009-10 | Revised Approved for FY 2009-10 |
|---------|-----------------------------|--|----------------------------------|------------------|--|---------------------------------|
| 1 | Interest on Working Capital | 31.58 | 0.17 | 31.40 | 38.72 | 35.86 |



5.8.2. Income Tax and other taxes for FY 2009-10**Petitioner's submission**

The petitioner has estimated a total income tax expense of Rs 31.87 crores for FY 2009-10 which is inclusive of Rs 30.03 crores paid as MAT and Rs 1.84 crores as 'fringe benefit tax'. The petitioner has submitted that as per the GERC's Tariff Regulations, the tax paid by the petitioner on income generated from its core business would be treated as an expense. The submission made by the petitioner is summarized in Table 80.

Table 80: Income tax and other taxes estimated by GETCO for FY 2009-10

(Rs. crores)

| Sr. No. | Particulars | Approved as per MYT order for FY 2009-10 | Revised Estimates as submitted by GETCO for FY 2009-10 |
|---------|----------------------------|--|--|
| 1 | Income tax and other taxes | - | 31.87 |

Commission's Analysis

The Commission has examined the submission of the petitioner with regard to the income taxes for FY 2009-10. The Commission has analysed the income tax paid for FY 2008-09 based on the provisional accounts. The Commission has observed that a total payment of Rs 6.38 crores has been made in FY 2008-09 towards taxes.

The Commission has observed that the petitioner has requested for recovery of total taxes for FY 2009-10 at Rs 31.87 crores. The petitioner has estimated the taxes at the rate of 11.33% on the RoE.

Since amount of tax is considered as pass through based on the actual, the Commission provisionally approves the submission made by the petitioner. The Commission is of the view that the amount of gain / loss based on the actual tax amount shall be considered during the annual performance review for FY 2009-10. The summary of the income tax provisionally approved for FY 2009-10 is provided in Table 81.

Table 81: Income tax and other taxes provisionally approved for FY 2009-10

(Rs. crores)

| Sr. No. | Particulars | Approved as per MYT order for FY 2009-10 | Revised Estimates as submitted by GETCO for FY 2009-10 | Revised Approved for FY 2009-10 |
|---------|----------------------------|--|--|---------------------------------|
| 1 | Income tax and other taxes | - | 31.87 | 31.87 |



5.9. Other income

Petitioner's submission

The petitioner has estimated the other income for FY 2009-10 as Rs 64.60 crores. The petitioner has stated that the income has been earned includes interest on staff loans, interest on investments, income for sale of stores etc.

Table 82 : Other income estimated by petitioner for FY 2009-10

(Rs crores)

| Sr. No. | Particulars | Approved as per MYT order for FY 2009-10 | Revised Estimates as submitted by GETCO for FY 2009-10 |
|---------|------------------|--|--|
| 1 | Net other income | 45.14 | 64.60 |

Commission's Analysis

The Commission has analyzed the other income estimated by the petitioner. The Commission is also of the view that since other income is considered as an uncontrollable factor, the revised estimate of the petitioner is to be provisionally approved. The other income approved by the Commission for FY 2009-10 is as under in Table 83:

Table 83: Other income approved by the Commission for FY 2009-10

(Rs crores)

| Sr. No. | Particulars | Approved as per MYT order for FY 2009-10 | Approved for SLDC for FY 2009-10 | Net MYT approved | Revised Estimates as submitted by GETCO for FY 2009-10 | Revised Approved for FY 2009-10 |
|---------|------------------|--|----------------------------------|------------------|--|---------------------------------|
| 1 | Net other income | 45.14 | 0.27 | 44.87 | 64.60 | 64.60 |

5.10. Incentive for Target availability

Petitioner's submission

The petitioner has submitted that the target availability for FY 2008-09 at 99.56% is higher than the target of 98% provided under the regulations. The petitioner has stated that the higher transmission availability of 1.56% over the prescribed level of 98% is eligible for revenue incentive which needs to be estimated as per Regulation 58 of GERC's Terms and Conditions of Tariff, 2005. The petitioner has claimed an incentive of Rs 29.53 crores for the increased availability of the transmission system.

Commission's Analysis



The Commission has examined the submission of the petitioner. The Commission has observed that the target availability for FY 2008-09 approved under the MYT Order is 99.33%. In this regard the Commission has noted that Regulation 8.2 of the MYT Regulations provides that trajectory provided under MYT Regulations shall replace trajectories fixed under any other regulation.

Based on the approach adopted, and the method described under the GERC's Terms and Conditions, the Commission has computed the incentive for FY 2008-09 as Rs 0.042 crores.

5.11. Annual transmission charges for FY 2009-10

Petitioner's Submission

The petitioner has estimated the Annual Transmission Charge of Rs 1,481.81 crores for FY 2009-10 which is summarized in Table 84.

Table 84 : ARR estimated by GETCO for FY 2009-10

(Rs in crores)

| Sr. No. | Particulars | Approved as per MYT | Revised estimates submitted by GETCO |
|---------|---|---------------------|--------------------------------------|
| 1 | Operations & Maintenance Expenses | 435.85 | 591.70 |
| 1.1 | <i>Employee Cost incl. impact on account of provisions of 6th Pay Commission for FY 2007-08 & FY 2008-09</i> | 290.92 | 398.91 |
| 1.2 | <i>Repair & Maintenance</i> | 97.36 | 134.24 |
| 1.3 | <i>Administration & General Charges</i> | 47.57 | 58.55 |
| 2 | ULDC Charges | 15.36 | - |
| 3 | Depreciation | 193.98 | 333.96 |
| 4 | Advance Against Depreciation | 46.72 | - |
| 5 | Interest & Finance Charges | 281.48 | 274.70 |
| 6 | Interest on Working Capital | 31.58 | 38.72 |
| 7 | Return on Equity | 316.20 | 265.04 |
| 8 | Total Fixed Costs | 1,321.17 | 1,504.12 |
| 9 | Less: Expenses Capitalized | 86.32 | 119.67 |
| | Add: Provision for Tax | - | 31.87 |
| 10 | Total Transmission Charges | 1,234.85 | 1,416.28 |
| 11 | Less: Other Income | 45.14 | 64.60 |
| | Add: Incentive for target availability | - | 29.53 |
| | Revenue gap in FY 2008-09 carried forward after treating gains/losses due to controllable/un controllable factors | - | 100.56 |
| 12 | Aggregate Revenue Requirement | 1,189.71 | 1,481.81 |

Commission's Analysis



The Commission on the basis of its provisional annual performance review of the FY 2008-09 expenses, has observed that the petitioner has made a total gain of Rs 12.21 crores. Accordingly, the Commission has computed the revised ARR for FY 2009-10 which is indicated in Table 85.

Table 85 : Aggregate Revenue Requirement approved for FY 2009-10

(Rs in crores)

| Sr. No. | Particulars | Net Approved as per MYT | Revised estimates submitted by GETCO | Revised Approved |
|----------|--|-------------------------|--------------------------------------|------------------|
| 1 | Operations & Maintenance Expenses | 435.85 | 591.70 | 432.28 |
| 1.1 | <i>Employee Cost incl. impact on account of provisions of 6th Pay Commission for FY 2007-08 & FY 2008-09</i> | 290.92 | 398.91 | 290.92 |
| 1.2 | <i>Repair & Maintenance</i> | 97.36 | 134.24 | 97.25 |
| 1.3 | <i>Administration & General Charges</i> | 47.57 | 58.55 | 44.11 |
| 2 | ULDC Charges | 15.36 | - | - |
| 3 | Depreciation | 193.98 | 333.96 | 340.08 |
| 4 | Advance Against Depreciation | 46.72 | - | - |
| 5 | Interest & Finance Charges | 281.48 | 274.70 | 206.73 |
| 6 | Interest on Working Capital | 31.58 | 38.72 | 35.86 |
| 7 | Return on Equity | 316.20 | 265.04 | 261.02 |
| 8 | Total Fixed Costs | 1,321.17 | 1,502.09 | 1,275.27 |
| 9 | Less: Expenses Capitalized | 86.32 | 119.67 | 119.67 |
| | Add: Provision for Tax | - | 31.87 | 31.87 |
| 10 | Total Transmission Charges | 1,234.85 | 1,414.29 | 1187.47 |
| 11 | Less: Other Income | 45.14 | 64.60 | 64.60 |
| 12 | Aggregate Revenue Requirement | 1,189.71 | 1,379.22 | 1,122.87 |
| 13 | Add: Incentive for target availability | | 29.53 | 0.042 |
| 14 | Aggregate Revenue Requirement | 1,189.71 | 1,381.21 | 1,122.91 |

The Commission is of the view that this annual performance review for FY 2008-09 is provisional in nature since it is based on provisional accounts. Accordingly, the Commission is of the opinion that the gain / loss of FY 2008-09 should be considered in the next tariff order based on verification from audited accounts. In this regard the Commission has observed that the scheduled time for submission of ARR for FY 2010-11 is due. The Commission shall treat the loss of FY 2008-09 in the ARR for FY 2010-11 based on the audited accounts of FY 2008-09.



5.12. Approved transmission tariff for FY 2009-10

Petitioner's Submission

The petitioner has submitted a revised transmission tariff based on the revised transmission costs estimated for FY 2009-10. The petitioner has revised the transmission tariff to Rs 3355.69/MW/day for FY 2009-10. The revised transmission tariff submitted by the petitioner is indicated in Table 86.

Table 86 : Transmission tariff estimated by GETCO for FY 2009-10

| Particulars | Approved as per MYT | Revised estimates submitted by GETCO |
|--|---------------------|--------------------------------------|
| Annual Transmission Charges (Rs in crores) | 1,189.71 | 1,481.81 |
| Total MW Allocation | 13,704 | 12,098 |
| MUs Transferred at 80% PLF | 96,038 | 84,784 |
| Transmission Tariff (Rs/MW/day) | 2,378.00 | 3,355.69 |
| Transmission Tariff (Paise/unit) | 12.39 | 17.48 |

Commission's Analysis

The Commission has taken note of the submissions made by the petitioner. The Commission is of the view that since a major portion of the FY 2009-10 has already elapsed there is no merit in revising the transmission charges at this stage. The Commission has therein permitted GETCO to continue to recover the charges at the FY 2008-09 approved rates of Rs 2410/MW/Day. The variance in the components of ARR for FY 2009-10 shall be considered at the time of annual performance review for FY 2009-10.

In regard to the gains/losses of FY 2008-09, the Commission is of the view that the gains/losses computed by the Commission is provisional in nature since the audited accounts of the petitioner is not available. Regulation 9.3 of the MYT Regulations provides that the scope of annual performance review shall include comparison of the audited performance of the applicant with the approved forecast. The Commission is therefore of the opinion that since the financial statements submitted by the petitioner are provisional in nature, the computation of gains/losses can only be considered as provisional. The Commission shall pass the gains/losses to the petitioner in its next Order once the audited accounts are submitted.

The Commission has provisionally computed the transmission tariff FY 2009-10 based on the revised ARR which is indicated in Table 87.

Table 87 : Transmission Tariff computed for FY 2009-10

| Sr. No | Particulars | Approved as per MYT | Revised estimates submitted by GETCO | Computed by Commission for FY 2009-10 |
|--------|-------------|---------------------|--------------------------------------|---------------------------------------|
| . | | | | |



| | | | | |
|---|--|--------------|--------------|----------------|
| 1 | Annual Transmission Charges (Rs in Crores) | 1189.71 | 1481.81 | 1122.91 |
| 2 | Total MW Allocation | 13,704 | 12,098 | 12,098 |
| 3 | MUs Transferred at 80% PLF | 96,038 | 84,784 | 84,784 |
| 4 | Transmission Tariff (Rs/MW/day) | 2,378 | 3,356 | 2542.93 |
| 5 | Transmission Tariff (Paise/unit) | 12.39 | 17.48 | 13.24 |

However, the Commission is of the view that for FY 2009-10, the transmission tariff of Rs 2410/ MW/ Day approved for FY 2008-09 would continue to be applicable for FY 2009-10. Further, the recovery of transmission / wheeling charges from purchasers/ users of renewable energy shall be in accordance with the Order of the Commission from time to time. In case of any under-recovery, the same will be considered while determining the transmission tariff for FY 2010-11.



6. Compliance of Directives

6.1. Compliance of Directives issued by the Commission

The Commission in its MYT Order dated 17th January 2009, had issued various directives. GETCO has now submitted a report on compliances of the Directives issued by the Commission. The Comments of the Commission on the submission of the petitioner is given below:

Directive No. 1: Filing of separate ARR for SLDC

Ministry of Power, Government of India has initiated action for establishment of SLDCs as independent entities. This is already discussed with the states and a directive may be issued shortly. Separate ARR for SLDC may have to be filed for 2009-10. GETCO may initiate action to compile the data for filing separate ARR petition for SLDC for 2009-10.

Compliance / Action Taken:

GETCO has stated that in compliance with the above directive actions have been taken to file the separate ARR petition for SLDC. It has stated that, a decision has been taken to file separate petition along with the filing of Performance Review Application & Tariff petition of GETCO for the FY 2009-10.

Commission's Comment: *The Commission has taken note of the submission made by the petitioner. The Commission has observed that a separate petition has been filed for SLDC for determination of its charges for FY 2009-10.*

Directive 2: Transmission Losses

GETCO to undertake a study to establish the impact on Transmission loss due to reduced drawl from the system in South Gujarat.

This directive was given in lieu of the reasons stated by GETCO for the increase in transmission loss during FY 2008-09. GETCO had explained that one of the reasons for increase in transmission loss during 2008-09 is due to direct feeding of Daman, Diu etc. loads directly from PGCIL network resulting in lower drawl from the system in South Gujarat. Also it has stated that the consumption in South Gujarat is anticipated to further reduce with the commissioning of SUGEN Power Plant of TPL which will feed Surat loads. The directive was given to establish the exact cause of increase in transmission loss.

Compliance / Action Taken:

GETCO has stated that the reason for its sudden increase in the Transmission losses has been explained to the Commission on 05.11.08 and the same was complied vide letter No. ACE(R&C/e-Urja/1351 dated.14.11.08. GETCO has stated that on commissioning of SUGEN plant of TPL the consumption in south Gujarat may further reduce resulting into increase in overall transmission loss of GETCO system. GETCO has stated that, in line with the directive, it has undertaken a technical



analysis has been done and the details of the same and the findings are as stated below:

GETCO has stated that as per the study, a considerable rise in transmission loss has been reported since June 2008. A statement showing monthly and quarterly transmission losses for the year 2008 in comparison with corresponding month and quarter for the year 2007 has been attached herewith as Annexure: 1.3

GETCO has stated that prior to May 2008, the Union Territory of DD & DNH was earlier supplied power supply from the following two voltages class system as detailed out below:

- **220 KV system:**
 - 220KV Bhilad -Magarwada (DD & DNH) 1 & 2 and
 - 220KV Bhilad- Kharadpada (DD & DNH) 1 & 2
- **66 KV system:**
 - 66KV Bhilad- Silvasa (DD & DNH) 1 & 2
 - 66KV Bhilad- Khaduli (DD & DNH) and
 - 66KV Vapi (4th Phase)-Dadra

GETCO has stated that as per the study it was established that till May 2008, on a monthly average @ 350 MUs used to be supplied to DD & DNH through the above specified grid network. However, as per the study it has been stated that since June 2008, the power flow pattern has changed because of commissioning of the following 220KV double circuit transmission lines of PGCIL:

- 220KV Vapi(Ambheti) PGCIL –Magarwada (UT) -1&2 (Comm. on 11-04- 08)
- 220KV Vapi (Ambheti) PGCIL- Kharadpada (UT) -1&2 (Comm. on 07- 06-08)

GETCO has stated that, therein as per the data analysis, the UT of DD& DNH started getting power supply from PGCIL through above two 220KV double circuit transmission lines from 400 KV Vapi (Ambheti) sub-station of PGCIL.

Based on the above data points, GETCO has shared the following analysis:

1. The feeding of power by GETCO system has reduced to approximately around 150 MUs since June-08 i.e. only through earlier referred four 66 KV transmission lines of GETCO. The remaining power requirement of DD&DNH is being met from Vapi PGCIL system. Therein a reduction of about 180 MUs per month in power supply being fed through GETCO system since June-08 has been noted.
 - The monthly transmission loss, calculated as the difference between generation received in MUs from various generating stations (GSECL, IPP and share from the Central Sector) and consumption of power by



various DISCOM (MGVCL,DGVCL, UGVCL & PGVCL) & UT is as shown in table here under:

| DISCOMs | May- 2008 | | | | November-2008 | | | |
|---------|------------|-------------|------------|-----------|---------------|-------------|------------|-----------|
| | Generation | Consumption | Difference | Diff in % | Generation | Consumption | Difference | Diff in % |
| DGVCL | 1876850 | 1477103 | 399747 | 21 | 1657141 | 1100582 | 556559 | 34 |
| MGVCL | 2098695 | 648211 | 1450485 | 69 | 2039769 | 564984 | 1474785 | 72 |
| PGVCL | 602105 | 1581835 | (979730) | (163) | 440169 | 1747439 | (1307270) | (297) |
| UGVCL | 768233 | 1434464 | (666231) | (87) | 796265 | 1304413 | (508148) | (64) |
| Total | 5345883 | 5141612 | Loss | 3.82 | 4933343 | 4717417.8 | Loss | 4.38 |

- The UT of DD&DNH was supplied power from the South Gujarat pocket of transmission network which is considered to be a low transmission loss area, of the tune to 1.5% , mainly because of the fact that generation is concentrated in that area having shorter length of transmission lines.
 - With the change in power feeding configuration to the UT of DD & DNH since June-08, the surplus power from this pocket has been wheeled to PGVCL which has the least generation and larger length of transmission lines therein, contributing to higher transmission losses.
2. A DISCOM-wise data of power surplus/deficit comparison for the month of May-08 with corresponding data for the month of November 2008, has indicated that the surplus power of DGVCL has increased from 21% to 34% and for MGVCL has increased from 69% to 72% in November 2008. The deficit of power for PGVCL is -163 % to-297 % and for UGVCL is -87 % to -64 %. GETCO has shared the power recorded on cross boundary /inter DISCOM lines & statement showing the comparison which has been annexed herewith as Annexure 1.4
- The statistical figures therein indicate that the increased surplus power of DGVCL and MGVCL is being wheeled into the PGVCL distribution systems since June 2008.
 - The total agriculture consumption has increased from 14842.15MUs to 15385.20 MUs in 2008-09 compared to the year 2007-08 for all DISCOMs. However, the total energy supplied has reduced from 55817.79 MUs to 55238.18 MUs in 2008-09 compared to the year 2007-08.
 - o The agriculture consumption of DGVCL has reduced from 544.21 MUs to 474.29 MUs in year 2008-09 compared to the year 2007- 08.



- The agriculture consumption in PGVCL has increased from 5194.27 MUs to 5619.87 MUs in the year 2008-09 compared to the year 2007-08.
- The agriculture consumption in UGVCL has increased from 8498.36 MUs to 8518.12 MUs in the year 2008-09 compared to the year 2007-08.
- As per the analysis of the agriculture load pattern, the surplus power from DGVCL has been utilized in agriculture by PGVCL and UGVCL. The analysis has pointed that this is also an additional factor resulting in the increase in transmission losses since agriculture load is highly reactive as well as has low power factor.

In view of the above analysis of the collected data, GETCO has summarized the following as the two main reasons for increase in transmission losses since June 2008.

- 1) Change in power feeding configuration to UT.
- 2) Change in agriculture load pattern of various DISCOMs.

Commission's Comment: *The Commission has taken note of the submission made by the petitioner. The Commission has observed that the actual transmission loss for FY 2008-09 is higher than the level approved under the MYT Order. The approved transmission loss for FY 2008-09 was higher than the actual transmission loss for FY 2007-08. Commission is of the view that transmission loss is controllable in nature and the petitioner should adopt measures to reduce the transmission losses. The petitioner is hereby directed to submit information in regard to measures undertaken for minimizing the transmission losses.*

Directive 3: Energy Audit

GETCO directed to undertake an energy audit in the transmission system. The Commission has noted that GETCO has initiated some measures including provision of high accuracy meters on feeders to arrive at the feeder-wise losses etc.

Compliance / Action Taken:

GETCO has stated that the directive has been complied with in the previous MYT Petition.

Commission's Comment: *The Commission has taken note of the submission made by the petitioner.*

Directive 4: Intra-State ABT and Interface metering

GETCO is to report the action taken for effective implementation of the Intra-State-ABT. Further the current status of the implementation of Intra –state- ABT is to be reported.



Compliance / Action Taken:

GETCO has stated that the Intra-State ABT is under advanced stage of implementation in the State of Gujarat and the status on the key activities being performed by it is as follows:

- Mock exercise of Intra State ABT has been completed & the report has been submitted to GERC for issuance of commercial operations order. The oral order issued by Hon'ble GERC has been complied by GETCO and reply has been submitted to GERC for finalization of commercial order.
- GERC has reviewed preparedness of SLDC/STU by experts appointed by GERC. SLDC/STU has indicated the preparedness at GETCO for implementation of Intra State ABT for all the relevant aspects. The necessary infrastructure and staff set up has been deployed to SLDC in order to meet the requirement of Intra State ABT.
- Final order for implementation of intra state ABT is awaited from the Hon'ble Commission.

Commission's Comment: *The Commission has taken note of the submission made by the petitioner.*

Directive 5: Reactive Compensation

GETCO has been directed to conduct a study on the adequacy of reactive power compensation and a report on it is to be submitted to the Hon'ble Commission.

Compliance / Action Taken:

GETCO has stated that it has conducted a study and the details of the same are herein under:

GETCO has stated that, while preparing its 11th F.Y. Plan care has been taken to provide adequate reactive compensation according to proposed load growth. To meet the requirement, GETCO has planned as under,

- | | | |
|--|---|----------|
| • To install 5 No. of 132 kV class Capacitor banks | - | 100 MVA |
| • To install 11 kV class capacitors | - | 2476 MVA |
| • To install Bus Reactor | - | 455 MVA |
| • To install Line Reactors | - | 200MVA |

GETCO has further stated that during the year 2008-09 Installation & commissioning of 4X25 MVA 220KV class bus reactor was completed i.e. 100MVA. Further, as per the WRPC study committee report for shunt capacitor requirement for the F.Y.2008, GETCO has to install 435 MVA. Accordingly GETCO has indicated that it has planned following reactive compensation measures in the system.



- Installation of Shunt Capacitor for 11KV class - 235 MVAR
- Installation of Shunt Capacitor for 66KV class - 100 MVAR
- Installation of 5 Nos. of 132KV class 20 MVAR Capacitor Banks at Samakhiali, Vallabhipur, Haripur and Junagadh (2) S/s - 100 MVAR
- Installation of Reactors at Kasor S/S - 125 MVAR
- Installation of Reactors at Soja S/S - 80 MVAR

GETCO has further submitted that the actions taken/ initiative undertaken in context of the above mentioned plans and recommendations of the WRPC study. The initiatives have been listed by GETCO as under:

- The work of Installation & commissioning of 4*25 MVAR 220 KV class bus reactor has been completed i.e.100MVAR.
- Installation of 5*20 MVAR 132KV Class bank is in progress and the same is expected to begin operations in June 09.
- For the installation of remaining Bus Reactor & Line Reactor, procurement action is in the final stages and installation is expected during F.Y.09-10.
- Procurement of 11KV, 66KV class shunt capacitor has been initiated & same has been planned to be installed during 2009-10.

Commission's Comment: *The Commission has taken note of the submission made by the petitioner and directs the petitioner to submit a status report on the same.*

Directive 5: Transmission Plan

GETCO was directed to finalize the Transmission Plan for XIth Plan and submit the same to the Hon'ble Commission along with cost benefit analysis.

Compliance / Action Taken:

The directive has been complied with in the previous MYT petition.

Commission's Comment: *The Commission has taken note of the submission made by the petitioner.*

Directive 6: Handing Over of 66 KV Transmission Plan

At present GETCO manages the transmission system comprising 66, 132, 220 & 400 KV voltage levels. The 66 KV system is fairly large consisting of 721 number 66 / 11 KV sub-Stations and 16,555 ckt. km. of Transmission lines. It is proposed to add 91 sub-stations and about 900 ckt. km Transmission lines, during 2006-07 and 2007-08. It would become too large for effective management. Further, 66 kV is almost at distribution voltage. In most of the States, system at 33 kV and below is considered as distribution voltage. Gujarat does not have 33 kV and in its place it has 66 kV. It is



considered desirable to hand over 66 kV to Distribution companies for better coordination and for taking prompt action in attending to outages, etc and to have proper planning.

Compliance / Action Taken:

The directive has been complied with in the previous MYT petition Further directives from the Hon'ble Commission are awaited.

Commission's Comment: *The Commission reserves its observation on this regard and further directives in this connection will be issued separately, if considered necessary.*

NEW DIRECTIVE

GETCO is directed to submit all financial figures in its future ARR and APR petitions in units of rupees crores.



COMMISSION'S ORDER

The Commission provisionally approves the gain of Rs. 12.22 crores for FY 2008-09 based on the annual performance review. The Commission further approves the revision in the components of ARR for FY 2009-10 as indicated in the table below:

(Rs crores)

| Sr. No. | Particulars | Revised Approved for FY 2009-10 |
|-----------|--|---------------------------------|
| 1 | Operations & Maintenance Expenses | 432.28 |
| 1.1 | <i>Employee Cost incl. impact on account of provisions of 6th Pay Commission for FY 2007-08 & FY 2008-09</i> | 290.92 |
| 1.2 | <i>Repair & Maintenance</i> | 97.25 |
| 1.3 | <i>Administration & General Charges</i> | 44.11 |
| 2 | ULDC Charges | - |
| 3 | Depreciation | 340.08 |
| 4 | Advance Against Depreciation | - |
| 5 | Interest & Finance Charges | 206.73 |
| 6 | Interest on Working Capital | 35.86 |
| 7 | Return on Equity | 261.02 |
| 8 | Total Fixed Costs | 1,275.27 |
| 9 | Less: Expenses Capitalized | 119.67 |
| | Add: Provision for Tax | 31.87 |
| 10 | Total Transmission Charges | 1,187.47 |
| 11 | Less: Other Income | 64.60 |
| 12 | Aggregate Revenue Requirement | 1,122.87 |
| 13 | Add: Incentive for target availability | 0.042 |
| 14 | Aggregate Revenue Requirement | 1,122.91 |

Further, the Commission approves the transmission charges for FY 2009-10 as indicated in the table below:

Transmission Tariff

| Sr. No. | Particulars | Unit | FY 2009-10 |
|---------|---------------------|-------------|------------|
| 1 | Transmission Tariff | (Rs/MW/day) | 2,410 |

The order shall come into force with immediate effect.

Sd/-

Sd/-

DR. P K MISHRA**Chairman****SHRI PRAVINBHAI PATEL****Member**Date: 14th December 2009

Ahmedabad



Annexure 1.1**List of Organizations and Individuals who filed objections/suggestions**

| | |
|----|---|
| 1 | N M Sadguru Water & Development Foundation |
| 2 | Shri Rameshbhai J. Fuletra |
| 3 | Shri Pankajkumar B. Patel |
| 4 | Mahuva Chamber of Commerce & Industry |
| 5 | Smt. Chetnaben M. Patel |
| 6 | Consumer Education and Research Society |
| 7 | Gondal Chamber of Commerce & Industry |
| 8 | Shri Surendrabhai B. Mehta |
| 9 | Bhatia International Limited |
| 10 | Bhavnagar District Chamber of Industries |
| 11 | Bhartiya Kisan Sangh |
| 12 | Akhil Bhartiya Grahak Panchayat – Rajkot |
| 13 | Sarpanch, Dhunvav Gram Panchyat |
| 14 | Tax Payers' Users' Consumers Association – Jamnagar |
| 15 | Dediyasan Industrial Estate Association |
| 16 | Shri Sunil Oza |
| 17 | Dy. Chief Electrical Engineer, Western Railway |
| 18 | Utility Users' Welfare Association |
| 19 | Federation of Gujarat Industries |
| 20 | Shri Vipul Hirabhai Raiyani |
| 21 | Gujarat Krushi Vij Grahak Suraksha Sangh |



Annexure 1.2**List of participants in Public Hearing**

| | |
|-----|--|
| 1. | N M Sadguru Water & Development Foundation |
| 2. | Shri Surendrabhai B. Mehta |
| 3. | Akhil Bhartiya Grahak Panchayat – Rajkot |
| 4. | Sarpanch, Dhunvav Gram Panchyat |
| 5. | Dy. Chief Electrical Engineer, Western Railway |
| 6. | Gondal Chamber of Commerce & Industry |
| 7. | Jagega Gujarat Sangharsh Samiti |
| 8. | Shri Amarsinh Chavda |
| 9. | Consumer Education and Research Society |
| 10. | Bhatia International Limited |
| 11. | Utility Users' Welfare Association |
| 12. | Federation of Gujarat Industries |
| 13. | Dediyasan Industrial Estate Association |
| 14. | Shri Vipulbhai Hirabhai Raiyani |
| 15. | Shri Hasmukh Shah |
| 16. | Gujarat Krushi Vij Grahak Suraksha Sangh |



Annexure 1.3**Comparison of Transmission Losses**

| Sr.No. | Month | Monthly Losses | | Quarterly Losses | |
|--------|----------------|----------------|-------------|------------------|-------------|
| | | 2007-08 | 2008-09 | 2007-08 | 2008-09 |
| 1 | APRIL | 3.95 | 3.57 | 3.82 | 4.03 |
| 2 | MAY | 3.76 | 3.82 | | |
| 3 | JUNE | 3.75 | 4.7 | | |
| 4 | JULY | 3.79 | 4.31 | 3.78 | 4.4 |
| 5 | AUGUST | 3.94 | 4.21 | | |
| 6 | SEPTEMBER | 3.59 | 4.68 | | |
| 7 | OCTOBER | 4.08 | 4.58 | 4.05 | 4.51 |
| 8 | NOVEMBER | 4.32 | 4.38 | | |
| 9 | DECEMBER | 3.75 | 4.56 | | |
| 10 | JANUARY | 3.78 | 3.78 | 3.73 | 4.10 |
| 11 | FEBRUARY | 3.57 | 4.29 | | |
| 12 | MARCH | 3.83 | 4.22 | | |
| | Average | 3.85 | 4.25 | | |



Annexure 1.4

DISCOM wise % surplus/deficit of power recorded and loading on cross boundary/inter DISCOM lines for months of May-08 and Nov-08.

| Generation (in MWH) | | | | | | |
|--|-------------------|-------------------|------------------|----------------|----------------|-------------------|
| | GSECL IPP | CENTRAL SECTOR | NON CONV. | | | Total |
| DGVCL | 1220475.60 | 656374.36 | | | | 1876849.96 |
| MGVCL | 1406808.22 | 691887.00 | | | | 2098695.22 |
| PGVCL | 288720.16 | | 313385.02 | | | 602105.18 |
| UGVCL | 520932.40 | 247300.20 | | | | 768232.60 |
| Total | 3436936.38 | 1595561.56 | 313385.02 | | | 5345882.95 |
| Consumption (in MWH) | | | | | | |
| | LV | HV | GUVNL | UT | EHVAUX | Total |
| DGVCL | 777672.41 | 85351.36 | 277283.60 | 336658. | 137.56 | 1477102.9 |
| MGVCL | 504928.01 | 143093.01 | | | 189.53 | 648210.55 |
| PGVCL | 1418326.80 | 158305.60 | 1231.74 | 3526.0 | 444.54 | 1581834.6 |
| UGVCL | 1222092.60 | 49427.28 | 162629.15 | | 314.78 | 1434463.8 |
| Total | 3923019.82 | 436177.25 | 441144.49 | 340184. | 1086.40 | 5141612.0 |
| DISCOM wise Transmission Losses | | | | | | |
| | Generation | Consumption | Difference | MF | | Diff in % |
| DGVCL | 1876849.96 | 1477102.99 | 399746.96 | 1.6 | | 21 |
| MGVCL | 2098695.22 | 648210.55 | 1450484.67 | 1.6 | | 69 |
| PGVCL | 602105.18 | 1581834.68 | -979729.50 | 1.6 | | -163 |
| UGVCL | 768232.60 | 1434463.80 | -666231.21 | 1.6 | | -87 |
| Total | 5345882.9 | 5141612.02 | | Loss | | 3.82 |

| Generation (in MWH) | | | | | | |
|-----------------------------|-------------------|-------------------|------------------|-------------------|--------|-------------------|
| | GSECLIPP | CENTRAL SECTOR | NON CONV. | Total | | |
| DGVCL | 1266681.88 | 390458.84 | | 1657140.72 | | |
| MGVCL | 1221586.67 | 818182.00 | | 2039768.67 | | |
| PGVCL | 285536.66 | | 154631.90 | 440168.55 | | |
| UGVCL | 407935.10 | 388329.98 | | 796265.08 | | |
| Total | 3181740.31 | 1596970.82 | 154631.90 | 4933343.02 | | |
| Consumption (in MWH) | | | | | | |
| | LV | HV | GUVNL | UT | EHVAUX | Total |
| DGVCL | 684624.16 | 80938.37 | 208352.20 | 126516.35 | 150.72 | 1100581.80 |
| MGVCL | 436177.23 | 128684.13 | | | 122.42 | 564983.78 |



| | | | | | | |
|--|-------------------|-------------------|------------------|------------------|---------------|-------------------|
| PGVCL | 1619811.58 | 122769.57 | 1172.71 | 3289.60 | 395.42 | 1747438.88 |
| UGVCL | 1155044.57 | 65798.43 | 83349.98 | | 220.37 | 1304413.34 |
| Total | 3895657.54 | 398190.50 | 292874.89 | 129805.95 | 888.93 | 4717417.81 |
| DISCOM wise Transmission Losses | | | | | | |
| | Generation | Consumption | Difference | Diff in % | | |
| DGVCL | 1657140.72 | 1100581.80 | 556558.92 | 34 | | |
| MGVCL | 2039768.67 | 564983.78 | 1474784.90 | 72 | | |
| PGVCL | 440168.55 | 1747438.88 | - | -297 | | |
| UGVCL | 796265.08 | 1304413.34 | -508148.27 | -64 | | |
| Total | 4933343.02 | 4717417.81 | | Loss | 4.38 | |

Agriculture load comparison of year 2007-08 & 2008-09

| Sr.No. | Month | % Transmission loss Losses | Energy Injected | Energy supplied | Total Agriculture load | DGVCL | UGVCL | PGVCL |
|--------------|--------|----------------------------|-----------------|-----------------|------------------------|---------------|----------------|----------------|
| 1 | Apr-07 | 3.95 | 5068.49 | 4868.46 | 1492.95 | 61.60 | 904.46 | 420.54 |
| 2 | May-07 | 3.76 | 5084.74 | 4893.57 | 1091.83 | 68.23 | 572.44 | 392.52 |
| 3 | Jun-07 | 3.75 | 4506.27 | 4337.32 | 930.38 | 41.11 | 541.54 | 320.74 |
| 4 | Jul-07 | 3.79 | 4136.83 | 3980.04 | 595.47 | 15.11 | 280.22 | 281.07 |
| 5 | Aug-07 | 3.94 | 4023.85 | 3865.31 | 433.89 | 11.95 | 218.78 | 176.96 |
| 6 | Sep-07 | 3.59 | 4325.25 | 4169.78 | 736.54 | 7.52 | 446.59 | 268.80 |
| 7 | Oct-07 | 4.08 | 5354.05 | 5135.72 | 1529.06 | 63.85 | 867.33 | 543.48 |
| 8 | Nov-07 | 4.32 | 4959.76 | 4745.31 | 1615.62 | 53.26 | 947.04 | 564.89 |
| 9 | Dec-07 | 3.75 | 5271.97 | 5074.54 | 1701.14 | 57.62 | 974.79 | 615.27 |
| 10 | Jan-08 | 3.78 | 5208.65 | 5011.64 | 1709.62 | 52.75 | 995.37 | 608.50 |
| 11 | Feb-08 | 3.57 | 4808.33 | 4636.53 | 1508.31 | 52.50 | 891.40 | 502.11 |
| 12 | Mar-08 | 3.83 | 5302.46 | 5099.59 | 1497.34 | 58.72 | 858.39 | 499.40 |
| Total | | 3.85 | 58050.65 | 55817.79 | 14842.15 | 544.21 | 8498.36 | 5194.27 |

| Sr.No. | Month | % Transmission loss Losses | Energy Injected | Energy supplied | Total Agriculture load | DGVCL | UGVCL | PGVCL |
|--------------|--------|----------------------------|-----------------|-----------------|------------------------|--------------|----------------|----------------|
| 1 | Apr-08 | 3.57 | 5069.23 | 4888.36 | 1304.20 | 61.53 | 723.36 | 458.74 |
| 2 | May-08 | 3.82 | 5345.88 | 5141.61 | 1493.58 | 66.58 | 910.72 | 442.86 |
| 3 | Jun-08 | 4.70 | 4614.03 | 4397.29 | 986.22 | 27.74 | 620.67 | 302.61 |
| 4 | Jul-08 | 4.31 | 4433.26 | 4242.01 | 836.16 | 9.01 | 486.91 | 311.42 |
| 5 | Aug-08 | 4.21 | 4020.10 | 3850.81 | 555.09 | 5.16 | 277.33 | 249.04 |
| 6 | Sep-08 | 4.68 | 4485.35 | 4275.65 | 936.43 | 7.51 | 473.26 | 393.71 |
| 7 | Oct-08 | 4.58 | 5228.43 | 4988.90 | 1465.76 | 34.82 | 796.48 | 567.30 |
| 8 | Nov-08 | 4.38 | 4933.34 | 4717.41 | 1680.67 | 57.63 | 863.67 | 688.00 |
| 9 | Dec-08 | 4.56 | 4970.04 | 4743.26 | 1658.76 | 54.76 | 848.02 | 626.08 |
| 10 | Jan-09 | 3.78 | 4892.09 | 4706.97 | 1634.26 | 44.14 | 925.53 | 578.25 |
| 11 | Feb-09 | 4.29 | 4518.62 | 4324.76 | 1344.49 | 40.76 | 766.09 | 474.83 |
| 12 | Mar-09 | 4.22 | 5179.52 | 4961.16 | 1489.56 | 64.65 | 826.09 | 527.02 |
| Total | | 4.25 | 57689.87 | 55238.18 | 15385.20 | 474.2 | 8518.12 | 5619.87 |



Note : Thus, total cattered during 08-09 has reduced but Agriculture load is increased

Units Handled By GETCO during Year 2007-2008

| Sr. No. | Month | Energy Received By Transmission(in MWH) | Energy Sent By Transmission(in MWH) | % Loss | Catter to Ag Sector | % Agriculture load |
|--------------|----------|---|-------------------------------------|-------------|---------------------|--------------------|
| 1 | Apr '07 | 5068495.383 | 4868471.34 | 3.95 | 1492950.86 | 30.67 |
| 2 | May '07 | 5084747.23 | 4893543.45 | 3.76 | 1091826.83 | 22.31 |
| 3 | Jun'07 | 4506279.98 | 4337098.07 | 3.75 | 930383.82 | 21.45 |
| 4 | Jul '07 | 4136834.03 | 3980024.86 | 3.79 | 595472.30 | 14.96 |
| 5 | Aug '07 | 4023855.80 | 3865315.38 | 3.94 | 433890.03 | 11.23 |
| 6 | Sept '07 | 4325260.20 | 4169781.15 | 3.59 | 736540.73 | 17.66 |
| 7 | Oct '07 | 5354055.26 | 5135720.47 | 4.08 | 1529057.95 | 29.77 |
| 8 | Nov '07 | 4959781.34 | 4745319.21 | 4.32 | 1615619.29 | 34.05 |
| 9 | Dec '07 | 5272188.17 | 5074547.22 | 3.75 | 1701141.79 | 33.52 |
| 10 | Jan '08 | 5208722.97 | 5011655.16 | 3.78 | 1709623.53 | 34.11 |
| 11 | Feb '08 | 4808337.76 | 4636610.68 | 3.57 | 1508306.47 | 32.53 |
| 12 | Mar '08 | 5302463.44 | 5099598.92 | 3.83 | 1497340.95 | 29.36 |
| Total | | 58051021.55 | 55817685.91 | 3.85 | 14842154.56 | 26.59 |

Units Handled By GETCO During Year 2008-2009

| Sr. No. | Month | Energy Received By Transmission (in MWH) | Energy Sent By Transmission(in MWH) | % Loss | Catered to Agriculture Sector | % Agriculture load |
|--------------|--------|--|-------------------------------------|-------------|-------------------------------|--------------------|
| 1 | Apr.08 | 5069229.00 | 4888355.00 | 3.57 | 1304201.80 | 26.68 |
| 2 | May.08 | 5345876.00 | 5141608.00 | 3.82 | 1493579.76 | 29.05 |
| 3 | Jun.08 | 4614027.00 | 4397292.00 | 4.70 | 986222.29 | 22.43 |
| 4 | Jul.08 | 4433264.00 | 4242011.17 | 4.31 | 836163.42 | 19.71 |
| 5 | Aug.08 | 4020104.00 | 3850805.00 | 4.21 | 555089.43 | 14.41 |
| 6 | Sep.08 | 4485350.00 | 4275650.00 | 4.68 | 936433.12 | 21.90 |
| 7 | Oct.08 | 5228441.57 | 4988904.62 | 4.58 | 1465761.54 | 29.38 |
| 8 | Nov.08 | 4933343.02 | 4717417.81 | 4.38 | 1680668.72 | 35.63 |
| 9 | Dec.08 | 4970037.00 | 4743261.00 | 4.56 | 1658760.51 | 34.97 |
| 10 | Jan.09 | 4892088.00 | 4706968.00 | 3.78 | 2672301.21 | 56.77 |
| 11 | Feb.09 | 4518620.00 | 4324760.00 | 4.29 | 1344488.73 | 31.09 |
| 12 | Mar.09 | 5179527.41 | 4961170.40 | 4.22 | 1886570.60 | 38.03 |
| Total | | 57689907.00 | 55238203.00 | 4.25 | 16820241.14 | 30.45 |

