Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
World Trade Centre, Centre No.1, 13th Floor, Cuffe Parade, Mumbai – 400 005
Tel No: 22163964 / 22163965, Fax: 22163976
Email: mercindia@mercindia.org.in
Website: www.mercindia.org.in

Case No. 66 of 2006

IN THE MATTER OF
Determination of Annual Revenue Requirement and Tariff for
FY 2007-08 under MYT for
Brihan-Mumbai Electric Supply & Transport Undertaking (BEST)

Dr. Pramod Deo, Chairman
Shri A. Velayutham, Member
Shri S. B. Kulkarni, Member

Date of Order: April 3, 2007

O R D E R

Upon directions from the Maharashtra Electricity Regulatory Commission (Commission), Brihan-Mumbai Electric Supply & Transport Undertaking (BEST), submitted its application for approval of Annual Revenue Requirement for the MYT Control Period from FY 2007-08 to FY 2009-10 and Tariff Proposal for FY 2007-08 under affidavit. The Commission, in exercise of the powers vested in it under Section 61 and Section 62 of the Electricity Act, 2003 and all other powers enabling it in this behalf, and after taking into consideration all the submissions made by BEST Undertaking, and after giving due consideration of all the objections, suggestions, made by the consumers and other stakeholders, responses given by the BEST Undertaking, as part of their written submissions as well as during the Public Hearing, hereby issues this Order on the determination of the Annual Revenue Requirement (ARR) for the Control Period from FY 2007-08 to FY 2009-10 and determination of tariff for supply of electricity by BEST for retail distribution for the first year of the Control Period i.e. FY 2007-08.

Organisation of the Order

This Order is broadly divided into five chapters.

- The **first chapter** gives a brief background to BEST's operations and the ARR and Tariff determination process under the Multi Year Tariff (MYT) Framework.
- The **second chapter** gives the details of the various objections, suggestions and comments raised by the various stakeholders in writing as well as during the public hearing. BEST's

responses to these objections and the Commission ruling have also been mentioned. For purposes of brevity, the above have been grouped into eight broad categories.

- The **third chapter** deals with the Commission's analysis and observations / decisions on the various revenue and expenditure components of BEST's ARR for FY 2007-08.
- The **fourth chapter** deals with the tariff philosophy adopted by the Commission and the determination of the retail tariff for BEST for the FY 2007-08.
- The **fifth chapter** deals with the Commission's directives to BEST.

LIST OF ABBREVATIONS

A&M	Administration and Maintenance
A&G	Administration and General
APDRP	Accelerated Power Development and Reforms Programme
ARR	Annual Revenue Requirement
AS	Accounting Standard
BE	Budget Estimates
BEST	Brihanmumbai Electric Supply & Transport Undertaking
BMC	Brihanmumbai Municipal Corporation
BSES	BSES Limited
BSSIA	Bombay Small Scale Industries Association
CAGR	Compounded Annual Growth Rate
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGRF	Consumer Grievances Redressal Forum
CIBS	Consumer Information and Billing System
COS	Cost of Supply
CPP	Captive Power Plant
Commission/ MERC	Maharashtra Electricity Regulatory Commission
Cr	Crore
DA	Dearness Allowance
DC	Direct Current
DPC	Delayed Payment Charges
DSM	Demand Side Management
EA 2003/ Act	Electricity Act, 2003
ERC Act	Electricity Regulatory Commission Act, 1998
FAC	Fuel Adjustment Cost
FY	Financial Year
GFA	Gross Fixed Assets
GM	General Manager
GoI	Government of India
GoM	Government of Maharashtra
HT	High Tension
kVA	Kilo-Volt Ampere
kW	Kilo Watt
kWh	Kilo Watt Hour / Unit
LT	Low Tension
MGP	Mumbai Grahak Panchayat
MMC	Mumbai Municipal Corporation
MMC Act	Mumbai Municipal Corporation Act, 1888
MSEB	Maharashtra State Electricity Board

MSLDC	Maharashtra State Load Despatch Centre
MU	Million Units (MkWh)
MYT	Multi Year Tariff
O&M	Operation and Maintenance
PF	Power Factor
PPD	Pre Payment Discount
PRC	Pay Revision Committee
RC	Reliability Charge
RE	Revised Estimates
REL	Reliance Energy Limited
RPO	Renewable Purchase Obligation
RPS	Renewable Energy Purchase Specification
Rs.	Indian Rupees
SLDC	State Load Despatch Centre
STU	State Transmission Utility
T&D	Transmission and Distribution
ToD	Time of Day
ToSE	Tax on Sale of Electricity
TPC	The Tata Power Company Ltd.
VRS	Voluntary Retirement Scheme

INDEX

INDEX

LIST OF TABLES

LIST OF TABLES

1. BRIEF BACKGROUND

BACKGROUND

1.1. This Order is with reference to Case No. 66 of 2006 in relation to the petition filed by BEST for determination of its ARR for the first control period (FY 2007-08 to FY 2009-10) and Electricity Tariff for the year FY 2007-08 during the first control period under MYT. The Commission had earlier determined BEST's ARR for FY 2006-07 under its detailed Order dated 18th January 2007, Case No. 50 of 2005.

1.2. BEST had submitted its petition on 11th December 2006. But the petition submitted by BEST had certain data gaps and inconsistencies. The Commission therefore did not admit the petition and asked for clarifications on 5th January 2007 and BEST replied to the same on 17th January 2007.

1.3. The technical validation session was held on 22nd of January 2007. BEST was asked to submit additional data and clarifications by 29th January 2007. BEST submitted this data and replies to the clarifications sought on 31st January 2007. However, the revised reply submitted by BEST did not include any tariff proposal for the control period.

1.4. The Commission vide its letter dated 2nd February 2007 conveyed provisional admission of BEST's petition under multi year tariff for the first control period subject to BEST's submission of further refined proposal on tariff revision for the first control period under Regulation 51 of the MERC (Conduct of Business) Regulation 2004 for further processing and conduct of public hearing.

1.5. BEST was further directed by the Commission to publish the Public Notice under Section 64 of the Electricity Act 2003 as per the approved template, latest by 5th February 2007. BEST was directed to fill up the required data in the Public Notice while ensuring consistency with the data furnished to the Commission before releasing the Public Notice. BEST was directed that the detailed petition should be made available to the public following the Public Notice, alongwith copy of earlier submissions and its accompaniments to the Commission and responses to the queries raised by the Commission. BEST was also directed to host these documents on its website in a downloadable format. Executive Summary of the petition was to be made available to the public free of cost.

1.6. BEST was directed to expeditiously reply to the objections received from the public on its MYT petition before the public hearing and to also reply to any rejoinders received on the same. The date, time and venue of the public hearing was decided as 27th February 2007, 11.00 AM at Daffodil Hall, 30th Floor, Centre No. 1, World Trade Centre, Cuffe Parade, Mumbai 400 005.

1.7. Accordingly BEST submitted the draft of the completed Public Notice and Executive Summary of its petition alongwith the proposed tariff for FY 2007-08 for the Commission's approval. The corrected Public Notice format and the Executive Summary was approved and BEST was directed to publish the Public Notice on 5th February 2007. BEST published the same in the following newspapers on the 7th and 8^{th} February 2007.

Marathi Newspapers: Sakal, Loksatta, Saamna, Maharashtra Times

Other Newspapers: The Times of India, Mid day, Indian Express, Gujarat Samachar

1.8. A hard copy of the Executive Summary of BEST's ARR and Tariff petition was also offered for sale to the public.

1.9. However, there was a difference in the contents of the matter published in the Public Notice (which was approved by the Commission) and the hard copy offered for sale to the public. The documents which were offered for sale to the public did not include the 'Stand-by Charges'. The tariff rates proposed in these two documents mentioned above also differed. BEST published a corrigendum in the newspapers (mentioned earlier) subsequently clarifying the matter of non-inclusion of 'Stand-by Charges' and that its proposed tariff would change if the Commission included the 'Stand-by Charges' while determining the ARR.

1.10. A Public Hearing was held on the February 27, 2007 at Daffodil Hall, World Trade Centre-I, Cuffe Parade, Mumbai 400 005 at 11.00 AM. A list of people who attended the Public Hearing is provided in Annexure III. Similarly, a list of Objectors is provided in Annexure II. Based on the various objections / comments received from the various stakeholders, and the Commission's analysis, additional information / data were sought from BEST. These information / data were in turn submitted by BEST.

1.11. The process outlined above was undertaken with the aim to ensure complete transparency in the methodology that was being followed to determine the ARR and Tariff. After considering the views of all the stakeholders, responses given by BEST, existing regulatory framework and previous ruling, the Commission has determined the ARR and Tariff for BEST for FY 2007-08.

1.12. For FY 2008-09 and FY 2009-10, the Commission has determined the ARR (excluding the Power Purchase Cost, Transmission Charge and SLDC Charge, as these could not be determined in the absence of an approved PPA between TPC-G and BEST, and the requirement of annual determination of transmission tariff and SLDC Fees and Charges).

CONCEPT OF MYT FRAMEWORK:

1.13. Introduction of Multi Year Tariff (MYT) principles is mandated by the Electricity Act 2003, the National Tariff Policy of the Ministry of Power, Government of India and Tariff Regulations of the Maharashtra Electricity Regulatory Commission (MERC).

1.14. MYT can be defined as a framework for regulating the Utilities over a period of time wherein the returns/profits and the trajectories for individual cost and revenue elements of the Utility are determined in advance. Under a MYT framework, the Licensee, the Consumers and other stakeholders would have clarity on the various actions / events and their outcomes likely to happen during such period. This enables the stakeholders to plan for the long term, without any apprehension of regulatory uncertainty.

1.15. The MYT framework also seeks to eliminate the control aspects of regulation and replace them with a system of incentives and penalties. It seeks to incentivise the Utilities to become more efficient in their operations by providing stronger incentives for cost optimisation and innovation.

1.16. The MYT framework provides a mechanism for reviewing the licensee's performance by way of an Annual Performance Review (APR). Under the APR process, the Commission reviews the licensee's actual performance, comparing it with the approved ARR and gain /

loss on account of uncontrollable factors is shared amongst the stakeholders through a pass-through mechanism. Similarly, gain/ loss on account of controllable factors is shared between the various stakeholders.

1.17. The Commission has notified the "MERC (Terms and Conditions of Tariff) Regulations, 2005" which applies to all the Distribution Licensees in the State. In the MERC (Terms and Conditions of Tariff) Regulations, 2005, the Commission has also laid down the procedures for filing ARR and tariff petition under multi-year tariff principles. The multi-year period is defined as the Control Period. The Commission in its order dated 20th December, 2005 has defined first Control Period to be the 3 year period from 1st April 2007 to 31st March 2010. The Commission has accordingly decided to determine the electricity tariffs under the Multi Year Tariff framework with effect from 1st April 2007.

1.18. The Commission has not accepted the ARR as submitted by BEST. The Commission after duly considering the various representations made to it (both written and oral) and taking into account BEST's replies to these and the objections raised during the Public Hearing, has determined the tariff in this Order.

2. OBJECTIONS RECEIVED, BEST'S RESPONSE AND THE COMMISSION'S OBSERVATION / RULING

2.1 The objections received, BEST's response and the Commission ruling have been grouped under the following heads-

- Legal
- Technical
- Power purchase
- Distribution loss
- Capital expenditure
- Operations and Maintenance expenditure
- Bad debts
- Sales
- Tariff
- Administrative and Others

2.2 Against each Objection, BEST's response as received is provided. The Commission's observations if relevant are provided and in areas where specific need was felt, the commission has given its ruling

LEGAL ISSUES

Validity of BEST's MYT Petition

Objection

2.3 Shri. Rakshpal Abrol objected to the validity of the submission of the MYT Petition as it was not approved by the BEST Committee.

BEST's Response

BEST clarified that the ARR and tariff proposal was filed by the General Manager (GM), BEST under the provisions of the Electricity Act, 2003. The GM was responsible to comply with the provisions of the Act and also the directions of the MERC. Thus it was not necessary for the Corporation to pass a Resolution under Section 460A (1) and 460I of the Mumbai Municipal Corporation Act, 1888. In any event the Committee and the Corporation had already approved the budget expenses and the ARR submitted by the BEST. BEST further submitted that as per the MMC Act, 1888 the fixation of tariff is subject to the enactment that would prevail at the relevant time and that the Electricity Act, 2003 which governs the field as regards determination of tariff can be done only by the Regulatory Commission.

Commission's Observation / Ruling

The Commission has already provided its ruling on the issue in detail in its Order in respect of ARR and Tariff Order for FY 2006-07 for BEST dated 18th January 2007. As regards the authority to submit ARR and Tariff Petition, the Commission rules that as long as the petition received from BEST was under affidavit and was notarised; the Commission, need not look into the point as to which authority was authorised to submit the ARR and Tariff Proposal on behalf of the Licensee.

Objection

2.4 Shri. Rakshpal Abrol further submitted that the Petition for MYT was filed under Section 29 of the Electricity Regulatory Commission's Act, 1998 which has been repealed after the introduction of the EA, 2003.

A similar query was also raised by Shri. N. Ponrathnam and Shri. Sandeep Ohri.

BEST's Response

Regarding the incorrect section, BEST submitted that MYT proposal had been submitted under directions of the MERC and under the Regulations and therefore, an incorrect section, would not affect substance of the matter nor does it go to the root of the matter so as to make any fundamental change.

Objection

2.5 Shri. Rakshpal Abrol objected that though the MYT Petition was submitted even before the public hearing of BEST for ARR and Tariff proposal for FY 2006-07, the same was not informed to the public.

A similar query was also raised by Shri. N. Ponrathnam and Shri. Sandeep Ohri.

BEST's Response

BEST submitted that though the municipal elections were declared on 13.12.2006, the procedure in relation to submission of the Multi Year Tariff Petition was strictly in accordance with the Electricity Act, 2003.

Commission's Observation / Ruling

BEST had submitted its MYT Petition to the Commission under Section 9 of MERC (Terms and Conditions Tariff) Regulations 2005, which required that an application for determination of tariff shall be made to the Commission not less than 120 days before the date on which such tariff is intended to be made effective. BEST's MYT petition was admitted only on 2nd February 2007 after the Technical Validation process and after receiving the required additional data and clarifications from BEST.

Distribution License

Objection

2.6 Shri. Rakshpal Abrol submitted that the validity of the Petition was also subject to the grant of License for Distribution and that MERC had not issued distribution license to BEST.

A similar query was also raised by Shri. N. Ponrathnam and Shri. Sandeep Ohri.

BEST's Response

BEST clarified that it was holding a perpetual distribution license and that MERC was yet to revise the said license. However, it did not mean that the BEST as a distribution licensee would cease to function. Thus all actions of BEST was being carried out as per the existing license until renewed or modified by the MERC and so the filing of MYT Petitions was in accordance with law.

Appointment Of Authorised Consumer Representatives

Objection

2.7 Shri. Rakshpal Abrol submitted that the Commission was required to publish in detail its formal policy, rules and regulations, on, nominating / authorising Consumer Representative Organisations as per section 94 (3) of the EA 2003 and also requested the Commission to clarify the status of M/s A.F. Ferguson & Co.

A similar query was also raised by Shri. N. Ponrathnam and Shri. Sandeep Ohri.

BEST's Response

BEST did not specifically reply to this query

Commission's Observation / Ruling

The formal policy regarding participation of Consumer Associations and other persons in any proceedings before the Commission is provided under Section 18 of the MERC (Conduct of Business) Regulations 2004. M/s A. F. Ferguson & Co. has been appointed as consultants to MERC for assistance in determination of ARR and Tariff for FY 2007-08 under MYT for BEST.

Connected Load

Objection

2.8 Shri. Rakshpal Abrol submitted that BEST had been using the term "Connected Load" in the bills raised and that the same had not been defined in the MERC Supply Code and Standards of Performance Regulations.

A similar query was also raised by Shri. Sandeep Ohri.

BEST's Response

BEST clarified that the connected load terminology, which was in vogue had been discontinued.

Commission's Observation / Ruling

BEST is directed to strictly follow correct terminology in its bills as per applicable MERC Regulations and Tariff determined by the Commission for BEST.

Classification Of Installation

Objection

2.9 Shri. Rakshpal Abrol submitted that BEST was providing supply in violation of the MERC (Standards of Performance of Distribution Licensees, Period for Giving Supply and

Determination of Compensation) Regulations, 2005 dated 20-1-2005 in relation to regulation 5.3 (i) (a), (b) and (c).

A similar query was also raised by Shri. Sandeep Ohri.

BEST's Response

BEST clarified that it was providing supply as per the provisions of MERC (Standards of Performance of Distribution Licensees, Period for Giving Supply and Determination of Compensation) Regulations, 2005 dated 20/01/2005, as per Regulation 5.3 (i) (a), (b), (c) and that there was no violation.

Regarding Regulation 5.3 (c), BEST further clarified that it did not violate any of the provisions made applicable by MERC. It was being interpreted that as per Regulation 5.3 (c) for load less than 150 kW, there cannot be a contract demand. However, a provision in the approved tariff schedule allowed BEST to charge such consumers on the basis of contract demand optionally. Hence, no consumer is compelled to enter into a contract demand for loads below 150 kW.

Contract Demand

Objection

2.10 Shri. Rakshpal Abrol asked BEST whether a formal written agreement was in place in respect of contract demand with all the consumers and also details regarding the number of consumers falling under this category and the consequences of not having an agreement for the contract demand. He also asked whether BEST had complied with the requirement of sanctioned load.

A similar query was raised by Shri. Sandeep Ohri.

BEST's Response

BEST clarified that where ever BEST had considered the contract demand for calculation of the billing demand, there existed a mutually signed agreement and that there were about 200 such consumers. BEST further submitted that penal charges have been proposed where the load drawn is in excess of contract demand and that the consumers, who have not confirmed their contract demand in writing under this category, were being proposed to be charged by considering their sanctioned load as contract demand. This condition already exists in the approved tariff schedule of the adjoining utility. It also submitted that prior to introduction of Supply Code, the terminology of connected load was used. Subsequently and after approval of the Conditions of Supply of BEST, the terminology of sanctioned load was being used. BEST also clarified that "contract demand" and "sanctioned load" being two specific terms and were not interchanged.

Supply Code Regulations

Objection

2.11 Shri. Rakshpal Abrol submitted that enforcing 3-phase supply for load below 40 Ampere, to residential, commercial and industrial users was violating MERC Supply Code Regulations.

A similar query was raised by Shri. Sandeep Ohri.

BEST's Response

BEST clarified that it does not violate any of the provisions of the MERC (Standard of Performance of Distribution Licensees, Period of giving Supply and determination of Compensation) Regulation 2005. It was being interpreted that as per point 5.3 (i) (c), load less than 150 kW, there cannot be contract demand. However, there was a provision in the approved tariff schedule to charge such consumers on the basis of contract demand optionally. Hence, no consumer is compelled to enter into a contract demand for loads below 150 kW.

TECHNICAL ISSUES

TPC Power Allocation

Objection

2.12 Shri. Rakshpal Abrol of BSSIA submitted that since the power purchase of BEST was dependent on the allocation and cost of TPC, it would be difficult to arrive at the power purchase cost of BEST and that it would be tedious to rework the whole cost.

BEST's Response

When BEST submitted its MYT proposal in December 2006, the details of TPC's MYT proposal were not available and therefore the submission was on the basis of the information then available, i.e. tariff orders of the Commission for TPC's ARR for FY 2006-07 with the projection of the capacity allocations, costs and CERC guidelines on the price escalation. On subsequent submission of Petition by TPC, a request has been made to the Commission to take into account the capacity allocation and costs proposed by TPC and proposed changes in transmission charges while determining BEST's MYT proposal.

Commission's Observation / Ruling

The Commission has determined the allocation of energy of TPC-G to BEST for FY 2007-08 in the ratio of coincident peak demand of all Mumbai Licensees viz. REL-D, TPC-D and BEST-D. The Commission has determined the power tariff for TPC-G for FY 2007-08 which has been used in arriving of power purchase cost for BEST. The details of the same are covered in the later part of this Order.

Power Purchase Plan

Objection

2.13 Shri. Rakshpal Abrol of BSSIA asked BEST whether any steps were already taken to fulfill the objective of a holistic power purchase plan and that a time frame should be fixed so that the objective is fulfilled.

A similar query was raised by Shri. Navin M Shetty

BEST's Response

BEST clarified that a consultant had been appointed and that the process for short term and long-term requirement as per the guidelines of GOI had already been initiated. BEST further submitted that the process was likely to get over within the next 18 months.

Others

Objection

2.14 Shri. Rakshpal Abrol of BSSIA submitted that the MYT Petition had links to various spreadsheets which were not made available to the public and that as a result the public could not make any sense from the data submitted by BEST.

A similar query was also raised by Shri. Sandeep Ohri.

BEST's Response

BEST clarified that the MYT Petition had to be submitted along with the requisite "forms", "formats" and any other information as desired by the Commission. During the process of preparation of the MYT Petition, the licensee had to undertake extensive exercise for submission of information as per the prescribed formats. Thus in order to avoid any duplicity of information, the same was submitted in various forms and formats which are linked to the original data source. These links were for internal convenience of BEST.

POWER PURCHASE ISSUES

Forecast of Power Allocation from TPC-G

Objection

2.15 Shri. Rakshpal Abrol of BSSIA submitted that there was no change in the forecast made by BEST, in relation to the allocation of units from TPC-G to BEST made in FY 2006-07.

BEST's Response

BEST clarified that when the MYT submission was made, BEST did not have the details of MYT petition of TPC and had to depend upon the allocation and tariffs contained in Commission's Tariff Order to TPC-G dated 3rd October 2006. However, MYT proposal for TPC was submitted subsequently and that the Commission has been requested to consider the same in deciding on the MYT petition of BEST for the control period.

Commission's Observation / Ruling

The Commission has considered the allocation of energy from TPC-G to BEST for FY 2007-08 in proportion to the share of coincident peak demand of the Mumbai Licensees viz. REL-D, TPC-D and BEST. Accordingly, a percentage share of 36.88 percent has been allocated to BEST.

Rebate for using Hydro Peaking Tariff

Objection

2.16 Shri. Rakshpal Abrol of BSSIA submitted that the reason for not continuing with the rebate for hydro-peaking usage for the first Control period was not explained by BEST.

A similar query was also raised by Shri. Sandeep Ohri.

BEST's Response

BEST further clarified that the continuity of hydro-peaking rebate for the First Control Period being uncertain, the same was not considered in the ARR for the first control period.

Commission's Observation / Ruling

The Commission has considered the rebate on account of using hydro peaking tariff for the purpose of Aggregate Revenue Requirement for the year FY 2007-08. For the year FY 2008-09 and FY 2009-10, the Commission has not determined the hydro peaking rebate because of the uncertainty in power purchase by BEST as the Power Purchase Agreement between TPC-G and BEST was not yet formalised.

Stand-by and Transmission charges

Objection

2.17 Shri. Rakshpal Abrol of BSSIA objected to the inclusion of Stand-by and Transmission charges for the purpose of determination of revenue requirement for the control period.

A similar query was also raised by Shri. Sandeep Ohri.

BEST's Response

BEST clarified that the standby charges were not included for the purpose of determining the Aggregate Revenue Requirement and that transmission charges were included as per the relevant orders of the Commission

Commission's Observation / Ruling

2.18 The Commission has considered the Stand-by and Transmission charges for the purpose of determination of Aggregate Revenue Requirement for FY 2007-08. A detailed explanation is given in the later part of this Order.

Alternative Source of energy

Objection

2.19 Dr. Ashok Pendse of MGP submitted that BEST should look for procuring cheaper sources of energy like wind energy to reduce the power purchase cost.

BEST's Response

BEST did not reply specifically to this query of MGP. However, in a presentation made during the public hearing BEST replied that it would make an endeavour to adopt a holistic power purchase plan. BEST expressed difficulties in procurement of renewable energy even at higher rates than that determined by the Commission. As such these purchases are not cheaper and therefore BEST was considering having own windmill generation. BEST stated that it had appointed a consultant to carry out a study in Power Procurement Strategy and Bid Process Management.

DISTRIBUTION LOSS ISSUES

Technical Losses

Objection

2.20 Shri. Rakshpal Abrol of BSSIA submitted that BEST needed to submit the audited data for technical losses for each of the past years from FY 2001-02 to FY 2006-07 duly audited.

A similar question was also raised by Shri. Sandeep Ohri.

BEST's Response

BEST clarified that the technical losses mentioned in their Petition for earlier years were based on study of a small scale, which was done as per Commission's directives in its Tariff Order dated 9th March, 2006. BEST further submitted that studies were being carried out in this regard but that the audited data for the technical losses for past years were not available.

Commercial Losses

Objection

2.21 Shri. Rakshpal Abrol of BSSIA asked BEST to submit detailed explanations and also quantify the various measures taken to reduce the commercial losses and provide historical data regarding commercial losses. He also wanted to know the status of "a micro analysis attributing quantum of Commercial Loss" which was to be submitted by BEST within three weeks from 23rd January 2007.

A similar question was also asked by Shri. Sandeep Ohri.

BEST's Response

BEST clarified that the methodology of working out of distribution losses in the past was based on certain assumptions and therefore showed wide fluctuations. Later, the methodology as prescribed by the Commission was adopted. Regarding the submission of micro analysis attributing quantum of commercial losses BEST clarified that would be submitted to the Commission within a week as the preliminary study indicated that the inclusion of other results would give a better clarity. BEST further submitted that with the adoption of monthly billing system, the computation of the distribution losses would be more accurate and also with the adoption of automatic reading method, the meter reading and billing errors get reduced and will help in reducing the distribution losses. The Commission has directed monthly billing with effect from 1st April, 2007 and the arrangements were being made by BEST for the same.

Objection

2.22 Dr. Ashok Pendse of MGP submitted that where transformer losses are high, BEST could consider franchisee system to reduce the same.

BEST's Response

BEST did not reply to this query

Commission's Observation / Ruling

The Commission has specified a trajectory for reduction of distribution loss over the Control Period. BEST will have to identify areas and reasons for such distribution loss and adopt measures to reduce these losses in order to bring them within the trajectory limits specified.

CAPITAL EXPENDITURE ISSUES

Capitalisation for the control period

Objection

2.23 Shri. Rakshpal Abrol of BSSIA submitted that BEST had projected an average capital expenditure of Rs. 265.18 Crores per year which was not in line with the past trends.

A similar question was also asked by Shri. N. Ponrathnam and Shri. Sandeep Ohri.

BEST's Response

BEST submitted that it was striving to improve its performance in meeting the targeted capital expenditure in the control periods. It further submitted that it would not be appropriate to cite the past trend only at a juncture when Undertaking is required to augment its system not only to meet the load growth but also to make up for the backlog of the previous yeas. It also clarified that the Reinstatement cost for excavation under capital schemes was not being accounted for under capital expenditure in prior years whereas the same had been included in the capital expenditure for all the years under the control period.

Commission's Observation / Ruling

The details of the Commission's reasoning and provisional approval of the captilisation for the control period for BEST has been given in the Chapter 3 of this Order.

Funding of Capital Expenditure

Objection

2.24 Shri. Rakshpal Abrol of BSSIA asked BEST to submit data regarding the funding pattern of capital expenditure for the past years.

A similar question was also asked by Shri. Sandeep Ohri.

BEST's Response

BEST submitted the details of funding of past capital expenditure for the period from FY 2000-01 till FY 2006-07 and the same is given below:

Table 2.1: Funding of Capital Expenditure

Year	Capital Expenditure (Rs. Crores)	Funding through Central Govt. / State Govt. as grants (Rs. Crores)		Internal Funds (Rs. Crores)
		Grant	Loan	
2000-2001	52.36	-	-	52.36
2001-2002	82.69	-	-	82.69
2002-2003	63.86	-	-	63.86
2003-2004	59.80	9.04	Rs.9.04	41.72
2004-2005	69.64	18.07	18.07	33.5
2005-2006	66.77	10.88	10.88	45.01
2006-2007 (proposed) Upto Jan. 2007	70.37	25	-	45.32

Capital Expenditure Vs Number of Consumers

Objection

2.25 Shri. Rakshpal Abrol of BSSIA submitted that the amount of capital expenditure proposed for the control period was disproportionate to the increase in number of consumers, or the increase in consumption, or the increase in revenue. The average capital expenditure from FY 2001-02 to FY 2005-06 was Rs. 65.68 Crores against which there was an annual average increase of 1.44% indicating that BEST is able to cater to its minimal increase in consumers, y-o-y, with a Capex of approx Rs. 66 Crores per year.

A similar query was also raised by Shri. N. Ponrathnam and Shri. Sandeep Ohri.

BEST's Response

BEST clarified that it may not be appropriate to link the entire capital expenditure to the number of consumers as capital expenditure is primarily required to be incurred to meet and maintain the load growth as well as improve the existing reliability levels by augmentation of system and infrastructure.

Tenders for Capital Expenditure

Objection

2.26 Shri. Rakshpal Abrol of BSSIA submitted that BEST had completed only Rs. 55.16 Crores of capital expenditure till November 2006 and that in order to complete the proposed capital expenditure of Rs. 171.06 Crores for the FY 2006-07 tenders would have already been sent. The details of such tenders giving the description of the assets were asked.

A similar query was also asked by Shri. Sandeep Ohri.

BEST's Response

BEST submitted that till January'07, Rs. 72 Crores had been actually incurred apart from the transformer cost of Rs. 15 Crores which had been incurred but had not been capitalised in the books. It further submitted that the capital portion of Re-instatement charges of Rs. 20 Crores was to be included and that the balance would mainly constitute metering costs. BEST submitted the required data and the same is given below:

Table 2.2: Details of Tenders for Fixed Assets

Sr. No.	Tender No.	Due Date of Opening	Description	Contractual Value
1	AMM(SB)/06/TCU/06 914/2006-07/Advt.	17/10/2006	Purchase of 10 (6) and 50 (100) Amps. Static Energy Meters	Rs.13.00 Crs.
2	AMM(SB)/06/TCU/07 224/2006-07/Advt.	23/01/2007	Purchase of 5 (30) Amps. single phase static meters along with data concentrator	Rs.6.50 Crs.
3	AMM(SB)/06/TCU/07 376/2006-07/Advt.	13/03/2007	Purchase of static poly phase 5 Amps. LVCTO meters and CT banks of various ratios.	Rs.6.00 Crs.

Identification of expenditure as capital and revenue

Objection

2.27 Shri. Rakshpal Abrol of BSSIA submitted that the policy regarding the classification of expenditure as Capital or Revenue should be clear as the proposed capital expenditure could also be revenue. Like in the case of Metering / Installation when a meter was being replaced, not all of the expenditure was deemed to be capital expenditure.

A similar query was also raised by Shri. Sandeep Ohri.

BEST's Response

BEST clarified that as per the policy, the expenditure proposed under Capital expenditure plan was classified as capital expenditure and the expenditure incurred for R & M activities was classified as revenue expenditure.

Meters

Objection

2.28 Shri. Rakshpal Abrol of BSSIA submitted that the Metering/installations being a large part of forecasted capital expenditure, BEST should detail its entire metering change / repair / installation rollout plan and also put on record the same.

A similar query was also raised by Shri. Sandeep Ohri.

BEST's Response

BEST clarified that the Central Electricity Authority, CEA had issued metering regulation. In order to implement this regulation, BEST was required to replace the existing conventional meters by electronic meters irrespective of their life. The replacement has been proposed to carry in a time frame of 5 years. However, Commission had directed to carry out this work within time frame of 3 years. BEST submitted that arrangements for necessary infrastructure for this purpose have been reflected in the proposed capital expenditure for the first control period.

Objection

2.29 Dr. Ashok Pendse of Mumbai Grahak Panchayat submitted that the utilities were reluctant to change meters on account of additional capital expenditure as it would help on proper energy accounting. He further submitted that the different schemes were also available for meter purchase like APRDP, PFC, etc.

BEST's Response

BEST did not specifically reply to this query. However, during the public hearing BEST responded that it had already been availing schemes under APDRP for capital expenditure projects.

OPERATION AND MAINTENANCE EXPENSES ISSUES

Administration and General (A&G) Expenses

Objection

2.30 Shri. Rakshpal Abrol of BSSIA submitted that BEST had given a table with percentage sharing (allocation) of General Administration expenses between Transport and Supply departments as done till FY 2005-06, but had mentioned that this had changed since. He required BEST to give reasons for change of this percentage sharing allocation and the resultant impact.

A similar query was also raised by Shri. Sandeep Ohri.

BEST's Response

BEST submitted that the A&G expenses for all the years of the control period were in line with the principles laid in the Tariff Order for FY 2006-07 issued on 18th January 2007 and that no change in the allocation percentage was done.

Objection

2.31 Dr. Ashok Pendse of MGP objected to the rationale behind the apportionment of administration and general expenses on percentage basis. He further said that the apportionment should be made on actual basis.

BEST's Response

BEST did not specifically reply to this query but had submitted that the A&G expenses was estimated based on the principles laid in the tariff Order for FY 2006-07 issued on 18th January 2007. BEST also submitted during the Public Hearing that going forward, it would try and allocate A&G expenses on an actual basis

Employee Expenses

Objection

2.32 Dr. Ashok Pendse of MGP submitted that BEST should make an analysis of in-house versus outsourcing and should act accordingly in reducing the employee costs.

BEST's Response

BEST did not specifically reply to this query. However during the public hearing presentation BEST submitted that there was a scope for outsourcing some in-house activities.

Commission's Observation / Ruling

The Commission had directed BEST to carry out a manpower study. The Commission notes with disapproval the delay in carrying out a scientific manpower study. The Commission directs BEST to submit at the time of truing up with the audited accounts of FY 2006-07, report on manpower study and cost benefit analysis on activities to be outsourced, measures for optimisation of manpower costs and resultant estimates to achieve the trajectory set out by the Commission for the control period.

BAD DEBTS REALTED ISSUES

Break up of Bad Debts

Objection

2.33 Shri. Rakshpal Abrol of BSSIA submitted that a party-wise break-up of proposed bad debts was not given by BEST and that BEST should put on record, its definition and basis of classification of receivables, as "bad debts" which have been projected in this MYT Petition. Also, BEST was silent on the steps and measures taken to recover the outstanding receivables of Rs. 221 Crores projected in the earlier ARR/Tariff Petition public hearing.

BEST's Response

As regards bad debts, BEST clarified that the proposed write off of Rs.7.91 Crores, Rs.8.25 Crores and Rs.5.41 Crores as bad debts in MYT proposal for FY 2007-08 to FY 2009-10 respectively are less than 2% of total earnings which are permitted in any business. Further, year wise break up of the bad debts proposed to be written off had been submitted. These amounts were not received in spite of disconnection of supply and extensive follow up and that the attempts to recover adopting the procedure of approaching court of law was not economically viable in these cases.

Regarding the outstanding receivable of Rs.221 Crores, a large portion of these arrears were pertaining to various government departments, hospitals and that it included the amount of delayed payment charges. Cases had already been filed in relation to the debts owed by the Hospital Association in the Mumbai High Court and that the Court had given an interim decision to make a payment every month based on Court's formula.

Commission's Observation / Ruling

The Commission has given its analysis and ruling in respect of treatment of bad debts proposed by BEST in Chapter 3 of this Order.

Amnesty Scheme

Objection

2.34 Shri. Rakshpal Abrol of BSSIA submitted that in line with the Order dated 18-1-2007, BEST was to introduce an "amnesty" scheme for these outstandings. However, there were no public announcements on this scheme. He also submitted that BEST is required to mention whether any BEST director, employee or other "interested person" have any interests in the amounts being so treated as bad debts.

A similar query was also raised by Shri. Sandeep Ohri.

BEST's Response

Regarding the amnesty scheme BEST clarified that the scheme was announced for both Government and Non-Government consumers but initially implemented only for Government consumers. It further submitted that the response from the consumers was good and that the scheme will be implemented effective from 1st March 2007 for which the public announcements were being made currently. Enquiries from consumers were being received, indicating willingness for settlement of the arrears.

Basis for Bad Debts

Objection

2.35 Dr. Ashok Pendse of MGP submitted that bad debts should be on actual basis instead of on percentage basis.

BEST's Response

BEST did not specifically reply to this query

Commission's Observation / Ruling

The Commission has given its analysis and ruling in respect of treatment of bad debts proposed by BEST in Chapter 3 of this Order.

SALES RELATED ISSUES

DC Supply

Objection

2.36 Shri. Rakshpal Abrol of BSSIA enquired about the details of DC customers, costs and other details of converting electricity from AC to DC (infrastructure required, etc.)

A similar objection was also raised by Shri. Sandeep Ohri.

BEST's Response

In response to the above objection, BEST stated that it had dis-continued giving DC supply since year 1964. Hence, this objection was no longer valid.

Sales Trend

Objection

2.37 Shri. Rakshpal Abrol of BSSIA requested for information on the historical trend of sales and customer mix (FY 2001-02 onwards). He also pointed out that the data given in the annexure did not show decrease in the industrial demand growth rate.

A similar objection was also raised by Shri. Sandeep Ohri.

BEST's Response

In response to the above objection, BEST provided the required data which showed that the share of industrial consumption within the total consumption mix was declining from 10.09 percent in FY 2001-02 to 8.62 percent in FY 2006-07 (P).

Growth in Customer Base

Objection

2.38 Shri. Rakshpal Abrol of BSSIA wanted to know the reasons for a sudden spurt in the growth rate to 2.83% during the first control period vis-à-vis the current growth rate of 1.445% during the past 5 years

A similar objection was also raised by Shri. Sandeep Ohri.

BEST's Response

In response to the above objection, BEST stated that its projection was based on the historical study of the segmental growth of consumers apart from the changes in the consumption pattern. It also envisaged that with the onset of intensified building activities and redevelopment like the Dharavi Project involving multi-storied buildings, there was every likelihood of further increase in the number of consumers.

Consumption Slabs

Objection

2.39 Shri. Rakshpal Abrol of BSSIA submitted that the consumption slabs for various tariff categories of BEST should be based on prevailing ground realities (stand by mode for CAS boxes, vertical growth in buildings, lifts, etc.) and be modified accordingly.

A similar objection was also raised by Shri. Sandeep Ohri.

BEST's Response

In response to the above objection, BEST stated that they had no comments to offer about the applicability for concept of set top boxes for conditional access system for cable networks to the electricity distribution network. According to them, the various consumption slabs were in line with the Commission's Tariff Order dated 09/03/2006, 26/09/2006 and 18/01/2007. BEST also added that according to them, these slabs were appropriate.

Commission's Observation / Ruling

In the revised tariff for FY 2007-08, the Commission has introduced two additional consumption slab in the LT I Residential (earlier LF 1) category as; 300-500 kWh and > 500 kWh consumption.

Customer Indexation and Mapping

Objection

2.40 Shri. Navin Shetty wanted BEST to engage in an exercise in consumer segment differentiation (micro analysing the consumer segments not only on the basis of units consumed but also on demographics) in light of the changing demographics.

BEST's Response

BEST did not give any reply in this matter.

Commission's Observation / Ruling

The Commission had in its earlier Operative Order dated 25th February 2006 and detailed Order dated 9th March 2006, had asked BEST to carry out a detailed customer indexation and grouping exercise to understand its existing customer base. The consumer category and consumption slabs groupings could be re-looked at only after the above data was submitted by BEST.

The Commission has also observed that the consumer categorisation policy currently being followed by BEST is unclear and does not follow a correct methodology. In this Order, the Commission has directed BEST to take up an exercise to regroup consumers into the Tariff categories specified by the Commission as per the grouping based on the purpose of usage of supply by such consumers giving consideration to the Regulation 13 of the MERC (Electricity Supply Code and Conditions of Supply) Regulations 2005. The Commission directs BEST to complete this exercise and submit the same to the Commission by 30th September 2007 for the FY 2007-08 the details of the regrouped consumer numbers and change in consumption levels and tariff revenue (as per tariff specified by the Commission for FY 2007-08) can be submitted at the time of APR for FY 2007-08. The Commission directs BEST to complete its customer indexation and mapping exercise before the end of the FY 2007-08.

Higher tariffs for Industrial consumers

Objection

2.41 Shri. Navin Shetty wanted to know whether BEST as a government body did share the view that industries needed to be encouraged in its area to expand their consumption base. He also wanted to know the reasoning for a steep increase in the tariffs for industries.

BEST's Response

BEST submitted that it had not stated any such thing in its petition. BEST's petition only pointed out that there was a decrease in the low voltage industrial demand growth and this was primarily on account of factors like increased competition and other socio-economic factors these industries were moving out of BEST's license area to the suburbs where real estate prices were lower and cheaper labour was available easily. As such these factors were beyond BEST's control.

Generation of Additional Revenues

Objection

2.42 Shri. Navin Shetty submitted that BEST should make efforts to generate additional revenues not just by following the cost plus approach but instead by increasing their consumer base, thereby allowing a wider distribution of its fixed charges and overheads.

A similar query was also raised by Dr. Ashok Pendse.

BEST's Response

BEST submitted that it may be mentioned that the BEST is licensee for the island city of Mumbai which is confined by the geographical boundaries of the sea from three sides and has no scope for horizontal expansion. BEST also added that the existing mix of its consumer base was a result of various socio-economic factors upon which it had no control. BEST also pointed out that customer mix was given as an uncontrollable factor in the MYT regulations.

Publishing of Defaulters List

Objection

2.43 Dr. Pendse, of MGP pointed out that BEST had published the Defaulter's list only once since November 06, whereas, the Commission had asked BEST to publish such list at regular intervals

BEST's Response

In response to the above objection, BEST stated that the Defaulters list was again published in the local newspapers on the 21st February 2007. BEST also pointed out that amongst the Government departments from whom it had recovered dues included the Police Commissioners Office and J. J. Hospital. BEST also added that advertisement regarding an 'Amnesty Scheme' aimed at speeding up the collection of dues was published in the local newspapers on the 26th of February 2007.

Commission's Observation / Ruling

BEST is directed to publish the defaulters list at regular intervals and ensure that the outstanding amounts are reduced.

TARIFF RELATED ISSUES

Monthly Billing

Objection

2.44 Shri. Rakshpal Abrol of Bombay Small Scale Industries Association (BSSIA) objected as to why BEST had not yet introduced monthly billing.

A similar objection was also raised by Shri. Sandeep Ohri.

BEST's Response

In response to the above objection, BEST stated that in keeping with the Commissions orders it would be switching to the monthly billing system from the FY 2007-08 beginning from the 1st of April, 2007. All arrangements for the same had been already made. BEST also pointed out that with the adoption of monthly billing system, the computation of the distribution losses would become more accurate and alongwith the adoption of automatic reading methods, the meter reading and billing errors would also be reduced. BEST submitted that these measures would go a long way in reducing its distribution losses.

Commission's Observation / Ruling

The Appellate Tribunal Judgement in Case No. 61 dated 18th August 2006 had directed BEST to introduce monthly billing from 1st of April 2007. BEST is required to comply with the ruling of the Appellate Tribunal for electricity.

Difference in the Tariff Schedule published in newspapers vs. that in the Petition of BEST offered for sale to public

Objection

2.45 Shri. Rakshpal Abrol of BSSIA pointed out that the Tariff Schedule that appeared in the newspapers differed from that given in the petition copy sold to the public.

A similar objection was also raised by Shri. Sandeep Ohri.

BEST's Response

In response to the above objection, BEST stated that its ARR and Tariff petition was submitted to Commission in the month of December 2006. The tariff schedule which appeared in the newspapers was subsequent to the above and was changed after taking into view the discussions held during the technical validation sessions in the month of January 2007 and the Commission's Order dated 18.01.2007. This was the reason for the difference in the ARR and Tariff schedule published in the Petition and the one shown in the newspaper advertisement.

Commission's Observation / Ruling

BEST first submitted its MYT petition on 11th December 2006. The ARR and Tariff in this petition was subsequently updated by BEST on 17th January 2007 and subsequently on the 31st January 2007 based on the discussions during the Technical Validation session and other data gaps / clarifications sought by the Commission. BEST published the Public Notice in newspapers on the 7th and 8th February 2007. However, in the Public Notice it showed an ARR excluding 'Stand-by Charges' and also revised the tariff rate. As such these were different from what it had stated in its original petition.

As per the Commissions instructions, BEST subsequently published a corrigendum in the newspapers to clarify the issue of non inclusion of standby charges in the public notice and executive summary of petition. BEST had stated in the Corrigendum – " *As a policy decision, the BEST Undertaking had decided to delete 'Standby Charges' as a part of Power Purchase Expenses in the Annual Revenue Requirement for the First Control Period FY 2007-08 to 2009-10 under MYT Proposal and accordingly, the revised tariff was proposed to bridge the revenue gap. In the event of incorporation of standby charges by the Hon'ble Commission while approving the Undertaking's Power Purchase Expenses, the proposed tariff will stand modified to that extent as a consequence".*

Tariffs for all the years of the Control Period

Objection

2.46 Shri. Rakshpal Abrol of BSSIA objected that the Tariff Schedule for only the first year under the MYT period was given by BEST in the public notice. He also wanted to know about the tariffs for the remaining 2 years of the control period.

A similar objection was also raised by Shri. Sandeep Ohri.

BEST's Response

In response to the above objection, BEST stated that it had submitted the Tariff Schedule for the first control period of the three years in its Petition in December 2006. The Tariff Schedule which appeared in newspapers was for the first year of control period i.e. FY 2007-08 and was as per the template forwarded and approved by the Commission.

Commission's Observation / Ruling

The Commission points out that as a part of the MYT framework in terms of Regulation 20 of the MERC (Terms and Conditions of Tariff) Regulation 2005, the tariff for the subsequent years of the Control Period would be determined, if required, depending upon the need for change as per the Annual Performance Review (APR) process at the end of each financial year within the Control Period. As such the need for change in tariffs for FY 2008-09 would be assessed during BEST's APR for FY 2007-08.

Recovery of cost of Receivers / Sub-stations from consumers by way of Rentals

Objection

2.47 Shri. Rakshpal Abrol of BSSIA wanted to know if BEST as a practice was recovering cost of installation like receivers / sub-stations from its consumers by way of some rental toward these.

A similar objection was also raised by Shri. Sandeep Ohri.

BEST's Response

In response to the above objection, BEST stated that it does not recover cost of installation of its transformers, receiving station and substation from its consumers and does not charge rental towards any of these elements.

Fixed Charges being paid by the Consumers

Objection

2.48 Shri. Rakshpal Abrol of BSSIA wanted to BEST to clarify to its consumers, details about the fixed charges being paid by them.

A similar objection was also raised by Shri. Sandeep Ohri.

Shri. Pandya S. N. submitted that there should not be demand / fixed charges for residential consumers.

BEST's Response

In response to the above objection, BEST stated that the Concept of Fixed Charges had been introduced by the Commission in the tariff order dated 09.03.06, wherein it was mentioned by the Commission that *"The Commission has abolished the minimum charges and the concept of Two Part Tariff, namely Fixed Charge and Variable Charge had been introduced for all consumers, in line with the policy already implemented for other licensees. The Commission stated that this will send the correct economic signal to the consumers that all consumers would have to contribute towards the fixed cost of the licensee, and would also simplify the bill and make it easier to understand."* It may be mentioned that the concept of Fixed Charges was already prevalent in tariff schedule prescribed by the Commission to the neighboring utilities and was also effective in BEST from 01.10.06 as per MERC Supplementary Tariff Order dated 26.09.2006 and 18.01.2007.

Parameters for computation of delayed payment charges and prompt payment discount

Objection

2.49 Shri. Rakshpal Abrol of BSSIA submitted that BEST should charge incentive for prompt payment and penalty for delayed payment on a similar set of parameters. He also wanted BEST to provide details of such collections done in the past.

A similar objection was also raised by Shri. Sandeep Ohri.

BEST's Response

In response to the above objection, BEST stated that the prompt payment charges incorporated in its proposed tariff schedule were in line with the Commission's Tariff Order dated 18/01/2007. The details of delayed payment charges billed / refunded and prompt payment discount for the years FY 2000-01 to FY 2006-07(upto December 2006) is tabulated below:

Table 2.3: Details of Delayed Payment Charges and Prompt Payment Discount

(In Rs.)

Year	DPC Billed	DPC Refunded	Net	PPD
2000-01	378461285.24	-43977976.54	334483308.70	N.A.
2001-02	400187176.13	-43211369.26	356975806.87	N.A.
2002-03	452036021.34	-48646739.39	403389281.95	23027121.63
2003-04	409633761.39	-80173423.49	329460337.90	12014150.16
2004-05	391010516.99	-55275370.27	335735146.72	1535153.27
2005-06	422026463.63	-76370471.85	345655991.78	1534405.66
2006-07 (Dec' 06)	209987751.74	-43251333.15	166736418.59	1120017.70

Commission's Observation / Ruling

The Commission has set out the parameters for prompt payment discount and delayed payment charges in the revised tariff schedule for BEST for FY 2007-08.

The energy bill of a consumer consists of three components viz. Demand / Fixed Charges, Energy Charge and Taxes and Duties.

The component of Taxes and Duties are a sovereign item as levied by the government or a statutory authority and are payable by the licensee whether the consumer pays his bill on time or otherwise. If the consumer does not pay his bill on time, then the licensee also has no relief in terms of time to pay these Taxes and Duties. If the delayed payment charges are levied on the bill amount including Taxes and Duties then that helps the licensee in cost control. Similarly, in terms of prompt payment discount, the licensee does not get any cash relief on the Taxes and Duties to be paid to the Government / Statutory Authority. Hence the prompt payment discount is provided on the bill amount excluding Taxes and Duties.

Average Cost of Supply

Objection

2.50 Shri. N. Ponrathnam pointed out that the average Cost of Supply despite giving subsidy to the transport division in the past was lower than the proposed Average Cost of Supply for the MYT period

BEST's Response

In response to the above objection, BEST stated that the increase in the average cost to serve was mainly due to the increase in the power purchase cost as explained in detail in its petition.

Subsidies

Objection

2.51 Shri. N. Ponrathnam submitted that the subsidies to categories as such Defence / Railways / BARC; Government / Commercial, Shops / Industries, Offices / Residence to be discontinued.

BEST's Response

In response to the above objection, BEST stated that it had in its tariff proposal followed the guidelines mentioned in the National Tariff Policy and had attempted to gradually reduce the cross subsidy to the residential category.

Commission's Observation / Ruling

As per the guidelines outlined in the National Tariff Policy, all subsidies would have to be reduced and ultimately eliminated over a period of time such that the tariff rates are within + or – twenty percent of the cost of supply by 2010-11. However, the efforts are on to reduce the cross-subsidies and this could have been an easier task in a situation of electricity supply matching the demand. Given the current power scenario there is a severe demand-supply gap, these are certain anomalies that have cropped up such as the need to purchase expensive power by the distribution licensees, which is making it difficult to achieve this objective of reducing the cross subsidy. The Commission has however attempted to reduce the cross-subsidy as regards the base energy charges. With easing of the demand-supply situation in the coming years, the Commission will continue its efforts to bring down the cross subsidy levels as envisaged in the National Tariff Policy.

Method for Calculation of Tariff Components

Objection

2.52 Shri. N. Ponrathnam wanted to know the working details / methodology to be given for calculation of the Fixed Charges for connection, the Demand Charges, Penalties, Maintenance of power factor and harmonics, RkVAh charges for different categories and differentiation of charges for industry, shops and commercial.

BEST's Response

In response to the above objection, BEST stated that it had followed the guidelines mentioned in the Commission Supplementary Order dated 26th September 2006 to calculate the fixed charges, RkVAh and penalty charges.

Commission's Observation / Ruling

Tariff determination is a complex issue. The guidelines for treatment of various cost segments and that for determination of tariff have been prescribed in the MERC (Terms and Conditions of Tariff) Regulation 2005. The Commission has determined the tariffs keeping in view the Regulation.

Tariff to be proportional to consumption

Objection

2.53 Shri. Pandia S. N. submitted that the tariff should be linked to the consumption levels for residential consumers

BEST's Response

In response to the above objection, BEST stated that it had already considered this principle while designing its proposed tariff schedule and had designed three slabs and differential rates for these slabs in its proposed tariff schedule that was published in the newspapers.

Commission's Observation / Ruling

The Commission has introduced four consumption slabs based for the residential category LT-I viz. 0 to 100, 101 to 300, 301 to 500 and greater than 500 kWh per month for the residential consumer category. The tariff is thus telescopic in nature for this category.

Maximum Demand Charges for LT Commercial and LT Industrial Categories

Objection

2.54 Shri. Navin Shetty submitted that the maximum demand charges for existing LTC 1 tariff category should be less than the maximum demand charges for the LTP 2 tariff category (as the diversity factor of LTP2 was lower than that of LTC I).

BEST's Response

BEST submitted that it has proposed lower demand charges for the LTC 1 category than that of the LTP 2 category in its proposed tariff structure.

Commission's Observation / Ruling

This is a matter of tariff determination and the Commission has kept this in mind while determining the revised tariff for BEST for FY 2007-08.

Similar tariff for HTP and Defence

Objection

2.55 Shri. Navin Shetty submitted that the HTP general and HTP Defence Tariffs should be same. He also wanted to know the reasoning for concessional rates being offered to the Defence consumers

BEST's Response

BEST did not give any reply to this objection

Commission's Observation / Ruling

The Commission clarifies that the HTP-5 Defence Bulk Supply under earlier tariff (as per Supplementary Order dated 26th September 2006) and other HT categories (HTP-1 to HTP-4) were distinctly different tariff categories and the tariff had been designed for each category. Hence the Tariff for HTP-5 category and other HT categories cannot be same.

In the revised Tariff, the Commission keeping in view the provisions of the MoP Order dated 9th June 2005 on Electricity (Removal of Difficulties) (Eighth) Order 2005, has ruled that the HT Bulk Supply Tariff of HT V (earlier HTP-5) category will be applicable only to the Group Housing Societies (Housing Colonies) including that for housing colonies for Defence. From 1st April 2007 onwards, the Commission has made applicable the HT V category for bulk residential consumption (Group Housing Societies) including that for Defence residential colonies and not for downstream commercial or industrial consumption.

Higher Tariff for SL Category

Objection

2.56 Shri. Navin Shetty submitted that the SL category Tariffs be revised upwards as the tariffs could not be determined mutually as per convenience between BEST and BMC. BMC's ability to pay higher tariffs again goes without saying, therefore they could be charged higher.

BEST's Response

BEST did not give any reply to this objection

Commission's Observation / Ruling

The Commission in its Supplementary Order dated 26th September 2006, had directed BEST to levy of Fixed Demand Charges of Rs. 300/kVA/ month with respect to street lights. It had also directed BEST to affix meters to the street lighting pillars within a period of six months (from 18th August 2006) as per the ruling of the Appellate Tribunal in Case No. 61 of 2006 dated 18.8.06.

In this Order the Commission has revised the tariff for SL category for Public Street Lighting for FY 2007-08.

Calculation of Maximum Demand Charges

Objection

2.57 Shri. Navin Shetty requested for clarification on whether the maximum demand charges levied by BEST was on a 30min interval basis or whether it was on an average basis of all MD in 30 min intervals during the billing cycle

BEST's Response

BEST replied to the query stating that the basis for the levy of maximum demand charges was 'kW hour' i.e. it was on a 30 minute interval.

Differential Tariffs for different consumer categories

Objection

2.58 Shri. Navin Shetty submitted that differential tariffs needed to be introduced in case of high end high rise residential complexes and elite shopping malls based on that consumer segment's ability to pay.

BEST's Response

BEST submitted that it may kindly be noticed from the BEST's MYT tariff proposal that the higher consumption in residential categories i.e. LF-1 and for LF-2 category, higher tariffs have been proposed.

Commission's Observation / Ruling

The Commission has introduced different consumption slabs and a sliding scale for energy rate to be charged across the consumption slabs for the residential consumer category LT-I and LT-II Commercial category. This would essentially mean that the consumers consuming more electricity would also pay higher tariff charges accordingly.

RkVAh CHARGES

Objection

2.59 Shri Rakshpal Abrol submitted that there was no logical reason for charging RkVAh as the Distribution Licensee was primarily responsible to ensure correct harmonics and power factor at the point of supply to the consumer.

BEST's Response

BEST submitted that RkVAh charges were being charged on the basis of Commission's Order dated 26th September 2006 to the consumers whose consumption was equal to or above 3000 units per month.

Commission's Observation / Ruling

Commission has replaced RkVAh charges with a mechanism of Power Factor Penalty and Incentive in the revised Tariff for FY 2007-08

ADMINISTRATIVE AND OTHER ISSUES

Others

Objection

2.60 Shri. Rakshpal Abrol of BSSIA submitted that a detailed timeline in chronological order of the dates of meetings that have taken place in the Case No. 66 of 2006 should be made public by the Commission.

A similar query was also raised by Shri. Sandeep Ohri.

BEST's Response

BEST did not specifically reply to this query.

Commission's Observation / Ruling

The meetings in respect of the Case No. 66 of 2006 were internal to the functioning of the Commission. The meeting in Public Domain was the Public Hearing in respect of the Case, which was attended by the public including Shri. Rakshpal Abrol.

Objection

2.61 Shri. Rakshpal Abrol of BSSIA submitted that the consumer representatives who were present during the technical validation and their objections should be made public.

BEST's Response

BEST did not specifically reply to this query.

Commission's Observation / Ruling

The list of attendees at the Technical Validation session is given in Annexure I of this Order. The technical validation session is a procedural step before the acceptance of the petition and public hearing. No objections are filed during or before the Technical Validation session, and only comments and suggestions are given by the Consumer Representatives during the Technical Validation. Objections are invited after admission of the Petition, which have been summarised in this Order.

Objection

2.62 Shri. Rakshpal Abrol of BSSIA submitted that the public was not given enough time to study and respond to the MYT Petition. He wanted to know if the public notice was given as per the Commission's Rules and Regulations and also submit a copy of the same.

BEST's Response

BEST clarified that draft Public Notice Template was provisionally approved by the Commission on 3rd February, 2007. BEST had made necessary arrangements for publishing the Public Notice in the newspapers as prescribed by the Commission on 5th February, 2007. As the contents of the Public Notice were voluminous it could not be published by the concerned newspapers due to the space constraints and it appeared on the 7th and 8th February, 2007. As far as the Petition copies are concerned they were available to the public from 8th February, 2007 onwards.

Furnishing Audited Accounts

Objection

2.63 Shri. Rakshpal Abrol of BSSIA submitted that the General Manager, BEST had not enclosed a copy of the Audited Balance Sheet for the year ended 31-3-2006 for the purpose of truing up of FY 2005-06 under provisions of the EA 2003 and other relevant Rules.

A similar query was also raised by Shri. N. Ponrathnam and Shri. Sandeep Ohri.

BEST's Response

BEST submitted that the audited Balance Sheet for the FY 2005-06 was submitted along with the ARR and Tariff Petition for FY 2006-07 vide letter dated 29th November, 2006 and that the Commission had considered the same for the purpose of truing up of FY 2005-06 in its Order dated 18th January, 2007.

2.64 Profit for FY 2004-05 and FY 2006-07

Objection

2.65 Shri. Rakshpal Abrol of BSSIA submitted that BEST, being only a distributor of electricity, purchases its requirement from Tata Power Company (TPC). TPC's Tariff was introduced on 1-6-2004 which, was being followed till 30-9-2006. BEST had the same Tariff from 1-10-1997 to 30-9-2006 and has yet made a profit every year. The details of profit made during the years 2004-05 and 2005-06 are to be brought out clearly.

BEST's Response

BEST submitted that the truing up for FY 2005-06 was undertaken by the Commission in the Tariff Order dated 18th January, 2007 and the revenue surplus / (gap) was adjusted in the net revenue surplus / (gap) for the FY 2006-07:-

Table 2.4: Profit of FY 2005-06 and FY 2006-07

Particulars	Amount (Rs. in Crores)
Revenue Surplus / (gap) for FY 2005-06	78.91
Revenue Surplus / (gap) for FY 2006-07	(198.45)
Net Revenue Surplus / (gap)	(119.54)

Regarding the truing up of FY 2004-05, the same was not allowed by the Commission with a reason that BEST should have come before the Commission in the appropriate years.

3. DETERMINATION OF ARR FOR FY 2007-08

COMMISSION'S ANALYSIS AND DECISION ON BEST'S PETITION FOR THE FIRST CONTROL PERIOD FROM FY 2007-08 TO FY 2009-10

Sales Projections And Tariff Income Projected By BEST

BEST's Submission

3.1. The sales forecast as submitted by BEST is on the basis of a 5 year CAGR on the revised tariff slabs as introduced in the Supplementary Order dated September 26, 2006. For the 5-year CAGR computation, FY 2001-02 and FY 2006-07 has been taken by BEST as the base years. The actual consumption for the 6-month period of April-06 to September-06 and the forecasted consumption for the period November-06 to March-07 have also been considered for the projections. The 5-year CAGR values so arrived at has been used as the basis for forecasting energy sales for FY 2007-08, FY 2008-09 and FY 2009-10.The five year CAGR to an extent, reflects the past in terms of the growth, addition of new customers and the reduction in industrial sales. BEST has mentioned that load growth approach for the next three years is on the basis of historical trends for areas being supplied by BEST presently.

3.2. The sale units and revenue from sale of power as per the existing tariff vide MERC Tariff Order dated 26th September 2006 (Case No. 4 of 2004) and as per BEST Petition for the control period years is given below:

Table 3.1: Sales forecast proposed by BEST for the control period

Tariff Slabs	FY 2006-07 (Revised projections)	FY 2007-08	FY 2008-09	FY 2009-10
BPL	0.01	0.01	0.01	0.01
LF-1	1595.47	1642.43	1691.17	1741.80
LF-2	1351.40	1402.51	1456.40	1513.26
LTC-1	68.45	69.11	69.78	70.46
C(D)	1.44	1.43	1.42	1.41
LTP-1	168.84	173.21	177.93	183.01
LTP-2	5.82	4.86	4.07	3.40
SL	36.57	36.22	35.89	35.57
E	1.12	1.03	0.95	0.88
T	15.63	20.41	26.80	35.37
TS (R)	0.12	0.08	0.05	0.04
HTP-1	1.23	1.26	1.30	1.34
HTP-2	20.84	21.46	22.09	22.75
HTP-3	274.72	282.36	290.22	298.31
HTP-4	75.93	75.90	75.98	76.17
HTP-5	106.24	118.48	135.46	159.01
Total (in MU)	**3723.83**	**3850.76**	**3989.52**	**4142.79**
Expected Revenue (Rs. Crores)	**1468.90**	**1443.37**	**1497.54**	**1557.45**

Commission's Observation / Ruling

3.3. BEST should adopt more scientific ways for projecting sales. Additional studies are to be carried out for the same as the present methodology may not yield a correct picture of the demand requirement. BEST is directed to initiate the exercise of demand projection through a scientific method and submit the same at the time of APR for FY 2007-08.

Distribution Loss

BEST'S Submission

3.4. The Distribution loss level proposed by BEST for the control period years is given below:

Table 3.2: Distribution loss proposed by BEST for the control period

Year	BEST Claim	Technical loss	Commercial loss
FY 2005-06 (Actual)	13.02%	7.52%	5.50%
FY 2006-07	12.40%	7.52%	3.98%
FY 2007-08	12.00%	7.52%	4.48%
FY 2008-09	11.50%	7.52%	3.98%
FY 2009-10	11.00%	7.52%	3.48%

3.5. BEST proposed to reduce distribution losses gradually during the 3-year MYT period and attain a loss level of 11% by F.Y. 2009-10 at the end of the first control period of MYT. For FY 2007-08 the distribution loss has been proposed at 12%, for FY 2008-09 at 11.5% and FY 2009-10 at 11.0%. Based on an in depth study of its network and also load flow study of its typical network, BEST arrived at a technical loss figure of 7.52%, the balance of 5.5% being commercial loss for the FY 2005-06. In each of the control period years the technical loss has been assumed to be at 7.52%, the balance being commercial loss.

3.6. BEST stated that it has been making intensified and focused efforts for reduction of commercial losses which include following measures:

- Adoption of monthly billing from April 2007, as per the ATE Judgement in Appeal No. 61 of 2006
- Clearing the backlog of non-functional and defective meters and thereafter ensuring prompt replacement of defective meters.
- Replacement of electro mechanical meters by static meters in a time bound manner.
- Adoption of automatic meter reading methods, etc.

Commission's Observation / Ruling

3.7. The Commission considers the distribution loss to be a controllable variable. The distribution loss approved by the Commission for the control period is given below:

Table 3.3: Distribution loss approved by the Commission for the control period

Year	BEST Claim	MERC Approved
FY 2006-07	12.40%	11.50%
FY 2007-08	12.00%	11.00%
FY 2008-09	11.50%	10.50%
FY 2009-10	11.00%	10.00%

3.8. The Commission is of the opinion that the commercial losses can be reduced further although BEST has started taking measures to reduce the same. Also, with the proposed capital expenditure, BEST should try to reduce the technical losses to the extent possible. The Commission feels that there should be an improvement over the loss levels prescribed by it for FY 2006-07 and therefore allows a distribution loss of 11%, 10.5% and 10% for the FY 2007-08, FY 2008-09 and FY 2009-10 respectively. The distribution loss levels approved by the Commission also sets out a trajectory road map with specific target for progressive reduction of distribution loss.

3.9. The Commission has set out a trajectory in respect of distribution loss. The gain or loss on account of the same will be treated in accordance with the Regulation 19 of MERC (TERMS AND CONDITIONS OF TARIFF) REGULATIONS 2005 at the time of APR for FY 2007-08.

Energy Input Requirement And Cost

3.10. In respect of FY 2007-08, the energy input requirement and cost has been computed on the basis of TPC-Generation Order for FY 2007-08 under MYT. In respect of FY 2008-09 and FY 2009-10, there is no clarity on the power purchase quantum and cost since the "Power Purchase Agreement" (PPA) between TPC-G and BEST is yet to be approved by the Commission. Thus, power purchase quantum and cost has been approved by the Commission pertaining to FY 2007-08 only. The Commission expects that the PPA will be formalised in the FY 2007-08 and the power purchase quantum and cost for FY 2008-09 and FY 2009-10 will be determined at the time of APR of FY 2007-08 and FY 2008-09, respectively, on the basis of the approved PPA between TPC-G and BEST.

BEST'S Submission

3.11. The energy requirement as determined by BEST is given below:

Table 3.4: Energy Input Requirement proposed by BEST for the Control Period

Particulars	F.Y. 2007-08	F.Y. 2008-09	F.Y. 2009-10
Estimated Sales (MU)	3850.75	3989.52	4142.79
Estimated Distribution loss (%)	12%	11.5%	11%
Estimated Distribution loss (MU)	525.10	518.41	512.03
Total Energy Requirement (MU)	4375.85	4507.93	4654.82

3.12. The energy requirement for the control period is computed by BEST after considering a distribution loss of 12% in FY 2007-08 to 11% in FY 2009-10. The Transmission loss of

4.85% has not been considered by BEST while estimating the input requirement for the years under the control period.

Commission's Observation / Ruling

3.13. Energy Input Requirement as approved by the Commission for the FY 2007-08 is given below:

Table 3.5 : Energy Input Requirement approved by the Commission for FY 2007-08

Particulars	FY 2007-08
Sales (MU)	3850.75
Distribution Loss (%)	11.00%
Transmission Loss (%)	4.85%
Gross Energy Purchase units (MU)	4547.23

3.14. The energy requirement for FY 2007-08 has been determined after considering the distribution loss levels approved by the Commission. Transmission loss of 4.85% as approved by the Commission for FY 2007-08 for the Intrastate Transmission System (vide its Order dated April 2, 2007 in Case No. 86 of 2006 on determination of Transmission Tariff for the Intra-State Transmission System) has also been considered to arrive at the input requirement (ex-bus).

BEST's Submission

3.15. Out of the total requirement, BEST has assumed that 3684 MU will be procured from TPC-Generation (TPC-G) every year for the control period and the balance from TPC-D. The table below shows the power sourcing plan assumed by BEST for the control period:

Table 3.6: Sourcing of Power by BEST for the Control Period

Particulars	F.Y. 2007-08	F.Y. 2008-09	F.Y. 2009-10
Total Requirement (MU)	**4375.85**	**4507.93**	**4654.82**
Source of Supply			
- TPC-G	3684.00	3684.00	3684.00
- TPC-D	691.85	823.93	970.82
Total (MU)	**4375.85**	**4507.93**	**4654.82**

** Note: BEST's Petition states that the energy requirement not supplied by TPC-G will be procured by TPC-D on behalf of BEST though the TPC petition does not mention the same.*

Commission's Observation / Ruling

3.16. The total energy requirement of BEST is catered to in the following manner:

- Renewable Energy Sources at the quantum specified
- Allocation of power from TPC-G (Except unit 4, being expensive source of power)
- Balance, if any, from Expensive source (Unit-4 and other sources of power)

3.17. The allocation of power from TPC-G for the first year of control period i.e. FY 2007-08 has been considered in the following manner - FY 2007-08 – 36.88% [In proportion to the Coincident peak demand of Distribution Licensees (REL, BEST and TPC-D)]

Table 3.7: Allocation of Power from TPC-G to BEST for FY 2007-08 considered by Commission

Year	Particulars	Total Generation (MU)	Allocated to BEST (MU)	Energy Rate Rs/KWh	Total Energy Requirement of BEST (MU)	Purchase from Other Sources (MU)
FY 2007-08	All units except unit 4	10349.00	3816.71	2.45		
	Unit 4	861.00	317.54	5.28		
	Sub-Total		**4134.25**		**4547.23**	236.14

Power Purchase Cost

BEST's Submission

3.18. The Power purchase cost as proposed by BEST is given below:

Table 3.8: Power Purchase Cost proposed by BEST for the Control Period

Particulars (Rs. Crores)	F.Y. 2007-08	F.Y. 2008-09	F.Y. 2009-10
Fixed Charges payable to TPC –G	175.65	190.72	207.35
Energy Charges payable to TPC –G	1002.05	1002.05	1002.05
(less) rebate due to Hydro peaking tariff	-	-	-
Charges payable to TPC -D for purchase from other sources	305.11	363.35	428.13
RPS purchases	60.39	81.14	104.73
Total (Rs. Crores)	**1543.20**	**1637.26**	**1742.26**

Commission's Observation / Ruling

3.19. The power purchase cost approved by the Commission for FY 2007-08 is given below:

Table 3.9: Power Purchase Cost approved by the Commission for FY 2007-08

Particulars	MU	F.Y. 2007-08 (Rs. Crores)
Fixed Charges		254.50
Energy Charges		
TPC-G (except unit-4 and RPS)	3998.60	996.52
Expensive power (Unit-4 of TPC-G)	317.54	164.31
Expensive power (purchase from other sources)	231.09	99.87
Less: Rebate due to hydro peaking Tariff		26.60
Total	**4547.23**	**1488.60**

Fixed Charges

BEST'S Submission

3.20. BEST has forecast fixed charges on the basis of fixed charges approved by the Commission for the FY 2006-07 after adjusting for the inflation factor

Commission's Observation / Ruling

3.21. While determining the fixed charges for the first year of the control period i.e. FY 2007-08, the fixed cost as approved by the Commission in the Tariff Order for TPC-Generation (TPC-G) for the control period has been considered. While allocating the fixed cost of TPC-G, the proportion of coincident peak demand of BEST has been considered by the Commission.

Table 3.10: Approved Fixed Charges Component of the Power Purchase cost for FY 2007-08

Particulars	FY 2007-08
Total Fixed Cost of Thermal Generation Unit of TPC-G (Rs. Crores)	690.00
Allocation %	36.88%
Total Fixed Charges component of power purchase cost allocated to BEST (Rs. Crores)	254.50

Energy Charges

BEST'S Submission

3.22. BEST has projected energy charges on the basis of energy allocation percentage and unit cost of purchase approved by the Commission for FY 2006-07.

Table 3.11: Energy Cost proposed by BEST for the Control Period from TPC-G

Particulars	F.Y. 2007-08	F.Y. 2008-09	F.Y. 2009-10
Supply from TPC-G (MU)	3684.00	3684.00	3684.00
Unit rate (Rs. / unit)	2.72	2.72	2.72
Total Cost (Rs. Crores)	1002.05	1002.05	1002.05

Commission's Observation / Ruling

3.23. The energy charges as approved by the Commission in the Tariff Order for TPC-G (excluding variable cost of generation from Unit-4 of TPC-G) for the year 2007-08 have been considered in determining the power purchase cost of BEST for the control period. The energy charges for FY 2007-08 are given below:

Table 3.12: Energy Cost approved by the Commission for FY 2007-08

Particulars	FY 2007-08
Purchase from TPC-G excluding unit-4	3816.71
Rs / kWh	2.45
Total Cost (Rs. Crores)	933.77

Rebate Due To Usage Of Hydro Peaking Tariff

BEST'S Submission

3.24. BEST has not forecast any rebate from use of hydro peaking tariff for the years under the control period.

Commission's Observation / Ruling

3.25. The Commission has considered TPC-Generation Order of FY 2007-08 under MYT in respect of rebate for using hydro peaking tariff for BEST for FY 2007-08. The rebate for the FY 2007-08 amounts to Rs. 26.60 Crores.

Energy From Renewable Energy Sources

BEST'S Submission

3.26. The Commission in its Order dated. 16th August 2006 on Long term Development of Renewable Energy Sources and associated Regulatory (RPS) Framework, has provided a roadmap regarding quantum of renewable energy to be procured by distribution licensee. The quantum of renewable energy to be purchased for the control period is given below:

Table 3.13: Renewable Energy in MU and % proposed by BEST for FY 2007-08

Financial year	Minimum %age specified	Energy input (in MUs)	RPS quantum (in MUs)	Cost (Rs. Crores)
F.Y 2007-08	4%	4375.85	175.03	60.39
F.Y 2008-09	5%	4507.93	225.40	81.14
F.Y 2009-10	6%	4654.82	279.29	104.73

Commission's Observation / Ruling

3.27. The EA 2003 recognises the importance of Renewable/ green power and has accordingly mandated under Section 86(e) of the EA Act 2003, that every distribution company must purchase from renewable sources of energy. This Renewable/ Green power purchase obligation has made applicable not only for the distribution licensees but also for captive power plants in the State. The Commission's Order (Case 1 of 2004) in the matter of Determination of Renewable Purchase Obligation (RPO) for Distribution Licensees in Maharashtra has laid down the RPO of distribution licensees in the State. The Cost of procuring energy from renewable sources is given below:

Table 3.14: Renewable Energy Purchase cost approved by the Commission for FY 2007-08

Particulars	FY 2007-08
Total Input (approved by the Commission) MUs	4547.23
Renewable energy (%)	4.00%
Renewable energy (MU)	181.89
Cost per Unit	3.45
Total Cost (Rs. Crores)	62.75

Expensive Power Purchase

BEST'S Submission

3.28. BEST has estimated that there shall be no change in the allocated capacity from TPC – G to Distribution licensees in Mumbai region and energy requirement over and above 3684 MUs shall be arranged by BEST from sources other than TPC-G. The table below shows the power purchase from other sources as proposed by BEST and the cost thereof:

Table 3.15: Cost of Procuring Power from other Sources as proposed by BEST

Particulars	F.Y. 2007-08	F.Y. 2008-09	F.Y. 2009-10
Energy input requirement (in MUs)	4375.85	4507.93	4654.82
Energy allotted from TPC –G (in MUs)	3684.00	3684.00	3684.00
Energy requirement from other sources (in MUs)	691.85	823.93	970.82
Charges forecast for future years (Rs./unit)	4.41	4.41	4.41
Total Cost (Rs. Crores)	**305.11**	**363.35**	**428.13**

Commission's Observation / Ruling

3.29. The energy requirement over and above of supply from TPC-Generation unit (excluding unit 4 of TPC-G) and Renewable energy sources is required to be procured from expensive sources. The expensive sources will include unit 4 of TPC-Generation and other sources. The energy requirement from other sources and cost thereof is given in the table below:

Table 3.16: Approval of power purchase cost from expensive sources by the Commission for FY 2007-08

Particulars	MUs	Cost per unit	Total Cost (Rs. Crores)
TPC-G: Unit 4	317.54	5.28	164.31
Purchase from other sources	231.09	4.41	99.87
Total	378.86	4.82	264.18

3.30. The cost of procuring energy from unit 4 of TPC-G has been considered from the TPC-G Order for FY 2007-08 under MYT. In respect of unit rate for procuring energy from other sources, BEST's claim of unit rate of Rs. 4.41 /kWh has been considered for FY 2007-08.

DSM MECHANISM FOR BEST

3.31. Traditionally distribution licensees have responded to their consumers' rising electricity demand or to rising gap between the electricity demand and supply through supply side options such as increasing the electricity purchases from outside sources and/or reducing the distribution losses. Hitherto, distribution licensees have ignored the demand side options. Demand side options involve reducing the demand for electricity by implementing suitable Demand Side Management (DSM) initiatives that call for adoption of energy conservation (EC) and energy efficiency improving (EE) measures and practices by consumers of electricity that result in saving of electricity consumption and reducing demand for electricity. Since electricity saved is better than electricity generated or purchased, any saving in electricity consumption or demand achieved as a result of DSM initiatives, directly contributes to balancing the electricity demand-supply equation.

3.32. Demand side options are more economical, environmentally more benign and are fast acting and hence, more sustainable. Whereas, it costs Rs. 4 crores to create/add one MW of generation capacity, it usually costs any where between Rs. 0.25 to Rs. 3 crores to save a MW of electricity at the point of use, which, given our high distribution losses, translates into more than 1.2 MW created at the generation point. Adoption of DSM initiatives also leads to reduction of green house gases which are the major cause of global warming and its attendant consequences that we are now witnessing. In addition, the gestation period for DSM initiatives is also much lower than a typical power generation capacity addition project that can take anywhere between 2 to 5 years, depending on the technology. Integrating DSM or demand side option with supply side option thus provides a least cost solution for the distribution licensees to meet the power demand emanating from their consumers.

3.33. Recognising this potential of demand side option or DSM, the Commission, in its Tariff Regulations of 2005, has treated EC and EE measures as a "supply" source and has stipulated that long-term power procurement plan of distribution licensees shall have proposals about measures proposed to be implemented as regards EC and EE [Regulation 23.2(d)]. However, none of the distribution licensees have submitted any proposals for EC and EE measures in their Multi-Year Tariff/ARR submissions. Given that demand side options are inherently more cost effective than supply side options, the Commission agrees with the views expressed by consumer representatives/consumers that the solutions proposed by distribution licensees for meeting the demand are not the least cost solutions for meeting the anticipated demand as it ignores demand side options. The Commission, therefore, is convinced that, had the distribution utilities integrated demand side options with supply options, the overall cost of power procurement would have been lower than what has been stated in the ARR submissions. In the absence of detailed data and analysis, however, the Commission, at this juncture, is not in a position to arrive at the exact quantum by which power procurement cost would have been lower. Nevertheless, the Commission, being in, "in principle" agreement with the observation that consumers are having to pay higher overall cost of power procurement because the distribution licensees have ignored demand side options, and that too despite Commission's Tariff Regulations explicitly providing for consideration of such options; the Commission has assumed that 2% of the costly power purchase requirement will be reduced through DSM measures. This translates to Rs. 5.39 crores, which is only 0.36 percent of the total power purchase cost. This, the Commission believes, will encourage BEST to speedily take up EC and EE to reduce their overall demand and thus reduce their need for costly power purchase. However, it is the obligation of the distribution licensee to meet all the demand in its license area, and licensees should not undertake load shedding in their area by reducing power purchase.

3.34. In line with National Electricity Policy, the Commission is committed to DSM and whereas, in the past, it had provided encouragement to the consumers to reduce their demand or reduce their demand during certain periods of the day through its tariff proclamations such as load management charge and incentive or time of day tariff; this time, the Commission, by assuming a 2% reduction in costly power purchase requirement through DSM measures, is providing encouragement to BEST to take up EC and EE through appropriately formulated DSM initiatives on a sustained basis and as an integral part of their operations. As has been repeatedly proclaimed by the Commission, the Commission is committed to allow as pass through in the ARR, all the cost incurred by the distribution licensees on design, development and implementation of DSM initiatives.

3.35. The Commission will revisit the power procurement plan during the Annual Review of FY 2007-08 and, in line with its Tariff Regulations, directs the distribution licensees to include measures proposed to be implemented as regards EC and EE in all its future long-term power procurement plans. The Commission reiterates its directive that BEST undertake design, development and implementation of DSM initiatives that provide technical and financial assistance, incentives and guidance to motivate the consumers to adopt EE and EC improving measures and practices as well as to motivate other stakeholders such as financiers, energy efficiency delivery companies and energy efficient product, process and device manufacturers to participate in the DSM initiatives.

3.36. In order to assess the impact of DSM initiatives on the overall demand for electricity and on the overall costs to be incurred to meet a particular level of consumer demand, it is essential to continuously track and monitor the extent to which load and consumption are getting affected due to DSM initiatives. Systematic load research is a key to providing this data. Load research, apart from providing data on DSM benefits, would also provide insight about consumer load profile (who are the consumers, how much are they consuming, purpose of consumption, where they are consuming and at what time they are consuming), data on cost of service, data on profitability analysis, and also help the distribution licensee in rate design, load forecasting, load control and load management. The Commission therefore, directs BEST to initiate systematic load research exercises on a continuous basis and to make load research an integral part of their operations.

3.37. As a first step in load research exercise, it would be necessary to understand load and consumption profile as well as appliance ownership and usage pattern among residential consumers to identify target segments and target EC/EE measures within this consumer class of BEST that accounts for 42.65 percent of total consumption and whose demand is rising at the rate of 2.98 percent per year over the control period. Since, there is no secondary data available on this, a survey would need to be carried out to gather the needed data. The Commission therefore directs BEST to get a survey carried out in the area of supply of the distribution licensee with scientifically selected sample size of residential consumers to understand consumer load and consumption profile as well as appliance ownership and usage pattern.

OPERATION AND MAINTENANCE EXPENSES

3.38. The Operation and Maintenance (O&M) Expenses of BEST have been determined under the following three subheads:

- Employee Expenses
- Administration and General Expenses
- Repairs and Maintenance Expenses

3.39. Each of these expense heads as proposed by BEST and Commission’s determination is explained in the following manner:

- BEST Forecast and basis
- Commission’s Observation / Ruling
- Directives of the Commission and Trajectories, if any.

3.40. When compared to other utilities, BEST, being a local authority has historically had higher employee and A&G expenses, as compared to the public sector distribution licensee as well as private sector licensee. The Commission has kept this in mind while determining the O&M

Expenditure (component wise) for the Control Period for BEST as compared to the method being adopted in respect of other distribution licensees. Hence, in case of BEST, the Commission has projected employee and A&G expenses on the basis of per unit cost, while R&M expenses have been approved as a percentage of GFA.

Employee Expenses

BEST's Submission

3.41. BEST has taken the employee expenses approved by the Commission for FY 2006-07 as the basis for forecasting the employee expenses for the control period. Since the employee cost is related to inflation and system demand, the inflation factor as notified by CERC vide its notification dated 22nd November 2006 has been considered. Accordingly, BEST has assumed an escalation rate of 5.37% p.a. for estimating employee expenses.

Table 3.17: Employee Expenses as proposed by BEST for the control period

S. No.	Particulars (Rs. Crore)	FY 2007-08	FY 2008-09	FY 2009-10
1	Basic Salary	40.84	43.03	45.35
2	Dearness Allowance	36.49	38.45	40.51
3	House Rent Allowance	7.44	7.84	8.26
4	Conveyance Allowance	0.33	0.34	0.36
5	Leave Travel Allowance	1.26	1.33	1.40
6	Earned Leave Encashment	1.60	1.69	1.78
7	Overtime Payment	3.68	3.87	4.08
8	Bonus/Ex-Gratia Payments	4.73	4.99	5.25
9	Interim Relief and Balance PRC	-	-	-
10	Provident Fund Contribution	11.30	11.90	12.54
11	Gratuity Payment	3.87	4.07	4.29
12	Cost of bus token/passes	2.21	2.33	2.46
	TOTAL	**113.75**	**119.86**	**126.29**

3.42. The Commission had directed BEST to carry out a man-power study. BEST submitted that a consultant was yet to be appointed for this purpose. But a preliminary study was conducted by BEST and it was observed that there was scope for outsourcing non-core activities such as maintenance of telecommunication systems, activities regarding refrigeration, air-conditioning, etc.

Commission's Observation / Ruling

3.43. The Commission analysed the Employee expenses incurred in the past and those proposed by BEST and noted the following:

- The Employee costs has grown at a CAGR of 8.6% from FY 2000-01 to FY 2006-07

- The Average Y-o-Y increase in Employee Expenses from FY 2000-01 to FY 2006-07 is 8.9%
- The Employee expenses as proposed by BEST for the control period increases at a CAGR of 5.37% (a rate specified by CERC vide notification dated 22nd November 2006)
- The Average employee cost per unit of sales for the period FY 2000-01 to FY 2006-07 amounts to Rs.0.24/kWh

3.44. The Commission, in allowing the employee costs, for the control period has considered the actual cost incurred for every unit of sale being a better yardstick as it is linked to the performance of the utility. The average employee cost for every unit of sales for the period FY 2001-02 to FY 2006-07 is Rs. 0.24/kWh.

Table 3.18: Average Employee Cost per Unit of Sale for the past years for BEST

Particulars	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	FY 2006-07
Employee Costs (Rs. Crores)	69.73	66.38	69.37	74.46	88.26	99.50	114.62
Sales (MU)	3176.03	3216.35	3318.53	3387.29	3535.04	3,614.69	3,725.03
Per Unit Cost: Rs./kWh	0.22	0.21	0.21	0.22	0.25	0.28	0.31
Average Cost per Unit: Rs/kWh	**0.24**						

3.45. Thus the employee cost allowed by the Commission for the control period is therefore at Rs. 0.24/kWh. Accordingly, as shown in the table below, the Commission has allowed the Employee Cost at Rs.92.42 Crore for FY 2007-08 and at Rs. 95.75 Crores for FY 2008-09 and at Rs.99.43 for FY 2009-10.

Table 3.19 (a): Employee Expenses approved by Commission for the Control Period

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Employee Expenses (Rs. Crores)	92.42	95.75	99.43
Sales (in MUs)	3850.75	3989.52	4142.80
Employee cost per unit of sales (Rs./kWh)	0.24	0.24	0.24

3.46. On an analysis of the employee expenses of Bangalore Electric Supply Company (BESCOM), a distribution licensee supplying to Bangalore city in the State of Karnataka, the Commission observed that the employee cost per of sales was higher in the case of BEST.

Table 3.19 (b): Comparison of Employee Expenses

Particulars	BEST	BESCOM
Employee Cost (Rs. Crores)	99.50	286.39
Sales (MU)	3614.69	11616.00
Cost per unit	0.28	0.25

3.47. The Commission notes with disapproval the delay in carrying out the scientific manpower study. The Commission directs BEST to submit, at the time of truing up with the audited accounts of FY 2006-07, report on manpower study and cost benefit analysis on activities to be outsourced, measures for optimisation of manpower costs and resultant estimates to achieve the trajectory set out by the Commission for the control period.

Administration and General (A&G) expenses

BEST's Submission

3.48. BEST has taken Administration and General Expenses approved by the Commission for FY 2006-07 as the basis for forecasting the expenses to be incurred for the control period. The inflation factor of 5.37% p.a. as notified by CERC vide its notification dated 22nd November 2006 has also been considered.

Table 3.20: Administration and General Expenses proposed by BEST for the Control Period

Sr. No.	Particulars (Rs. Crore)	FY 2007-08	FY 2008-09	FY 2009-10
1	Rent Rates & Taxes	3.48	3.66	3.86
2	Insurance	0.07	0.08	0.08
3	Telephone & Postage, etc.	1.76	1.85	1.95
4	Legal charges & Audit fee	0.21	0.22	0.23
5	Electricity charges	4.48	4.72	4.97
6	Security arrangements	4.68	4.93	5.19
7	Printing & Stationery	0.44	0.47	0.49
8	Advertisements	0.13	0.13	0.14
9	Vehicle Running Expenses Truck / Delivery Van	0.24	0.26	0.27
10	Property Insurance Fund	5.58	5.88	6.20
11	Contingency Reserve Fund	5.58	5.88	6.20
12	Lease Rent of Meters	0.86	0.91	0.96
13	Service Charge on Gas Insulated Switches	0.93	0.98	1.03
14	Others	21.64	22.81	24.03
15	Share of General Administration Expenses	36.31	38.26	40.31
	TOTAL	**86.40**	**91.04**	**95.93**

3.49. BEST has provided the break up of expenses under the head "Other" in the Administration and General Expenses as given in the table below:

Table 3.21: Break up of "Others" in A&G Expenses as proposed by BEST

Particulars (Rs. Crore)	FY 2007-08	FY 2008-09	FY 2009-10
Clothing\	0.27	0.29	0.30
Hire & servicing of office equipment, etc.	0.42	0.44	0.47
Contingencies	0.02	0.02	0.02
Accident compensation to staff	0.01	0.01	0.01
Materials (including for buses)	0.07	0.08	0.08
Stock adjustment	0.06	0.07	0.07
Dead stock	0.19	0.20	0.21
Receiving and distribution S/S	2.43	2.56	2.70
Mains & Aerial mains	6.21	6.54	6.89
Street lighting	2.32	2.44	2.57
Meter installations	1.69	1.78	1.87
Meter testing	0.25	0.27	0.28
Consumer advisory services	0.08	0.09	0.09
Rebate on advance payment	0.17	0.18	0.19
Miscellaneous and general expenses	5.76	6.07	6.40
Inspection and License fees	1.05	1.11	1.17
Motor vehicle and third party insurance fund	0.01	0.01	0.01
Free issue of petrol to officers	0.58	0.61	0.64
Provision for obsolescence of stores	0.03	0.03	0.04
TOTAL	**21.64**	**22.81**	**24.03**

Commission's Observation / Ruling

3.50. The Commission analysed the Administration and General expenses incurred in the past and those proposed by BEST and noted the following:

- The A&G Expenses have grown at a CAGR of 3.9% p.a. from FY 2000-01 to FY 2006-07
- The average Y-o-Y increase in A&G Expenses from FY 2000-01 to FY 2006-07 is 4.2%
- The A&G Expenses as proposed by BEST for the first control period shows an increase of 5.37 % (a rate specified by CERC vide notification dated 22nd November 2006)
- The average cost per unit of sales for the period FY 2000-01 to FY 2006-07 amounts to Rs.0.24/kWh

3.51. The Commission has approved the Administration and General Expenses as claimed by BEST on the following grounds:

- The CAGR of A&G expenses over the past seven years show an increase of only 3.9% p.a. when compared to the average Y-o-Y increase of 4.2%.

- The A&G expenses proposed by BEST works out to between Rs. 0.22 to Rs. 0.23 per kWh which is well within the average cost per unit of Rs. 0.24 per kWh for the period FY 00-01 to FY 06-07.
- Considering the above, the claim of BEST is well in line with the cost per unit of sales factor and thus the claim is allowed for the control period.

3.52. The Administration and General Expenses approved by the Commission for the control period is given below:

Table 3.22: Administration and General Expenses as approved by the Commission

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Administration and General Expenses (Rs. Crores)	86.40	91.04	95.93
Sales (in MUs)	3,850.75	3,989.52	4,142.80
Cost per unit sold (Rs/kWh)	0.22	0.23	0.23

Repairs and maintenance (R&M) expenses

BEST's Submission

3.53. The Repairs and Maintenance Expenses as estimated by BEST for the control period is given below:

Table 3.23: Repairs and Maintenance Expenses proposed by BEST for the Control Period

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
R&M Expenses (Rs. Crores)	5.73	7.25	8.97
GFA (Rs. Crores)	1173.00	1261.00	1349.00
R&M as a % of GFA	0.49%	0.57%	0.66%

3.54. The Repairs and Maintenance expenses as estimated by BEST for the control period is based on that for FY 2006-07 and after considering the apportionment of the revenue portion of re-instatement charges.

Commission's Observation / Ruling

3.55. Commission analysed the Repairs and Maintenance expenses incurred during the past and proposed by BEST and noted the following:

- The average R&M expenses as a percentage of Gross Fixed Assets (GFA) for the period FY 2000-01 to FY 2006-07 is 1.1%.
- The R&M Expenses as a percentage of GFA as proposed by BEST for the control period is within the average of the preceding 7 years.
- The R&M proposed by BEST is in line with the past trends.

3.56. Considering the above, the R&M Expenses as proposed by BEST is allowed by the Commission for the control period. Accordingly the R&M expenses allowed by the Commission for the control period is Rs. 5.73 Crores for FY 2007-08, Rs. 7.25 Crores for FY 2008-09 and Rs. 8.97 Crores for FY 2009-10.

Capital expenditure

BEST's Submission

3.57. BEST has submitted its projection for Capital expenditure for system augmentation for adhering to and implementing the reliability standards, meeting additional loads and procurement and installation of electronic meters for ensuring adherence to CEA regulations on meters. The investment is also an effort of BEST to provide efficient and reliable electricity to its consumers and to comply with the CEA regulations. The capital expenditure proposed by BEST is inclusive of capital portion of Re-instatement charges payable to MCGM. BEST has also projected the capital expansion that has provisions for increase in energy consumption due to Textile mill land development and Dharavi makeover plan envisaged by Govt. of Maharashtra. Thus the capital expenditure proposed by BEST can be broadly classified in two categories:

(1) to meet the bulk load and anticipated load growth

(2) to remove the overloads in the systems and to build up redundancy in the system in such a manner that in the event of failure of any equipment /cable network, the supply can be restored promptly without extended duration of Nil/ off supply.

3.58. Apart from this network criteria, capital schemes are also prepared for replacement of old and obsolete equipments which have completed their life and also to adopt new technology such as different circuit technology, transformer technology and control technology such as SCADA, etc. In its MYT Petition, BEST has proposed Capital expenditure to the level of Rs. 310.56 Crore in FY 2007-08. For the years FY 2008-09 and FY 2009-10, BEST has proposed a capital expenditure of Rs. 278.26 Crore and Rs. 281.09 Crore, respectively.

Table 3.24: Capital Expenditure proposed by BEST for the Control Period

SECTORAL OUTLAY	FY 2006-07 (BEST Claim)	FY 2007-08 (Projected)	FY 2008-09 (Projected)	FY 2009-10 (Projected)
Extension to existing 22kv substations. New 22kv/ 33kv up gradations.	33.86	39.74	53.27	53.7
110kv substations at Wadala Truck Terminus	24.98	-	-	5.00
6.6kv/ 11kv substations, extensions and alterations to existing substations and sites for new substations	29.51	56.37	56.10	56.10
Laying of High and Low Voltage cables, service cables and street lighting cables	33.50	56.20	56.92	57.03
Meters	7.97	0.00	0.00	0.00
Purchase of Street Lighting Lamps	1.71	1.71	1.88	2.07
Electronic meters and Test Benches	21.13	119.51	81.30	74.86
Remote control of receiving substations communication network, additions and extensions, installation and commissioning of ripple control	4.91	2.40	17.50	17.50
Computerization, Digitization and TSP	7.43	3.43	0.40	0.10
Generating Station	0.15	15.00	5.00	0.00
Furniture and office equipment, Tools & Equipments etc.	1.67	5.80	1.67	5.80
Civil Engineering Works	0.84	1.33	0.84	1.33
Motor Vehicles	2.58	6.67	2.58	6.67
Sub Total	**170.24**	**308.78**	**277.46**	**280.33**
Share of General Administration	0.82	1.78	0.80	0.76
Grand Total	**171.06**	**310.56**	**278.26**	**281.09**

Commission's Observation / Ruling

3.59. The Commission analysed the actual capitalisation in the past and proposed by BEST for the control period and noted the following:

- The Average yearly capitalisation from FY 2000-01 to FY 2006-07 is Rs. 69 Crores
- BEST is required to obtain approval under MERC (Terms and Conditions of Tariff Regulations, 2005, for all capital expenditure exceeding Rs. 10 Crores.
- The actual capitalisation has shown an increasing trend from FY 2005-06.

3.60. The Commission has not considered item-wise break up of capital expenditure. However, depreciation is allowed on assets capitalised and not capital expenditure incurred.

3.61. Considering the above, the Capitalisation provisionally allowed by the Commission, (pending the submission of BEST's scheme-wise Capital Expenditure plan for the control period and scrutinising and approval of the same by the Commission) is given below:

Table 3.25: Capitalisation provisionally allowed by the Commission for the Control Period

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Capitalisation (Rs. Crores)	100.00	110.00	120.00

3.62. Where any scheme of capital expenditure exceeding Rs. 10 Crores has not been submitted, any subsequent submission will not be considered by the Commission.

3.63. The Capitalisation allowed by the Commission does not form a part of the ARR. The total capitalisation is recovered over a period of years in the form of depreciation, which forms a part of ARR. The actual capitalisation is also considered for the purpose of interest on internal funds at 6%.

3.64. BEST had submitted application for approval of capital expenditure for FY 2006-07 amounting to Rs. 161.90 Crores. Commission had provisionally approved a Capitalisation of Rs. 90 Crores. In respect of the Control Period, BEST has submitted only a rolling plan. Scheme wise break up of capital expenditure is yet to be submitted by BEST to the Commission. Therefore, the Commission has asked BEST to submit a "Detailed Project Report" (DPR) on every scheme of capital expenditure proposed. The DPR submitted by BEST will be approved by the Commission on a case to case basis. Thus the capital expenditure allowed by the Commission for the control period is provisional. BEST is directed to submit a scheme wise break up of capital expenditure (exceeding Rs. 10 Crores) for the first control period within one month from the date of the Order for the approval of the Commission.

Depreciation

BEST's Submission

3.65. The depreciation forecasted by BEST is on the basis of expected capitalisation proposed during the control period. Depreciation is computed under "Straight Line Method" on the basis of 90% of cost of the asset over the estimated life of the asset.

Table 3.26: Depreciation proposed by BEST for the Control Period

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Depreciation (Rs. Crores)	54.22	66.83	78.42

Commission's Observation / Ruling

3.66. On a scrutiny of depreciation proposed by BEST, the Commission noted that the depreciation was provided on the whole of capital expenditure proposed and not on the expected capitalisation. Whereas as per prudent accounting principles, depreciation should be on the assets capitalised during the year and not on the capital expenditure incurred during the year. Accordingly the Commission has reworked the depreciation for the control period.

3.67. The depreciation allowed by Commission for the control period is given below:

Table 3.27: Depreciation approved by the Commission for the Control Period

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Depreciation (Rs. Crores)	44.73	50.01	55.65

Interest On Loans

BEST's Submission

3.68. The interest on loans proposed by BEST is on the basis of expected borrowings for the control period. BEST funds the capital expenditure primarily from its internal funds and partially from external borrowings. The external borrowings are loans under APDRP Schemes.

Table 3.28: Interest on Loan proposed by BEST for the Control Period

Particulars (Rs./Crore)	F.Y. 2007-08	F.Y. 2008-09	F.Y. 2009-10
Interest on loans	19.31	26.12	32.54
Bank commission	0.0014	0.0014	0.0014
Miscellaneous loan charges	0.0025	0.0025	0.0025
Total	19.31	26.13	32.54

Commission's Observation / Ruling

3.69. The Commission, on the borrowings proposed by BEST for the control period, noted the following:

- The increase in loans proposed is on account of increased capital expenditure proposed for the control period.
- The borrowings are under the APDRP Scheme according to which 50% of the project cost will come from Government of India in the form of grant and loan
- The interest on the loans has been computed on the basis of estimated loans and at the rates applicable

3.70. Considering the above, the Commission has allowed the interest on full loans borrowed for the purpose of capital expenditure.

Table 3.29: Average Interest rate (%) for the control period

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Interest Expenses (Rs. Crores)	19.31	26.12	32.54
Closing Loan Balance	202.71	275.71	333.80
Average Interest (%)	9.52	9.48	9.75

3.71. The table above shows that the average interest rate ranges from 9.5% to 9.75% p.a. The interest on loans as proposed by BEST and approved by the Commission is Rs. 19.31 Crores for FY 2007-08, Rs. 26.12 Crores for FY 2008-09 and Rs. 32.54 Crores for F Y2009-10.

Interest On Internal Funds

BEST's Submission

3.72. BEST has estimated the interest on internal funds on the basis of proposed assets and liabilities for the control period. Except for long term loans, all other liabilities for the control period have been proposed at the same level as in the case of FY 2006-07. BEST Undertaking is not governed by the Companies Act, 1956 and does not have equity in the traditional sense.

Table 3.30: Interest on Internal Funds proposed by BEST for the Control Period

(Rs. Crores)

Particulars	2007-08 (Projected)	2008-09 (Projected)	2009-10 (Projected)
Assets:			
Net Fixed Assets	878.05	1,124.83	1,307.30
Other Assets	632.83	632.83	632.83
Sub Total (A)	1,510.88	1,757.66	1,940.13
Less:			
Amount Invested outside the business	3.62	3.62	3.62
Long Term Loans			
Mega City	5.55	1.81	0.42
Public Loans	4.60	3.49	2.74
DPDC	2.39	2.23	2.07
APDRP	36.13	35.18	34.23
Bank Loan	60.00	160.00	236.25
Liabilities:			
Deposits	299.05	299.05	299.05
Current Liabilities	165.74	165.74	165.74
BEST Staff Benefit Fund	1.95	1.95	1.95
GEF	189.29	189.29	189.29
Govt. Assistance	56.52	56.52	56.52
Sub Total (B)	824.84	918.88	991.88
Total Assets Used (A) - (B)	686.04	838.78	948.25
Government Assistance / Grants	56.52	56.52	56.52
Other deposits	31.30	31.30	31.30
Other funds (GEF, BEST staff)	191.24	191.24	191.24
Total Assets Used / Internal Funds including Government Assistance	965.10	1,117.84	1,227.31
Interest on Internal Funds (at 6%)	57.91	67.07	73.64
Incremental Internal Funds Utilised	152.73	109.47	117.75
Interest on Internal Funds (at 6% of 50% of Incremental Internal Funds)	4.58	3.28	3.53
Total	**62.49**	**70.35**	**77.17**

3.73. The funding is mainly done through internal resources of the Corporation with the approval of the BEST Committee and Mumbai Municipal Corporation, as per Section 460 II of the Mumbai Municipal Corporation Act, 1888.

3.74. Interest on Internal Funds figure as in BEST's petition also includes (a) Interest on other deposits (b) interest on Other Funds (GEF, BEST Staff) and (c) interest on government grants at 6% in line with the ATE Judgement dated 18th August 2006 in Case No. 61 0f 2006 and Commission's Order dated 8th November 2006 in Case No. 32 of 2006 in respect of Review Petition of BEST.

3.75. Additional interest at 50% of the incremental internal funds for each year has also been claimed by BEST for the control period. Accordingly BEST has claimed Interest on Internal Funds for FY 2007-08 at Rs. 49.97 Crore. For FY 2008-09 and FY 2009-10, BEST has claimed Interest on Internal Funds at Rs. 47.52 Crore and Rs. 46.61 Crore, respectively.

Commission's Observation / Ruling

3.76. The interest on internal funds has been recomputed by the Commission after considering the following:

- In respect of fixed assets, the additions allowed by the Commission for each of the years under the control period have been considered.
- Other assets and liabilities as approved by the Commission for the control period has been considered.
- The Commission has recomputed current liabilities on the basis of the average balance for the period FY 2000-01 to FY 2006-07, which work out to Rs. 196 Crores.
- While estimating the GEF funds, the commission has considered the CAGR of the period FY 2000-01 to FY 2006-07 which is around 12% p.a. and the same has been applied on the balance of Rs. 189.29 Crores considered for FY 2006-07.
- Additional interest on internal funds at 50% as claimed by BEST is not allowed as it is not in line with the ATE Judgement in respect of interest on internal funds.

3.77. In respect of bank loans proposed by BEST the Commission notes the following:

- BEST is required to analyse the possibility of using internal funds instead of borrowings.
- Where BEST is required to borrow funds, the same should be obtained on a competitive bidding basis from public sector banks to ensure that the borrowings are made at the rates favourable to BEST

3.78. Thus the Commission allows the funds required for the control period but does not approve the mode of funding. BEST is required to consider the above regarding the mode of funding

3.79. Considering the above, the interest on internal funds allowed by the Commission is given below:

Table 3.31: Interest on Internal Funds approved by the Commission for the Control Period

(Rs. Crores)

Particulars	FY 2006-07 (MERC order)	FY 2007-08	FY 2008-09	FY 2009-10
Assets:				
Net Fixed Assets	726.24	776.05	829.22	887.11
Other Assets	632.83	632.83	632.83	632.83
Sub Total (A)	**1359.07**	**1408.88**	**1462.05**	**1519.94**
Less:				
Amount Invested outside the business	3.62	3.62	3.62	3.62
Long Term Loans				
Mega City	10.80	5.55	1.81	0.42
Public Loans	4.60	4.60	3.49	2.74
DPDC	2.55	2.39	2.23	2.07
APDRP	37.99	36.13	35.18	34.23
Canara Bank	0.00	60.00	160.00	236.25
Liabilities				
Consumer Security Deposits	267.75	267.75	267.75	267.75
Other Deposits	31.30	31.30	31.30	31.30
Current Liabilities	165.74	196.00	196.00	196.00
BEST Staff Benefit Fund	1.95	1.95	1.95	1.95
GEF	189.29	212.00	237.45	265.94
Govt. Assistance	56.52	56.52	56.52	56.52
Sub Total (B)	**772.11**	**877.81**	**997.30**	**1098.79**
Total Assets Used (C)=(A) - (B)	**586.96**	**531.07**	**464.75**	**421.15**
Government Assistance / Grants **(D)**	56.52	56.52	56.52	56.52
Other deposits **(E)**	31.30	31.30	31.30	31.30
Other funds (GEF, BEST staff) **(F)**	191.24	213.95	239.40	267.89
Total Assets Used / Internal Funds (G)=(C+D+E+F)	**866.02**	**832.84**	**791.97**	**776.86**
Interest on Internal Funds (at 6% on G)	**51.96**	**49.97**	**47.52**	**46.61**

Interest on Internal Funds also includes (a) Interest on other deposits (b) interest on Other Funds (GEF, BEST Staff) and (c) interest on government grants at 6% in line with the ATE Judgement dated 18th August 2006 in Appeal No. 61 0f 2006 and Commission's Order dated 8th November 2006 in Case No. 32 of 2006 in respect of Review Petition of BEST.

Interest On Security Deposits

BEST's Submission

3.80. BEST has projected the interest on consumer security deposits on the basis of the deposit balance of Rs. 194.92 Crores as at 31st May 2006. The impact of change in the number of consumers has not been considered. Thus BEST has projected the same amount of interest on security deposits of Rs. 11.70 Crores for the control period.

Table 3.32: Interest on Security Deposits proposed by BEST for the Control Period

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Interest on consumer security deposits (Rs. Crores)	11.70	11.70	11.70

Commission's Observation / Ruling

3.81. The interest on consumer security deposits as claimed by BEST has been provisionally allowed by the Commission for the first control period years. BEST should strictly abide by the Section 11 of the MERC (Electricity Supply Code & Condition of Supply) Regulation 2005 and submit the details of adjusted consumer security deposits at the time of APR for each year and the same would be trued up for the respective years.

Table 3.33: Interest on Security Deposits as approved by the Commission

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Interest on Security Deposit (Rs. Crores)	11.70	11.70	11.70

Commission's Directive

3.82. It was observed that deposits held by BEST were in excess of the amount required to be held by the utility.

3.83. The Commission directs BEST to strictly observe the provisions under the MERC (Electricity Supply Code and Condition of Supply) Regulations 2005 in respect of Consumer Security Deposits. BEST should submit details of security deposit refunded/ re-adjusted with consumers as per Section 11 of MERC (Electricity Supply Code & Condition of Supply) Regulations 2005 for the year FY 2006-07 at the time of APR for FY 2007-08 and for subsequent APR for remaining control period years. The Commission also directs BEST to show the amount of Security Deposit held by BEST from the consumer in his monthly bill.

Bad Debts

BEST's Submission

3.84. BEST has projected bad debts on the basis of past trends. For the FY 2006-07, BEST had projected bad debts write off amounting to Rs. 6.19 Crores in its ARR Petition submitted to the Commission. BEST has projected the bad debts write off amounts for the first control period on the basis of amounts proposed to be written off for earlier years.

3.85. Break up of bad debts proposed by BEST to be written off year wise is given below:

Table 3.34: Break up of bad debts proposed by BEST year wise

Year to which it pertains to	Amount proposed to be written off in		
	FY 2007-08	FY 2008-09	FY 2009-10
1998-99	3.23	-	-
1999-00	2.02	-	-
2000-01	2.67	-	-
2001-02	-	2.60	-
2002-03	-	2.82	-
2003-04	-	2.84	-
2004-05	-	-	2.69
2005-06	-	-	2.73
Total (Rs. Crores)	**7.92**	**8.25**	**5.42**

3.86. BEST has stated in its petition that in case of BEST, the actual bad debts written off are around 0.2% of the revenue as against a general thumb rule of 2% of the revenue for any commercial business. Further for making the system more transparent, BEST stated that it is in the process of following a structured methodology for identifying and reducing bad debts.

Commission's Observation / Ruling

3.87. The Commission notes the following in respect of bad debts proposed by BEST:

- Since BEST does not follow commercial accounting policies in this regard, the bad debts proposed by BEST is only a provision in the ARR and not actual write off.
- BEST should take legal or other measures to recover the debts, especially the high value bad debts.
- BEST should identify actual bad debts for write off after exhausting all possible measures for its recovery.

3.88. Considering the above, the bad debts approved for the control period is given below:

Table 3.35: Provision for Bad debts approved by the Commission for the Control Period

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Bad Debts (Rs. Crores)	0.06	0.08	0.10

Stand-By Charges

BEST's Submission

3.89. In its Order dated 18th January 2007 in case no. 50 of 2005, the Commission had approved Rs. 60.75 Crores as the share of stand-by charges payable by BEST for the FY 2006-07 from 1st October 2006 to 31st March 2007.

3.90. However in its Petition for FY 2007-08 under MYT, BEST has not proposed any stand-by charges for the control period years.

Commission's Observation / Ruling

3.91. The standby charges have been allocated to the distribution licensees in proportion to the contribution to coincident peak demand, as the standby charges are payable to MSEDCL for providing standby support to the Mumbai license area for meeting peak demand. Currently MSEDCL is providing standby support to BEST even at the cost of resorting to load shedding in its licensee area. BEST has the obligation to pay for its share of standby charges, in return for the comfort of not having to undertake load shedding when there is a system emergency. It is an omission on the part of BEST for not providing for stand-by charges in its Petition. BEST's share of standby charges is given the Table below:

Table 3.36: Standby charges approved by the Commission for FY 2007-08

Parameters	F.Y. 2007-08
Standby charges payable to MSEDCL (Rs. Crores)	146.10

Transmission Charges

BEST's Submission

3.92. The Transmission charges as proposed by BEST for the control period are given below:

Table 3.37: Transmission charges proposed by BEST for the control period

Particulars	F.Y. 2007-08	F.Y. 2008-09	F.Y. 2009-10
Maximum demand forecasted (in MVA)	854.00	880.00	908.00
Transmission Fixed cost (in Rs. Crores / MVA)	0.12	0.12	0.12
Transmission charges payable to STU (in Rs. Crores)	104.91	108.11	111.55

3.93. Transmission charges are linked to the system demand forecasted by BEST. The maximum Non Coincident peak demand forecasted for F.Y. 2006-07 is 774 MVA, based on which the applicable rate for computation being Rs. 0.123 Crores. The same cost per MVA has been taken by BEST for all the years under the control period for forecasting the transmission charges.

Commission's Observation / Ruling

3.94. The Commission has determined the share of Transmission charges to be paid by the licensees in the State including the licensees in the Mumbai region for FY 2007-08 vide its Order dated April 2, 2007, in Case No. 86 of 2006. Thus, the Commission has approved the transmission charge for BEST for FY 2007-08 is given below:

Table 3.38: Transmission charges approved by the Commission for FY 2007-08

Particulars	F.Y. 2007-08
Transmission charges payable to STU (Rs. Crores)	97.64

Annual SLDC Fees And Charges

BEST'S Submission

3.95. BEST has not projected any SLDC Fees and charges payable for the control period.

Commission's Observation / Ruling

3.96. The Annual SLDC Fees and Charges payable by BEST approved by the Commission for FY 2007-08 is given below:

Table 3.39: Annual SLDC fees and charges for BEST for FY 2007-08

Particulars	F.Y. 2007-08
Annual SLDC fees and Charges payable to MSLDC (Rs. Crores)	0.80

Non-Tariff Income

BEST's Submission

3.97. The Non-Tariff income as submitted by BEST is given below:

Table 3.40: Non-tariff Income Proposed by BEST for the control period

S. No.	Particulars	2007-08	2008-09	2009-10
1	Customer Charges/ Contract Charges	17.33	17.33	17.33
2	Sale & Repair of Lamps and Apparatus	0.02	0.02	0.02
3	Sales Service - Electricity Duty Collection Charges	0.05	0.05	0.05
4	Sales Service - Other Receipts	2.50	2.50	2.50
5	MISC (Rent of Buildings, Advertisement Receipts)	20.17	20.17	20.17
6	Share of Receipt of General Administration	6.14	6.14	6.14
7	**Total (Rs. Crores)**	46.21	46.21	46.21

3.98. BEST had projected non-tariff income of Rs. 82.70 Crores for F.Y. 2006-07. In respect of the first control period BEST has proposed an amount of Rs. 46.21 crores for each year as non-tariff income. Delayed Payment Charges, which forms the major component of Sales Service – other receipts, does not feature in the MYT Control period due to introduction of amnesty scheme.

Commission's Observation / Ruling

3.99. The Commission had asked BEST to provide the details of Non-Tariff income under affidavit which was provided by BEST. The Non-Tariff income as projected by BEST (given under affidavit) was substantially less as compared to the previous years on account of the following:

- Rent and advertisement receipts have been projected to be significantly lower when compared to the previous years.
- introduction of the "Amnesty Scheme". BEST provided the following description of the amnesty scheme.

3.100. As per its existing accounting policy of BEST, Delayed Payment Charges (DPC) is accounted for in non-tariff income. BEST has proposed an Amnesty Scheme proposed by BEST to its defaulting customers who are willing to settle the outstanding bills and their entire DPC will be waived off. BEST has not shown this as an income in future years also..

3.101. Hitherto, BEST was showing DPC as a non-tariff income while in the revised proposal and Executive Summary submitted vide letter dated 6th February 2007. The Commission notes that this is a change in accounting policy. BEST is required to take a prior approval of the Commission before making any change in accounting policy.

- The Commission directs BEST that any waiver of delayed payment charges should not be at the cost of other consumers.
- Thus, the waiver of delayed payment charges has not been considered as a pass through in tariff by the Commission and should also not be charged to the revenue under prior period items, Operation and maintenance head or any other head.
- Thus, the impact of amnesty scheme has not been considered and the income from delayed payment charges has been considered for the control period.

3.102. Considering the above and the past trends, the non-tariff income considered by the Commission for the Control Period is given below:

Table 3.41: Non-Tariff income as submitted by BEST under affidavit

Particulars (Rs. Crores)	2007-08	2008-09	2009-10
Contract Charges	17.33	17.33	17.33
Sale & Repair of Lamps and Apparatus	0.02	0.02	0.02
Rent & Advertisement Receipts	18.13	18.13	18.13
Other Receipts	38.00	38.00	38.00
TOTAL (Rs. Crores)	**73.48**	**73.48**	**73.48**

Annual Revenue Requirement

3.103. As discussed earlier in this Order, the ARR does not include the power purchase cost, transmission charges, Stand-by charges and SLDC charges for FY 2008-09 and FY 2009-10. The Annual Revenue Requirement of BEST for the first Control Period as proposed by BEST and as approved by the Commission is given below:

3.104. As seen in the table shown below, the increase in revenue gap is primarily on account of the fact that there was an uncovered gap of around Rs. 120 crores in BEST's ARR for FY 2006-07, and the impact of the un-recovered FAC of TPC-G of Rs.124 crores, the primary supplier of energy to BEST, which has been carried forward to FY 2007-08, and BEST's share of the standby charges amounting to Rs. 146 crores, which had not been considered by BEST.

Table 3.42: Annual Revenue Requirement approved by the Commission for the control period

(Rs. Crore)

Particulars	FY 2007-08		FY 2008-09		FY 2009-10	
	BEST Proposal	**MERC Approved**	**BEST Proposal**	**MERC Approved**	**BEST Proposal**	**MERC Approved**
Power Purchase Cost	1543.20	1488.60	1637.26	-	1742.26	-
O&M Expenses	205.88	184.55	218.15	194.04	231.19	204.33
Employee Expenses	113.75	92.42	119.86	95.75	126.29	99.43
Administration & General Expenses	86.40	86.40	91.04	91.04	95.93	95.93
Repairs & Maintenance	5.73	5.73	7.25	7.25	8.97	8.97
Depreciation	54.22	44.73	66.83	50.01	78.42	55.65
Bad debts	7.91	0.06	8.25	0.08	5.41	0.10
Interest on Loans	19.31	19.31	26.12	26.12	32.54	32.54
Interest on Consumer Security Deposits	11.70	11.70	11.70	11.70	11.70	11.70
Interest on Internal Funds	62.49	49.97	70.35	47.52	77.17	46.61
Under Recovered FAC of TPC	-	123.70	-	-	-	-
Under Recovered FAC of BEST	-	8.00	-	-	-	-
Stand-by Charges	-	146.10	-	-	-	-
Annual SLDC Fees & Charges	-	0.80	-	-	-	-
Transmission charges	104.91	97.64	108.11	-	111.55	-
Total Revenue Requirement	**2009.62**	**2175.17**	**2146.78**	**329.46**	**2290.24**	**350.93**
Less: Non-Tariff Income	43.71	73.48	43.71	73.48	43.71	73.48
Annual Revenue Requirement	**1965.91**	**2101.69**	**2103.07**	**255.98**	**2246.53**	**277.45**
Revenue from existing Tariff	1443.37	1443.37	1497.54		1557.45	
Revenue surplus / (gap)	**(522.54)**	**(658.32)**	**(605.53)**		**(689.08)**	
Revenue gap of FY 2006-07		**(119.54)**				
Interest on above		**(1.20)**				
Gross Revenue Gap		**(779.06)**				
Total Revenue Requirement inclusive of gross revenue gap		**2222.43**				

4. DETERMINATION OF TARIFF FOR RETAIL SALE OF ELECTRICITY FOR FY 2007-08

4.1. This chapter is organized as follows-

- Tariff Philosophy
- Reliability Charges
- ToD Tariffs
- Tariff Components
- Average CoS and Cross Subsidy
- Changes in Tariff Categories And Slabs
- Revised Category-Wise Tariff
- Applicability of Tariff
- Incentives and Disincentives
- Directives to BEST

TARIFF PHILOSOPHY

4.2. BEST's existing tariff structure was rationalised by the Commission in its past Orders - dated 9th March 2006 and Supplementary Order dated 26th September 2006.

4.3. While determining the tariff for the first year (FY 2007-08) of the Control Period under MYT, the Commission has considered the revenue gap for the earlier year, i.e. for FY 2006-07. The determination of ARR for the three years of the Control Period has been explained in detail in Chapter 3 of this Order.

4.4. In determining the tariffs, the Commission is guided by the principles set out in the National Tariff Policy. The National Tariff Policy mandates that by the year 2010-11, the tariffs should be within a range of plus or minus twenty percent of the average Cost of Supply (CoS). The Commission's efforts are on to reduce the cross subsidy levels. Reduction of cross subsidies in an ideal demand-supply situation is a much easier task. However, in terms of the current scenario of shortage of supply there are some anomalies that have cropped up such as need for purchase of expensive power, which needs to be recovered through tariff. Moreover, the cross-subsidy in BEST license area has historically been high, which cannot be removed overnight, and more time is required to reduce the cross-subsidy levels. The Commission has however attempted to reduce the cross-subsidy as regards the base energy charges. With easing of demand-supply situation in the coming years, and over time, the Commission intends to achieve gradual reduction in the cross-subsidies.

4.5. An effort has been made to bring some uniformity in the prevailing tariffs applicable to licencees in Mumbai region and its suburbs. Accordingly, an effort has been made to follow similar nomenclature for tariff categories as being done for the other Distribution Licensees in the Mumbai region and State of Maharashtra, by renaming BEST's existing tariff categories.

4.6. The consumer classification adopted by BEST is very confusing and complicated, with consumers grouped on the basis of consumption or past agreements, rather than the purpose for which supply is being taken. The Commission directs BEST to regroup the consumers into the revised tariff categories specified by the Commission based on the purpose for which supply is taken, such as residential, commercial, industrial, etc., giving consideration to Regulation 13 of the MERC (Electricity Supply Code and Conditions of Supply) Regulations, 2005. The Commission directs BEST to complete this exercise and submit the same to the Commission by 30th September 2007 for the year 2007-08. The details of the re-grouped consumer numbers and change in consumption levels and tariff revenue (as per tariff specified by the Commission for FY 2007-08) may be submitted at the time of APR for FY 2007-08.

4.7. RkVAh charges earlier applicable to consumers of category LT II (earlier LF-2), LT III (earlier LTC-1), LT V (earlier LTP-1), LT VI (earlier LTP 2), and all HT categories have been replaced with a mechanism of power factor (PF) penalty and incentive.

4.8. ToD tariff has been introduced in all HT categories viz. HT I (earlier HTP 1), HT II (earlier HTP 2), HT III (earlier HTP 3), HT IV (earlier HTP 4) except HT V Bulk Supply for Housing (earlier HTP 5). Following three time slots have been introduced for all HT consumers-

- 0800 hrs to 1600 hrs
- 1600 hrs to 2400 hrs
- 2400 hrs to 0800 hrs

4.9. ToD tariff would also be made applicable to all consumers in the following categories – LT II, LT III, LT V and LT VI having consumption above 3,000 kWh/ month from the second year of the MYT Control Period i.e. FY 2008-09. BEST should by then install meters which are ToD compliant at such consumer's premises (ToD meters should be capable of upgradation to four time slots).

4.10. The tariffs are telescopic for all existing / new consumers / regrouped consumers for LT I (earlier LF-1), LT II (earlier LF-2) and LT V (earlier LTP-1) categories, i.e., consumers falling in the higher slabs will have to pay higher tariffs for their incremental consumption in various consumption slabs and not on their total consumption.

Reliability Charge

4.11. Due to increasing energy consumption in its licence area, BEST has been purchasing expensive power over and above that allocated from the generating plants of The Tata Power Company (TPC-G), to meet this increased demand. Given the current power situation in the State and the increasing cost of power, BEST has been passing on this additional cost to the consumers who are enjoying the benefits of uninterrupted assured power.

4.12. As compared to consumers in other parts of the State and country, consumers in Mumbai city have had the privilege of uninterrupted power supply for many years, on account of the availability of cheaper power, as well as the existence of a standby power agreement with Maha DISCOM, which ensures that the city does not face load shedding. However, there is a cost implication to this assurance of uninterrupted power supply, due to the cost of standby facility being provided by Maha DISCOM and the increasing requirement of costlier power purchases.

4.13. The Commission has determined the basic energy tariff excluding the cost of expensive power and the standby charges. The Commission has provided for recovery of the expensive power cost and the stand by charges with the introduction of a 'Reliability Charge' which has been levied to specific categories of consumers. This charge would be levied on all consumer categories except the following – BPL, LT I (earlier LF-1) having consumption below 300 units, LT VIII (earlier E), LT XI (earlier TSR), and HT V (earlier HTP-5).

4.14. The residential, commercial and LT industrial consumers consuming below 300 units per month and LT VIII and HT V consumers have to bear their share of the standby charges, while all other consumers have to bear their share of the standby charges as well as the share of costly power purchases, since they are primarily contributing towards the increasing incidence of costly power purchases.

4.15. Lower level of reliability charge (excluding expensive power cost) of only Rs. 0.38 per unit has been made applicable for the electricity consumption of Public Water Supply and Sewerage Systems Works operated by Government/Local Authority. This is in anticipation that they would adopt Demand Side Management measures.

4.16. The Commission has ensured that the smaller consumers in the residential, commercial and industrial category do not have to face a tariff shock. On the other hand, the Commission has targeted the conspicuous consumption categories like shopping malls, floodlighting at stadiums, hoardings, etc., by steeply increasing their tariffs. Rather than banning consumption by such consumer categories, as has been sought by different consumer groups in the Public Hearings held across the State, the tariff has been determined such that it may be more economical for such consumers to opt for captive power supply through DG sets, etc., rather than take supply from the distribution licensee.

4.17. The demand-supply situation in the city of Mumbai is in a fine state of balance, with the licensees barely managing to meet the demand, through a combination of own generation and costly power purchases from outside the State. However, if the demand continues to grow at the current rate, then it is likely that the city of Mumbai, including BEST's consumers, will have to face load shedding during system peak hours, even after paying the Reliability Charges. The Commission has hence, determined the tariffs such that there is an in-built incentive to consumers to reduce their consumption, as the impact on the bills is designed to increase as the consumption increases.

Determination of Reliability Charges

Concept of Expensive Power

4.18. BEST has been purchasing major part of its energy requirement from the generation business of The Tata Power Company (TPC-G). In the absence of an approved Power Purchase Agreement between TPC-G and BEST, the share of allocation of TPC-generation to the Mumbai region Licensees viz. BEST, REL-D and TPC-D has been in the ratio of their non-coincident peak demand as considered by the Commission in the Tariff Order for TPC for FY 2006-07 dated 03/10/06 (Case No. 12 of 2005 and Case No. 56 of 2005). For FY 2007-08, the Commission has considered this allocation of TPC-G generation to these licensees in the ratio of their co-incident peak demand.

Demand Projections of BEST

4.19. As per the demand projections of BEST for FY 2007-08, the energy demand from the consumers in the Licensee area of BEST has been over and above the allocation of the TPC-G generation and BEST is required to purchase this additional power from other expensive sources (including Unit 4 of TPC-G which is run on fuel oil) at a much higher rate, in order to meet the energy demand of consumers in its license area.

Stand-by Charge

4.20. Apart from this, in order to ensure 24 hours uninterrupted supply, BEST is required to pay Standby Charges to MSEDCL as determined by the Commission in its Tariff Order for MSEDCL.

Principles of Determination of Reliability Charge

4.21. According to the National Tariff Policy, consumers those who are ready to pay a tariff which reflects efficient costs have the right to get uninterrupted 24 hours supply of quality power.

4.22. The Commission has thus introduced a concept of Reliability Charge to recover the Stand-by Charge and the cost of purchase of Expensive Power.

4.23. The Reliability Charges have been calculated after considering the Stand-by Charges per unit (per kWh) applicable to all consumer categories except BPL category. A share of 98 percent of the expensive power (2 percent reduction considered on account of achievement of reduction through DSM measures) is apportioned over certain high consuming categories of consumers in proportion to their share of energy consumption to the total consumption of these categories.

4.24. Accordingly, while determining the average Cost of Supply (CoS) and base tariffs for FY 2007-08, the Commission has considered the ARR including only the power purchase expenses from TPC-G (except that from Unit 4) to be recovered from base tariff and the expensive power purchase cost and Stand-by charges would be recovered through Reliability Charge over and above the base tariff.

Methodology for calculation of Reliability Charges

4.25. The reliability Charge consists of two components-

a) Standby Charges and
b) Expensive Power Purchase Cost

4.26. The procedure followed in calculation of the component of stand-by charge per unit for FY 2007-08 is as follows-

1. Cost of stand-by charge (as per the ARR) = 146.10 Rs. Crores
2. Total energy consumption = 3,850,750,235 kWh
3. less energy consumption by BPL category= 135,000 kWh
4. Energy consumption base (2)-(3) = 3,850,615,235 kWh
5. Stand-by Charge (1) / (4) = 0.38 Rs. / kWh

4.27. The stand-by charge is applicable to all units consumed by all categories of consumers (except BPL) at a flat rate of Rs. 0.38 / kWh.

4.28. The Expensive Power Purchase Cost component of the Reliability Charge for FY 2007-08 has been calculated as follows-

- This charge would be applicable for consumption above 300 units for LT-I and LT-II and LT-V categories and all other LT and HT categories except HT-V category. The HT-V category for bulk supply for residential consumption has been exempted from this levy of expensive power component of Reliability Charge considering the low unitary level consumption in such mass Group Housing Societies / Housing Colonies.

- The table below summarises the various categories and their consumption slabs on which this charge would be applicable.
- From the table it can be noted that the total energy consumption for the above mentioned consumers is 2,227,086,104 kWh.
- The expensive power cost has been apportioned over the energy consumed by the above consumers, to arrive at a per unit charge.
- The cost of expensive power (from ARR) is as follows-

a) 98% of the cost of expensive Power from TPC-G Unit 4 = Rs. 164.31 Crore

b) 98% of the cost of expensive Power from Other Sources = Rs. 99.87. Crore

c) 98% of Total Cost of Expensive Power (a + b) = Rs. 264.18 Crore

- This expensive power cost of Rs. 264.18 Crore has been divided by the total units consumed i.e. 2,227,086,104 kWh, giving a unit charge of Rs. 1.19 / unit

Table 4.1: Determination of Reliability Charge - Component of Expensive Power Cost

Tariff Category		Consumption Slab (units)	Total Energy Consumption		Base for Apportionment of Expensive Power Cost	
Existing	**Revised**		**(kWh)**	**(%)**	**(kWh)**	**(%)**
BPL	**BPL**	0-30	135,000	0%		
LF 1	**LT I**	0 - 100	668,444,094	17%		
		101 - 300	500,258,656	13%		
		301-500	132,386,819	3%	132,386,819	***6%***
		>500	341,451,684	9%	341,451,684	***15%***
		Sub Total	**1,642,541,252**	**43%**		
LF 2	**LT II**	0 - 300	382,158,263	10%		
		301 - 500	112,375,832	3%	112,375,832	***5%***
		501 - 1000	178,190,842	5%	178,190,842	***8%***
		> 1000	759,257,042	20%	759,257,042	***34%***
		Sub Total	**1,431,981,980**	**37%**		
LTC 1	**LT III**	**All Units**	**69,112,886**	**2%**	**69,112,886**	***3%***
CD	**LT IV**	**All Units**	**1,426,318**	**0.04%**	**1,426,318**	***0.1%***
LTP 1	**LT V**	0 - 300	26,314,016	1%		
		301 - 500	12,217,827	0%	12,217,827	***1%***
		501 - 1000	20,560,353	1%	20,560,353	***1%***
		> 1000	114,119,044	3%	114,119,044	***5%***
		Sub Total	**173,211,241**	**4%**		
LTP 2	**LT VI**	**All Units**	**4,864,116**	**0.13%**	**4,864,116**	***0.2%***
SL	**LT VII**	**All Units**	**36,222,520**	**1%**	**36,222,520**	***2%***
E	**LT VIII**	**All Units**	**1,028,971**	**0.03%**		
T	**LT IX**	**All Units**	**13,264,615**	**0.34%**	**13,264,615**	***1%***
T	**LT X**	**All Units**	**7,142,485**	**0.19%**	**7,142,485**	***0.3%***
TSR	**LT XI**	**All Units**	**80,029**	**0.00%**		
HTP 1	**HT I**	**All Units**	**12,728,865**	**0.33%**		
HTP 2	**HT II**	**All Units**	**21,455,611**	**1%**	**21,455,611**	***1%***
HTP 3	**HT III**	**All Units**	**251,572,559**	**7%**	**251,572,559**	***11%***
HTP 4	**HT IV**	**All Units**	**151,465,548**	**4%**	**151,465,548**	***7%***
HTP 5	**HT V**	**All Units**	**32,516,237**	**1%**		
		Grand Total	**3,850,750,235**	**100%**	**2,227,086,104**	**100%**

TOD TARIFF

4.29. The Commission in its earlier Tariff Order dated 9th March 2006 (Case 4 of 2004) had directed that; to begin with ToD tariff with three time slots will be introduced and these will be upgraded to four time slots in future. BEST was also directed to ensure the ToD metering capability for consumers in the following categories viz. LT II (earlier LF -2), LT III (earlier LTC-1), LT V (LTP-1) and LT VI (earlier LTP-2), having consumption above 3,000 kWh/month and also to all consumers in the HT categories.

4.30. To begin with, ToD tariff has been introduced in all HT categories except HT V (Bulk Residential Supply) viz. HT I (earlier HTP-1), HT II (earlier HTP-2), HT III(earlier HTP-3), HT IV(earlier HTP-4).

4.31. Following three time slots have been introduced for all HT consumers-

Table 4.2: ToD Tariff

Time Slot	Applicable tariff over and above base tariff (Rs/kWh)
0800 hrs to 1600 hrs	Nil
1600 hrs to 2400 hrs	plus Rs. 0.60 / kWh
2400 hrs to 0800 hrs	minus Rs. 0.60 / kWh

4.32. This has been done with an objective to shift demand from the system peak for Maharashtra, which has been considered as 1800 hrs to 2200 hrs. An additional per unit cost of Rs. 0.60 (in addition to the basic tariff per unit) has been made applicable for all consumption units during the time slot of 1600 hrs to 2400 hrs, while an incentive of Rs. 0.60 / unit has been offered on all units consumed during 2400 hrs to 0800 hrs. Based on data collected during the first year of implementation for FY 07-08, the time slots and the incentive / disincentive factors would be reviewed by the Commission during the APR exercise for the FY 2007-08.

4.33. The ToD metering would also be made applicable to all consumers in the following categories – LT II (earlier LF-2), LT III (earlier LTC-2), LT V (earlier LTP-1) and LT VI (earlier LTP-2) having consumption above 3,000 kWh/ month from the second year of the MYT control period i.e. FY 2008-09. BEST should capture data on the ToD slotwise consumption of these and all HT consumers for FY 2007-08 and submit the same to the Commission at the time of the APR for the FY 2007-08.

TARIFF COMPONENTS

Fixed Charge

4.34. These charges are on a per month or per connection or per occasion basis based on the type of supply (single / three phase) and on a per kVA / month or sanctioned load basis for categories where MD based tariff has been made applicable.

4.35. For Residential consumers grouped under LT-I category and having Sanctioned Load less than or equal to 10 kW, supplied through single phase meters, shall be charged 'Fixed Cost' according to the rates specified under the head 'Single Phase' in the tariff tables given in Chapter 4 of this Order. Those Residential consumes availing three phase supply through three phase meters, shall be charged 'Fixed Cost' according to the rates specified under the head 'Three Phase' in the tariff tables.

Variable Charge

Energy Charges

4.36. These are on a per kWh basis for energy consumed.

Reliability Charge

4.37. These include charges paid by BEST to MSEDCL for providing the stand-by support and the cost for procurement of expensive power from sources other than TPC-G (excluding Unit 4) at higher rates than normal. As explained earlier, these are levied to all the consumers except the BPL category at varying levels based on their energy consumption on a per kWh basis.

Other Charges

FAC

4.38. The existing Fuel Adjustment Cost (FAC) has been merged with the basic tariff since the Commission has considered the prevailing power purchase prices. Continuing with the previous Order of the Commission, the FAC charge will be applicable on the entire sales of BEST, without any exemption to any consumer categories. The Commission has approved the following FAC formula to account for any change in the cost of power purchase due to variations in the fuel cost as per the MERC (Terms & Conditions of Tariff) Regulation 2005, as:

FAC = C + I + B, where,

FAC = Fuel Adjustment Cost

C = Change in cost of power purchase due to variation in the fuel cost

I = Interest on Working Capital

B = Adjustment Factor for over-recovery/ under-recovery

4.39. The FAC on a monthly basis shall be calculated and charged as per Section 82 of the MERC (Terms and Conditions of Tariff) Regulations 2005. BEST will be required to obtain post facto approval of the Commission on a quarterly basis for the FAC charged. For this purpose, BEST should submit the details of FAC incurred and FAC chargeable from all consumers for each month in that quarter, alongwith the detailed computations and the supporting documents for verification by the Commission, which should also be displayed prominently at the cash collection centres and on BEST's website.

4.40. Since the Commission has differentiated between Base power and Expensive power (which is expected to be procured on short-term basis depending upon the prevailing demand), the FAC on account of the Expensive power (considered for calculation of Reliability Charge) would be considered at the time of the APR process for truing-up.

ToSE, Other Taxes and Duties

4.41. Tariffs are exclusive of Tax on Sale of Electricity (ToSE), Electricity Duty, Taxes and other charges as levied by Government or other competent authorities and the same as applicable will be payable by the consumers in addition to the charges levied as per the tariff approved by the Commission.

AVERAGE COS AND CROSS SUBSIDY

4.42. While determining the average CoS, the Commission has considered the Annual Revenue Requirement considering only the cost of power purchase from non-costly sources of power and Transmission Charges to be recovered through base tariffs. The Stand-by Charges and power purchase expense would be recovered through Reliability Charges. The details of Reliability Charges have been discussed earlier.

4.43. The calculation of the average CoS for FY 2007-08 without considering cost of expensive power and Stand-by Charges is given below-

(a) Base Annual Revenue Required = 1,812.14 Rs. Crore

(excluding Expensive Power cost and Stand-by Charges)

(b) Sales = 3, 850.75 MU

(c) Average CoS (a / b) = 4.71 Rs./ kWh

4.44. The table below shows the ratio of the Average Revised Tariff rate to Average Cost of Supply excluding Reliability Charges and percentage point change in tariff with respect to Cost of Supply.

Table 4.3: Ratio of Average Billing Rate to Average Cost of Supply (FY 2007-08) excluding Reliability Charge

Category	Average Cost of Supply (Rs./unit)	Average Realisation (Rs./unit)		Ratio of Average Realisation to Average Cost of Supply		Percentage Point increase / decrease in tariff w.r.t. Average CoS
		Existing Tariff	Revised Tariff	Existing Tariff	Revised Tariff	
FY 2007-08	a	b	c	d = b/a	e = c/a	f = e - d
LT Category						
BPL	4.71	1.60	1.60	34%	34%	0%
LT I	4.71	2.07	2.38	44%	50%	7%
LT II	4.71	5.39	6.85	114%	146%	31%
LT III	4.71	4.80	7.65	102%	163%	61%
LT IV	4.71	11.71	13.36	249%	284%	35%
LT V	4.71	4.74	6.03	101%	128%	27%
LT VI	4.71	4.32	6.52	92%	138%	47%
LT VII	4.71	3.95	5.75	84%	122%	38%
LT VIII	4.71	1.61	1.51	34%	32%	-2%
LT IX	4.71	9.74	10.05	207%	214%	7%
LT X	4.71	8.53	6.37	181%	135%	-46%
LT XI	4.71	6.13	5.72	130%	121%	-9%
HT Category						
HT I	4.71	2.14	2.84	45%	60%	15%
HT II	4.71	3.95	5.20	84%	111%	27%
HT III	4.71	4.18	5.88	89%	125%	36%
HT IV	4.71	2.99	4.24	63%	90%	27%
HT V	4.71	2.15	3.95	46%	84%	38%
Grand Total	4.71	3.72	4.71	79%	100%	21%

CHANGES IN TARIFF CATEGORIES AND SLABS

4.45. The Commission has undertaken the following rationalisation of categories and slabs in the revised tariff. The revised tariff schedule is given in Annexure IV.

BPL (no change): Below Poverty Line

4.46. The 'BPL category' introduced in the Tariff Order for FY 04-05 and FY 05-06 (Case No. 4 of 2004) in accordance with the National Electricity Policy for consumers below poverty line remains unchanged. The tariff for this category has also not been changed.

Tariff Category		Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)		RkVAh rate (paise / RkVAh)
			Single phase	Three phase		Energy	Reliability	
Revised	BPL	0-30	3	Nil	Nil	0.40	Nil	Nil
Existing	BPL	0-30	3	Nil	Nil	0.40	Nil	Nil

LT I (earlier LF-1): Residential

4.47. The LT I category is for Residential consumption. This category has been continued. The only change is the introduction of a new slab for consumption above 500 units per month.

4.48. All consumers in this category with energy consumption upto and including 300 units per month would have to pay the Reliability Charge of Rs. 0.38 / kWh. Consumers with energy consumption greater than 300 units per month would have to pay a Reliability Charge of Rs. 1.57 / kWh for their energy consumption above 300 units.

Tariff Category		Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)		RkVAh rate (paise / RkVAh)
			Single phase	Three phase		Energy	Reliability	
Revised	LT I	0 - 100	10	100	Nil	0.50	0.38	Nil
		101 - 300	30	100	Nil	1.80	0.38	Nil
		301-500	60	100	Nil	3.50	1.57	Nil
		>500	100	100	Nil	5.65	1.57	Nil
Existing	LF 1	0 - 100	10	100	Nil	0.75	Nil	Nil
		101 - 300	10	100	Nil	2.00	Nil	Nil
		>300	50	100	Nil	3.60	Nil	Nil

4.49. Note: Additional fixed charge of Rs. 100 per 10 kW or part thereof above the sanctioned 10 kW load shall be payable by consumers in this category

LT II (earlier LF-2) : Non-Residential cum Commercial

4.50. This category includes consumers who use electricity at Low / Medium Voltage in all non-residential / residuary premises for commercial consumption except premises falling within LT I (earlier LF-1), LT III (earlier LTC-1) and LT VIII (earlier SL) with sanctioned load upto 100 kW. One new consumption slab has been introduced for consumption between 501 upto and including 1,000 units' per month. All consumers in this category would have to pay the Reliability Charge of Rs. 0.38 / kWh for their energy consumption upto 300 units. Consumers with energy consumption greater than 300 units would have to pay a Reliability Charge of Rs. 1.57 / kWh for their energy consumption above 300 units.

4.51. The RkVAh charges earlier applicable for consumers with greater than 3,000 units monthly consumption has been removed. This has been replaced by a mechanism of PF penalty and incentive.

Tariff Category		Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)		RkVAh rate (paise / RkVAh)
			Single phase	Three phase		Energy	Reliability	
Revised	LT II *	0 - 300	60	150	Nil	3.75	0.38	
		301 - 500	120	200	Nil	6.00	1.57	
		501 - 1000	180	250	Nil	7.25	1.57	
		> 1000	300	300	Nil	8.40	1.57	
Existing	LF 2	0 - 300	150	150	Nil	3.50	Nil	
		301 - 1000	150	150	Nil	5.00	Nil	
		> 1000	150	150	Nil	5.90	Nil	
		PF < 0.92						2.70
		0.92 < PF < 0.95						1.80
		0.95 < PF < 0.97						1.20
		PF > 0.97						0.00

*Note: * Power Factor incentive and penalty applicable for consumers consuming over 3,000 units per month*

LT III (earlier LTC-1); Low Tension Commercial

4.52. This category includes commercial consumers using electricity at Low / Medium Voltage mainly for commercial consumption and having sanctioned load above 100 kW. Though the Commission would prefer to have one single category under LT commercial, the existing categorization is being continued as the tariff structure and tariff differential is significant between these categories due to historical reasons,.

4.53. This category has been continued without any changes in the consumption slab. All consumers in this category would have to pay the Reliability Charge of Rs. 1.57 / kWh. The RkVAh charges have been removed. This has been replaced by a mechanism of PF penalty and incentive.

Tariff Category		Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)		RkVAh rate (paise / RkVAh)
			Single phase	Three phase		Energy	Reliability	
Revised	LT III *	ALL UNITS	Nil	Nil	300	6.75	1.57	
Existing	LTC 1	ALL UNITS	Nil	Nil	300	3.90	Nil	
		PF < 0.92						2.70
		0.92 < PF < 0.95						1.80
		0.95 < PF < 0.97						1.20
		PF > 0.97						0.00

*Note: * Power Factor incentive and penalty applicable for all consumers*

LT IV (earlier C (D)): Advertisements and Hoardings

4.54. This category includes consumers using electricity exclusively for all advertisements and hoardings and other conspicuous consumption such as that used for external flood light displays, neon signs at departmental stores, malls, multiplexes, theatres, clubs, hotels and other such entertainment / leisure establishments which is to be covered under this category.

The Commission has felt it necessary to give such conspicuous consumption a tariff signal, for limiting such consumption. BEST should ensure that such opulent consumption is separately supplied and metered for the purpose of charging tariff under this category.

4.55. This category has been continued without any changes in the slab.

4.56. All consumers in this category would have to pay the Reliability Charge of Rs. 1.57 / kWh for their energy consumption.

Tariff Category		Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)		RkVAh rate (paise / RkVAh)
			Single phase	Three phase		Energy	Reliability	
Revised	**LT IV**	ALL UNITS	Nil	400	Nil	13.00	1.57	Nil
Existing	**CD**	ALL UNITS	200	200	Nil	11.00	Nil	Nil

LT V (earlier LTP-1): Low Tension V: Industrial

4.57. This category includes consumers with consumption of electricity used at Low / Medium Voltage in industrial premises other than premises falling within tariffs LT VI (earlier LTP-2), including for the purpose of general lighting, fans etc. and with a sanctioned load upto and including 20 kW.

4.58. One new consumption slab has been added in the tariff structure of this category, viz., 501 upto and including 1,000 units. All consumers in this category would have to pay the Reliability Charge of Rs. 0.38 / kWh for their energy consumption upto 300 units. Consumers with energy consumption greater than 300 units would have to pay a Reliability Charge of Rs. 1.57 / kWh for their energy consumption above 300 units.

4.59. The RkVAh charges have been removed. This has been replaced by a mechanism of PF penalty and incentive. However, this would be applicable only for those consumers consuming more than 3,000 units in a month.

Tariff Category		Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)		RkVAh rate (paise / RkVAh)
			Single phase	Three phase		Energy	Reliability	
Revised	**LT V ***	0 - 300	Nil	300	Nil	3.20	0.38	
		301 - 500	Nil	350	Nil	4.50	1.57	
		501 - 1000	Nil	400	Nil	5.50	1.57	
		> 1000	Nil	400	Nil	6.85	1.57	
Existing	**LTP 1**	0 - 300	300	300	Nil	2.70	Nil	
		301 - 1000	300	300	Nil	3.40	Nil	
		> 1000	300	300	Nil	5.10	Nil	
		PF < 0.92						2.70
		0.92 < PF < 0.95						1.80
		0.95 < PF < 0.97						1.20
		PF > 0.97						0.00

*Note: * Power Factor incentive and penalty applicable for consumers consuming over 3,000 units per month*

LT VI (earlier LTP-2): Low Tension VI: Industrial

4.60. This category includes consumers with consumption of electricity used at Low / Medium Voltage in industrial premises with sanctioned load of above 20 kW.

4.61. For the consumers with Sanctioned Load between 20 kW upto and including 100 kW, fixed charge of Rs. 400 per connection per month and for those consumers with Sanctioned Load above 100 kW, demand charges of Rs. 300 per kVA per month would be charged. This category has been continued without any changes in the slab. Ideally, the Commission would have liked to move toward Demand based tariff for consumers between 20 kW upto and including 100 kW. However, due to the lack of requisite data on number of such consumers and the demand for such consumers, the Commission has not been able to assess the impact of such a move. In order to avoid any tariff shock on this account, the Commission has continued with the existing practice of levying fixed charges on the basis of Rs. per connection per month, for consumers between 20 kW and 100 kW. BEST is directed to submit this data, to enable the Commission to take up this issue in the next Order.

4.62. All consumers in this category would have to pay the Reliability Charge of Rs. 1.57 / kWh for their energy consumption.

4.63. The RkVAh charges have been removed. This has been replaced by a mechanism of PF penalty and incentive.

Tariff Category		Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)		RkVAh rate (paise / RkVAh)
			Single phase	Three phase		Energy	Reliability	
Revised	LT VI *							
	Santioned Load between 21 kW to 100 kW	ALL UNITS	Nil	400	Nil	6.50	1.57	
	Santioned Load greater than 100 kW	ALL UNITS	Nil	Nil	300	5.50	1.57	
Existing	LTP 2	ALL UNITS	Nil	Nil	300	3.30	Nil	
		PF < 0.92						2.70
		0.92 < PF < 0.95						1.80
		0.95 < PF < 0.97						1.20
		PF > 0.97						0.00

*Note: * Power Factor incentive and penalty applicable for all consumers*

LT VII (earlier SL): Street Lights

4.64. This category includes consumers using electricity at low / medium voltage for public gardens, in traffic islands, bus shelters, public sanitary conveniences, police chowkies, or for lights on public streets or traffic lights, public fountains, irrespective of whether such facilities are provided by the Government or the MCGM, or MbPT or private parties.

4.65. This category has been further subdivided as-

(a) Street Lighting on Public Streets and

(b) Public Utility Lighting: Lighting in Public areas like gardens, bus shelters, toilets and basic sanitation, police chowkies, fountains, traffic islands and traffic signals.

4.66. MD based fixed charges on Rs. / kVA basis are applicable for street lighting on public streets with MD meters installed.

4.67. Fixed charges for other consumers as defined under group 'b' above would be at Rs. 200 / connection / month or Rs. 150 / connection / month depending upon whether the supply is three phase or single phase, respectively.

4.68. All consumers in this category would have to pay the Reliability Charge of Rs. 1.57 / kWh for their energy consumption.

Tariff Category		Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)		RkVAh rate (paise / RkVAh)
			Single phase	Three phase		Energy	Reliability	
Revised	LT VII							
	Street Lighting	ALL UNITS	Nil	Nil	300	5.00	1.57	
	Public Utility Lighting	ALL UNITS	150	200	Nil	5.00	1.57	Nil
Existing	SL	ALL UNITS	Nil	Nil	300	3.20	Nil	

LT VIII (earlier E): Electric Crematoriums

4.69. This category consists of consumers consuming electricity used at Low / Medium Voltage in Electric Crematoria for all purposes including lighting (Halls or gardens or any portion of the premises that may be let out for consideration or used for commercial activities at any time would be charged at LT II (earlier LF-2) tariff as applicable).

4.70. This category has been continued without any changes in the consumption slabs. All consumers in this category would have to pay the Reliability Charge only to the extent of Rs. 0.38 / kWh for their energy consumption.

Tariff Category		Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)		RkVAh rate (paise / RkVAh)
			Single phase	Three phase		Energy	Reliability	
Revised	LT VIII	ALL UNITS	Nil	100	Nil	1.50	0.38	Nil
Existing	E	ALL UNITS	100	100	Nil	1.60	Nil	Nil

LT IX (earlier T): Temporary

4.71. This category includes temporary supply of electricity at Low / Medium Voltage for any construction work, decorative lighting for exhibitions, circus, film shooting, marriages, etc. and any activity not covered under tariff LT-XI (earlier TS(R)).

4.72. This category has been continued without any changes in the consumption slabs. All consumers in this category would have to pay the Reliability Charge of Rs. 1.57 / unit for their energy consumption.

Tariff Category		Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)		RkVAh rate (paise / RkVAh)
			Single phase	Three phase		Energy	Reliability	
Revised	LT IX	ALL UNITS	Nil	300	Nil	10.00	1.57	Nil
Existing	T	ALL UNITS	250	250	Nil	8.50	Nil	Nil

LT X (earlier T): Stand-by (Emergency Supply)

4.73. This is a new category. It includes supply of electricity at Low / Medium Voltage to the residential / other premises for any fire fighting activity by the fire department in case of an outbreak of fire in the respective premises.

4.74. As such this power is not consumed since it is on a 'stand-by'. Power is consumed only in case of a fire outbreak or other emergency situation. Hence, unlike other categories, this category is charged demand charges based on its sanctioned load (kW) in addition to energy charges based on actual consumption.

4.75. All consumers in this category would have to pay the Reliability Charge of Rs. 1.57 / unit for their energy consumption.

Tariff Category		Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kW /month)	Variable Charge (Rs. / kWh)		RkVAh rate (paise / RkVAh)
			Single phase	Three phase		Energy	Reliability	
Revised	**LT X**	ALL UNITS	Nil	Nil	150	5.60	1.57	
Existing	**T**	ALL UNITS	250	250	Nil	8.50	Nil	Nil

LT XI (earlier TS (R)): Temporary Supply for Public Religious Functions

4.76. This tariff category includes temporary supply of electricity at low voltage for public religious functions like Ganesh Utsav, Navaratri, Eid, Mohurram, Ram Lila, Christmas, Guru Nanak Jayanti, etc. or where community prayers are held.

4.77. This category has been continued without any changes in the slab structure. All consumers in this category would have to pay the Reliability Charge only to the extent of Rs. 0.38 / kWh for their energy consumption.

Tariff Category		Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)		RkVAh rate (paise / RkVAh)
			Single phase	Three phase		Energy	Reliability	
Revised	**LT XI**	ALL UNITS	150	200	Nil	1.80	0.38	Nil
Existing	**TSR**	ALL UNITS	200	200	Nil	1.70	Nil	Nil

HT I (earlier HTP-1): High Tension-I

4.78. This category includes consumers of electricity such as Schools, Charitable / Public Trusts or Religious Institutions and Municipal / Government hospitals taking supply at High Voltage.

4.79. This category has been continued without any changes in the slab structure. All consumers in this category would have to pay the Reliability Charge of Rs. 1.57 / kWh for their energy consumption.

4.80. The RkVAh charges have been removed. This has been replaced by a mechanism of PF penalty and incentive. ToD tariff has been made applicable for this category.

Tariff Category		Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)		RkVAh rate (paise / RkVAh)
			Single phase	Three phase		Energy	Reliability	
Revised	HT I *	ALL UNITS	Nil	Nil	300	2.50	1.57	
Existing	HTP 1	ALL UNITS	Nil	Nil	300	1.80	Nil	
		PF < 0.92						2.70
		0.92 < PF < 0.95						1.80
		0.95 < PF < 0.97						1.20
		PF > 0.97						0.00

*Note: * Power Factor incentive and penalty applicable for all consumers*

HT II (earlier HTP-2): High Tension – II: Commercial

4.81. This category includes consumers such as Hospitals owned or controlled by private individuals or institutions or those owned or run or controlled by public trusts, religious, charitable institutions not exempted from levy of general tax under Section 143 (1)(a) of the MMC Act, taking supply at High Voltage.

4.82. This category has been continued without any changes in the slab structure. All consumers in this category would have to pay the Reliability Charge of Rs. 1.57 / kWh for their energy consumption.

4.83. The RkVAh charges have been removed. This has been replaced by a mechanism of PF penalty and incentive. ToD tariff has been made applicable for this category.

Tariff Category		Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)		RkVAh rate (paise / RkVAh)
			Single phase	Three phase		Energy	Reliability	
Revised	HT II	ALL UNITS	Nil	Nil	300	4.75	1.57	
Existing	HTP 2	ALL UNITS	Nil	Nil	300	3.50	Nil	
		PF < 0.92						2.70
		0.92 < PF < 0.95						1.80
		0.95 < PF < 0.97						1.20
		PF > 0.97						0.00

Note: Power Factor incentive and penalty applicable for all consumers

HT III (earlier HTP-3): High Tension-III: Commercial

4.84. This category includes consumers taking electricity supply at High Voltage for commercial consumption except those covered under HT-I and HT-II categories.

4.85. The Consumers belonging to HT III requiring a single point supply for the purpose of downstream consumption by separately identifiable entities will have to either operate through a franchisee route or such entities will have to take individual connections under relevant category from 1st April 2007.

4.86. The Commission has directed that the HT III consumers supplying electricity to separately identifiable downstream entities will act as a limited franchisee for the purpose of billing and collection of electricity charges from the downstream entities. These downstream entities will pay appropriate tariff as applicable as per BEST tariff schedule i.e. LT-I, LT-II, etc. (Ref: Commission's directive vide its Order dated 18th January 2007). In case such HT III

Consumer has declined to operate as a limited franchisee, then BEST should ensure that from 1st April 2007 such downstream entities are given separate (metered) connections under relevant tariff category from 1st April 2007.

4.87. This category has been continued without any changes in the slab structure. All consumers in this category would have to pay the Reliability Charge of Rs. 1.57 / kWh for their energy consumption.

4.88. The RkVAh charges have been removed. This has been replaced by a mechanism of PF penalty and incentive. ToD tariff has been made applicable for this category.

Tariff Category		**Consumption Slab (kWh)**	**Fixed Charge (Rs. / connection / month)**		**Demand Charges (Rs / kVA /month)**	**Variable Charge (Rs. / kWh)**		**RkVAh rate (paise / RkVAh)**
			Single phase	**Three phase**		**Energy**	**Reliability**	
Revised	**HT III**	ALL UNITS	Nil	Nil	300	5.00	1.57	
Existing	**HTP 3**	ALL UNITS	Nil	Nil	300	3.30	Nil	
		PF < 0.92						2.70
		0.92 < PF < 0.95						1.80
		0.95 < PF < 0.97						1.20
		PF > 0.97						0.00

Note: Power Factor incentive and penalty applicable for all consumers

HT IV (earlier HTP-4): High Tension-IV: Industrial

4.89. This category includes consumers taking electricity supply at High Voltage for industrial consumption.

4.90. This category has been continued without any changes in the slab structure. All consumers in this category would have to pay the Reliability Charge of Rs. 1.57 / kWh for their energy consumption.

4.91. The RkVAh charges have been removed. This has been replaced by a mechanism of PF penalty and incentive. ToD tariff has been made applicable for this category.

Tariff Category		**Consumption Slab (kWh)**	**Fixed Charge (Rs. / connection / month)**		**Demand Charges (Rs / kVA /month)**	**Variable Charge (Rs. / kWh)**		**RkVAh rate (paise / RkVAh)**
			Single phase	**Three phase**		**Energy**	**Reliability**	
Revised	**HT IV**	ALL UNITS	Nil	Nil	300	3.50	1.57	
Existing	**HTP 4**	ALL UNITS	Nil	Nil	300	2.25	Nil	
		PF < 0.92						2.70
		0.92 < PF < 0.95						1.80
		0.95 < PF < 0.97						1.20
		PF > 0.97						0.00

Note: Power Factor incentive and penalty applicable for all consumers

HT-V (earlier HTP -5): High Tension - V

4.92. This category includes consumers taking electricity supply at High Voltage for bulk residential consumption.

4.93. Defence establishments taking bulk supply for residential consumption under HT V category shall act as a limited franchisee for billing and collection of electricity charges from any downstream commercial or industrial entities / consumers. Such downstream entities / consumers will pay appropriate tariffs as applicable as per BEST tariff schedule (LT-II, LT-III, etc.) in force.

4.94. There is no change in the slab structure of this category. Since this category consists of bulk supply to residential consumers which are essentially low unitary consumption condominiums, the consumers in this category would have to pay lower Reliability Charge only to the extent of Rs. 0.38 / kWh for their energy consumption.

4.95. The RkVAh charges have been removed. This has been replaced by a mechanism of PF penalty and incentive.

Tariff Category		Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)		RkVAh rate (paise / RkVAh)
			Single phase	Three phase		Energy	Reliability	
Revised	**HT V**	ALL UNITS	Nil	Nil	300	3.50	0.38	
Existing	**HTP 5**	ALL UNITS	Nil	Nil	100	2.00	Nil	
		PF < 0.92						2.70
		0.92 < PF < 0.95						1.80
		0.95 < PF < 0.97						1.20
		PF > 0.97						0.00

Note: Power Factor incentive and penalty applicable for all consumers

Exclusions

Public Municipal /Government Water Supply Schemes

4.96. Public Municipal / Government Water Supply Services either taking LT or HT supply would be charged a lower Reliability Charge only to the extent of Rs. 0.38 / kWh for their energy consumption.

Revised Category-Wise Tariff

4.97. Summary of the revised tariff structure is shown in the table below

4.98. The detailed revenue computation with revised tariff has been given in Annexure VI. The impact of the tariff revision on the monthly electricity bills of the different consumer categories is presented in Annexure VII.

Table 4.4: Revised Tariff Structure (FY 2007-08)

Earlier Tariff Category (as per MERC Order dated 26/09/06)	Revised Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
			Single phase	Three phase		Energy	Reliability
BPL	BPL	0-30	3	Nil	Nil	0.40	Nil
LF 1	LT I: Residential	0 - 100	10	100	Nil	0.50	0.38
		101 - 300	30	100	Nil	1.80	0.38
		301-500	60	100	Nil	3.50	1.57
		>500	100	100	Nil	5.65	1.57
LF 2	LT II: Non-residential cum Commercial	0 - 300	60	150	Nil	3.75	0.38
		301 - 500	120	200	Nil	6.00	1.57
		501 - 1000	180	250	Nil	7.25	1.57
		> 1000	300	300	Nil	8.40	1.57
LTC 1	LT III: Commercial	All Units	Nil	Nil	300	6.75	1.57
CD	LT IV:Advertisements and Hoardings	All Units	Nil	400	Nil	13.00	1.57
LTP 1	LT V: Industrial (upto & including 20 kW Sanctioned Load)	0 - 300	Nil	300	Nil	3.20	0.38
		301 - 500	Nil	350	Nil	4.50	1.57
		501 - 1000	Nil	400	Nil	5.50	1.57
		> 1000	Nil	400	Nil	6.85	1.57
LTP 2	LT VI: Industrial (> 20 kW Sanctioned Load)	Sanctioned Load between 21 kW & upto and including 100 kW (All Units)	Nil	400	Nil	6.50	1.57
		Sanctioned Load > 100 kW (All Units)	Nil	Nil	300	5.50	1.57
SL	LT VII: Street Lights	Street Lighting (All Units)	Nil	Nil	300	5.00	1.57
		Public Utility Lighting (All Units)	150	200	Nil	5.00	1.57
E	LT VIII: Electric Crematoriums	All Units	Nil	100	Nil	1.50	0.38
T	LT IX: Temporary Supply	All Units	Nil	300	Nil	10.00	1.57
T	LT X: Stand-by (Emergency Supply)	All Units	Nil	Nil	150	5.60	1.57
TS (R)	LT XI: Temporary Supply for Public Religious Functions	All Units	150	200	Nil	1.80	0.38
HTP 1	HT I: Schools, Govt./ Municipal Hospitals, Public/ Charitable Trusts	All Units	Nil	Nil	300	2.50	1.57
HTP 2	HT II: Commercial: Private/ Non-Govt. Hospitals	All Units	Nil	Nil	300	4.75	1.57
HTP 3	HT III: Commercial	All Units	Nil	Nil	300	5.00	1.57
HTP 4	HT IV: Industrial	All Units	Nil	Nil	300	3.50	1.57
HTP 5	HT V: HT Bulk Supply	All Units	Nil	Nil	300	3.50	0.38

INCENTIVES AND DISINCENTIVES

Power Factor

Power Factor Calculation

4.99. Wherever, the average power factor measurement is not possible through the installed meter, the following method for calculating the average power factor during the billing period shall be adopted-

-The total kWh is divided by the total of kVAh

kVAh is calculated as follows-

a) Summation of the squares of kWh and RkVAh is determined

b) The square root of the above (calculated) summation is computed

Power Factor Incentive

4.100. Whenever the average power factor is more than 0.95, an incentive shall be given at the rate of 1% (one percent) of the amount of the monthly energy bill including Reliability Charge (RC), FAC charge, Demand Charge, but excluding Taxes and Duties for every 1% (one percent) improvement in the power factor (PF) above 0.95. For PF of 0.99, the effective incentive will amount to 5% (five percent) reduction in the energy bill and for unity PF, the effective incentive will amount to 7% (seven percent) reduction in the energy bill.

Power Factor Penalty

4.101. Whenever the average PF is less than 0.9, penal charges shall be levied at the rate of 2% (two percent) of the amount of the monthly energy bill including Reliability Charges, FAC, Demand Charges, Fixed Charges, but excluding Taxes and Duties for the first 1% (one percentage point) fall in the power factor below 0.9. Beyond which penal charges shall be levied at the rate of 1% (one percent) for each percentage point fall in the PF below 0.89.

Load Factor Incentive

4.102. Consumers having load factor over 75% upto 85 % will be entitled to a rebate of 0.75 % on the energy charges (exclusive of Taxes and Duties) for every percentage point increase in load factor from 75% to 85%. Consumers having a load factor over 85 % will be entitled to rebate of 1% on the energy charge (exclusive of Taxes and Duties) for every percentage point increase in load factor from 85 %.

4.103. The total rebate under this head will be subject to a ceiling of 15% of the energy charges for that consumer. Further, the load factor rebate will be available only if the consumer has no arrears with the BEST, and payment is made within seven days from the date of the bill

4.104. In case the billing demand exceeds the contract demand in any particular month, then the load incentive will not be payable in that month. (The billing demand definition excludes the demand recorded during the non-peak hours i.e. 24.00 hrs to 08.00 hrs and therefore, even if the maximum demand exceeds the contract demand in that duration, load factor incentives would be applicable. However, the consumer would be subjected to the penal charges for exceeding the contract demand and has to pay the applicable penal charges).

Bill Payment

Prompt Payment Discount (PPD)

4.105. A prompt payment discount of one percent on the energy bill (excluding Taxes and Duties) shall be available to the consumers if the bills are paid within a period of 7 days from the date of issue of the bill or within 5 days from the receipt of the electricity bill.

Delayed Payment Charges

4.106. In case the electricity bills are not paid within the due date mentioned on the bill, delayed payment charges of 2 percent on the energy bill shall be levied on the bill amount

Contract Demand

Definition of Billing Demand

4.107. "Billing Demand" (for LT categories):

Monthly Billing Demand will be the higher of the following:

i. 65% of the Actual Maximum Demand recorded in the month during 0800 hours to 2400 hours.

ii. 40% of the Contract Demand.

NOTE:

a) Demand registered during the period 0800 to 2400 Hrs. will only be considered for determination of the Billing demand.

b) In case of change in Contract Demand, the period specified in Clause (i) above will be reckoned from the month following the month in which the change of Contract Demand takes place.

4.108. "Billing Demand" (for HT categories):

Monthly Billing Demand will be the higher of the following:

i. Actual Maximum Demand recorded in the month during 0800 hours to 2400 hours.

ii. 75% of the highest billing demand recorded during preceding eleven months subject to limit of contract demand.

iii. 50% of the Contract Demand.

NOTE:

c) Demand registered during the period 0800 to 2400 Hrs. will only be considered for determination of the Billing demand.

d) In case of change in Contract Demand, the period specified in Clause (i) above will be reckoned from the month following the month in which the change of Contract Demand takes place.

Penalty for exceeding Contract Demand

4.109. In case, a consumer (availing Demand based tariff) exceeds his Contract Demand, he will be billed at the appropriate Demand Charge rate for the demand actually recorded and will be additionally charged at the rate of 150 percent of the prevailing demand charges (only for the excess demand over the contract demand).

4.110. In case any consumer exceeds any the Contract Demand on more than three occasions in a calendar year, the action taken in such cases would be governed by the Supply Code.

Additional Demand Charges for Consumers having Captive Power Plant

4.111. For customers having Captive Power Plant (CPP), the additional demand charges would be at a rate of Rs. 20 / kVA / month only on extent of standby demand component and not on the entire Contract Demand. Additional Demand Charges will be levied on such consumers on the Stand-by component, only if the consumers demand exceeds the Contract Demand.

Security Deposit

4.112. The security deposits to be collected from the consumers would be as per the provisions mentioned under the Regulation 11 of the Maharashtra Electricity Regulatory Commission (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005.

DSM Measures

4.113. These have been explained in detail in the earlier Chapter 3 of this Order.

5. COMMISSION'S DIRECTIVES

5.1. The Commission, in its earlier Operative Order dated 25th February 2006 and detailed Order dated 9th March 2006, had asked BEST to carry out a detailed customer indexation and grouping exercise to understand its existing customer base. The consumer category and consumption slab groupings can be more scientifically assessed only after the above data is submitted by BEST. The Commission has also observed that the consumer categorisation policy currently being followed by BEST is unclear and does not follow a correct methodology. The Commission directs BEST to take up an A-B-C exercise to regroup consumers into appropriate categories specified by the Commission based on the purpose of usage of supply giving consideration to the Regulation 13 of the MERC (Electricity Supply Code and Conditions of Supply) Regulations 2005. BEST should complete this exercise and submit the detailed report to the Commission by 30th September 2007.

5.2. For FY 2007-08, the details of regrouped consumer numbers and change in consumption levels and tariff revenue (as per tariff specified by the Commission for FY 2007-08) can be submitted at the time of APR for FY 2007-08. The Commission directs BEST to complete its customer indexation and mapping exercise before the end of the FY 2007-08. BEST shall also send a written communication alongwith the consumer's bills about the above exercise and shall take further steps to communicate through its own collection centres, media and its official website about the same.

5.3. However, while complying with the above direction and in course of implementing such categorisation and re-grouping exercise, BEST shall ensure that the affected / re-classified customers are given only prospective effect for purposes of tariff. BEST shall not take recourse of levying any additional charge(s) for retrospective period as applicable under Section 126 of the EA.

5.4. BEST is directed to develop and maintain separate data on consumption and demand of consumers having sanctioned load of upto 20 kW and for those having load above 20 kW (so that Maximum Demand and ToD metering can be specified for consumers with Sanctioned Load above 20 kW).

5.5. BEST is directed to initiate the exercise of demand projection in a more scientific manner and submit the same at the time of APR for FY 2007-08.

5.6. The ToD time slots in future shall be for 4 time slots. BEST should keep this in mind, while installing new meters for existing/ new connections in the HT and relevant LT Industrial and Commercial categories specified in this Order.

5.7. Commission directs BEST to abide by the MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005 in respect of Sanctioned Load / Contract demand.

5.8. The Commission has specified a trajectory for the distribution loss for the Control Period years. BEST will have to identify areas and reasons for such distribution loss and adopt measures to reduce these losses in order to bring them within the trajectory limits specified.

5.9. BEST is directed to effectively put systems in place for implementing and reporting on Regulatory Compliance parameters as set out in the Standard of Performance Regulation, 2005.

5.10. The Commission had directed BEST to carry out a manpower study. The Commission notes with disapproval the delay in carrying out a scientific manpower study. The Commission directs BEST to submit at the time of truing up with the audited accounts of FY 2006-07, report on manpower study and cost benefit analysis on activities to be outsourced, measures for optimisation of manpower costs and resultant estimates to achieve the trajectory set out by the Commission for the control period.

5.11. The Commission directs BEST to analyse the feasibility of using internal funds as against borrowings for the purpose of funding capital expenditure. It further directs that where borrowings are to be made, competitive quotes for the same should be obtained from public sector banks to ensure that the borrowings are made at rates favourable to BEST.

5.12. The Commission directs BEST to ensure that the Consumers belonging to HT III requiring a single point supply for the purpose of downstream consumption by separately identifiable entities will have to either operate through a franchisee route or such entities will have to take individual connections under relevant category from 1st April 2007.

5.13. Defence establishments taking bulk supply for residential consumption under HT-V category shall act as a limited franchisee for billing and collection of electricity charges (as per the BEST tariff schedule in force) from any downstream commercial or industrial entities / consumers located in their area.

5.14. Residential consumers grouped under LT-I category and having Sanctioned Load less than or equal to 10 kW, supplied through single phase meters, shall be charged 'Fixed Cost' according to the rates specified under the head 'Single Phase' in the tariff tables given in Chapter 4 of this Order. Those Residential consumers availing three phase supply through three phase meters, shall be charged 'Fixed Cost' according to the rates specified under the head 'Three Phase' in the tariff tables.

5.15. All new consumers (Commercial, Industrial) taking Sanctioned Load of more than 20 kW shall be provided with appropriate meters that are capable of measuring and recording Power Factor and Maximum Demand.

5.16. The 'Tariff Schedule' is given in Annexure IV to this Order. BEST shall be required to prepare a booklet of the same for making it available to any person on payment of Rs. 20/- (Rupees twenty only). BEST should also host the same on its website in a freely downloadable format.

The ARR determined in this Order has been for the first Control Period (FY 2007-08 to FY 2009-10). This ARR and Tariff Order shall come into force with effect from 1st April, 2007.

The tariff specified in this Order shall come into force with effect from 1st April 2007 and shall remain valid until 31st March 2008.

Sd/-	Sd/-	Sd/-
(S. B. Kulkarni)	(A. Velayutham)	(Pramod Deo)
Member, MERC	Member, MERC	Chairman, MERC

(Malini Shankar)
Secretary, MERC

Annexure I

List of persons who attended the Technical Validation Session held on 22nd January 2007

S. No.	Name of the Person	Designation	Institution/ Firm
1	Shri Uttam Khobragade	GM	BEST
2	Shri Anil.V. Kale	Manager	CRISIL
3	Shri. Vivek Sharma	Team Leader	CRISIL
4	Shri S.A. Puranik	DGMES	BEST
5	Shri A. V. Kane	AGM-ES	BEST
6	Shri. N. V. Bhandari	Supd. (MERC Cell)	BEST
7	Shri. S. M. Salpal	Supdt GM	BEST
8	Shri A. G. Patil	DCE MERC	BEST
9	Shri. C. H. Shinde	DCEPL	BEST
10	Shri S. N. Pawar	Asst Engineer	BEST
11	Shri. A. S. Tambdi	Dy CAO Sr	BEST
12	Shri. S. B. Dhole	ACAO	BEST
13	Shri. N. B. Moher	AIA	BEST
14	Shri. N. R. Dharaskar	Superintendent	BEST
15	Shri. S. R. Khedkar	Div. Engineer	BEST
16	Shri. Rajan Divekar	Senior Director	AFF
17	Shri. Shrikant horat	Sr. Manager	AFF
18	Shri. Vikas B Nair	Manager	AFF
19	Shri. Venkatesh. K	Consultant	AFF
20	Shri. Akhilesh Awasthy	Consultant	ABPS

Annexure II

List of Objectors

Sr. No.	Name of the Objector	Organisation Address	Attended Public Hearing	Spoke at Public Hearing
Consumer Representative Organisations				
1	Shri. Shantanu Dixit	Member, Prayas, Energy Group, 4, Om Krishna Kunj Society, Opp. Kamla Nehru Park, Ganagote Path, Erandavane, Pune-411 004	No	No
2	Dr. Ashok Pendse	Mumbai Grahak Panchayat, Grahak Bhavan, Sant Dyaneshwar Marg, Behind Cooper Hospital, Vile Parie (W), Mumbai – 400 056	Yes	Yes
3	Dr. S. L. Patil	Secretary General, Thane Belapur Ind. Association, Plot No. P-14. MIDC, Rabale Village, PO Ghansoli, Navi Mumbai – 400 701	No	No
4	Shri. R. B. Goenka	Vidarbha Industries Association, 1st Floor, Udyog Bhawan, Civil Lines, Nagpur-440 001	No	No
Objectors				
5	Shri. Sandeep N. Ohri	C-123/124, Shreyas Indl. Estate, Off. Western Express Highway, Goregaon (E), Mumbai – 400 063	Yes	Yes
6	Shri. Rakshpal Abrol	President, Bombay Small Scale Industries Association, Madhu Compound, 2nd floor, Sonawala Cross Road No. 2, Goregaon (E), Mumbai – 400 063	Yes	Yes
7	Shri. B. N. Basu	4-B, Majithia Industrial Estate, W.T.P. Marg, Deonar, Mumbai	No	No
8	Shri. K. Sampath	22, Majithia Industrial Estate, Waman Tukaram Patil Marg, Deonar, Mumbai	No	No
9	Shri. Jude Tondon	Stafford Infrastructure & Marketing Co. (SIMCO), Jain Indl. Estate, Ghatla Road, Behind S.T. Bus Stop, Near Mohan Garage, Chembur, Mumbai-400 071	Yes	No
10	Shri. N. Ponrathnam	Vel Induction Hardenings, 25, Majithia Industrial Estate, Waman Tukaram Patil Marg, Deonar, Mumbai – 400 088	Yes	Yes
11	Shri. Praveen Chheda	Member, BEST Undertaking, (BEST Committee), B/19, K.J. Patel Bldg; Sainath Nagar, Ghatkopar (W), Mumbai – 400 086	Yes	Yes
12	Shri. Subodh N. Pandia	Sagar Tarang, Flat No. 11, 81/83, Bhulabhai Desai Road, Mumbai 400 036	Yes	Yes
13	Dr. Kirit Somaiya	Ex-Member of Parliament, Bhartiya Janata Party, 9C, Neelam Nagar, Mulund (E), Mumbai 400 081	No	No

Annexure III

List of persons who attended the Public Hearing held on 27th February 2007

S. No.	Name of the Person	Designation	Institution/ Firm
1	Shri. Uttam Khobragade	GM	BEST
2	Dr. Pendse	Consumer Representative	Mumbai Grahak Panchayat
3	Shri Rakshpal Abrol	President	BSSIA
4	Shri Sandeep N. Ohri		Shreyas Indl. Estate
5	Shri. R. T. Shah		
6	Shri Navin Shetty		51/A, Sidhpura Indl. Estate
7	Shri. U.Y. Vajandar		
8	Shri. Ankur Puranik		
9	Shri. A. A. Mule		
10	Shri. Vivek Sharma		
11	Shri. G. M. Bhagat		
12	Shri. B. K. Chavan		
13	Shri. S. M. Salpal	Supdt GM	BEST
14	Shri. Rajiv.M.Pradhan		
15	Shri. Prashanth K. Anvekar		
16	Shri. Amey V. Polekar		
17	Shri. Gacinto Das		
18	Smt. Philomena Joseph		
19	Smt. Theresiamma		
20	Smt. P. S. Kirbilan		
21	Shri. Dharaskar		
22	Shri. S. R. Khedkar		
23	Shri. M. Z. M. A. Sayed		
24	Shri. C.H.Shinde	DCE PL	BEST
25	Shri. A. V. Kane	AGM-ES	BEST
26	Shri. P. V. Dhoble		
27	Shri. K. N. Rajagopal		
28	Smt. Puranik		
29	Smt. Cheralata V. Vajandar		
30	Shri. A.G.Patil	DCE MERC	BEST
31	Shri. S.N.Pawar		BEST
32	Shri. Anil.V.Kale	Manager	CRISIL
33	Shri. S.A. Puranik	DGMES	BEST
34	Smt. R.S. Mujumdar		BEST
35	Shri. S. B. Dhole	Dy. CA & FA	BEST
36	Shri. Rajan Divekar	Senior Director	A. F. Ferguson & Co.
37	Shri. S. B. Thorat	Sr. Manager	A. F. Ferguson & Co.
38	Shri. Venkatesh. K	Consultant	A. F. Ferguson & Co.
39	Shri. Vikas Nair	Manager	A. F. Ferguson & Co.

Annexure IV

THE B E S & T UNDERTAKING

(Of the Brihan Mumbai Mahanagarpalika)

SCHEDULE OF ELECTRICITY TARIFFS

(With Effect from April 1, 2007)

The Maharashtra Electricity Regulatory Commission, in exercise of the powers vested in it under Section 61 and Section 62 of the Electricity Act, 2003 and all other powers enabling it in this behalf, has determined, by its Order dated April 3, 2007 in the matter of Case No. 66 of 2006, the tariff for supply of Electricity by BEST Undertaking for various classes of consumers is applicable from April 1, 2007 and has issued further the 'Schedule of Electricity Tariffs'.

General

1. These tariffs supercede all tariffs so far in force including in the case where any agreement provides specifically for continuance of old agreemental tariff, or any modifications thereof as may have been already agreed upon.
2. Tariffs are subject to revision and/or surcharge that may be levied by BEST from time to time as per the directives of the Commission.
3. The tariffs are exclusive of electricity duty, Tax on Sale of Electricity (ToSE) and other charges as levied by Government or other competent authorities and the same, will be payable by the consumers in addition to the charges levied as per the tariffs hereunder.
4. The tariffs are applicable for supply at one point only.
5. BEST reserves the right to measure the Maximum Demand on any period shorter than 30 minutes period of maximum use, subject to conformity with the prevalent Supply Code, in cases where BEST considers that there are considerable load fluctuations in operation.
6. The tariffs are subject to the provisions of the MERC (Electricity Supply Code and Other Conditions of Supply) Regulation, 2005 in force (i.e. as on April 1, 2007) and directions, if any that may be issued by the Hon'ble Commission from time to time.
7. Unless specifically stated to the contrary, the figures relate to Rupees per unit (kWh) charge for energy consumed during the month.
8. Fuel Adjustment Costs Charge (FAC) as may be approved by the Commission from time to time shall be applicable to all categories of consumers and will be charged over and above the tariffs on the basis of FAC formula specified by the Commission and computed on a monthly basis. This FAC shall be applicable on the base energy cost and not on the expensive energy cost considered for calculation of Reliability Charge.
9. The Commission has introduced a new charge namely "Reliability Charge" to meet the cost towards costly power purchase and Stand-by charges; which will be in addition to the base tariffs.
10. The "Reliability Charge" shall depend upon the energy consumption pattern of the tariff categories to which these charges are applicable.
11. The "Reliability Charge" shall be separately shown in the consumer's energy bills
12. Reliability Charges shall be considered for computing the Rebates / Incentives/ Penalties / DPC / Additional Security Deposit..

<u>Tariff Schedule</u>

BPL: Below Poverty Line

<u>Applicability</u>

Electricity used at Low / Medium voltage for use in private residential premises by economically backward consumers consuming less than or equal to 30 units of per month. In case the consumption of any BPL category consumer exceeds 30 units in any billing month, then such consumer will thereafter be automatically considered permanently under LT-I category and charged accordingly

<u>Rate Schedule</u>

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
		Single phase	Three phase		Energy	Reliability
BPL	0-30	3	Nil	Nil	0.40	Nil

LT I: Residential

<u>Applicability</u>

Electricity used at Low / Medium voltage for operating various appliances used for purposes like lighting, heating, cooling, cooking, washing / cleaning, entertainment/leisure, pumping in the following places:

a) Private residential premises,

c) Government aided Educational institutions, Hospitals and Dispensaries

d) Students Hostels affiliated to and / or managed by Government recognised Educational Institutions / Registered Charitable Institutions, except such students Hostels affiliated to and / or managed by private Engineering / Medical Colleges or such other Professional Colleges,

e) All Ladies Hostels, such as Students (Girls) Hostels, Working Women Hostels, etc. managed / aided by the Government,

f) Other type of Hostels, like (i) Homes / Hostels for Destitute, Handicap or Mentally deranged persons (iii) Remand Homes (iv) Dharmashalas, etc., subject to verification and confirmation by BEST's concerned Zonal Chief Engineer,

g) Residential premises used by professionals like Lawyers, Doctors, Professional Engineers, Chartered Accountants, etc in furtherance of their professional activity in their residences or premises used by 'Not For Profit' charitable institutions registered with the Charity Commissioner but shall not include Nursing Homes and any Surgical Wards.

b) Premises exclusively used for worship such as temples, gurudwaras, churches, mosques,

Provided that Halls, Gardens or any other portion of the premises that may be let out for consideration or used for commercial activities would be charged at LT-II tariff as applicable

Rate Schedule

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
		Single phase	Three phase		Energy	Reliability
LT I	0 - 100	10	100	Nil	0.50	0.38
	101 - 300	30	100	Nil	1.80	0.38
	301-500	60	100	Nil	3.50	1.57
	>500	100	100	Nil	5.65	1.57

Note:

- Additional fixed charge of Rs. 100 per 10 kW or part thereof above sanctioned 10 kW load shall be payable by consumers in this category.

LT II: Non-Residential cum Commercial

Applicability

Electricity used at Low / Medium Voltage in all non-residential, non-industrial premises for commercial consumption with sanctioned load upto and including 100 kW except premises falling within LT I, LT III and LT VIII meant for operating various appliances used for purposes such as lighting, heating, cooling, cooking, washing / cleaning, entertainment/leisure, pumping in following places:

a) Non-domestic, Commercial and Business premises,

b) Hospitals, other than those mentioned at LT-1,

c) Hostels, other than those mentioned at LT-1,

d) Combined lighting and power services for Entertainment, Hospitality, Leisure, Meeting Halls and Recreation places.

e) Electricity used for the external illumination of monumental/ historical/ heritage buildings approved by MTDC, with sanctioned load upto and including100 kW.

Rate Schedule

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
		Single phase	Three phase		Energy	Reliability
LT II	0 - 300	60	150	Nil	3.75	0.38
	301 - 500	120	200	Nil	6.00	1.57
	501 - 1000	180	250	Nil	7.25	1.57
	> 1000	300	300	Nil	8.40	1.57

Note:

- PF incentive and penalty has been made applicable to this category for consumers consuming more than 3,000 units (based on average consumption during January to December 2006 i.e. the past year's consumption) per month
- Additional fixed charges of Rs. 150 per 10 kW or part thereof above 10 kW sanctioned load shall be payable.

LT III: Low Tension – Commercial

Applicability

Electricity used at Low / Medium Voltage mainly for commercial purposes and having sanctioned load above 100 kW. This category will also include Electricity used for the external illumination of monumental, historical / heritage buildings approved by MTDC, with sanctioned load above 100 kW.

Rate Schedule

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
		Single phase	Three phase		Energy	Reliability
LT III	All Units	Nil	Nil	300	6.75	1.57

Note:

- PF incentive and penalty has been made applicable to this category (based on average consumption during January to December 2006 i.e. the past year's consumption) per month

LT IV: Advertisements and Hoardings

Applicability

Electricity used for purpose of advertisements, hoardings and other conspicuous consumption such as external flood light, displays, neon signs at departmental stores, malls, multiplexes, theatres, clubs, hotels and other such entertainment / leisure establishments except those specifically covered under LT-II or LT-III as well as electricity used for the external illuminations of monumental, historical / heritage buildings approved by MTDC, which shall be covered under LT-II or LT-III category depending upon Sanctioned Load.

Rate Schedule

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
		Single phase	Three phase		Energy	Reliability
LT IV	All Units	Nil	400	Nil	13.00	1.57

LT V: Low Tension – Industrial

Applicability

Electricity used at Low / Medium Voltage in premises other than those falling within tariff category of LT VI, for purpose of manufacturing, including that used within these premises for general lighting, heating / cooling, etc. having a sanctioned load upto and including 20 kW.

Rate Schedule

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
		Single phase	Three phase		Energy	Reliability
LT V (upto 20 kW Sanctioned Load)	0 - 300	Nil	300	Nil	3.20	0.38
	301 - 500	Nil	350	Nil	4.50	1.57
	501 - 1000	Nil	400	Nil	5.50	1.57
	> 1000	Nil	400	Nil	6.85	1.57

Note

- PF incentive and penalty has been made applicable to this category for consumers consuming more than 3,000 units (based on average consumption during January to December 2006 i.e. the past year's consumption) per month

LT VI: Low Tension – Industrial

Applicability

Electricity used at Low / Medium Voltage in premises other than those falling within tariff category of LT V, for purpose of manufacturing including that used within these premises for general lighting, heating / cooling, etc. and having sanctioned load greater than 20 kW.

Rate Schedule

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
		Single phase	Three phase		Energy	Reliability
LT VI						
Santioned Load above 20 kW & upto and including 100 kW	All Units	Nil	400	Nil	6.50	1.57
Santioned Load greater than 100 kW	All Units	Nil	Nil	300	5.50	1.57

Note

- PF incentive and penalty has been made applicable to this category

LT VII: Street Lights

Applicability

Electricity used at low / medium voltage for purpose of public street lighting, lighting in public gardens, traffic island, bus shelters, public sanitary conveniences, police chowkies, traffic lights, public fountains, other such common public places irrespective of whether such facilities are being provided by the Government or the Municipality, or Port Trust or other private parties.

This category is further subdivided as-

a) Street Lighting on Public Streets and
b) Public Utility Lighting: Lighting in Public areas like gardens, bus shelters, toilets and basic sanitation, police chowkies, fountains, traffic island and traffic signals.

Rate Schedule

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
		Single phase	Three phase		Energy	Reliability
LT VII						
Street Lighting	All Units	Nil	Nil	300	5.00	1.57
Public Utility Lighting	All Units	150	200	Nil	5.00	1.57

Note

- Street Lightings having 'Automatic Timers' for switching On / Off the street lights would be levied Demand Charges on lower of the following–
  a) 50 percent of 'Contract Demand' or
  b) Actual 'Established Demand'

LT VIII: Electric Crematoriums

Applicability

Electricity used at Low / Medium Voltage in Electric Crematoriums for all purposes including lighting (Halls or gardens or any portion of the premises that may be let out for consideration or used for commercial activities at any time would be charged at LT II tariff as applicable).

Rate Schedule

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
		Single phase	Three phase		Energy	Reliability
LT VIII	All Units	Nil	100	Nil	1.50	0.38

LT IX: Temporary Supply

Applicability

Electricity used at Low / Medium Voltage on a temporary basis of supply for any construction work, decorative lighting for exhibitions, circus, film shooting, marriages, etc. and any activity not covered under tariff LT XI.

Rate Schedule

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
		Single phase	Three phase		Energy	Reliability
LT IX	All Units	Nil	300	Nil	10.00	1.57

Note

- Additional fixed charges of Rs. 150 per 10 kW load or part thereof above 10 kW load shall be payable.

LT X: Stand-by (Emergency Supply)

Applicability

Electricity used at low / medium voltage on an emergency basis for purpose of fire fighting activity by the fire department in residential / other premises.

Rate Schedule

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
		Single phase	Three phase		Energy	Reliability
LT X	All Units	Nil	Nil	150	5.60	1.57

LT XI: Temporary Supply for Public Religious Functions

Applicability

Electricity supplied at low / medium voltage for temporary purposes during public religious functions like Ganesh Utsav, Navaratri, Eid, Mohurram, Ram Lila, Ambedkar Jayanti, Christmas, Guru Nanak Jayanti, etc. or areas where community prayers are held.

Rate Schedule

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
		Single phase	Three phase		Energy	Reliability
LT XI	All Units	150	200	Nil	1.80	0.38

HT I: High Tension-I

Applicability

This category includes consumers of electricity such as Educational Institutions, Not for Profit Institutions like Charitable / Public Trusts / Religious Institutions and Hospitals run / aided by the Government / Municipal Corporation taking supply at High Voltage.

Rate Schedule

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
		Single phase	Three phase		Energy	Reliability
HT I	All Units	Nil	Nil	300	2.50	1.57

Note

- PF incentive and penalty has been made applicable to this category
- ToD tariff has been made applicable for this category as in the table below:

Time Slot	Applicable tariff over and above base tariff (Rs/kWh)
0800 hrs to 1600 hrs	Nil
1600 hrs to 2400 hrs	plus Rs. 0.60 / kWh
2400 hrs to 0800 hrs	minus Rs. 0.60 / kWh

HT II: High Tension Commercial – II

Applicability

This category includes consumers such as Hospitals owned or controlled by private individual or institutions or those owned or run or controlled by public trusts, religious, charitable institutions

Rate Schedule

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
		Single phase	Three phase		Energy	Reliability
HT II	All Units	Nil	Nil	300	4.75	1.57

Note

- PF incentive and penalty has been made applicable to this category
- ToD tariff has been made applicable for this category

Time Slot	Applicable tariff over and above base tariff (Rs/kWh)
0800 hrs to 1600 hrs	Nil
1600 hrs to 2400 hrs	plus Rs. 0.60 / kWh
2400 hrs to 0800 hrs	minus Rs. 0.60 / kWh

HT III: High Tension Commercial – III

Applicability

This category includes consumers taking electricity supply at High Voltage for commercial purposes.

The Consumers belonging to HT III requiring a single point supply for the purpose of downstream consumption by separately identifiable entities will have to either operate through a franchisee route or such entities will have to take individual connections under relevant category effective from April 1, 2007. These downstream entities will pay appropriate tariff as applicable as per BEST Tariff Schedule i.e. LT I, LT II, etc. (Ref: Commission directive vide its Order dated January 18, 2007).

In case such HT III consumers are unwilling to operate as a limited franchisee for the purpose of billing and collection, then BEST should ensure that the downstream entities / consumers are given separate (metered) connection from April 1, 2007.

Rate Schedule

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
		Single phase	Three phase		Energy	Reliability
HT III	All Units	Nil	Nil	300	5.00	1.57

Note

- PF incentive and penalty has been made applicable to this category.
- ToD tariff has been made applicable for this category

Time Slot	Applicable tariff over and above base tariff (Rs/kWh)
0800 hrs to 1600 hrs	Nil
1600 hrs to 2400 hrs	plus Rs. 0.60 / kWh
2400 hrs to 0800 hrs	minus Rs. 0.60 / kWh

HT IV: High Tension Industrial – IV

Applicability

This category includes consumers taking electricity supply at High Voltage for industrial purposes.

Rate Schedule

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
		Single phase	Three phase		Energy	Reliability
HT IV	All Units	Nil	Nil	300	3.50	1.57

Note

- PF incentive and penalty has been made applicable to this category
- ToD tariff has been made applicable for this category

Time Slot	Applicable tariff over and above base tariff (Rs/kWh)
0800 hrs to 1600 hrs	Nil
1600 hrs to 2400 hrs	plus Rs. 0.60 / kWh
2400 hrs to 0800 hrs	minus Rs. 0.60 / kWh

HT-V: High Tension – V: Bulk Residential Supply

Applicability

This category includes consumers taking electricity supply at High Voltage for bulk residential consumption.

HT Bulk Residential Consumers including Defence establishments taking bulk supply for residential consumption under HT V category shall act as a limited franchisee for billing and collection of electricity charges from any downstream commercial or industrial entities / consumers located in their area. Such downstream entities / consumers will pay appropriate tariff as per BEST Tariff Schedule (LT I, LT II, etc.) in force.

Rate Schedule

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand Charges (Rs / kVA /month)	Variable Charge (Rs. / kWh)	
		Single phase	Three phase		Energy	Reliability
HT V	All Units	Nil	Nil	300	3.50	0.38

Note

- PF incentive and penalty has been made applicable to this category
- Since this category consists of bulk supply to residential consumers with lower individual unitary level consumption, the consumers in this category would have to pay lower Reliability Charge of Rs. 0.38 / kWh for their energy consumption.

Exclusions

Public Municipal / Government Water Supply Schemes

Public Municipal / Government Water Supply Services taking either LT or HT supply would be charged Reliability Charge of Rs. 0.38 / kWh for their energy consumption.

Incentive / Disincentive and General Charges:

Electricity Duty and Tax on Sale of Electricity

The electricity duty and Tax on Sale of Electricity will be charged in addition to charges levied as per the tariffs mentioned hereunder (as approved by the Commission) as per the Government guidelines from time to time. However, the rate and the reference number of the Government Resolution/ Order vide which the Electricity Duty and Tax on Sale of Electricity is made effective, shall be stated in the bill. A copy of the said resolution / order shall be made available on BEST website at www.bestundertaking.com.

Power Factor Calculation

Wherever, the average power factor measurement is not possible through the installed meter, the following method for calculating the average power factor during the billing period shall be adopted-

$$\text{Average Power Factor} = \frac{Total(kWH)}{Total(kVAh)}$$

$$\text{Wherein the kVAh is} = \sqrt{\sum (kWh)^2 + \sum (RkVAh)^2}$$

(i.e. Square Root of the summation of the squares of kWh and RkVAh)

Power Factor Incentive

Whenever the average power factor is more than 0.95, an incentive shall be given at the rate of 1% (one percent) of the amount of the monthly energy bill including Reliability Charge (RC), FAC, Demand Charge, but excluding Taxes and Duties for every 1% (one percent) improvement in the power factor (PF) above 0.95. For PF of 0.99, the effective incentive will amount to 5% (five percent) reduction in the energy bill and for unity PF, the effective incentive will amount to 7% (seven percent) reduction in the energy bill.

Power Factor Penalty

Whenever the average PF is less than 0.9, penal charges shall be levied at the rate of 2% (two percent) of the amount of the monthly energy bill including Reliability Charges, FAC, Demand Charges, Fixed Charges, but excluding Taxes and Duties for the first 1% (one percentage point) fall in the power factor below 0.9. Beyond which penal charges shall be levied at the rate of 1% (one percent) for each percentage point fall in the PF below 0.89.

Prompt Payment Discount

A prompt payment discount of one percent on the energy bill (excluding Taxes and Duties) shall be available to the consumers if the bills are paid within a period of 7 working days from the date of issue of the bill

Delayed Payment Charges (DPC)

In case the electricity bills are not paid within the due date mentioned on the bill, delayed payment charges of 2 percent on the total electricity bill (including Taxes and Duties) shall be levied on the bill amount. For the purpose of computation of time limit for payment of bills, “the day of presentation of bill” or “the date of the bill” or "the date of issue of the bill", etc. as the case may be, will not be excluded.

Rate of Interest on Arrears

The rate of interest chargeable on arrears will be as given below for payment of arrears-

Sr. No.	Delay in Payment (months)	Interest Rate p.a. (%)
1	Payment after due date upto 3 months (0 - 3)	12%
2	Payment made after 3 months and before 6 months (3 - 6)	15%
3	Payment made after 6 months (> 6)	18%

Load Factor Incentive

Consumers (LT-III, LT-VI, HT-I, HT-II, HT-III and HT-IV) having load factor over 75 percent upto 85 percent will be entitled to a rebate of 0.75 percent on the energy charges (exclusive of Taxes and Duties) for every percentage point increase in load factor from 75% to 85%. Consumers having a load factor over 85 % will be entitled to a rebate of 1% on the energy charge (exclusive of Taxes and Duties) for every percentage point increase in load factor from 85 %.

The total rebate under this head will be subject to a ceiling of 15% of the energy charges for that consumer. Further, the load factor rebate will be available only if the consumer has no arrears with BEST, and that payment is made within seven days from the date of the bill.

In case the billing demand exceeds the contract demand in any particular month, then the load factor incentive will not be payable in that month. (The billing demand definition excludes the demand recorded during the non-peak hours i.e. 24.00 hrs to 08.00 hrs and therefore, even if the maximum demand exceeds the contract demand in that duration, load factor incentives would be applicable. However, the consumer would be subjected to the penal charges for exceeding the contract demand and has to pay the applicable penal charges).

Penalty for exceeding Contract Demand

In case, a consumer (availing Demand based Tariff) exceeds his Contract Demand, he will be billed at the appropriate Demand Charge rate for the Demand actually recorded and will be additionally charged at the rate of 150% of the prevailing Demand Charges (only for the excess Demand over the Contract Demand).

In case any consumer exceeds the Contract Demand on more than three occasions in a calendar year, the action taken in such cases would be governed by the Supply Code.

Additional Demand Charges for Consumers having Captive Power Plant

For customers having Captive Power Plant (CPP), the additional demand charges would be at a rate of Rs. 20 / kVA / month only on extent of Stand-by demand component, and not on the entire Contract Demand. Additional Demand Charges will be levied on such consumers on the Stand-by component, only if the consumer's demand exceeds the Contract Demand

Security Deposit

1) Subject to the provisions of sub-section (5) of Section 47 of the Act, BEST would require any person to whom supply of electricity has been sanctioned to deposit a security in accordance with the provisions of clause (a) of subsection (1) of Section 47 of the Electricity Act, 2003.
2) The amount of the security shall be an equivalent of the average of three months of billing or the billing cycle period, whichever is lesser. For the purpose of determining the average billing, the average of the billing to the consumer for the last twelve months, or in cases where supply has been provided for a shorter period, the average of the billing of such shorter period, shall be considered
3) Where BEST requires security from a consumer at the time of commencement of service, the amount of such security shall be estimated by the Distribution Licensee based on the tariff category and contract demand / sanctioned load, load factor, diversity factor and number of working shifts of the consumer.
4) BEST shall re-calculate the amount of security based on the actual billing of the consumer once in each financial year.
5) Where the amount of security deposit maintained by the consumer is higher than the security required to be maintained under this Supply Code Regulation 11, BEST shall refund the excess amount of such security deposit in a single payment: Provided that such refund shall be made upon request of the person who gave the security and with an intimation to the consumer, if different from such person, shall be, at the option of such person, either by way of adjustment in the next bill or by way of a separate cheque payment within a period of thirty

(30) days from the receipt of such request: Provided further that such refund shall not be required where the amount of refund does not exceed the higher of ten (10) per cent of the amount of security deposit required to be maintained by the consumer or Rupees Three Hundred.

6) Where the amount of security re-calculated pursuant as above, is higher than the security deposit of the consumer, BEST shall be entitled to raise a demand for additional security on the consumer. Provided that the consumer shall be given a time period of not less than thirty days to deposit the additional security pursuant to such demand.
7) Upon termination of supply, BEST shall, after recovery of all amounts due, refund the remainder amount held by the Distribution Licensee to the person who deposited the security, with an intimation to the consumer, if different from such person.
8) A consumer - (i) with a consumption of electricity of not less than one lac (1,00,000) kilo-watt hours per month; and (ii) with no undisputed sums payable to BEST under Section 56 of the Act may, at the option of such consumer, deposit security, by way of cash, irrevocable letter of credit or unconditional bank guarantee issued by a scheduled commercial bank.
9) BEST shall pay interest on the amount of security deposited in cash (including cheque and demand draft) by the consumer at a rate equivalent to the bank rate of the Reserve Bank of India: Provided that such interest shall be paid where the amount of security deposited in cash under this Regulation 11 of Supply Code is equal to or more than Rupees Fifty.
10) Interest on cash security deposit shall be payable from the date of deposit by the consumer till the date of dispatch of the refund by BEST.

<u>Reliability Charges</u>

Reliability Charges (part of Energy Bill) shall be considered for computing the Incentives/ Penalties / DPC / Additional Security Deposit.

Definitions:

<u>Maximum Demand</u>

Maximum Demand in Kilowatts or Kilo-Volt-Amperes, in relation to any period shall, unless otherwise provided in any general or specific Order of the Commission, means twice the largest number of kilowatt-hours or kilo-Volt-Ampere-hours supplied and taken during any consecutive thirty minute blocks in that period.

<u>Contract Demand</u>

Contract Demand means demand in Kilowatt (kW) / Kilo – Volt Ampere (kVA), mutually agreed between BEST and the consumer as entered into in the agreement or agreed through other written communication (For conversion of kW into kVA, Power Factor of 0.80 shall be considered).

<u>Sanctioned Load</u>

Sanctioned Load means load in Kilowatt (kW) mutually agreed between BEST and the consumer

<u>Load Factor</u>

Load Factor means the ratio of total number of units (kWh) consumed during a given period to the total number of units (kWh) which may have been consumed had the Contract Demand / Sanctioned Load been maintained throughout the same period, subject to availability of power supply from BEST and shall usually be expressed as a percentage.

The Load Factor has been defined below:

$$\text{Load Factor} = \frac{\textit{Consumption during the month}}{\textit{Maximum Consumptiion possible during the month in MU}}$$

Maximum consumption possible = Contract Demand (kVA) x Actual Power Factor x (Total no. of hrs during the month)

<u>Billing Demand</u> (for LT categories):

Monthly Billing Demand will be the higher of the following:

- 65% of the actual Maximum Demand recorded in the month during 0800 hours to 2400 hours.
- 40% of the Contract Demand.

NOTE:

- Demand registered during the period 0800 to 2400 Hrs. will only be considered for determination of the Billing demand.
- In case of change in Contract Demand, the period specified in Clause (i) above will be reckoned from the month following the month in which the change of Contract Demand takes place.

<u>Billing Demand</u> (for HT categories):

Monthly Billing Demand will be the higher of the following:

- Actual Maximum Demand recorded in the month during 0800 hours to 2400 hours.
- 75% of the highest billing demand recorded during preceding eleven months subject to limit of contract demand.
- 50% of the Contract Demand.

NOTE:

- Demand registered during the period 0800 to 2400 Hrs. will only be considered for determination of the Billing demand.
- In case of change in Contract Demand, the period specified in Clause (i) above will be reckoned from the month following the month in which the change of Contract Demand takes place.

Annexure V

Comparison of Revised And Existing Tariff (1/2)

Existing as per Supplementaty Order dated 26th September 2006

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month) Single phase	Fixed Charge (Rs. / connection / month) Three phase	Demand charge (Rs / kVA /month)	Energy charge (Rs. / kWh)	RkVAh rate (Rs. / RkVAh)
BPL	0-30	3.00			0.40	
LF 1	0 - 100	10.00	100.00		0.75	
	101 - 300	10.00	100.00		2.00	
	> 300	50.00	100.00		3.60	
LF 2	0 - 300	150.00			3.50	
	301 - 1000	150.00			5.00	
	> 1000	150.00			5.90	
	PF < 0.92					2.70
	0.92 < PF < 0.95					1.80
	0.95 < PF < 0.97					1.20
	PF > 0.97					0.00
LTC 1	All Units			300.00	3.90	
	PF < 0.92					2.70
	0.92 < PF < 0.95					1.80
	0.95 < PF < 0.97					1.20
	PF > 0.97					0.00
CD	All Units	200.00			11.00	
LTP 1	0 - 300	300.00			2.70	
	301 - 1000	300.00			3.40	
	> 1000	300.00			5.10	
	PF < 0.92					2.70
	0.92 < PF < 0.95					1.80
	0.95 < PF < 0.97					1.20
	PF > 0.97					0.00
LTP 2	All Units			300.00	3.30	
	PF < 0.92					2.70
	0.92 < PF < 0.95					1.80
	0.95 < PF < 0.97					1.20
	PF > 0.97					0.00
SL	All Units			300.00	3.20	

Revised FY 2007-08

Revised Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month) Single phase	Fixed Charge (Rs. / connection / month) Three phase	Demand charge (Rs / kVA /month)	Energy Charge (Rs./kWh)	Reliability Charge Components (Rs. / kWh) Stand-By	Expensive Power	Total RC
BPL	0-30	3.00	0.00	0.00	0.40	0.00	0.00	0.00
LT I: Residential	0 - 100	10.00	100.00	0.00	0.50	0.38	0.00	0.38
	101 - 300	30.00	100.00	0.00	1.80	0.38	0.00	0.38
	301-500	60.00	100.00	0.00	3.50	0.38	1.19	1.57
	>500	100.00	100.00	0.00	5.65	0.38	1.19	1.57
LT II: Non-residential cum Commercial	0 - 300	60.00	150.00	0.00	3.75	0.38	0.00	0.38
	301 - 500	120.00	200.00	0.00	6.00	0.38	1.19	1.57
	501 - 1000	180.00	250.00	0.00	7.25	0.38	1.19	1.57
	> 1000	300.00	300.00	0.00	8.40	0.38	1.19	1.57
LT III: Commercial	All Units	0.00	0.00	300.00	6.75	0.38	1.19	1.57
LT IV: Advertisements and Hoardings	All Units	0.00	400.00	0.00	13.00	0.38	1.19	1.57
LT V: Industrial (upto and including 20 kW Sanctioned Load)	0 - 300	0.00	300.00	0.00	3.20	0.38	0.00	0.38
	301 - 500	0.00	350.00	0.00	4.50	0.38	1.19	1.57
	501 - 1000	0.00	400.00	0.00	5.50	0.38	1.19	1.57
	> 1000	0.00	400.00	0.00	6.85	0.38	1.19	1.57
LT VI: Industrial (> 20 kW Sanctined Load)	21 kW upto & including 100 kW Sanctioned Load (All Units)	0.00	400.00	0.00	6.50	0.38	1.19	1.57
	> 100 kW Sanctioned Load (All Units)	0.00	0.00	300.00	5.50	0.38	1.19	1.57
LT VII: Street Lights	Street Lighting (All Units)	0.00	0.00	300.00	5.00	0.38	1.19	1.57
	Public Utility Lighting (All Units)	150.00	300.00	0.00	5.00	0.38	1.19	1.57

Annexure V cntd

Comparison of Revised And Existing Tariff (2/2)

Existing as per Supplementaty Order dated 26th September 2006

Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand charge (Rs / kVA /month)	Energy charge (Rs. / kWh)	RkVAh rate (Rs. / RkVAh)
		Single phase	Three phase			
E	All Units	100.00			1.60	
T	All Units	250.00			8.50	
N.A.						
TSR	All Units	200.00			1.70	
HTP 1	All Units			300.00	1.80	
	PF < 0.92					2.70
	0.92 < PF < 0.95					1.80
	0.95 < PF < 0.97					1.20
	PF > 0.97					0.00
HTP 2	All Units			300.00	3.50	
	PF < 0.92					2.70
	0.92 < PF < 0.95					1.80
	0.95 < PF < 0.97					1.20
	PF > 0.97					0.00
HTP 3	All Units			300.00	3.30	
	PF < 0.92					2.70
	0.92 < PF < 0.95					1.80
	0.95 < PF < 0.97					1.20
	PF > 0.97					0.00
HTP 4	All Units			300.00	2.25	
	PF < 0.92					2.70
	0.92 < PF < 0.95					1.80
	0.95 < PF < 0.97					1.20
	PF > 0.97					0.00
HTP 5	All Units			100.00	2.00	
	PF < 0.92					2.70
	0.92 < PF < 0.95					1.80
	0.95 < PF < 0.97					1.20
	PF > 0.97					0.00

Revised FY 2007-08

Revised Tariff Category	Consumption Slab (kWh)	Fixed Charge (Rs. / connection / month)		Demand charge (Rs / kVA /month)	Energy Charge (Rs./kWh)	Reliability Charge Components (Rs. / kWh)		
		Single phase	Three phase			Stand-By	Expensive Power	Total RC
LT VIII: Electric Crematoriums	All Units	0.00	100.00	0.00	1.50	0.38	0.00	0.38
LT IX: Temporary Supply	All Units	0.00	300.00	0.00	10.00	0.38	1.19	1.57
LT X: Stand-by (Emergency Supply)	All Units	0.00	0.00	150.00	5.60	0.38	1.19	1.57
LT XI: Temporary Supply for Public Religious Functions	All Units	150.00	200.00	0.00	1.80	0.38	0.00	0.38
HT I:Schools, Govt./ Municipal Hospitals, Public/ Charitable Trusts	All Units	0.00	0.00	300.00	2.50	0.38	1.19	1.57
HT II:Commercial: Private/ Non-Govt. Hospitals	All Units	0.00	0.00	300.00	4.75	0.38	1.19	1.57
HT III: Commercial	All Units	0.00	0.00	300.00	5.00	0.38	1.19	1.57
HT IV: Industrial	All Units	0.00	0.00	300.00	3.50	0.38	1.19	1.57
HT V: HT Bulk Supply	All Units	0.00	0.00	300.00	3.50	0.38	0.00	0.38

Annexure VI - Detailed revenue computation with revised tariff for FY 2007-08

Year	Tariff Category		Consumption Slab (units)	Fixed Charge (Rs. / connection /		Variable Charges Energy (Rs./kWh)	Reliability Charges (Rs. / kWh)			Demand Charges kVA (Rs / kVA /month)	Consumers / Meters (nos)			Energy Consumption (kWh)	kVA Demand (kVA /month)	Revenue from Fixed Charges (Rs. Crores)				Revenue from Variable Charges Energy (Rs. Crore)	Revenue from Reliability Charges (Rs. Crore)			Revenue Total (Rs. Crore)
	Existing	Revised		Single phase	Three phase		Stand-By	RC	Total		Single phase	Three phase	Total			Single phase)	Three phase	Three Phase Demand Charges	Revenue - Total Fixed Charges		Stand-By	RC	Total RC +SB	
FY 07-08	**BPL**	**BPL**	0-30	3.00		0.40			0.00		**4,500**	**0**	**4,500**	**135,000**		**0.02**	**0.00**	**0.00**	**0.02**	0.01	0.00	**0.00**	**0.00**	**0.02**
FY 07-08	**LF 1**	**LT I**	0 - 100	10.00	100.00	0.50	0.38		**0.38**		252,662	10,901	263,563	668,444,094		3.03	1.31	0.00	**4.34**	33.42	25.36	0.00	**25.36**	**63.12**
FY 07-08	**LF 1**	**LT I**	101 - 300	30.00	100.00	1.80	0.38		**0.38**		320,357	17,854	338,211	500,258,656		11.53	2.14	0.00	**13.68**	90.05	18.98	0.00	**18.98**	**122.70**
FY 07-08	**LF 1**	**LT I**	301-500	60.00	100.00	3.50	0.38	1.19	**1.57**		37,571	14,226	51,797	132,386,819		2.71	1.71	0.00	**4.41**	46.34	5.02	15.70	**20.73**	**71.47**
FY 07-08	**LF 1**	**LT I**	>500	100.00	100.00	5.65	0.38	1.19	**1.57**		13,680	28,764	42,444	341,451,684		1.64	3.45	0.00	**5.09**	192.92	12.96	40.50	**53.46**	**251.47**
FY 07-08	**LF 1**	**LT I**	**Sub Total**								**624,269**	**71,745**	**696,014**	**1,642,541,252**		**18.91**	**8.61**	**0.00**	**27.52**	**362.72**	**62.32**	**56.21**	**118.53**	**508.77**
FY 07-08	**LF 2**	**LT II**	0 - 300	60.00	150.00	3.75	0.38		**0.38**		168,401	13,031	181,433	382,158,263		0.17	1.17	0.00	**1.34**	143.31	14.50	0.00	**14.50**	**159.15**
FY 07-08	**LF 2**	**LT II**	301 - 500	120.00	200.00	6.00	0.38	1.19	**1.57**		13,524	2,929	16,454	112,375,832		0.06	0.32	0.00	**0.37**	67.43	4.26	13.33	**17.59**	**85.39**
FY 07-08	**LF 2**	**LT II**	501 - 1000	180.00	250.00	7.25	0.38	1.19	**1.57**		16,727	10,748	27,475	178,190,842		0.10	0.51	0.00	**0.61**	129.19	6.76	21.14	**27.90**	**157.70**
FY 07-08	**LF 2**	**LT II**	> 1000	300.00	300.00	8.40	0.38	1.19	**1.57**		2,628	17,570	20,198	759,257,042		0.07	0.96	0.00	**1.03**	637.78	28.81	90.06	**118.87**	**757.68**
FY 07-08	**LF 2**	**LT II**	**Sub Total**								**201,281**	**44,278**	**245,560**	**1,431,981,980**		**0.40**	**2.96**	**0.00**	**3.36**	**977.70**	**54.33**	**124.53**	**178.86**	**1,159.92**
FY 07-08	**LTC 1**	**LT III**	**All Units**			6.75	0.38	1.19	**1.57**	300.00	**0**	**98**	**98**	**69,112,886**	17,276	0.00	0.00	6.22	**6.22**	46.65	2.62	8.20	**10.82**	**63.69**
FY 07-08	**CD**	**LT IV**	**All Units**		400.00	13.00	0.38	1.19	**1.57**		**313**	**107**	**420**	**1,426,318**		**0.00**	**0.05**	**0.00**	**0.05**	1.85	0.05	**0.17**	**0.22**	**2.13**
FY 07-08	**LTP 1**	**LT V**	0 - 300		300.00	3.20	0.38		**0.38**		2,371	6,513	8,884	26,314,016		0.00	0.00	0.00	**0.00**	8.42	1.00	0.00	**1.00**	**9.42**
FY 07-08	**LTP 1**	**LT V**	301 - 500		350.00	4.50	0.38	1.19	**1.57**		385	1,315	1,700	12,217,827		0.00	0.00	0.00	**0.00**	5.50	0.46	1.45	**1.91**	**7.41**
FY 07-08	**LTP 1**	**LT V**	501 - 1000		400.00	5.50	0.38	1.19	**1.57**		464	1,713	2,177	20,560,353		0.00	1.09	0.00	**1.09**	11.31	0.78	2.44	**3.22**	**15.62**
FY 07-08	**LTP 1**	**LT V**	> 1000		400.00	6.85	0.38	1.19	**1.57**		201	2,667	2,868	114,119,044		0.00	0.00	0.00	**0.00**	78.17	4.33	13.54	**17.87**	**96.04**
FY 08-09	**LTP 1**	**LT V**	**Sub Total**								**3,422**	**12,208**	**15,629**	**173,211,241**	**0**	**0.00**	**1.09**	**0.00**	**1.09**	**103.40**	**6.57**	**17.43**	**24.00**	**128.49**
FY 07-08	**LTP 2**	**LT VI**	**All Units**			5.50	0.38	1.19	**1.57**	300.00	**0**	**10**	**10**	**4,864,116**	1,375	0.00	0.00	0.49	**0.49**	2.68	0.18	0.58	**0.76**	**3.93**
FY 07-08	**SL**	**LT VII**	**All Units**			5.00	0.38	1.19	**1.57**	300.00	**260**	**84**	**344**	**36,222,520**	7,571	**0.00**	**0.00**	**2.73**	**2.73**	**18.11**	**1.37**	**4.30**	**5.67**	**26.51**
FY 07-08	**E**	**LT VIII**	**All Units**		100.00	1.50	0.38		**0.38**		**0**	**11**	**11**	**1,028,971**		**0.00**	**0.00**	**0.00**	**0.00**	**0.15**	**0.04**	**0.00**	**0.04**	**0.19**
FY 07-08	**T**	**LT IX**	**All Units**		300.00	10.00	0.38	1.19	**1.57**		**0**	**2,268**	**2,268**	**13,264,615**		**0.00**	**0.07**	**0.00**	**0.07**	**13.26**	**0.50**	**1.57**	**2.08**	**15.41**
FY 07-08	**T**	**LT X**	**All Units**			5.60	0.38	1.19	**1.57**	150.00	**0**	**724**	**724**	**7,142,485**	3,073	**0.00**	**0.00**	**0.55**	**0.55**	**4.00**	**0.27**	**0.85**	**1.12**	**5.67**
FY 07-08	**TSR**	**LT XI**	**All Units**	150.00	200.00	1.80	0.38		**0.38**		**755**	**1,001**	**1,756**	**80,029**		**0.01**	**0.02**	**0.00**	**0.03**	**0.01**	**0.00**	**0.00**	**0.00**	**0.05**
FY 07-08	**HTP 1**	**HT I**	**All Units**			2.50	0.38	1.19	**1.57**	300.00	**0**	**2**	**2**	**12,728,865**	1,191	0.00	0.00	0.43	**0.43**	3.18	0.48	1.51	**1.99**	**5.60**
FY 07-08	**HTP 2**	**HT II**	**All Units**			4.75	0.38	1.19	**1.57**	300.00	**0**	**5**	**5**	**21,455,611**	2,707	0.00	0.00	0.97	**0.97**	10.19	0.81	2.55	**3.36**	**14.53**
FY 07-08	**HTP 3**	**HT III**	**All Units**			5.00	0.38	1.19	**1.57**	300.00	**0**	**55**	**55**	**251,572,559**	61,422	0.00	0.00	22.11	**22.11**	125.79	9.55	29.84	**39.39**	**187.29**
FY 07-08	**HTP 4**	**HT IV**	**All Units**			3.50	0.38	1.19	**1.57**	300.00	**0**	**50**	**50**	**151,465,548**	31,001	0.00	0.00	11.16	**11.16**	53.01	5.75	17.97	**23.71**	**87.89**
FY 07-08	**HTP 5**	**HT V**	**All Units**			3.50	0.38		**0.38**	300.00	**0**	**8**	**8**	**32,516,237**	4,033	0.00	0.00	1.45	**1.45**	11.38	1.23	0.00	**1.23**	**14.07**
FY 07-08			**Grand Total**								**834,800**	**132,654**	**967,454**	**3,850,750,235**	**129,651**	**19.34**	**12.80**	**46.12**	**78.26**	**1,734.11**	**146.10**	**265.69**	**411.79**	**2,224.16**

Note: Tariff revenue for LT VI has been computed by considering demand-based tariff (Rs./kVA/month) for the total number of consumers and entire category's consumption based on data available. The actual impact for the fixed charges for consumers with sanctioned load of 21 to 100 kW and demand charges for consumers with sanctioned load greater than 100 kW will be considered at the time of truing-up for FY 2007-08.

Annexure VII

Impact on Monthly Bill with Revised Tariff

Tariff Category		Consumption Slab (Units)	Monthly Consumption (Units)	Billing Demand (kVA)	Monthly Bill as per Existing Tariff	Monthly Bill as per Revised Tariff		
Existing	Revised				Monthly Bill including Stand-by Charges embeded at Rs.0.33 per kWh (Unit)	Monthly Bill including Reliability Charge (Stand-by charge of Rs 0.38 paise per kWh and Expensive Power at Rs. 1.19 per kWh as applicable to the catergory and consumption slab) (Rs.)	Increase / Decrease (Rs.)	Increase / Decrease (%)
BPL	BPL	0-30	20		11	11	0	0%
LF 1	LT I	0 - 100	75		66	76	10	15%
		101 - 300	250		385	445	60	16%
		300-500	450		1,115	1,384	269	24%
		>500	510		1,331	1,709	378	28%
LF 2	LT II	0 - 300	275		1,113	1,286	173	16%
		301 - 500	480		2,100	2,801	701	33%
		501 - 1000	700		3,200	4,765	1,565	49%
		> 1000	15,000		87,300	146,979	59,679	68%
		> 1000	15,000		87,300	146,979	59,679	68%
LTC 1	LT III	All Units	29,640	127	154,344	284,575	130,231	84%
CD	LT IV	All Units	7,000		77,200	102,359	25,159	33%
LTP 1	LT V	0 - 300	275		1,043	1,284	242	23%
		301 - 500	480		1,722	2,516	794	46%
		501 - 1000	700		2,470	4,100	1,630	66%
		> 1000	1,400		6,610	9,586	2,976	45%
LTP 2	LT VI	All Units	68,400	276	324,180	566,089	241,909	75%
HTP 1	HT I	All Units	756,000	1,654	2,181,000	3,569,819	1,388,819	64%
HTP 2	HT II	All Units	474,990	1,019	2,022,543	3,305,563	1,283,020	63%
HTP 3	HT III	All Units	53,080	264	266,028	427,704	161,676	61%
HTP 4	HT IV	All Units	231,400	1,431	998,370	1,601,488	603,118	60%
HTP 5	HT V	All Units	288,000	214	753,601	1,181,573	427,972	57%

Note: Existing Tariff has Stand-by Charges embedded