Before the

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

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Case No. 118 of 2008

IN THE MATTER OF

Petition filed by Brihan-Mumbai Electricity Supply and Transport Undertaking (BEST) for approval of Truing Up for FY 2007-08, Annual Performance Review for FY 2008-09 and determination of ARR and Tariff for FY 2009-10

Shri. V. P. Raja, Chairman

Shri A. Velayutham, Member

Shri S. B. Kulkarni, Member

ORDER

Dated: June 15, 2009

In accordance with the MERC Tariff Regulations and upon directions from the Maharashtra Electricity Regulatory Commission (hereinafter referred to as "MERC" or "the Commission"), Brihan-Mumbai Electricity Supply and Transport Undertaking (BEST), submitted its application on affidavit for approval of truing up for FY 2007-08, Annual Performance Review (APR) for FY 2008-09 and Determination of Aggregate Revenue Requirement (ARR) and tariff for FY 2009-10. The Commission, in exercise of the powers vested in it under Section 61 and Section 62 of the Electricity Act, 2003 (EA 2003) and all other powers enabling it in this behalf, and after taking into consideration all the submissions made by BEST, all the suggestions and objections of the public, responses of BEST, issues raised during the Public Hearing, and all other relevant material, and after review of Annual Performance for FY 2008-09 determines the ARR and Tariff for BEST for FY 2009-10 as under.

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List of Abbreviations

A&M	Administration and Maintenance
A&G	Administration and General
APDRP	Accelerated Power Development and Reforms Programme
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
AS	Accounting Standard
ATE	Appellate Tribunal for Electricity
BE	Budget Estimates
BEST	Brihanmumbai Electric Supply & Transport Undertaking
BMC	Brihanmumbai Municipal Corporation
BMC Act	Brihanmumbai Municipal Corporation Act, 1988
BSES	BSES Limited
BSSIA	Bombay Small Scale Industries Association
CAGR	Compounded Annual Growth Rate
CAIDI	Customer Average Interruption Duration Index
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGRF	Consumer Grievances Redressal Forum
CIBS	Consumer Information and Billing System
COS	Cost of Supply
CPI	Consumer Price Index
CPP	Captive Power Plant
Commission/ MERC	Maharashtra Electricity Regulatory Commission
Cr	Crore
CSMVS	Chhatrapati Shivaji Maharaj Vastu Sangrahalaya
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
ESG	Energy Study Group
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
HV	High Voltage
IBSM	Interim Balancing Settlement Mechanism
IDC	Interest During Construction
InSTS	Intra-State Transmission System
kVA	Kilo-Volt Ampere
kW	Kilo Watt
kWh	Kilo Watt Hour / Unit
LMC	load management charge
LT	Low Tension
LV	Low Voltage
MGP	Mumbai Grahak Panchayat
MMC	Mumbai Municipal Corporation
MMC Act	Mumbai Municipal Corporation Act, 1888
MSEB	Maharashtra State Electricity Board
MSETCL	Maharashtra State Electricity Transmission Company Ltd.
MSLDC	Maharashtra State Load Despatch Centre

MSPGCL	Maharashtra State Power Generation Company Limited
MU	Million Units (MkWh)
MYT	Multi Year Tariff
O&M	Operation and Maintenance
PF	Power Factor
PMG	Power Management Group
PPA	Power Purchase Agreement
PPD	Pre Payment Discount
PRC	Pay Revision Committee
RC	Reliability Charge
RE	Renewable Energy
REL/RInfra	Reliance Energy Limited / Reliance Infrastructure Limited
RPO	Renewable Purchase Obligation
RPS	Renewable Purchase Specification
RoE	Return on Equity
Rs.	Indian Rupees
SAIDI	System Average Interruption Duration Index
SERC	State Electricity Regulatory Commission
SLDC	State Load Despatch Centre
STU	State Transmission Utility
TP	Tariff Policy
T&D	Transmission and Distribution
ToD	Time of Day
TAH	The Association of Hospitals
ToSE	Tax on Sale of Electricity
TPC	The Tata Power Company Ltd.
TTSC	Total Transmission System Cost
TVS	Technical Validation Session

UI	Unscheduled Interchange
VRS	Voluntary Retirement Scheme
WPI	Wholesale Price Index

1 BACKGROUND AND BRIEF HISTORY

The Brihan-Mumbai Electric Supply and Transport Undertaking (BEST) is an Undertaking of the Brihanmumbai Mahanagarpalika and is in the business of distribution of electricity and providing public road transport.

1.1 MERC Tariff Regulations

The Commission, in exercise of the powers conferred by the Electricity Act, 2003, notified the Maharashtra Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2005, on August 26, 2005 (hereinafter referred as MERC Tariff Regulations). These Regulations superseded the MERC (Terms and Conditions of Tariff) Regulations, 2004.

1.2 MERC Order on ARR and Tariff Petition for FY 2004-05 and FY 2005-06 and related Orders

BEST submitted its application for approval of Annual Revenue Requirement and Tariff Proposal for the first time for FY 2004-05 and FY 2005-06 (Case No. 4 of 2004). The Commission issued the Operative Order dated February 25, 2006 and subsequent Detailed Order dated March 9, 2006.
Subsequently, BEST filed a Petition with the Hon'ble Appellate Tribunal for Electricity (ATE) on April 18, 2006 (Appeal No. 61 of 2006), challenging the operative Order and detailed Order of the Commission. The ATE passed its Judgment in Appeal No. 61 on August 18, 2006.

In compliance of the ATE's Judgment dated August 18, 2006 and various directives issued/ relief granted thereunder, the Commission re-determined the ARR for FY 2004-05 and FY 2005-06 and Tariff for FY 2005-06 for BEST through its Supplementary Order dated September 26, 2006.

Subsequently, BEST submitted a Review Petition under Affidavit to the Commission vide its letter dated October 11, 2006 seeking a review of the Supplementary Order of the Commission under Section 94(1)(f) of the Electricity Act, 2003 read with Regulation 85 of MERC (Conduct of Business) Regulations, 2004.

The Commission disposed of the review Petition of BEST vide its Order dated November 8, 2006 in Case No. 32 of 2006.

Subsequently, BEST filed a Petition with the ATE (Appeal No. 13 of 2007), challenging the Order of the Commission dated November 8, 2006 in Case No. 32 of 2006. The ATE passed its Judgment in Appeal No. 13 of 2007 on August 27, 2007.

1.3 MERC Order on ARR and Tariff Petition for FY 2006-07

BEST submitted its ARR and Tariff Petition for FY 2006-07 on February 13, 2006 numbered as Case No. 50 of 2005. The Commission observed certain data gaps in the BEST ARR Petition for FY 2006-07. Pursuant thereto the Commission's consultants requested BEST to submit additional data including the Tariff Proposal for FY 2006-07 (based on the Tariff Structure given in the MERC Tariff Order dated March 9, 2006 for BEST for FY 2004-05 and FY 2005-06) and the data for truing up for FY 2005-06.

In response to the request placed by the Commission's Consultants for submission of additional data, BEST submitted additional information and tariff proposal for FY 2006-07 vide their letter dated October 31, 2006. A Technical Validation Session was held on November 8, 2006, in the presence of Consumer Representatives (authorised on a standing basis under Section 94(3) of the EA 2003), in respect of BEST's ARR Petition for FY 2006-07 dated February 13, 2006 and additional information and Tariff Proposal dated 31st October 2006.

The updated ARR and Tariff Petition of BEST for FY 2006-07 was admitted on December 8, 2006 after scrutiny of the same and receipt of additional information from BEST. The Commission issued the Order on the ARR and Tariff Petition of BEST for FY 2006-07 on January 18, 2007 in Case No. 50 of 2005.

1.4 MERC Order on MYT Petition for BEST for first Control Period from FY 2007-08 to FY 2009-10

BEST submitted its ARR and Multi Year Tariff (MYT) Petition for the first Control Period from FY 2007-08 to FY 2009-10 on December 11, 2006 numbered as Case No. 66 of 2006. The Commission issued the MYT Order for BEST for the first Control Period, i.e., FY 2007-08 to FY 2009-10, on April 3, 2007, which came into effect from April 1, 2007 and the tariff were valid upto March 31, 2008, which was later extended till the revised revenue requirement was determined for FY 2008-09, vide the Commission's Order dated April 1, 2008, in Case No. 102 of 2007.

1.5 MERC Order on APR Petition for BEST for FY 2007-08 and Tariff Determination for FY 2008-09

BEST submitted its Petition for Annual Performance Review (APR) for FY 2007-08 and Tariff Determination for FY 2008-09 on December 17, 2007 numbered as Case No. 73 of 2007. The Commission issued the APR Order for BEST on June 6, 2008, which came into effect from June 1, 2008, and the tariffs were initially valid upto March 31, 2009, which was later extended till the revised revenue requirement is determined for FY 2009-10, vide the Commission's Order dated April 15, 2009 in Case No. 152, 153 and 154 of 2008.

1.6 Petition for Annual Performance Review for FY 2008-09 and Tariff Determination for FY 2009-10

In accordance with Regulation 9.1 of the MERC Tariff Regulations, an Application for the determination of tariff is required to be made to the Commission not less than 120 days before the date from when the tariff is intended to be made effective. Further, the first proviso to Regulation 9.1 of the MERC Tariff Regulations provides that the "*date of receipt of application for the purpose of this Regulation shall be the date of intimation about receipt of a complete application in accordance with Regulation 8.4 above*." The Commission had directed BEST to submit the Petition for APR latest by 30th November of each year in accordance with Regulation 9.1 of the MERC Tariff Regulations.

BEST submitted its Petition for truing up for FY 2007-08, APR for FY 2008-09 and tariff determination for FY 2009-10 on December 11, 2008, based on actual audited expenditure for FY 2007-08, actual expenditure for first half of FY 2008-09, i.e., from April to September 2008, and revised estimated expenses for October 2008 to March 2009, and projections for FY 2009-10. BEST, in its Petition, requested the Commission to:

- Undertake truing up for FY 2007-08;
- Approve revised Annual Revenue Requirement for FY 2008-09;

- Approve revenue gap arising out from previous years as detailed in the Petition;
- Approve the revised ARR for FY 2009-10 considering the revenue gap of previous years and proposed tariff for FY 2009-10.
- Approve the impact of the Commission's Order dated February 2, 2009 in Case No. 46 of 2008
- Approve the proposed tariff schedule for FY 2009-10 to bridge the estimated revenue gap

The Commission, vide its letter dated January 9, 2009, forwarded the preliminary data gaps and information required from BEST. BEST submitted its replies to preliminary data gaps and information requirement on January 19, 2009.

The Commission scheduled a Technical Validation Session (TVS) on BEST's Petition for approval of APR for FY 2008-09 and Tariff for FY 2009-10, on January 22, 2009 in the presence of Consumer Representatives authorised on a standing basis under Section 94(3) of the EA 2003 to represent the interest of consumers in the proceedings before the Commission. The list of individuals, who participated in the TVS, is provided at **Appendix-1**. During the TVS, the Commission directed BEST to provide additional information and clarifications on the issues raised during the TVS. The Commission also directed BEST to submit the draft Public Notice in English and Marathi in the format prescribed by the Commission.

1.7 ADMISSION OF PETITIONS AND PUBLIC PROCESS

BEST submitted its responses to the queries raised during the TVS, on February 16 and February 20, 2009, and the Commission admitted the APR Petition of BEST on February 20, 2009.

In accordance with Section 64 of the EA 2003, the Commission directed BEST to publish its APR Petition in the prescribed abridged form and manner, to ensure public participation. The Commission also directed BEST to reply expeditiously to all the suggestions and objections received from stakeholders on its Petition. BEST issued the Public Notice in newspapers inviting suggestions and objections from stakeholders on its APR Petition. The Public Notice was published in The Times of India, Indian Express, DNA, Loksatta and Maharashtra Times newspapers on February 24, 2009. The copies of BEST's Petitions and its summary were made available for inspection/purchase to members of the public at BEST's offices and on

BEST's website (www.bestundertaking.com). The copy of Public Notice and Executive Summary of the Petition was also available on the website of the Commission (www.mercindia.org.in) in downloadable format. The Public Notice specified that the suggestions and objections, either in English or Marathi, may be filed in the form of affidavit along with proof of service on BEST.

The Commission received written suggestions and objections on various issues. The Public Hearing was held in Mumbai on March 25, 2009 at 11:00 hours at **Vista Hall, 30th Floor, Centre 1, World Trade Centre, Cuffe Parade, Mumbai-400 005**. The list of objectors, who participated in the Public Hearing, is provided in **Appendix- 2.**

The Commission has ensured that the due process as contemplated under law to ensure transparency and public participation was followed at every stage meticulously and adequate opportunity was given to all the persons concerned to file their say in the matter.

This Order deals with the truing up for FY 2007-08, Annual Performance Review of FY 2008-09 and tariff determination of BEST for FY 2009-10. Various suggestions and objections that were raised on BEST's Petition after issuance of the Public Notice both in writing as well as during the Public Hearing, along with BEST's response and the Commission's rulings have been detailed in Section 2 of this Order.

1.8 ORGANISATION OF THE ORDER

This Order is organised in the following six Sections:

- **Section 1** of the Order provides a brief history of the quasi-judicial regulatory process undertaken by the Commission. For the sake of convenience, a list of abbreviations with their expanded forms has been included.
- **Section 2** of the Order lists out the various suggestions and objections raised by the objectors in writing as well as during the Public Hearing before the Commission. The various suggestions and objections have been summarized, followed by the response of BEST and the rulings of the Commission on each of the issues.
- **Section 3** of the Order details the truing up of expenses and revenue of BEST for FY 2007-08, including sharing of efficiency gains/losses due to controllable factors.

- **Section 4** of the Order comprises the Review of Performance for FY 2008-09, covering both physical performance and expenditure heads. This Section also comprises the Commission's analysis on various components of aggregate revenue requirement of BEST for FY 2009-10.
- **Section 5** of the Order comprises the Tariff Philosophy adopted by the Commission and the category-wise tariffs applicable for FY 2009-10.

2 OBJECTIONS RECEIVED, BEST'S RESPONSE AND COMMISSION'S RULING

2.1 Non- Compliance with Regulations

Shri Mahesh Barbhaya and others submitted that BEST has failed to comply with the various provisions of MERC (Standards of Performance of Distribution Licensees, Period for Giving Supply and Determination of Compensation) Regulations, 2005, MERC Tariff Regulations and MERC (Electricity Supply Code and other Conditions of Supply) Regulations, 2005. They stated that BEST has been providing electric supply connections to the consumers on the basis of connected load though Regulations require the Petitioner to supply consumers on the basis of the sanctioned load or contract demand, as applicable. They added that the contract demand cannot be defined without an agreement.

The Objectors also submitted that BEST has not followed the MERC Tariff Regulations for approval of Power Purchase Agreement (PPA) and has violated the provisions of EA 2003. The Objectors also contended that BEST has been filing wrong data on Affidavits and should be tried under Section 142 of EA 2003.

Shri N. Ponrathnam representing Vel Induction Hardenings submitted that the Commission should take steps to stop violation of Section 62(3) of EA 2003 and Article 14 of the Constitution by enforcing same tariff for a particular group of consumers. Further, BEST should submit the reasons for not supplying electricity to suburban areas of Mumbai. He added that the Commission should specify maximum price ceiling under Section 62(1) of the EA 2003. He further contended that all the distribution licensees are violating Regulation 5.5 of the MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005, which specifies that the old agreement for space required for distribution transformer, is deemed to have expired at the end of two years from the date of notification of the Regulations and should be renewed. He further submitted that the issue of single point supply at low tension for a load upto 600 kW should be addressed before amending the MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005 and similarly before issuing the guidelines for Cost Effective assessment of Demand Side Management (DSM) measures and programs, the comments and suggestions on approving DSM expenditure should be decided upon. He further submitted that the tariff should be revised only once in the Control Period as per Section 61(f) of the EA 2003.

Shri. Ponrathnam further submitted that the contract load cannot be defined without an agreement and any increase or decrease in contract demand could be done only as per Section 6.8 of the MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005, which states that the distribution licensee shall increase or reduce the contract demand upon receipt of an application from the consumer. The licensee is required to execute an agreement as per Section 6.1 of the Supply Code Regulations for defining the contract demand.

BEST's Response

BEST submitted that supplying in areas other than given in specific conditions of the license is illegal. The proposal to get a distribution licence in new area has to be financially viable as large capital investment will be required. Further, the utility should have the financial capability to meet the condition of universal service obligation to supply electricity. Further, arrangement for additional power needs to be made, which is a difficult task in the present shortage scenario.

With reference to determination of a price ceiling, BEST submitted that under Section 62 of EA 2003, it is not mandatory for the Commission to fix maximum ceiling of electricity. With reference to the violation of Section 5.5 of EA 2003, BEST submitted that it always abides by the EA 2003 and the Regulations. With reference to the sanctioned load, BEST submitted that there is no need of agreement for sanctioned load less than 50 kW as per Regulation 6.1 of MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005.

Commission's Ruling

The Objectors have contended violation of various provisions of the Electricity Act 2003 and Regulations of the Commission. These aspects are not within the scope of the present exercise, which is being undertaken to determine the truing up requirement for FY 2007-08, provisional truing up for FY 2008-09, and determination of ARR and tariff for FY 2009-10.

The Commission is determining tariff on an annual basis within the first Control Period, in accordance with the MERC Tariff Regulations.

While undertaking the rationalisation of tariff categories, the Commission has borne in mind the provisions of Section 62(3) of the Electricity Act, 2003, which stipulates as under:

> *"The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required."*

Thus, there is no merit in Shri. Ponrathnam's contention that different categorisation for consumers amounts to violation of Section 62(3) of the EA 2003, and that there should be only one tariff category for all consumers, because the aforesaid section does permit differentiation in tariffs which means that different consumers could be put into different categories according to the various factors mentioned in the aforesaid section.

As regards supply of electricity by BEST in suburban areas of Mumbai, it is clarified that supply of electricity can be undertaken only in the area of supply, and BEST does not have a distribution licence for the suburban areas of Mumbai.

As regards Shri. Ponrathnam's suggestion that only ceiling tariff should be specified in BEST licence area, the last proviso to Section 62 (1) (a) stipulates as under:

> *"Provided that in case of distribution of electricity in the same area by two or more distribution licensees, the Appropriate Commission may, for promoting competition among distribution licensees, fix only maximum ceiling of tariff for retail sale of electricity."*

Thus, as Section 62 (1) (a) makes it discretionary on the Commission by employing the word "may", it would be clear that this is only an enabling and discretionary provision. It is therefore not mandatory to specify the maximum ceiling tariff in case of distribution of electricity in the same area by two or more distribution licensees.

Hence, the Commission may exercise this discretionary function once it is of the opinion that the right time has emerged for promoting competition that requires or makes it necessary to fix only maximum ceiling of tariff for retail sale of electricity.

2.2 Sales Tax

Shri N. Ponrathnam submitted that there should not be any differentiation in levy of tax on sale of electricity to different consumer categories.

BEST's Response

BEST submitted that tax on sale of electricity is levied as per the Notifications issued by the State Government.

Commission's Ruling

The taxes and duties are not within the purview of the Commission, and the objectors may approach the appropriate forum for relief, if any.

2.3 Sales Forecast and Revenue

Shri A.R. Bapat submitted that there is a substantial difference between approved and actual sales for LT-I (ii), (iii) and (iv) categories. In case of LT-III category, sales of 25 MU was indicated in the Petition as against actual of 2.21 MU. He submitted that BEST has projected increase in sales and decrease in revenue for FY 2009-10, which is contradictory. He further submitted that for FY 2007-08, the actual and approved sales are same; yet the total actual revenue is Rs. 172 Crore lower than the approved revenue; BEST should clarify whether the difference is on account of built in deficit.

Shri. Guruprasad Shetty, representing Association of Hotels & Restaurants (AHAR), and others submitted that the actual sales have gone down as against the projected sales because of the high cost of supply and recession. They added that this trend will continue if the recession continues. Further, if BEST increases its tariff then the industrial consumers would install captive power plants and there will be further decrease in demand from BEST.

BEST's Response

BEST submitted that the estimated sales to LT-I category in APR 2007-08 were higher than the actual sales, due to reasons explained in the APR Petition. As regards the discrepancy in the estimation of units for LT III category, BEST submitted that this discrepancy was brought to the notice of the Commission.

BEST submitted that the gap of Rs. 171.95 Crore for FY 2007-08 was considered by the Commission while determining the ARR for FY 2008-09. However, this amount could not be recovered in FY 2008-09, as there is a projected revenue deficit in FY 2008-09. Therefore, the deficit of Rs. 171.95 Crore is built in deficit for FY 2009-10.

BEST submitted that the revenue for FY 2008-09 is computed based on actuals of H1 and estimates for H2. Whereas the actual revenue for H1 is inclusive of FAC, TOD charges and PF surcharges, etc., the projection for H2 is based on only revenue from only sale of energy. Hence, projected revenue appears to be lower.

Commission's Ruling

For FY 2007-08, the Commission has accepted the actual sales and revenue as submitted by BEST in its APR Petition. For FY 2008-09, the Commission has considered the actual sales and revenue as submitted by BEST in reply to the Commission's query in this regard, under the provisional truing up exercise. The sales for FY 2009-10 have been projected on the basis of the revised sales estimate for FY 2008-09, considering the past trends in sales. The details of category-wise sales considered by the Commission have been elaborated in Section 4.4 of this Order.

As elaborated in 'Section 5.4: Tariff Philosophy' of this Order, the Commission has been able to reduce the tariff to different consumer categories, while at the same time, reducing the cross-subsidies prevalent between different consumer categories.

2.4 Estimation of Demand

Dr. Ashok Pendse of Mumbai Grahak Panchayat (MGP) submitted that the Compounded Annual Growth Rate (CAGR) of demand during the previous years had been in the range of 4% to 6%. As a result, average CAGR of 4.21% has been assumed by BEST. However, in the current situation, the growth is expected to be 1.5% to 2% and not 4.21% as assumed by BEST. He also submitted that there has been no substantial increase in consumption during FY 2008-09, and therefore, the same projections should be continued while estimating the demand for FY 2009-10. He further submitted that it is essential to re-estimate the growth because any energy requirement beyond 4565 MU has to be purchased at an extraordinarily high cost of Rs. 8.50 per unit.

BEST's Response

BEST submitted that the demand in any particular year between FY 2003-04 and FY 2009-10 was calculated using CAGR for previous five years. BEST further submitted that the distribution licensee has to make arrangements to meet its peak demand and its requirement should not be seen only in energy terms. Further, BEST has adopted the standard practice of forecasting sales using CAGR for the last five years. It is incumbent upon BEST to estimate sales and make provision for meeting the requirement of consumers and procure power from external sources to meet the demand-supply gap during the peak hours.

Commission's Ruling

The sales for FY 2009-10 have been projected on the basis of the revised sales estimate for FY 2008-09, considering the past trends in sales. The details of category-wise sales considered by the Commission have been elaborated in Section 4.4 of this Order.

2.5 Power Purchase Expense

Dr. Ashok Pendse of MGP submitted that if a sales growth of 1.5% and distribution loss of 10% is considered, then gross energy requirement will be 4870 MU, i.e., 130 MU lower than BEST's estimation of 4999 MU. The net external purchase can be reduced from 433 MU to 300 MU and the net reduction in power purchase cost will be approximately Rs. 110 Crore.

Shri N. Ponrathnam submitted that BEST should submit the details of all the sources of expensive power purchase in its Petition. Further, he submitted that the cost of power purchases not approved by the Commission should not be taken into consideration while calculating the ARR for FY 2009-10.

Indian Hotel & Restaurant Association and others submitted that with the availability of power from Units 4 and 7, and further entitlement from Unit 8 of TPC-G, BEST would have a supply of 5175 MU available as against the requirement of 4647 MU. Therefore, there will be no need of external power purchase. Further, in its rejoinder, Indian Hotel & Restaurant Association submitted that TPC-G has estimated cost of fuel oil at Rs. 20860 per MT and cost of coal at Rs. 5443 per MT, but the actual cost of fuel oil is Rs. 15850 per MT in NYMEX and that of coal is Rs. 2600 per MT as per Collieries price Notification.

Shri A.R. Bapat submitted that BEST should clarify the reasons behind an expected revenue surplus for FY 2008-09 as stated by the Commission in its previous order.

Shri Pravin Velji Chheda, President, BEST Committee, submitted that BEST should clarify the reasons behind increase in actual power purchase expense by Rs. 338.31 Crore for FY 2007-08. He further submitted that for FY 2008-09, the actual power purchase expenses were Rs. 2546.20 Crore as against approved power purchase expense of Rs. 2056.18 Crore, and BEST should clarify the reasons for the same. He further submitted that BEST has signed a PPA with TPC-G for purchase of power at fixed rates for a period of 10 years. Hence, while approving the tariff of TPC's generating stations, the Commission should consider this fact, since there is an impact on BEST.

BEST's Response

BEST submitted that the availability of the power from TPC-G in terms of MU is adequate to meet BEST's requirement. However, the maximum demand of about 864 MW occurs during the day peak time. This maximum demand when projected at G<>T interface works out to be 914 MW. However, BEST's share in TPC-G's net availability at its full capacity is only 727 MW and the expected availability is 618 MW i.e., 85% of 727 MW. In order to bridge this gap, power has to be procured from external sources even though sufficient energy is available through TPC-G. Further, the demand projections are subject to prudence check by the Commission.

BEST added that tariffs are based not only on oil price but are determined in accordance with the principles laid down under EA 2003 and MERC Tariff Regulations.

BEST submitted that in the previous Tariff Order dated June 6, 2008, the revenue surplus arose due to truing up for FY 2006-07 in which surplus was received from TPC.

BEST submitted that during FY 2007-08, while determining the ARR, the Commission has not considered the PPA between TPC-G and BEST and since other licensees in Mumbai area were not having any formal agreement with generation facilities, therefore, as an interim measure, the net capacity of TPC-G was allocated among all the distribution licensees. Thus, despite allocation of 45.02% of the net capacity under PPA, BEST got only 36.88% allocation of the net capacity. BEST added that in FY 2007-08, there was reduction in power purchase expenses due to lower energy requirement on account of lower distribution losses and lower consumption as against the approved by the Commission. However, the quantum of power available from TPC-G was lower than that required and thus, BEST had to purchase additional power from external sources. Hence, the power purchase cost did not reduce in proportion to the reduction in power purchase from TPC-G.

As regards the issue of long-term PPA, BEST submitted that according to the PPA enforced from April 1, 2008, 45.02% of the total generation capacity of 1777 MW of TPC-G has been allocated to BEST. Further, BEST stated that fixing a constant power purchase rate over the tenure of PPA is not in accordance with the Regulations. Also, every year during Annual Performance Review of TPC-G, the generation cost gets revised, which in turn has an impact on the cost of power purchase from TPC-G by BEST. Hence, the rate at which BEST purchases power from TPC-G varies every year.

Commission's Ruling

In this Order, the Commission has undertaken truing up of the actual power purchase expenses in FY 2007-08 vis-à-vis the expenses approved in the APR Order for FY 2007-08, subject to prudence check. As regards FY 2008-09, the Commission has undertaken provisional truing up of the expenses, as elaborated in Section 4 of this Order. The power purchase requirement and expenditure for FY 2009-10 has been approved considering the PPA executed by BEST with TPC-G, which has been approved by the Commission. The power purchase has been estimated for FY 2009-10 after considering the power available from existing and new generating stations of TPC-G and RPS. The total power purchase quantum available to BEST works out to be higher than the energy input requirement, resulting in surplus energy, which has been estimated to earn additional revenue, and thus off-set the power purchase expenses. The Commission's computations in this regard have been elaborated in the relevant Sections of this Order on truing up for FY 2007-08 and revised revenue requirement for FY 2008-09 and FY 2009-10.

2.6 Employee Expenses

Shri Pravin Velji Chheda, President, BEST Committee, submitted that BEST should clarify the reasons behind increase of Rs. 11.43 Crore in employee expenses over employee expenses for FY 2009-10 approved in the MYT Order.

Dr. Ashok Pendse submitted a comparison of the number of consumers, sales in MU and employee expenses between BEST and MSEDCL (Bhandup zone consisting of Thane, Bhandup, Navi Mumbai, etc.). He submitted that the manpower cost of BEST is higher than that of MSEDCL in comparable areas. Hence, the employee cost of BEST should be restricted.

BEST's Response

BEST submitted that the employee expenses approved in the MYT Order did not include the DA benefits and the allowances for employees working in electricity division. Further, hundred employees were regularised after the MYT Order was passed. BEST clarified that the prevailing wage agreement is due for revision on April 1, 2009, which is expected to have a further impact of Rs. 171.30 Crore.

As regards the comparison of the number of consumers, sales in MU and employee expenses between BEST and MSEDCL, BEST submitted that the comparison cannot be considered in isolation and in the comparative statement the performance benchmarks and the voltage levels served should also be taken into consideration. BEST opined that while comparing the manpower requirement, few more criteria should be considered like reliability of supply, collection efficiency, distribution loss, the ratio of consumption and consumer served at HV and LV, extent of outsourcing, and level of consumer satisfaction. BEST further submitted a chart showing comparison of employee cost/unit of various utilities across the country to indicate that it is comparable with other Utilities.

Commission's Ruling

The approved employee expenditure for FY 2009-10 has been determined by applying the appropriate inflation indices on the provisionally trued up expenditure for FY 2008-09. The final truing up of the employee expenditure for FY 2008-09 will be undertaken only after the end of the year, once the audited data is submitted to the Commission, and subject to prudence check. The Commission's computations in this regard have been elaborated in the Section 4.7 of this Order on provisional truing up and revised revenue requirement for FY 2008-09 and FY 2009-10, respectively.

2.7 Repair & Maintenance Expenses

Shri Pravin Velji Chheda submitted that BEST has stated that R&M expenses were Rs. 257.55 Crore in FY 2007-08. Further, BEST estimated R&M expenses of Rs. 272.01 Crore for FY 2008-09 and projected Rs. 294.70 Crore for FY 2009-10. He further submitted that out of the estimated R&M expenses only 40 to 50% is actually incurred. Therefore, the Commission should examine the R&M expenses submitted by the licensee.

BEST's Response

BEST submitted that for FY 2007-08, the actual R&M expenditure was Rs. 257.55 Crore as against approved expenses of Rs. 235.98 Crore. For FY 2006-07, the approved expense was Rs. 216.62 Crore as against actual of Rs. 254.73 Crore. Thus, it can be concluded that the contention that actual expense are 40 to 50% lower than the approved expenses is not true. Further, for FY 2009-10, BEST has estimated Rs. 294.70 Crore as R&M expenses.

Commission's Ruling

In this Order, the Commission has undertaken truing up of the actual expenses in FY 2007-08 vis-à-vis the expenses approved in the APR Order for FY 2007-08, subject to prudence check. For FY 2008-09, the Commission has undertaken provisional truing up of the expenses, as elaborated in Section 4 of this Order. The approved R&M expenditure for FY 2008-09 has been determined by applying the appropriate inflation indices on the provisionally trued up expenditure for FY 2008-09. The final truing up of the R&M expenditure for FY 2008-09 will be undertaken only after the end of the year, once the audited data is submitted to the Commission, and subject to prudence check.

2.8 Interest on Working Capital

Shri Pravin Velji Chheda submitted that BEST should clarify the reasons behind the proposed increase in the interest on working capital for FY 2009-10.

BEST's Response

BEST submitted that the increase in the estimated interest on working capital for FY 2009-10 is due to the dependency on short term loans. Under the BMC Act 1988, long-term loans cannot be arranged without the approval of the State Government, which is a time consuming process. Since the capital works have to be completed on time, BEST has to take short-term loans from various financial institutions. Therefore, interest for FY 2009-10 has been calculated based on the possibility of short-term loans. During FY 2008-09, BEST received working capital from various financial institutions on short-term and over-draft basis. Further, the working capital was also used for paying bulk power purchase costs, stand-by charges and FAC charges.

Commission's Ruling

The Commission clarifies that interest on working capital is an element of Aggregate Revenue Requirement and is being computed in accordance with the MERC Tariff Regulations. The Commission's computations in this regard have been elaborated in Section 4.13 of this Order on revised revenue requirement for FY 2008-09 and FY 2009-10.

2.9 Interest on Consumer's Security Deposit

Shri Pravin Velji Chheda submitted that the Commission should examine BEST's estimate of interest on consumer's security deposit of Rs. 37.77 Crore for FY 2009-10.

BEST's Response

BEST submitted that the actual increase in Interest on Consumer's Security Deposit for FY 2007-08 and FY 2008-09 is Rs. 0.38 Crore, which is negligible.

Commission's Ruling

The Commission's computations in this regard have been elaborated in Section 4.13 of this Order on revised revenue requirement for FY 2008-09 and FY 2009-10.

2.10 Power Generation

Shri. Guruprasad Shetty submitted that BEST should enter into power generation business and should install decentralised captive power plants in their depots all over the city, which would supplement the electricity purchases and eliminate all emergency costly power purchase.

BEST's Response

BEST submitted that due to space constraints and other environmental issues, installation of captive power plant in depots all over the city may not be feasible.

Commission's Ruling

In accordance with the provisions of Electricity Act 2003 and the Commission's Regulations, the Commission can only direct the Distribution Licensee to make adequate arrangements for supply of power to consumers in the license area. However, the Commission cannot direct the distribution licensee to set up generating capacity, and it is for the management of the distribution licensee to decide on the appropriate approach to be followed in this regard.

2.11 Distribution Losses

Dr. Ashok Pendse and others submitted that despite achieving a distribution loss of 10.38% in FY 2007-08, BEST has considered distribution loss of 10.50% for FY 2008-09. Further, BEST has projected a distribution loss of 10.50% for FY 2009-10 though the Commission has approved distribution loss of 10% in the MYT Order. Further, they submitted that aggressive distribution loss target of 9.5% should be specified instead of 10% for FY 2009-10. They also submitted that in spite of investing large amounts on Capital Expenditure (capex), BEST is not prepared to reduce distribution loss. Dr. Pendse referred to the Judgment of the Honourable Appellate Tribunal for Electricity (ATE) on Appeal No. 158 of 2007 [Uttar Haryana Bijli Vitaran Nigam Limited vs. Haryana Electricity Regulatory Commission (HERC)] in the matter of fixing the loss levels of distribution at 26%. In the aforesaid matter, the HERC allowed the distribution licensee an extensive capital investment for upgradation of system for curtailment of losses. However, the ATE opined that the consumers should not be burdened twice, firstly by cost of funds deployed for up-gradation of distribution system and secondly due to high distribution losses. The ATE opined that the Commission should have retained a stricter loss reduction trajectory.

Shri J.P. Bengali suggested that for reducing commercial losses, the number of illegal connections should be minimised and heavy penalties should be imposed on them. Also, dues should be recovered from the Government/other organisations, officials and individuals along with heavy fines.

Shri N. Ponrathnam submitted that the Commission should ensure that proper metering is done to curtail the AT&C loss level to 5% of the total supply.

Shri. H.S. Kamath and several others submitted that the distribution loss of BEST is 10.38% while that of TPC-D is 0.49%. BEST needs to separate technical and commercial losses.

BEST's Response

BEST submitted that citing the ATE Judgment pertaining to a distribution licensee having a distribution loss of 26% is unfair, since, BEST is maintaining a distribution loss of around 10.38% (one of the lowest in India) by adopting various measures such as prudent network design, quality assurance on equipments, optimum loading of equipment, etc.

With reference to lower distribution loss of TPC-D, BEST submitted that bulk of TPC-D's consumption is on the HV side where the technical and other losses are much lower, whereas bulk of BEST's consumption is on LV side.

As regards segregation of technical and commercial losses, BEST replied that it had already submitted a detailed report on the analysis of technical loss and trajectory for loss reduction. BEST further submitted that for the last two years it has been maintaining the distribution loss within the specified trajectory by intensifying its vigilance activities.

Commission's Ruling

The Commission has considered the distribution losses for FY 2008-09 and FY 2009-10 in accordance with the distribution loss trajectory approved by the Commission in the MYT Order. The detailed computation of energy input requirement is given in Section 3.2 of this Order.

2.12 Transmission Charges

The Indian Hotel & Restaurant Association and others submitted that the Tariff Policy guidelines are clear that transmission charges are to be paid by Transmission System Users (TSUs) in proportion to their actual usage. Since BEST is not a TSU, Rs.109.61 Crore paid by BEST to MSETCL is illegitimate and should not be passed on to the consumers.

BEST's Response

BEST submitted that since it is a long-term transmission system user, it is required to pay the Transmission Capacity Charges as determined by the Commission.

Commission's Ruling

From FY 2006-07, the Commission has recognised the concept of composite Intra State Transmission System (InSTS) as detailed out in various Orders of the Commission. Accordingly, the consolidated ARR of all transmission entities is recovered from all the Distribution Licensees in the State, who are long-term Transmission System Users through uniform transmission tariff.

2.13 Stand-by Charges

Shri. Guruprasad Shetty submitted that the Tariff Policy guidelines do not mention this charge and it is unique to distribution licensees in Mumbai. This charge is paid to MSEDCL to make available 550 MVA to Mumbai area in the event of forced or planned outages of generating plants. He further submitted that since BEST does not buy power from MSEDCL nor has the transmission arrangement to directly buy power in the event of outage, BEST is not liable to pay any stand-by charges.

BEST's Response

BEST submitted that it is sourcing power from TPC-G. For years, there has been a stand-by arrangement between TPC and the erstwhile MSEB, whereby in the event of failure of any generating unit of TPC-G, MSEB was meeting the consequent shortfall for ensuring uninterrupted supply to consumers in Mumbai. Subsequent to the enactment of EA 2003, the arrangement has been continued and the distribution licensees are required to pay the stand-by charges to MSEDCL as determined by the Commission and hence, the charge has been included.

Commission's Ruling

For the purposes of this Order, the Commission has considered the Standby Charges in accordance with the philosophy adopted in the MYT Order and the APR Order, and has accordingly allocated the Standby Charges for FY 2009-10 between the three Distribution Licensees in Mumbai in proportion to the coincident peak demand for the last one year, i.e., for the period from October 2007 to September 2008. As regards the need for standby arrangement, the Commission will look into this matter separately, as there are certain matters pending before the Commission and the higher Courts in this regard.

2.14 Capital Expenditure

Dr. Ashok Pendse submitted that as compared to FY 2007-08, there has been a four time increase in the capital expenditure in FY 2008-09 and three times increase in FY 2009-10. In view of high capital expenditure and the ATE's Judgment on Appeal No. 158 of 2007, only 9.5% distribution loss should be allowed. He also submitted that there is further scope for improvement in performance parameters like SAIDI and CAIDI.

BEST's Response

BEST submitted that the capital expenditure is aimed at meeting the increasing demand, maintaining redundancy of equipments and system, maintaining the high reliability indices and for restricting any further increase in distribution loss. It further submitted that for a distribution licensee having higher distribution loss, the aim of capex may be reduction in distribution loss, which is not the case with BEST and the distribution loss cannot reduce directly in proportion with capex.

Commission's Ruling

The Commission shares with the concerns raised by several stakeholders regarding the high capital expenditure being undertaken by BEST, and the impact of the same on the tariff. The Commission has carried out a detailed analysis regarding the capital expenditure and capitalisation and the treatment of the same has been elaborated in Sections 3.5 and 4.8 of this Order.

2.15 Load Factor Incentives

Shri N. Ponrathnam submitted that load factor incentives should be given to consumers operating at higher load factor.

BEST's Response

BEST submitted that the load factor incentive is already provided in the tariff schedule for HT consumers in industrial and commercial category.

Commission's Ruling

The load factor incentive has been provided to selected consumer categories, as elaborated in Section 5.4 of this Order.

2.16 Fixed charges payable to TPC

Shri. Guruprasad Shetty and others submitted that as per BEST's estimate, BEST would have to pay Rs. 429.50 Crore as its share of the total fixed cost of TPC-G. BEST should clearly specify the components included in computation of fixed cost, since, tax on income cannot be considered as cost or expense as per the Income Tax

Act. Further, they submitted that in the last 5 years, TPC made a profit of Rs. 4622 Crore out of which 45.02% i.e., Rs. 2080 Crore was contributed by BEST. Therefore, BEST should seek refund of excess profit made by TPC-G. Further, BEST should demand return on profit contributed to TPC-G on behalf of its consumers. Since, income tax, return on equity and return on internal funds are not recognised by income tax authorities, they should be disallowed.

Shri N. Ponrathnam submitted that uniform fixed charges should be levied across all the consumer categories, since the meters of all the consumers are same.

BEST's Response

BEST submitted that the Commission will consider the relevant points of TPC-G's ARR in the appropriate perspective and the same will be factored in BEST's APR Order.

BEST submitted that meters for all the consumers are not same. Further, fixed charge is for recovery of the infrastructural costs incurred by the licensee to provide electricity to the consumer.

Commission's Ruling

The computation of Return on Equity (RoE), interest on long-term loan and interest on working capital has been done in accordance with the MERC Tariff Regulations. As per the MERC Tariff Regulations, Return on Equity is allowed on opening balance of equity invested in the Gross Fixed Assets and 50% of the equity portion of assets capitalised during the year. It is clarified that the RoE is allowed on the Regulated Equity, i.e., the equity as computed by the Commission in accordance with the MERC Tariff Regulations, and not on the actual equity or reserves available with the Company. As regards Return on Internal Funds (RoIF), the same has been allowed in accordance with the Judgment dated August 27, 2007 (Appeal No. 13 of 2007) of the ATE in this regard.

Further, income tax is allowed as a part of the ARR, in accordance with the MERC Tariff Regulations.

As regards the surplus and profits available with TPC, the same issue has also been by the same objectors on the APR Petition filed by TPC-G, TPC-D, etc., and this issue has been addressed there. The fixed charges are payable by BEST to TPC-G in proportion to the share of TPC-G's generation capacity as determined by the Commission in the Order on TPC-G's APR Petition for FY 2009-10.

As regards the contention raised regarding seeking refund on account of additional profit made by TPC-G, it is clarified that the Commission has considered the revenue surplus/gap as approved by the Commission for TPC-G in its Order in Case No. 111 of 2008, while determining the ARR of BEST.

2.17 Short-term Power Purchase Cost

Dr. Ashok Pendse of MGP submitted that in FY 2008-09, 10 to 12% of the total energy, i.e., approximately 100 MW is being purchased from external sources at approximately Rs. 8.20 per unit without any visible efforts for procuring power through long-term Power Purchase Agreement (PPA). He also submitted that despite availability of power from the proposed Ultra Mega Power Projects (UMPP) along with a number of private projects at an affordable price range of Rs. 1.20 per unit to Rs. 2.80 per unit, no efforts are being made to purchase cheaper power, The shortfall is being met by external purchases at the rate of Rs. 9 to 10 per unit, as the power purchase cost is a pass through. Dr. Pendse also suggested that since BEST has failed to bring in cheaper power, part of the difference between Rs. 8.20 per unit and average cost of Rs. 4 per unit must be borne by BEST, in a manner similar to that applied for sharing of controllable gains and losses.

Shri A.V. Shenoy, representing Energy Study Group and others, submitted that TPC-G has signed a PPA with BEST for 800 MW of capacity and in case of power purchase from outside sources due to unavailability of supply of power from TPC-G, the cost should be borne by TPC-G.

Shri. Guruprasad Shetty submitted that BEST has assumed a substantial increase in power purchase cost for FY 2008-09 despite incurring Rs. 1900 Crore as power purchase expenses in FY 2007-08. In FY 2008-09, it paid Rs. 4.71 per unit during the first half due to unavailability of power from Unit -7 of TPC-G, which reduced to Rs. 3.92 per unit in the second half. TPC-G expects Unit -7 to generate and to further reduce the cost of power, therefore, for FY 2009-10, the cost of power purchase is expected up to reduce to Rs. 2.71 per unit.

In response to the query raised by the Energy Study Group, TPC-G submitted that expected availability of any generating unit is 80% for full fixed cost recovery as per MERC Tariff Regulations and the PPA has provisions of penalty for availability lower than the target availability of 80%.

BEST's Response

BEST submitted that it was the first licensee in the State of Maharashtra to enter into a PPA with TPC-G for 800 MW capacity and it faces only peak time shortages. Its demand estimation has already been approved by the Commission and it would be shortly submitting to the Commission for approval, the draft Bid Documents for procurement of power on long term basis through competitive bidding process. As the competitive bidding process is time consuming, as an interim measure BEST has been procuring power on short-term basis from outside sources. Short term procurement takes place using prevalent market mechanism and the prices are currently higher in this market. BEST further submitted that the Mumbai licensees do not get any share from any Central Generating Stations (CGS) or proposed UMPPs.

BEST submitted that the estimation of the power purchase cost for FY 2009-10 was based on the revised APR Petition of TPC-G as directed by the Commission during the TVS. The Petition of TPC-G will be thoroughly scrutinised and the tariff so determined by the Commission will be factored into BEST's power purchase cost by the Commission.

Commission's Ruling

The Commission is of the view that there is merit in the suggestions of the objectors that the increase in the power purchase cost due to costly power purchase from external sources should be treated as controllable expenditure, and certain portion of the cost of purchase from other sources on short-term basis should be borne by the Distribution Licensee, rather than being entirely passed through to the consumers, in a manner similar to that adopted for other controllable expenses such as Operation & Maintenance (O&M) expenses, etc. The Commission has given repeated directives to all the distribution licensees to enter into long-term contracts for their power purchase requirement at reasonable rates, rather than relying on costly short-term sources. However, the Commission has to consider the power purchase expenses in accordance with the MERC Tariff Regulations, which categorise the power purchase expenses under uncontrollable factors and any variation in the power purchase cost is to be allowed as pass through in the ARR.

Therefore, at this stage, under the first Control Period under the MYT framework, the Commission has not considered any sharing of the increase in cost on account of purchase from other sources on short-term basis. However, the Commission has noted the point made by the objectors in this regard and would consider this suggestion of treating power purchase expenses as a controllable expense, and sharing of increase in power purchase expenses between the Distribution Licensee and the consumers under the second Control Period of the MYT framework, after making suitable modifications to the MERC Tariff Regulations, if required.

The power purchase expenses of BEST have been computed in accordance with the PPA for purchase from TPC-G, which has been approved by the Commission. In case of BEST, while there is a requirement of certain quantum of costly power purchase due to the mismatch between the MW requirement and the MW available from TPC-G, in energy terms (MU), based on all sources of power including Unit 8 of TPC-G, it is estimated that BEST will have surplus energy, which will be contributed to the pool under the Balancing and Settlement Mechanism (BSM) prevalent in the State of Maharashtra, and will earn revenue at the rate of Rs. 7 per kWh. This revenue has been considered to reduce the overall power purchase expense, and has accordingly, enabled the Commission to reduce the ARR correspondingly.

2.18 Renewable Purchase Specification (RPS)

Shri A.R. Bapat submitted that the Commission has mandated purchase of power from renewable energy and BEST was expected to get 256 MU at Rs. 3.50 per unit and apparently it is not mandatory for wind farms to sell energy at the rate specified by the Commission. In case of shortage of total available energy, the generators and distribution licensee appear to be getting discriminatory treatment.

BEST's Response

BEST submitted that due efforts have been made by BEST to procure renewable energy as directed, but so far it has not been able to achieve the target.

Commission's Ruling

The Commission in this Order has considered the purchase of power by BEST from renewable energy sources in FY 2008-09 as proposed by BEST. Further, the Commission will carry out the truing up of power purchase from renewable energy sources based on final settlement of RPS for FY 2008-09. For FY 2009-10, the Commission has considered purchase of renewable energy equivalent to 6% of energy input requirement as per RPS obligation for FY 2008-09.

2.19 Cost of Supply

Dr. Ashok Pendse and others submitted that the estimated average cost of supply of BEST for FY 2009-10 is Rs. 9.38 per unit. BEST is seeking increase in tariff of almost 50%. At such a high average cost of supply, cross-subsidising consumers can opt for captive generation. They also submitted that if the gas availability improves by September - October 2009, the cost of generation will reduce to Rs. 4.5 to Rs. 5 per unit. Hence, increase in tariff should be restricted to 5-6 % and not 50 % as requested by BEST.

Urjavaran Foundation, a voluntary non-profit NGO, and others submitted that while determining the power purchase expenses, the present fuel cost along with a reasonable increase should be considered. The tariff should gradually be increased for each consumer category, and purchasing power of the consumers during recession should be taken into account while determining the tariff.

Shri Hiroo P. Malkani and others submitted that the proposed hike of 40-45% is due to huge amount of loss incurred due to under-recovery of bills and the loss amount should be obtained from the defaulters who illegally indulge in power theft.

Shri Adi F. Merchant submitted that the proposed hike of 18-45% would come as a tremendous blow to the common consumer. If any tariff increase is necessary, it should not be more than 5-10% of the current tariff. He further submitted that the tariff should be calculated not only on the basis of area occupied, but also on the basis of locality, and should be different for residential, commercial and industrial plots.

Maker Arcade Premises Co.op. Soc. Ltd and others requested that the tariff should not be further increased during recession. Premsons Bazaar submitted that they are categorised under LT-II category. The present recession and the terrorist attack have had serious impact on its business. It further submitted that according to the agreement with BEST dated September 17, 1995, it was governed under fixed agreement tariff. Without giving any prior notice BEST terminated the agreement and now BEST has proposed tariff of Rs. 14.47 per unit for LT-II category. Further, consumers having higher load should get concession in tariff. Therefore, Premsons suggest that the tariff for each category barring the initial low consumption slab should have either lower rates for higher consumption or common rates for all consumption levels.

Shri A.R. Bapat submitted that the proposed increase in tariff for FY 2009-10 for LT-I and LT-IIA consumers (consuming 0-300 units) is more than 100%. The increase in tariff should be allowed only upto certain levels, and the remaining amount should be carried forward to FY 2011-12 to make the tariff increase bearable. BEST should submit the reasons behind the difference in cost of supply of BEST and that of RInfra-D.

Shri N. Ponrathnam submitted that as per the Tariff Policy, the price of electricity and the cost of supply should not vary with the pattern of use and the tariffs should not vary more than $\pm$20% cost of supply. He submitted that the Commission is violating the EA 2003 by levying different tariffs for consumers having the same voltage. The cost of supply is higher for rural areas than in urban areas and also for single phase supply than for three–phase supply. He also submitted that the licensees charge single part tariff only for low tension consumers and two-part tariff to high tension consumers. LT consumers can have an option to avail demand based tariff, which is cheaper than single part tariff. Thus, the Commission should direct the licensee to charge two-part tariff to its consumer.

Shri. Guruprasad Shetty and Indian Hotel & Restaurant Association submitted that in FY 2009-10, the average cost of generating electricity by TPC would be less than Rs 2 per unit and BEST would get electricity at around Rs. 2.70 per unit and the cost of supply to consumers would be around Rs. 3.46 per unit. Clause 8.3 of the Tariff Policy guidelines require the tariff to be linked to the cost of service and advises SERC to notify a road map so that by the end of FY 2010-11, the tariffs should be within 20% of the average cost of supply.

Shri Pravin Velji Chheda submitted that BEST has proposed a steep increase in the tariff for LT-I category, which needs to be reconsidered by the Commission.

BEST's Response

BEST submitted that the cost of supply is derived by dividing total ARR with projected sales. However, the ARR of FY 2009-10 is not a standalone ARR, but includes the revenue gap of previous years. In FY 2007-08, BEST suffered deficit of Rs. 301.75 Crore. Also, impact due to ATE's Order dated May 12, 2008 on TPC-G's Appeal is Rs. 218 Crore, i.e., Rs. 0.51 per unit (5%). Therefore, it is not an increase in tariff but a legitimate recovery. BEST also submitted that the cost of supply excluding above mentioned costs is Rs. 6.99 per unit, which is much lower than the proposed cost of supply. The ARR for FY 2009-10 includes cumulative revenue gap of previous years and thus the cost of service prima facie appears to be high.

BEST added that for a distribution licensee, power purchase expense constitutes 80% of its total expenditure. BEST procured power from external sources at higher prices in order to avoid load shedding in the city. BEST further submitted that the increase in the expenses are due to the legitimate dues towards TPC-G and unprecedented increase in fuel cost. Further, BEST clarified that the proposed tariff hike is not due to under recovery of bills from the defaulters.

BEST submitted that tariffs are not based on only oil prices but are determined in accordance with the principles laid down under EA 2003 and MERC Tariff Regulations. The BPL consumers, residential consumers consuming upto 500 units per month and commercial consumers consuming less than 300 units per month are subsidised.

BEST submitted that electricity tariff applicable is independent of the area occupied or the locality in which the buildings are situated.

BEST submitted that based on the consumption pattern, the fixed charges and the variable charges are levied. Tariffs are designed to benefit consumers with lower consumption. BEST submitted that consumers consuming 0-100 units per month are heavily subsidised over the years and the tariff proposed for FY 2009-10 is in line with Tariff Policy, which states that cross-subsidy should be reduced in a gradual manner.

As regards the higher cost of supply for single phase, BEST submitted that the single phase and three phase meters are given depending on the sanctioned load, and three phase meters are connected where load is higher. For higher loads, higher infrastructure costs have to be recovered.

BEST submitted that the cost of supply is based on various factors like power purchase expenses, O&M expenses, general expenses and other expenses besides reliability provided to the consumers. Due to the addition of reliability charges, the cost of supply to metropolitan areas is higher.

With respect to charging of two part tariff, BEST submitted that the tariff is determined by the Commission and BEST is implementing the tariff determined by the Commission.

Commission's Ruling

The Commission has determined the average cost of supply for BEST for FY 2009-10 as Rs. 6.34 /kWh, based on the ARR and sales determined by the Commission for FY 2009-10. Accordingly, the Commission has been able to reduce the average tariff by around 6% over the existing levels, while at the same time reducing the cross-subsidy between the consumer categories. The computation of ARR for FY 2007-08 after final truing up has been elaborated in Section 3 of this Order, while provisional truing up for FY 2008-09 and determination of ARR and Tariff for FY 2009-10, have been elaborated in Section 4 and 5 of this Order.

2.20 Cross-Subsidy

Hardcastle Restaurants Pvt. Ltd. (Hardcastle) submitted that it is cross subsidising other consumers and the cross-subsidy should be reduced gradually and tariffs should be brought closer to average Cost of Supply (CoS). Hardcastle further submitted that there should not be any increase in the tariff for any consumer category beyond average percentage hike in average CoS, and the Commission should lay down a roadmap for cross-subsidy reduction, so as to bring it within the range of ±20% of the CoS by the FY 2010-11. It also submitted that BEST has not justified the proposed increase in tariff when seen in comparison with the increase in the input cost and BEST should submit detailed justification for the proposed increase in tariff.

Shri N. Ponrathnam submitted that the cost of subsidy for BPL consumers should be borne by the State Government, and other consumer categories should not be burdened with the cost of subsidy to BPL consumers. Further, the subsidy should be gradually reduced without giving tariff shock to the consumers.

BEST's Response

BEST submitted that all the reasons and explanations for the expenditure incurred, revenue received and the carried forward revenue gaps of the previous years are given in detail in the Petition.

BEST submitted that as per the Tariff Order dated June 6, 2008, the BPL category will be available to residential consumers consuming load less than or upto 0.1 kW and have consumed less than 360 units per annum in the previous financial year. BEST will abide by the directive of the Commission with respect to cross-subsidy reduction.

Commission's Ruling

The Commission has determined the average cost of supply for BEST for FY 2009-10 as Rs. 6.34 /kWh , based on the ARR and sales determined by the Commission for FY 2009-10. Accordingly, the Commission has been able to reduce the average tariff by around 6% over the existing levels, while at the same time reducing the cross-subsidy between the consumer categories. The cross-subsidy between different consumer categories based on tariffs determined by the Commission in this Order are given in Section 5.4 of this Order.

2.21 Reliability Charge

Premsons Bazaar submitted that the rationale given for higher tariff for higher slabs, i.e., external power purchases does not hold good, since the expensive power charges are already recovered through the reliability charges. Thus, the consumers are charged twice for the expensive power purchases.

Shri N. Ponrathnam submitted that there is no provision in the law for charging reliability charges and standby charges to the consumers.

BEST's Response

BEST submitted that the tariff philosophy has been enumerated by the Commission in the Tariff Order of BEST and the current tariff proposal of the BEST is in accordance with the tariff philosophy specified by the Commission. BEST submitted that it is charging reliability charges as directed by the Commission in its Tariff Order.

Commission's Ruling

In the MYT Order and the APR Order for FY 2007-08, the Commission had separately indicated the component of standby charges and expensive power charges chargeable to specific consumer categories, as a part of the energy charges, with the intention of sensitising the consumers about the consequences of the rapid increase in consumption and the ever-increasing demand-supply gap. The Commission is of the view that the desired objective has been achieved to some extent, since there have been several representations regarding these charges, and the need to separately show these charges, which indicate that the desired awareness has been created. In this Tariff Order, the Commission has discontinued the practice of indicating the standby charges and expensive power charges separately (also called as reliability charges), and has specified a unified energy charge applicable for the energy consumed.

2.22 Fuel Adjustment Cost (FAC)

Shri A.R. Bapat submitted that FAC should not be levied on LT-I (i) and (ii) category consumers. He further submitted that BEST should submit the details of FAC payable to TPC-G for FY 2008-09 and BEST should clarify whether the FAC mentioned in the Petition are included in power purchase expense. Also, there should be ceiling on FAC charged by TPC-G to its consumers.

Shri N. Ponrathnam submitted that the Commission should clarify the reasons behind approving different FAC to different licensees despite having same source of power.

Shri. Guruprasad Shetty and others submitted that the fuel oil prices peaked globally in August 2008 and then crashed in February 2009. He added that the per unit FAC of TPC has come down from Rs. 1.38 to Rs. 0.59 and is expected to touch nil in FY 2009-10.

Shri Pravin Velji Chheda submitted that FAC charges should not be levied on the consumers in FY 2009-10.

BEST's Response

BEST in its reply submitted that the proposed FAC surcharge of Rs. 0.60 per unit is the under recovered FAC for the period of FY 2007-08 and FY 2008-09.

BEST submitted that while determining the tariff for FY 2009-10, the Commission would take into account the declining trend of the Fuel Adjustment Charges to be charged by TPC-G to distribution licensees, if any. For FY 2009-10, FAC will be recovered from the consumers as per the mechanism stipulated by the Commission. BEST further submitted that the Commission has not yet specified any ceiling on FAC recoverable by generating companies, but it is subject to prudence check once every three months. For the distribution licensees, there is a ceiling of 10% of the variable cost as mentioned in the MERC Tariff Regulations.

Commission's Ruling

The philosophy behind the Fuel Adjustment Cost (FAC) Charge has been elaborated in several Orders by the Commission, which is in accordance with Regulation 82 of the MERC Tariff Regulations, which stipulates:

> *"82.3 The FAC charge shall be computed and charged on the basis of actual variation in fuel costs relating to power generated from own generation stations and power procured during any month subsequent to such costs being incurred, in accordance with these Regulations, and shall not be computed on the basis of estimated or expected variations in fuel costs.*

The Commission also approves the purchase from external/bilateral sources. Accordingly, the same is being considered for the computation of FAC charges. Since the power purchase costs are based on the prevailing fuel costs, the prevailing FAC is effectively equated to zero at the time of issue of the Tariff Order, and will come into effect in case there is a variation in the fuel prices (positive or negative) and the generators ask BEST to pay for the difference in fuel costs, which is a pass-through expense. The FAC is allowed to be recovered on a monthly basis, in accordance with the Formula stipulated in the MERC Tariff Regulations, and the FAC is vetted on a post-facto basis for each quarter. The detailed vetting reports are available on the Commission's website.

It is clarified that the FAC is chargeable to all consumers, in accordance with the MERC Tariff Regulations. Also, in the present MERC Tariff Regulations, there is no cap on the recovery of FAC by Generating Companies, while there is a cap of 10% of average variable charges on FAC recovery by the Distribution Licensees. It is also clarified that the FAC per unit will be different for different Distribution Licensees, given that the FAC per unit is a factor of the total power purchase quantum, variation in cost of fuel of own generation and power purchase for the sources contracted by the concerned Distribution Licensee, under-recovered cost of fuel, the energy sales, distribution loss, etc.

2.23 Imbalance Pool Settlement

Shri A.R. Bapat submitted that BEST, in its Petition, should submit the break-up of Rs. 1.88 Crore paid towards settlement of imbalance pool with MSEDCL.

BEST's Response

BEST in its reply submitted that there is an allocation of 45.02% of TPC's generation to BEST as per the PPA. This generation has to flow through transmission system and BEST's metered off take is at Transmission and Distribution interconnection (T< >D) points. The metered energy at T< >D point is to be grossed up by transmission loss of the whole State for the month. This exercise is carried out to match all generation and drawal by each Utility. There will be a mismatch as some Utilities would be in surplus and others may be in deficit. The surplus will however, match the deficit. The surplus of those Utilities is considered as increment to the imbalance pool and deficit Utilities are supposed to decrement the pool. The settlement takes place at weighted average system marginal cost of the supplying Utilities. As per this settlement mechanism, MSEDCL has supplied energy to BEST and hence, the same is settled at the marginal cost.

Commission's Ruling

In this Order, the Commission has undertaken truing up of the actual expenses in FY 2007-08 vis-à-vis the expenses approved in the APR Order for FY 2007-08, subject to prudence check. The Commission validated the actual expense on power purchase from various sources like purchase from TPC-G, external sources, imbalance pool, etc. In order to validate the power purchase quantum and expense amongst the Mumbai Distribution Licensees for FY 2007-08, the Commission's staff convened a common meeting between representatives of the three Distribution Licensees of Mumbai and Maharashtra State Load Despatch Centre, on April 6, 2009. Based on revised details submitted by BEST and TPC-G and after validating the figures with MSLDC's energy settlement for FY 2007-08, the Commission has considered the revised power purchase costs for purchase of energy from other sources (i.e., external process and imbalance pool) during FY 2007-08 for truing up purposes.

2.24 Demand Side Management

Urjavaran Foundation, a voluntary non-profit NGO submitted that the distribution licensees should conduct educational programmes to enlighten their consumers on the right product and system to be used in the domestic and commercial establishments to curb wastage.

Shri Jimmy S. Bengali submitted that Solar Panels should be made mandatory for all buildings. Efforts should be made to reduce leakage of electricity due to old and hanging wiring in building junction boxes.

Shri H.S. Kamath submitted that BEST has not made any significant efforts towards energy conservation and energy efficiency.

BEST's Response

BEST in its reply submitted that it will make aware all the NGOs about the DSM activities undertaken by BEST.

Commission's Ruling

The Commission's analysis of BEST's expenses on energy efficiency and DSM projects, and the expected reduction in power purchase expenses on this account, has been elaborated in Section 4.17 of this Order. As regards making the installation of solar panels compulsory for all buildings, the same, if considered appropriate, will have to be addressed by the State Government, since the Commission does not have the jurisdiction to issue such directions.

2.25 Tariff and Non-Tariff Income

Shri Mahesh Barbhaya and Shri Rakshpal Abrol representing Bharatiya Udhami Avam Upbhokta Sangh, submitted that BEST should provide the details of non-tariff income incurred by selling the burnout parts, electric meters and other equipments since March 1, 1986. They also submitted that BEST cannot collect expensive power charges from the consumers since it has signed a PPA with TPC-G for procurement of power. Further, BEST should submit the detailed break-up of revenue received as fixed charges, TOD charges and revenue received from various consumer categories such as BPL, LT-I, LT-IIA, LT-IIB, LT-IIC, LT-III, LT-IV, LT-VA, LT-VB, LT-VI, LT-VII, LT-VIII, HT-I, HT-II, HT-III. BEST should submit the data of the number of consumers being provided three-phase connections and also about the number of consumers being provided single-phase connections in the residential, commercial and industrial category.

BEST's Response

As regards the contention that BEST has not provided the details of revenue received from various consumer categories, BEST submitted that the contentions of the objectors are incorrect and its revenue statement for all the consumer categories has been provided in the Petition in accordance with the Formats specified by the Commission. As regards the details of the number of consumers being provided for three-phase connection, BEST submitted that it has provided all the required data as per the requirement of the Commission.

Commission's Ruling

In the MYT Order and the APR Order for FY 2007-08, the Commission had separately indicated the component of standby charges and expensive power charges chargeable to specific consumer categories, as a part of the energy charges, with the intention of sensitising the consumers about the consequences of the rapid increase in consumption and the ever-increasing demand-supply gap. The Commission is of the view that the desired objective has been achieved to some extent, since there have been several representations regarding these charges, and the need to separately show these charges, which indicate that the desired awareness has been created. In this Tariff Order, the Commission has discontinued the practice of indicating the standby charges and expensive power charges separately (also called as reliability charges), and has specified a unified energy charge applicable for the energy consumed.

Further, BEST has submitted the required data in the Formats specified by the Commission along with the APR Petition, which was published for inviting comments and suggestions. As regards the details of non-tariff income earned by BEST since March 1, 1986, the Commission is of the view that the objectors cannot seek to obtain such data from the distribution licensee under the regulatory process being undertaken for the APR Petition for FY 2008-09.

2.26 Aggregate Revenue Requirement (ARR)

Shri Pravin Velji Chheda stated that BEST has indicated a higher ARR as against the Commission approved ARR for all the three years under consideration, viz., FY 2007-08, FY 2008-09 and FY 2009-10. The Commission should examine the reason behind this increase.

BEST's Response

BEST, in its Petition, has submitted audited values of expenses for FY 2007-08 for determination of ARR. For FY 2008-09, the ARR is based on the actual expenses for the first half, i.e., April to September and estimated values for the second half, i.e., October to March. The increase in the estimated ARR for FY 2008-09 is mainly on the account of external power purchase expenses. BEST further stated that in the MYT Order, the Commission has not considered the bulk power purchase expenses while calculating the revenue requirement for FY 2009-10 and the increase in the projected ARR is due to the addition of external power purchase expenses.

Commission's Ruling

The Commission's computation of ARR and Revenue at existing tariffs and revenue gap for FY 2007-08, FY 2008-09 and FY 2009-10, have been elaborated in Section 3 and Section 4, respectively of this Order. The Commission has determined the average cost of supply for BEST for FY 2009-10 as Rs. 6.34 per kWh , based on the ARR and sales determined by the Commission for FY 2009-10. Accordingly, the Commission has been able to reduce the average tariff by around 6% over the existing levels, while at the same time reducing the cross-subsidy between the consumer categories.

2.27 Re-Categorisation of Consumers

Consulate General of the Russian Federation in Mumbai submitted that it is being charged under HT-II commercial tariff category. However, the Consulate General of the Russian Federation in Mumbai does not carry out any commercial activity. It also submitted that residential load is two-thirds of the total electrical load and the rest is consumed by the office area. The proposed hike in the average billing rate of 45% will lead to a monthly payment of Rs.12 to 13 Lakh. Therefore, it requested the Commission for shifting them to a more appropriate tariff category, i.e., from an existing HT-II tariff category to HT-III tariff category comprising Group Housing Society.

The Association of Hospitals submitted that all the charitable hospitals charge for treatment to those who can afford and offer free and concessional services to those who cannot. They are presently categorised under LT-II commercial category, which adversely affects their ability to provide quality service. Therefore, they requested that there should be a separate concessional category for charitable hospitals.

Vidyalankar Dnyanapeeth Trust submitted that it is a charitable trust, regulated and aided by Government, and approved by AICTE. During FY 2006-07, it was charged under LT-I category and now it is charged under LT-II category. BEST should not consider the institute as a private college since, the fees of the college are decided by the Government and it should be allowed to shift from BEST to TPC-D.

Municipal Corporation of Greater Mumbai (MCGM) submitted that a separate category should be made for public Water and Waste Water Utilities and they should be charged 28% cheaper than the HT industrial consumers for the power drawn through the HT connections as an average 28% cost reduction was offered by various licensees for different social obligations.

Shri A.V. Shenoy submitted that consumers consuming between 0 to 500 units should be re-categorised into single category.

Shri N.Ponrathnam submitted that consumers like airport terminal, BEST terminals, Central and State Government offices falling under the new category of HT Public/Government should not be subsidised as they are profit centres and there is no law to provide subsidy to this category. He further added that HT-III Group Housing category is being subsidised and its benefits are reaped by builders/real estate players.

Shri Pravin Velji Chheda stated that the consumption level for BPL consumers should be increased from 30 units per month to 100 units per month.

BEST's Response

BEST submitted that the tariff applicable to Consulate General of the Russian Federation in Mumbai is non-residential HT tariff (HT-II). The Consulate General may segregate residential and non-residential load including air-conditioning load and apply for separate meters for residential and non-residential purposes. Thereafter, BEST may change tariff applied from HT-II to HT-III category. BEST added that the establishments of Consulates of other nations are charged under non-residential tariff category.

BEST further submitted that offering concessional tariff to a large category of consumers would make survival of the distribution licensee difficult. The Commission has recognised this fact and has therefore, reduced the number of concessional tariff categories. Further, the Commission's views on re-categorisation of charitable hospitals will be binding.

BEST submitted that the Government offices are not subsidised. The Commission is the final authority for approving the categories and tariff.

As per EA 2003, the tariff for any consumer category should be determined by the State Electricity Regulatory Commission. The consumption level and the tariff for BPL consumers have been determined by the MERC.

Commission's Ruling

While undertaking the rationalisation of tariff categories, the Commission has borne in mind the provisions of Section 62(3) of the Electricity Act, 2003, which stipulates as under:

> *"The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required."*

It should be noted that it is not possible to apply all the above specified criteria at the same time, for designing the tariff categories; else, with many permutations and combinations, there will be too many categories. If any specific consumer category has to be created then it has to be done according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required. All these criteria may not exist for a consumer at the same time. Any one criteria is sufficient to be there for differentiating in tariffs.

In this context, quite a few consumers have been sending communications to the Commission after the issuance of the Tariff Orders, as well as representing before the Commission during and after the Public Hearings, stating that they are not undertaking any ‘commercial’ activity or activities for making ‘profit’ within their premises, and hence, they should not be classified under the ‘commercial’ category. It is clarified that the ‘commercial’ category actually refers to all ‘non-residential, non-industrial’ purpose, or which has not been classified under any other specific category. For instance, all office establishments (whether Government or private), hospitals, educational institutions, airports, bus-stands, multiplexes, shopping malls, small and big stores, automobile showrooms, etc., are all covered under this categorisation. Clearly, they cannot be termed as residential or industrial. In order to remove the confusion and to bring clarity in this regard, the Commission has renamed this category as ‘non-residential or commercial’ in this Order.

A similar confusion has arisen as in an impression is being conveyed as regards the ‘Industry’ categorisation, with the Commission receiving several representations through communications after the issuance of the Tariff Orders, as well as representations during and after the Public Hearings, from the hotel industry, leisure and travel industry, etc., stating that they have also been classified as ‘industry’ for the purpose of taxation and/ or other benefits being extended by the Central Government or State Government, and hence, they should also be classified as ‘industry’ for the purpose of tariff determination. In this regard, it is clarified that classification under Industry for tax purposes and other purposes by the Central or State Government shall apply to matters within their jurisdiction and have no bearing on the tariffs determined by the Commission under the EA 2003, and the import of the categorisation under Industry under other laws cannot be applied to seek a tariff categorisation under the EA 2003. Broadly, the categorisation of ‘Industry’ is applicable to such activities, which entail ‘manufacture’.

While appreciating the anxiety of different classes of consumers to reduce their payments on account of use of electricity, the reasonable costs incurred by the

Utilities have to be met, and irrespective of the number of consumer categories or the sub-classification considered in accordance with the provisions of Section 62(3) of the EA 2003, the cross-subsidies have to be reduced gradually and the tariff differential between categories cannot be very significant in the long-run.

As regards the concerns expressed by the Consulate General of the Russian Federation in Mumbai, BEST has already submitted that the Consulate may segregate their commercial and residential load, so as to enable BEST to levy the appropriate tariffs to the residential and non-residential loads.

As regards increasing the limit for classification under BPL category, it is clarified that this category has been created in accordance with the stipulations of the National Electricity Policy, and is intended for lifeline consumers. If the limit for classification is increased upto 100 units per month, then the objective of creating the category will be lost, as several more consumers would shift to this category from LT I residential, and the cross-subsidy burden of other consumers would increase.

2.28 TOD Tariff

Shri. N. Ponrathnam submitted that TOD charges should be levied after getting the written consent of the consumers.

BEST's Response

BEST submitted that TOD charges are levied in accordance with the Guidelines specified by the Commission.

Commission's Ruling

The Commission has designed the TOD tariffs in such a manner that it disincentivises consumption during the peak hours in the State, and incentivises shift in consumption from peak hours to off-peak hours, by charging higher tariffs for consumption during peak hours and providing a rebate for consumption during off-peak hours. The details of time-slots and applicable ToD tariffs have been elaborated in Section 5.5 of this Order.

2.29 Permanent Tariff for Temporary Connection

Mumbai Housing & Area Development Authority (MHADA) submitted that earlier "commercial category tariff" was applicable for long duration temporary connections, i.e., supply for more than two years. This tariff was being applied as per Procedure Order no.-102, Clause No. 3.5.2. However, as per the Tariff Booklet issued by BEST applicable for the period for June 1, 2008 to March 31, 2009, there is no provision for longer duration temporary supply users. Thus, BEST has not made any provision suitable for the consumers covered under the said section of the Procedure Order mentioned above. BEST is requested to charge a permanent tariff since the projects take four to five years for completion.

BEST's Response

BEST submitted that after the commencement of Electricity Act 2003, and MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005, the above mentioned Procedure Order is now redundant and LT-VIII tariff is applicable for electric supply for construction activities as per tariff approved by the Commission.

Commission's Ruling

The tariff applicable for temporary connections for construction purposes will be 'LT VII (B): Temporary Supply (Others)' and 'HT IV: Temporary Supply' depending on whether the supply is at LT or HT voltage.

2.30 Formation of State Advisory Committee

Shri. Guruprasad Shetty submitted that the Commission should establish a State Advisory Committee to represent interest of consumers and the Committee would advice the Commission on:

1. Average cost of supply of electricity
2. Allowable legitimate cost and disallowable illegitimate cost
3. Protect consumer interest
4. Ensure quality supply of electricity and monitor performance standard of utilities

BEST's Response

BEST submitted that the Maharashtra State Advisory Committee has already been established.

Commission's Ruling

The State Advisory Committee has already been constituted in October 20, 2000 and advises the Commission on relevant matters from time to time.

3 TRUING UP OF AGGREGATE REVENUE REQUIREMENT FOR FY 2007-08

BEST, in its Petition for Annual Performance Review for FY 2008-09 and tariff determination for FY 2009-10 has elaborated on the final truing up of expenditure and revenue for FY 2007-08 based on actual expenditure and revenue for FY 2007-08 as per audited accounts. BEST provided the comparison of actual revenue and expenditure against each head with the revenue and expenditure approved by the Commission along with the reasons for deviations.

In this Section, the Commission has analysed all the elements of actual revenue and expenses for FY 2007-08, and has carried out the truing up of expenses and revenue after prudence check.

3.1 SALES

BEST submitted the month-wise actual category-wise sales in the Formats annexed to the APR Petition, and stated that in its APR Petition for FY 2007-08, BEST had forecasted energy sales of 4151.96 MU for FY 2007-08, and the Commission in the APR Order approved sales of 4239 MU, whereas the actual sales have been lower at 4023.94 MU. Thus, the actual sale in FY 2007-08 is 5.07% lower than the approved sales, though sales in FY 2007-08 has shown a growth of 5.9% as compared to sales in FY 2006-07.

Table: BEST's Actual Sales in FY 2007-08 ***(MU)***

Sl.	Particulars	APR Order	Actuals
1	Sales	4239	4024

In response to the Commission's query regarding the reasons for the significant difference between the actual sales and the sales approved by the Commission in the APR Order, despite the Commission's projections being based on 10-month actual sales, BEST submitted as under:

§ In the first half of FY 2007-08, the growth in the sales was very high at about 14% as compared to the average growth of about 4% for the last 3 years

§ The residential category has shown almost negative growth rate during the second half of FY 2007-08, which may be due to severe winter condition experienced by Mumbai in FY 2007-08.

§ BEST projected 9.3% growth for FY 2007-08, which was done on the basis of growth rate of first half ofFY 2007-08.

§ The sales projected by the Commission for FY 2007-08 was high since it was based on the actual sales of first 10 months of FY 2007-08, which were exceptionally high at around 8.3%. However, during the second half of FY 2007-08, the growth in sales compared to the first half was very low, which may be due to the unusually severe and long winter conditions experienced in Mumbai. Thus, the projections of both BEST and the Commission did not materialize due to unforeseen weather changes.

§ The actual growth rate of 5.9% in sales for FY 2007-08 as compared to FY 2006-07 levels, seems to be normal, as compared to the CAGR of 4.2% over the last five years.

The Commission has considered the actual sales in FY 2007-08 under the truing up process.

3.2 DISTRIBUTION LOSSES AND ENERGY INPUT REQUIREMENT

In the MYT Order, the Commission directed BEST to reduce the distribution losses to 11.0% in FY 2007-08, from the level of 11.50% in FY 2006-07.

In the APR Petition, BEST submitted that the actual distribution losses in FY 2007-08 were 11.48%, as compared to the approved distribution losses of 11.5%, as given in the Table below:

Table: Distribution Losses for FY 2006-07 and FY 2007-08 as submitted by BEST

Year	Units Purchased (MU)	Units Sold (MU)	Distribution Losses (%)	Distribution Losses Approved (%)
FY 2006-07	4293	3800	11.48%	11.50%
FY 2007-08	4396	3940	10.38%	11.00%

BEST submitted that it had achieved a significant reduction in the distribution losses, which have been reduced to 10.38% as against the target of 11% specified for FY 2007-08 in the MYT Order, on account of various measures being undertaken including prudent network design, quality assurance on equipments vis-à-vis losses, optimum loading of the equipments as well as replacement of faulty meters and theft detection drives.

BEST also submitted the Energy Balance for FY 2007-08, wherein BEST has considered the Intra-State Transmission System (InSTS) losses as 4.54%. The Commission has re-computed the Energy Balance for BEST for FY 2007-08, by considering the actual InSTS losses of 4.67% for FY 2007-08, based on the Maharashtra State Load Despatch Centre's (MSLDCs) Balancing & Settlement Statements for FY 2007-08. The Energy Balance as submitted by BEST for FY 2007-08 and as re-computed by the Commission for FY 2007-08 is shown in the Table below:

Table: Energy Input of BEST for FY 2007-08

Particulars	BEST	Commission
Sales (MU)	4024	4024
Less Adjustment (MU)	84.3	84.3
Net Sales (MU)	3939.7	3939.7
Distribution loss (in %)	10.40%	10.27%
Energy Requirement (MU) at T&D interface	4396.8	4390.9
Transmission Losses (%)	**4.54%**	**4.67%**
Total Energy Requirement (MU)	4605.95	4605.95

The above analysis shows that the actual distribution losses in BEST's system are actually lower than the levels being claimed by BEST. BEST has considered a lower InSTS loss of 4.54% for the energy settlement, though the actual losses for the year as reported by SLDC based on metering of all energy interchange points is 4.67%. The Commission has hence, restated the above Energy Balance Statement by considering the actual intra-State transmission loss of 4.67%. The restated distribution loss works out to 10.27%, as compared to the level of 10.40% indicated by BEST, and as compared to the target of 11.0% stipulated by the Commission. Since distribution losses are a controllable factor, the efficiency gains on account of the lower distribution losses have been computed and shared between BEST and the consumers as explained subsequently in Section 3.15 of this Order.

3.3 POWER PURCHASE EXPENSES FOR FY 2007-08

The Commission, in its APR Order dated June 6, 2008 in Case No. 73 of 2007 approved the total quantum of power purchase of 5005 MU from 'The Tata Power Company-Generation Business (TPC-G)', Renewable Energy (RE) sources and other sources including short-term power purchase from external sources and imbalance pool for FY 2007-08. However, the actual quantum of power purchase by BEST from various sources during FY 2007-08, as submitted in BEST's APR Petition, is 4606 MU.

The Commission, in its above-said APR Order dated June 6, 2008 had allowed total power purchase expenses of Rs. 2024.70 crore for FY 2007-08, excluding transmission charges, Maharashtra State Load Despatch Centre (MSLDC) charges and Standby Charges, while the actual power purchase expense for FY 2007-08 as submitted by BEST in its APR Petition is Rs. 2008.85 crore, excluding transmission charges, MSLDC charges and Standby Charges.

3.3.1 <u>Power Purchase from TPC-G</u>

The Commission validated the actual expense on power purchase from TPC-G by the three Distribution Licensees in Mumbai, i.e., The Tata Power Company-Distribution Business (TPC-D), BEST and Reliance Infrastructure Limited-Distribution Business (RInfra-D), as submitted in their respective APR Petitions, with the details of revenue submitted by TPC-G in its APR Petition and observed that TPC-G has shown a different value as revenue from Distribution Licensees during FY 2007-08. In order to reconcile the power purchase quantum and expense amongst the Mumbai Distribution Licensees for FY 2007-08, the Commission's staff convened a common meeting between representatives of the three Distribution Licensees of Mumbai and Maharashtra State Load Despatch Centre, on April 6, 2009.

Subsequently, BEST submitted the reconciled statement for power purchase quantum and cost for FY 2007-08 from various sources including TPC-G, considering MSLDC's final energy balance statement for FY 2007-08 and submitted the revised power purchase details in the Format F2, which has been considered by the Commission.

The summary of power purchase by BEST from TPC-G is given in the following Table:

Source	BEST		Approved after truing up	
	Quantum (MU)	Total Cost (Rs Crore)	Quantum (MU)	Total Cost (Rs Crore)
TPC-G	4,086.28	1,510.87	4,086.28	1,510.87
TPC FAC of previous years	-	123.70	-	123.70

3.3.2 Power Purchase from other Sources

BEST submitted that the actual power purchased from external sources on short-term basis, imbalance pool and sale to Outside License Area was 516.00 MU (subsequently revised to 518.43 MU) against the approved quantum of 882 MU. BEST further submitted that the rate approved by the Commission for such short-term power purchase and imbalance pool was Rs. 5.50/kWh; whereas the actual average rate was approximately Rs. 7.80/kWh. BEST submitted that the rate of power purchase was high primarily on account of the higher Weighted Average System Marginal Price (WASMP). BEST further submitted that the balance cost, i.e., excluding purchase from imbalance pool, has been incurred on bilateral purchases, primarily on account of following reasons:

a. For FY 2007-08, BEST received only 4086 MU from TPC-G, which resulted in a shortfall of 57 MU from TPC-G and had to be met from external sources.
b. Non availability of RE sources.
c. The cost of expensive power was Rs 7.80/kWh as against the approved cost of Rs. 5.50.

During the public regulatory process on the APR Petitions filed by the Distribution Licensees, many objectors voiced their concerns over the increase in power purchase cost due to costly power purchase from external sources. Some objectors also suggested that such expenditure should be treated as controllable expenditure, and certain portion of the cost of purchase from other sources on short-term basis should be borne by the Distribution Licensee, rather than being entirely passed through to the consumers, in a manner similar to that adopted for other controllable expenses such as Operation & Maintenance (O&M) expenses, etc. The Commission is of the view that there is merit in the suggestions of the objectors, given that the Commission has given repeated directives to all the distribution licensees to enter into long-term contracts for their power purchase requirement, at reasonable rates, rather than relying on costly short-term sources. However, the Commission has to consider the power purchase expenses in accordance with the provisions of the MERC Tariff Regulations, which categorise the power purchase expenses under uncontrollable factors and any variation in the power purchase cost is to be allowed as pass through in the ARR. Therefore, at this stage, under the first Control Period under the MYT framework, the Commission has not considered any sharing of the increase in cost on account of purchase from other sources on short-term basis. However, the Commission has noted the point made by the objectors in this regard and would consider this suggestion of treating power purchase expenses as a controllable expense, and sharing of increase in power purchase expenses between the Distribution Licensee and the consumers under the second Control Period of the MYT framework, after making suitable modifications to the MERC Tariff Regulations.

Based on revised details submitted by BEST and TPC-G and after validating the figures with MSLDC's energy settlement for FY 2007-08, the Commission has considered the revised power purchase costs for purchase of energy from other sources during FY 2007-08 for truing up purposes. The summary of power purchase by BEST from other sources is given in the following Table:

Table: Summary of Power Purchase Expenses from Other sources

Source	BEST		Approved after truing up	
	Quantum (MU)	Total Cost (Rs Crore)	Quantum (MU)	Total Cost (Rs Crore)
Short Term	400.77	214.72	400.77	214.72
Pool Purchase/(Sales)	255.54	187.75	255.54	187.75
Sale to Outside License Area and Banking	(137.88)	(45.38)	(137.88)	(45.38)

3.3.3 Renewable Purchase Specification (RPS) Obligation

As regards the purchase from Renewable energy sources for FY 2007-08, BEST submitted that it purchased only 3.67 MU at a cost of Rs. 1.67 crore.

As regards purchase from RE sources, BEST submitted that during FY 2007-08, it invited Expression of Interests (EOI) on three occassions, to procure renewable power from various sources. On two occasions, BEST received only solitary offers and the third EOI resulted in a few offers. BEST submitted that one of the offers in the third

EOI was from a RE project developer who sought higher tariff to sell RE to BEST by terminating existing Energy Purchase Agreements (EPAs) with Maharashtra State Electricity Distribution Company Ltd. (MSEDCL). BEST submitted that the developer could only supply 3.67 MU @ Rs 4.56/kWh. BEST submitted that even this 3.67 MU was procured by scheduling the energy and therefore, it was in fact replacement for the costly generation of TPC-G itself.

BEST further submitted that due to the shortage of availability of RE sources, it had initiated steps to setup a wind farm of 51 MW at an estimated cost of Rs. 331 crore. However, due to various financial, administrative and land issues, the project could not be taken up. BEST submitted that it is pursuing, in partnership with a developer to set up a biomass generation facility, which is expected to start generation from the third quarter of FY 2008-09.

Considering energy input for FY 2007-08 as 4608.38 MU, 4% of the RPS target as stipulated in the Commission's Order dated August 16, 2006 in Case No. 6 of 2006 works out to 184.34 MU, as against actual purchase of 3.67 MU by BEST. Thus, BEST has not met the RPS target corresponding to FY 2007-08. For truing up purposes, the Commission for FY 2007-08 has considered actual purchase of 3.67 MU from renewable sources at a purchase cost of Rs. 1.67 crore, however, the Commission clarifies that it has considered this amount for truing up without detailed scrutiny of source and rate for such purchase from RE sources. As regards the enforcement on account of non-fulfilment of the RPS target, BEST has filed a separate Petition in Case No. 125 of 2008 before the Commission for waiver of the RPS target, which is under the scrutiny of the Commission. Based on the Commission's ruling on this issue in the separate case pending before the Commission for waiver of the RPS target, the Commission will consider the appropriate impact on account of the Order of the Commission on this issue. However, the Commission directs BEST to expedite its activities to procure power from possible RE sources to meet the targets as specified by the Commission for FY 2009-10 in this Order.

Further, BEST in its present APR Petition has considered expenditure to the extent of Rs 2.12 Crore as RPO charges paid to MEDA, as an element under A&G expenses for FY 2007-08. The Commission is of the view that such expenses being related to Power Purchase expense should not be treated as an element of A&G expense. Therefore, the same has been deducted from A&G expense and has been allowed as a part of Power Purchase expense for FY 2007-08.

3.3.4 Reduction in Costly Power Purchase through Demand Side Management (DSM)

The Commission, in its MYT Order, had ruled that 2% of the costly power purchase requirement will have to be reduced by implementation of DSM as an initial step. This translated to reduction in power purchase cost by Rs. 5.39 crore for BEST for FY 2007-08. However, BEST did not consider any reduction in costly power purchase on this account under its truing up requirement, hence, the Commission asked BEST to submit the justification for the same.

BEST submitted that major areas where DSM Programmes can be implemented are Energy Efficient Lighting, Air Conditioning, Refrigeration and Water Pumping. BEST submitted that in order to save the units as per the target set by the Commission it was necessary to implement a large DSM Programme. However, before taking a large programme it is essential to implement a pilot project and observe its results.

BEST submitted that it proposed to execute following pilot projects for DSM.

- **Energy Efficient Lighting Project**:

A tender was advertised in month of February 2008 for awarding contract to replace 40 Watt (T-12) FTL and conventional choke by 36 Watt (T-8) FTL and electronic ballast respectively. BEST submitted that the tender has been processed in FY 2008-09. BEST submitted that it expected that there would be saving of 0.192 MU at consumer end after execution of pilot project, which works out to 0.221 MU (0.192 x 1.15) at generation end after adding distribution loss (10%) and transmission loss (5%). The cost of saved units works out to Rs. 17.24 Lakh (0.221 MU x Rs. 7.8/kWh (costly power purchase rate)). BEST submitted that the project is in progress.

- **Energy Efficient Water Pumping Energy Audit**

BEST submitted that the approval of the Commission was received to undertake pilot demonstration project in the areas of efficient lighting and water pumping vide letter no. MERCIDSMI Demo-BEST/585 dated March 28, 2007. The Commission had accorded the approval for Energy Auditing in water pumping of 10 high rise buildings to be done by M/s MITCON Ltd. BEST submitted that the Energy Auditing was conducted and the report was submitted to the Commission in November 2007.

- **Additional activities:**

BEST submitted that the following DSM related activities were also done

  - **Arranging Awareness Programme:**

BEST submitted that a media campaign to educate the consumers regarding energy conservation was conducted jointly by the Utilities i.e., BEST, RInfra-D and TPC-D during FY 2007-08, apart from other activities undertaken by BEST such as Energy Conservation Week, etc.

Ø **Capacity building:**

BEST submitted that during the month of April 2007 it has conducted a programme for its officers with the help of National Productivity Council. Also, a guiding lecture on energy efficiency, with specific coverage on measurement and verification, of an expert and consultant in this field Shri Arun Kumar from New Delhi was arranged during the month of June 2007.

Ø **Load Survey:**

BEST submitted that in accordance with the directives of the Commission a load survey regarding load and consumption profile as well as electricity consuming appliance ownership and usage pattern among residential consumers was carried out by the consultant. BEST submitted the observations on report as "The consumption of air conditioners is very high at day peak load. Constant peak load is observed for refrigerators, bulbs and fans". BEST further submitted that a presentation on the report was given to the Commission.

BEST further submitted that it is a Distribution Licensee and has no control over the energy consumption by the consumers. However, sincere efforts were made to educate the consumers regarding energy conservation. These efforts might have resulted in intangible energy saving and quantifying the savings is difficult. In view of the best efforts made by undertaking with regard to DSM and to educate the consumers regarding energy conservation, which have resulted in intangible energy saving, BEST requested the Commission to not consider reduction of Rs. 5.39 crore in the ARR.

As BEST has not achieved the desired reduction in power purchase cost through DSM activities by taking concrete steps in this regard, the Commission has considered the reduction in power purchase cost by Rs. 5.39 crore for FY 2007-08 as approved in the APR Order for FY 2007-08, while undertaking the final truing up for FY 2007-08.

3.3.5 MSLDC and Transmission Charges

As regards transmission charges and MSLDC charges during FY 2007-08, BEST submitted that it has considered an amount of Rs. 97.61 crore and Rs. 0.80 crore, respectively, for FY 2007-08, in accordance with the approved figures, which has been considered by the Commission under the truing up exercise.

3.3.6 Standby Charges

As regards Standby Charges being paid to the Maharashtra State Electricity Distribution Company limited (MSEDCL), BEST submitted that it has considered an amount of Rs. 114.63 crore as approved by the Commission in its APR Order dated June 6, 2008 in Case No. 73 of 2007, which has been considered by the Commission under the truing up exercise.

3.3.7 Summary of Power Purchase Costs

The summary of power purchase quantum and costs, including Standby Charges and transmission tariff for FY 2007-08 as approved by the Commission after final truing up, is given in the following Table:

Table: Summary of Approved Power Purchase Quantum and Costs for FY 2007-08

S.No	Source	APR Order		BEST APR Petition		BEST submission after reconciliation		Approved after truing up	
		Quantum (MU)	Cost (Rs Crore)	Quantum (MU)	Cost (Rs Crore)	Quantum (MU)	Cost (Rs Crore)	Quantum (MU)	Cost (Rs Crore)
1	TPC-G: Existing	4143.04	1399.10	4086.28	1481.00	4086.28	1510.87	4086.28	1510.87
2	Short Term/External sources	822.35	452.29	516.00	402.48	400.77	214.72	400.77	214.72
3	RPS	40.00	20.00	3.67	1.67	3.67	1.67	3.67	1.67
4	Outside Licence Area Sale								
5	Standby Charges	0.00	114.63		114.63		114.63		114.63
6	Transmission Charges	0.00	97.61		97.61		97.61		97.61
7	SLDC Charges	0.00	0.80		0.80		0.80		0.80
8	Reduction of DSM		(5.39)						(5.39)
9	TPC FAC of previous years		123.70		123.70		123.70		123.70
10	Under-recovery of FAC for previous years		8.00						
11	True-up due to Corrigendum order		27.00						
12	Pool Imbalance					255.54	187.75	255.54	187.75
13	OLA					(137.88)	(45.38)	(137.88)	(45.38)
14	RPO charges to MEDA								2.12
	Total	**5005.38**	**2237.73**	**4605.95**	**2221.89**	**4608.38**	**2206.37**	**4608.38**	**2203.10**

3.4 O&M EXPENSES

Operation and Maintenance (O&M) expenditure comprises employee related expenditure, Administrative and General (A&G) expenditure, and Repair and Maintenance (R&M) expenditure. BEST's submissions on each of these expenditure heads, and the Commission's ruling on the truing up of the O&M expenditure heads are detailed below.

3.4.1 Employee Expenses

BEST submitted that the actual employee expenditure in FY 2007-08 was Rs. 150.35 Crore as compared to the employee expenses of Rs. 128.15 Crore approved by the Commission in the APR Order dated June 6, 2008. BEST submitted the primary reasons for the higher employee expenditure as under:

§ Decision of the Management to make the payment to ex-employees for the last wage agreement period, i.e., from FY 2001-02 to FY 2005-06.

§ Regularisation of 547 employees comprising of unskilled labourers and allied staff during FY 2007-08.

§ PRC impact for FY 2007-08 as approved by the Commission in the Order on ARR for FY 2006-07.

§ Special Benefit of Rs. 500/month as per the approved wage agreement.

§ Increase in expenses on HRA, LTA, Bonus and VRS, etc.

Regarding PRC impact on employee expense for FY 2007-08, BEST added that the Commission in the Order on ARR for FY 2006-07 had approved PRC impact of Rs. 79.30 crore, which was claimable by BEST based on the actual payment in the respective financial year, as given below:

Table: PRC expenses of Supply division (Rs. Crore)

Particulars	**Electric Supply**
Interim Relief paid till FY 2004 to FY 2006	61.32
Paid in 2007-08 to Ex-employees	5.05
Balance to be paid in future	12.93
Total	79.30

As regards the balance amount of Rs. 12.93 Crore to be paid in future, BEST submitted that the same will be claimed as and when it is paid to the employees. The Commission has considered the increase in employee expense due to impact of PRC for truing up purpose.

The summary of the employee expenses approved by the Commission under the truing up exercise has been shown in the following Table:

Table: Employee Expenses ***(Rs Crore)***

Particulars	APR Order	Actuals	Allowed after truing up
Net Employee Expenses	**128.15**	**150.35**	**133.20**

The difference between the approved employee expenses and the employee expenses allowed after truing up for FY 2007-08 has been considered as a controllable loss and has been shared between BEST and the consumers in accordance with Regulation 19 of the MERC Tariff Regulations, as explained later in this Section.

3.4.2 A&G Expenses

BEST submitted that the actual A&G expenditure in FY 2007-08 was Rs. 76.26 Crore as compared to the approved expenses of Rs. 81.91 Crore. BEST also submitted the details of A&G expenses under the sub-head 'Others'.

While analysing the individual components of A&G expenses as submitted by BEST, the Commission observed that an amount of Rs 5.76 Crore had been considered by BEST towards Contribution to Reserve Fund as a part of the A&G expense for FY 2007-08. However, Contribution to Contingency Reserve is being allowed separately in accordance with the MERC Tariff Regulations. The Commission has therefore, deducted the same from A&G expenses under truing up of A&G expense for FY 2007-08, and considered contribution to contingency reserves at the rate of 5% of opening GFA.

Further, as regards RPO Charges of Rs. 2.12 Crore paid to MEDA, such expense being related to power purchase should be added to the power purchase expenses and should not be treated as an element of A&G expense. Therefore, the same has been deducted from A&G expenses and has been included in the Power Purchase expenses for FY 2007-08 as detailed in the earlier section of this Order.

The summary of A&G expenses approved in the Order, actual A&G expenses and A&G expenses approved after truing up for FY 2007-08 has been shown in the following Table:

Table: A&G Expenses ***(Rs Crore)***

Particular	APR Order	Actuals	Allowed after truing up
A&G Expenses	81.91	76.26	68.38

The Commission has considered the difference between the allowed A&G expenses and approved A&G expenses under the sharing of gains and losses due to controllable factors (without considering the expenses shifted to other heads, such as contribution to contingency reserves, since these cannot be considered under the mechanism of sharing of controllable gains/losses), since A&G is a controllable expense.

3.4.3 R&M Expenses

BEST submitted that the actual R&M expenditure in FY 2007-08 was Rs. 30.94 Crore as compared to the approved expenses of Rs. 25.93 Crore. BEST submitted that as per Commission's APR Order dated June 6, 2008, certain items of other expenses have been included under the R&M Expenses and accordingly the items are regrouped. BEST added that the major increase in the expenditure is observed under "Main Aerials" only.

The Commission has considered the R&M expenses in the APR Order for FY 2007-08, for truing up for FY 2007-08. However, the difference between the actual R&M expenses and the R&M expenses allowed after truing up for FY 2007-08 has been considered as a controllable loss and has been shared between BEST and the consumers in accordance with Regulation 19 of the MERC Tariff Regulations, as explained later in this Section. The summary of R&M expenses approved in the Order, actual R&M expenses and R&M expenses approved after truing up for FY 2007-08 has been shown in the following Table:

Table: R&M Expenses (Rs Crore)

Particular	APR Order	Actuals	Allowed after truing up
R&M Expenses	25.93	30.94	25.93

3.5 Capital Expenditure and Capitalisation

The Commission has examined the actual capitalisation claimed by BEST in detail as against the various capex schemes approved by the Commission. As against capital expenditure of Rs. 323.47 Crore and corresponding capitalisation of Rs. 89.88 Crore considered under the Commission's APR Order dated June 6, 2008, actual capitalisation claimed by BEST during FY 2007-08 amounted to Rs. 154.60 Crore. The Commission observes that out of total capitalisation of Rs 154.60 Crore, the DPR schemes comprised new receiving substations (Rs 43.13 Crore), new distribution substations (Rs 45.09 Crore), extension of distribution network (Rs 37.09 Crore), augmentation and revamping of existing substations (Rs 11.24 Crore), energy meters (Rs 4.59 Crore), furniture, office equipment, tools, civil works, etc. (Rs 10.18 Crore), and street lights (Rs 0.5 Crore), whereas capitalisation of non-DPR related schemes has been proposed as Rs 2.43 Crore. Out of above, no DPR has been furnished in respect of schemes for furniture, office equipment, tools, civil works (Rs 10.18 Crore) and Street lights (Rs 0.5 Crore).

The Commission has instituted a process of giving in-principle approval for the capital expenditure schemes costing above Rs. 10 Crore (together known as DPR Schemes), wherein the Utility has to submit Detailed Project Report (DPR) as well as the expected cost-benefit analysis, payback period, etc., as per well laid out guidelines. Schemes costing less than Rs. 10 Crore are considered as non-DPR schemes and the Utilities are not required to submit any DPR for the approval of the same. It is often observed that at the time of obtaining in-principle approval of the Commission for the DPR schemes, the Utilities indicate several quantifiable benefits and a short payback period. However, the Utilities are not able to substantiate the benefits once the capital investment is actually undertaken and the assets are added to the Gross Fixed Assets (GFA). As a result, the costs and hence, the tariffs are increased, but the expected benefits to the system do not accrue.

In this regard, the in-principle approval given by the Commission to the DPR Schemes has certain standard covenants. One such in-principle approval given to a scheme submitted by MSETCL is reproduced below, for reference:

> *"…2. Please note that this in-principle clearance should not be construed as final approval for ARR purpose and the scheme will be open for scrutiny during the tariff determination process/ARR review, particularly in the context of actual cost incurred, scope and objective achieved etc. ex post after*

implementation of the scheme. MSETCL will be required to submit the status of implementation of the scheme with cost incurred till date, likely completion date etc. along with their ARR petition or during the tariff determination process at the appropriate time.

3. MSETCL should submit half yearly report giving the status of implementation of the scheme in terms of expenditure incurred and item wise physical progress achieved during the implementation of the scheme.

4. Assets created after execution of the scheme should be maintained separately in the Asset register.

5. Immediately after completion / commissioning of the respective scheme, MSETCL should communicate to the Commission the date of completion of the scheme, actual cost incurred, escalation in cost, if any with reasons, the scope and objectives of the scheme and to what extent they have been achieved, etc. so as to facilitate a comparison between the in-principle clearance and the actual."(emphasis added)

However, the Utilities have not been able to submit any evidence that the scope and objective of the scheme have been achieved. Further, in this context, the recent Report by Forum of Regulators on Multi-Year Framework has also emphasised that the capital expenditure plans of Utilities should clearly bring out cost benefit analysis and targeted reduction in technical losses.

Accordingly, for truing up for FY 2007-08, the Commission has provisionally considered the capitalisation of Rs. 89.88 Crore, as approved by the Commission for FY 2007-08 in its previous APR Order. Further, the Commission has also considered the earlier approved IDC of Rs 1.55 Crore for FY 2006-07 as part of capitalised amount for FY 2007-08, as claimed by BEST.

Table: Approved Capitalisation ***(Rs Crore)***

Particulars	FY 2007-08		
	APR Order	Actuals	Approved after truing up
TOTAL			
Capitalisation	89.88	154.60	89.88

Add approved IDC for FY 2006-07		1.55	1.55
Total Capitalisation	89.88	156.15	91.43

As regards whether projected benefits have actually accrued for the benefit of the consumers, the Commission directs BEST to submit the detailed report with established benefits vis-à-vis the benefits projected, within one month from the issuance of this Order. The Commission, at the time of annual performance review, shall consider revision of approved capitalisation for FY 2007-08, if necessary, upon scrutiny of BEST's submission in this respect.

3.6 Depreciation

The Commission, in its earlier Order dated June 6, 2008, had permitted depreciation to the extent of Rs 41.65 Crore for FY 2007-08, which amounts to 3.60% of Opening level of Gross Fixed Assets (GFA) of BEST for FY 2007-08, which was stated at Rs 1157 Crore. The depreciation rates were considered as prescribed under MERC (Terms and Conditions of Tariff) Regulations, 2005. BEST, in its APR Petition, submitted that the actual depreciation expenditure incurred in FY 2007-08 was Rs 40.39 Crore.

The Commission has examined the depreciation and actual capitalisation claimed by BEST in detail as against the various capex schemes approved by the Commission. The Commission observed that the actual opening level of GFA for FY 2007-08 amounts to Rs 1157 Crore in line with that considered by the Commission in its Tariff Order. The Commission has considered depreciation only on Opening GFA and not on the assets added during the year in line with its earlier Orders.

Accordingly, for the purposes of truing-up exercise for FY 2007-08, the Commission has considered opening GFA for BEST's distribution business at Rs 1157 Crore and depreciation of Rs 40.39 Crore. The depreciation expenditure approved by the Commission for FY 2007-08 has been summarised in the following Table:

Table: Depreciation ***(Rs Crore)***

Particulars	APR Order	Actuals	Allowed after truing up
Depreciation	41.65	40.39	40.39
Opening GFA	1157	1157	1157

3.7 Interest Expenses

The Commission, in its earlier Order dated June 6, 2008, had approved interest expenditure of Rs 4.79 Crore, based on estimate of average outstanding loan balance during FY 2007-08 and actual interest paid until September 2007. The Commission has considered the interest expenditure on the actual loans (public loans, MMRDA loans for MegaCity project, DPDC loans and APDRP loan) as claimed by BEST in accordance with Regulations 76.3.1 and 76.3.2 of the MERC Tariff Regulations.

BEST submitted that the interest on debt for FY 2007-08 is around Rs 7.97 Crore as against Rs 4.79 Crore approved by the Commission. The BEST's claim for Rs 7.97 Crore as interest expense for FY 2007-08 included interest on existing loan of Rs 4.78 Crore and interest expense of Rs 3.19 Crore towards new short term loan borrowings of Rs 150 Crore during the year FY 2007-08. The Commission notes that variation in interest expenditure claimed by BEST as compared to that considered in the Tariff Order is mainly on account of the additional short term bank loans of Rs 150 Crore considered by BEST. As a part of the replies to queries raised by the Commission, BEST submitted that for raising any long term loan, it has to follow the provisions of MMC Act, 1888 and procedure laid down in the said Act, i.e., approval of BEST Committee and Corporation and thereafter State Government approval, which is a very time consuming owing to which BEST plans to roll over short-term finance till the time long term finance is available. Thus, BEST has considered short term loans for FY 2007-08 to the extent of Rs. 100 Crore and Rs. 50 Crore from Canara Bank and Vijaya Bank, respectively.

The Commission notes that interest on loan capital will have to be provided corresponding to the assets put to use (capitalised) and not on the capital expenditure. The Commission observes that interest on capital expenditure will have to be treated as interest during construction (IDC) and the same should be capitalised in accordance with Regulation 72.2, 72.4, and 72.7 of MERC Tariff Regulations for the purpose of allowable capital cost of the project scheme; whereas, the interest expenditure towards such capitalised schemes after the date of capitalisation will have to be treated as interest expenditure chargeable to revenue account in accordance with Regulation 76.3 of MERC Tariff Regulations.

In this context, the Commission observes that the capitalisation during FY 2007-08 as claimed by BEST amounts to Rs 156.15 Crore (a higher amount as compared to Rs 150 Crore of additional loan considered by BEST) and as per BEST's submissions under Form-8; the same is funded by way of contributions from consumers (Rs 8.78 Crore), grant from Government (Rs 0.12 Crore), additional equity capital on normative basis at 30% (Rs 44.18 Crore) and normative debt component at 70% (Rs 103.08 Cr). In case additional loan of Rs 150 Crore as claimed by BEST is admitted along with above sources of funding, total capitalisation will amounts to Rs 203.08 Crore, which is much higher than capitalisation of Rs 156.15 Crore as proposed by BEST and capitalisation Rs 91.43 Crore as admitted by the Commission as per earlier paragraphs.

Accordingly, for the purposes of truing-up exercise for FY 2007-08, the Commission has considered the capitalisation during FY 2007-08 of Rs 91.43 Cr (including IDC of Rs 1.55 Crore); and considered the funding as contributions from consumer (Rs 8.78 Crore), grant from Government (Rs 0.12 Crore), and actual loan of 82.53 Crore. The interest expenditure on actual loan amount admitted has been considered at the rate of 11.5% p.a. for loan from Canara Bank and at the rate of 10% p.a. for loan from Vijaya Bank as proposed by BEST, which amounts to Rs 4.54 Crore. The Commission observes that although BEST has submitted interest rates of 11.5% and 10% for loans from Canara Bank/Vijaya Bank respectively, the weighted average rate of interest considering interest amount of Rs 3.19 Crore on loan of Rs 150 Crore, as claimed by BEST works out to much lower rate of interest.

The Commission has considered the interest expenditure on the existing loans (public loans, MMRDA loans for MegaCity project, DPDC loans, APDRP loan at Rs 4.78 Crore as claimed by BEST in accordance with MERC Tariff Regulations 76.3.1 and 76.3.2.

Table: Interest Expenses (Rs Crore)

Particulars	APR Order	Actuals	Allowed after truing up
Opening balance of loan	50.50	50.50	50.50
Additions	0.00	150.00	82.53
Repayment	(7.81)	(5.00)	(5.00)
Closing balance of loan	42.69	195.50	128.03

Particulars	APR Order	Actuals	Allowed after truing up
Interest expenditure	**4.79**	**7.97**	**9.31**

3.8 Interest on Internal Funds

The Commission, in its earlier Order dated June 6, 2008, had approved interest expenditure on internal funds at Rs 8.37 Crore, at 6% p.a. based on estimation of internal funds during FY 2007-08, in accordance with the ATE Judgment dated August 18, 2006 in Appeal No. 61 of 2006 and Commission's Order dated November 8, 2006 in Case No. 32 of 2006 in respect of Review Petition filed by BEST.

In its APR Petition, BEST submitted that the ATE Judgment dated August 27, 2007, has provided Interest on Internal funds on additional funds deployed by BEST in the distribution network, comprising the following components:

- Normative debt component of the allowable capital cost
- Grants received by BEST for capital expansion

Based on the above, BEST's submission in respect of Interest on Internal funds at the rate of 6% for FY 2007-08 is as given below:

Table: BEST's Estimation of Interest on Internal funds (Rs. Crore)

Particulars	APR Approval	FY 2007-08 (audited)
Capital expenditure during the year	89.88	156.15
Less: Consumer Contribution received during the year	7.00	8.78
Less: Govt. Grant Received during the year	0.12	0.12
Allowable Capital cost	82.76	147.25
Cumulative Grants at the end of the year	**81.63**	**81.63**
Interest on Internal funds (at 6%)		
Normative debt component	*3.48*	*6.18*
On Government assistance at the start of the year	*4.89*	*4.89*
Returns as Interest on Internal funds	*8.37*	*11.07*

The Appellate Tribunal for Electricity (ATE), in its Judgment dated August 27, 2007 in Appeal 13 of 2007 had directed the Commission to take into consideration interest on government grants as well as interest on internal funds, which did not go into calculation of the capital base or notional equity in any way. The relevant extract of the ATE Judgment is as under:

> *"28. In the result, on a consideration of the entire matter, we find full justification and rationale in the contention of the appellant and, therefore, we allow the appeal and hold that the return on equity already allowed by the Commission in its order dated March 9, 2006 be retained. In addition, interest @ 6% on the Government grants and such of the internal funds which did not go into calculation of the capital base or notional equity in any way, should be allowed. The Commission is directed to work out the aforesaid interest and return on equity elements and allow the same in the ARR for the year 2008-09."*

As regards claim for interest on internal funds during FY 2007-08, the Commission has modified the same to the extent of capitalised cost considered as Rs 91.43 Crore instead of capitalisation of Rs 156.15 Crore as claimed by BEST as elaborated under earlier paragraphs. To that extent, allowable capital cost is revised to Rs 82.53 Crore (BEST's claim of Rs 147.25 Crore). Further, as highlighted under earlier paragraphs, the Commission has considered interest on actual loan of Rs 82.53 Crore corresponding to allowable capital cost of Rs 82.53 Crore, hence, there is no need to consider normative debt as funding source and interest thereof. The interest on internal funds as approved by Commission for FY 2007-08 is summarised in the following Table:

Table: Approved Interest on Internal funds for FY 2007-08 (Rs. Crore)

Particulars	APR Approval	FY 2007-08 (audited)	Allowed after truing up
Capitalised Cost during the year	89.88	156.15	91.43
Less: Consumer Contribution received during the year	7.00	8.78	8.78

Particulars	APR Approval	FY 2007-08 (audited)	Allowed after truing up
Less: Govt. Grant Received during the year	0.12	0.12	0.12
Allowable Capital cost	82.76	147.25	82.53
Cumulative Grants at the end of the year	81.63	81.63	81.63
Interest on Internal funds (at 6%)			
Normative debt component	*3.48*	*6.18*	*0.00*
On Government assistance at the start of the year	*4.89*	*4.89*	*4.90*
Returns as Interest on Internal funds	***8.37***	***11.07***	***4.90***

3.9 Return on Equity (RoE)

The Commission, in its Order on APR for FY 2007-08 and Tariff determination for FY 2008-09 dated June 6, 2008, approved Rs.101.15 Crore as RoE, whereas the actual RoE for FY 2007-08 as claimed by BEST amounts to 102.91 Crore. The Computation of return on equity as submitted by BEST for FY 2007-08 is given below:

Table: RoE estimated by BEST for FY 2007-08 (Rs. Crore)

Particulars	Formula	APR Order	Actual/ Audited
Opening Equity	A	**619.76**	**619.76**
Annual allowable capital cost for the year	B	89.88	156.15
Less: Contribution made by consumers	C	(7.00)	(____)*
Less: Government Assistance	D	(0.12)	(____)*
Net allowable capital cost	E=B-C-D	82.76	156.15
Normative equity (30%)	F = E*30%	24.83	46.85
Closing Equity	G = A+F	**644.59**	**666.61**
Computation of RoE			

Particulars	Formula	APR Order	Actual/ Audited
Return @ 16% on equity capital at commencement of year	H=A*16%	99.16	99.16
Return @ 16% on 50% of equity portion of annual allowable cost for the year	I=F*16%* 50%	1.99	3.75
RoE for the year	G=E+F	**101.15**	**102.91**

**(Note: Actual amount against Contribution made by consumers and Government Assistance as submitted by BEST are Rs 8.78 Crore and Rs 0.12 Crore respectively. However, BEST has not considered the same in ROE Computation)*

As highlighted under earlier paragraphs, entire capitalisation of Rs 91.43 Cr during FY 2007-08 is assumed to be funded by way of consumer contribution (Rs 8.78 Crore), grant (Rs 0.12 Crore) and actual loan amount (Rs 82.53 Crore). Thus, there is no case for assuming normative equity addition as funding source towards approved capitalisation for FY 2007-08. Accordingly, for the purpose of Return on Equity computations during FY 2007-08, the Commission has not considered any equity contribution for funding capitalisation during the year. Further, the Commission has modified the capitalised cost considered as Rs 91.43 Crore instead of capitalisation of Rs 156.15 Crore as claimed by BEST. To that extent, allowable capital cost is revised to Rs 82.53 Crore (against BEST's claim of Rs 156.15 Crore) and equity portion of allowable capitalised cost is considered to be nil for reasons explained above as against BEST's claim of Rs 46.85 Crore. The Return on Equity as approved by Commission for FY 2007-08 is summarised in the following Table:

(Rs Crore)

Particulars	Formula	APR Order	Actual/ Audited	Allowed after truing up
Opening Equity	A	**619.76**	**619.76**	**619.76**
Annual allowable capital cost for the year	B	89.88	156.15	91.43
Less: Contribution made by consumers	C	(7.00)	(____)*	(8.78)
Less: Government Assistance	D	(0.12)	(____)*	(0.12)
Net allowable capital cost	E=B-C-D	82.76	156.15	82.53
Normative equity (30%)	F =	24.83	46.85	0

Particulars	Formula	APR Order	Actual/ Audited	Allowed after truing up
	E*30%			
Closing Equity	G = A+F	**644.59**	**666.61**	**619.76**
Computation of RoE				
Return @ 16% on equity capital at commencement of year	H=A*16%	99.16	99.16	99.16
Return @ 16% on 50% of equity portion of annual allowable cost for the year	I=F*16%* 50%	1.99	3.75	0
RoE for the year	G=H+I	**101.15**	**102.91**	**99.16**

(Note: Actual amount against Contribution made by consumers and Government Assistance as submitted by BEST are Rs 8.78 Crore and Rs 0.12 Crore respectively. However, BEST has not considered the same in ROE Computation)

Thus, total interest on internal funds and return on equity approved by the Commission vis-à-vis that claimed by BEST for FY 2007-08 is summarised in the following Table:

(Rs Crore)

Particulars	FY 2007-08		
	Tariff Order	Revised Estimate by BEST	Allowed after true-up
Returns as Interest on Internal funds	8.37	11.08	4.90
Return as Return on equity	101.15	102.91	99.16
Total	**109.52**	**113.99**	**104.06**

3.10 INTEREST ON WORKING CAPITAL AND CONSUMERS' SECURITY DEPOSIT

BEST, in its APR Petition, has considered both, actual interest on working capital of Rs 19.52 Crore, including normative interest on working capital of Rs 1.26 Crore, against normative interest on working capital of Rs 4.64 Core approved by the Commission in the APR Order dated June 6, 2008. Further, BEST submitted that actual interest on consumers' security deposit for FY 2007-08 was Rs. 12.84 against the interest on consumer deposit of Rs. 12.46 Crore approved by the Commission.

As regards Interest on Working Capital, BEST submitted that consistent revenue gap of last 3 years, sharp rise in power purchase cost and un-recovered FAC has led to severe scarcity of working capital for BEST. In addition to its overdraft (OD) facilities (with Canara Bank) and its opening working capital loan of Rs 92 Crore, BEST submitted that it has raised various shot term loans/financial arrangement in FY 2007-08 and FY 2008-09 to maintain proper liquidity caused due to blockage of funds in power purchase.

The Commission has estimated the normative working capital interest for FY 2007-08 in accordance with the MERC Tariff Regulations and based on expenses approved in this Order after truing up. However, the Commission has not directly allowed the actual interest on working capital incurred by BEST, but has computed the sharing of losses on the difference between normative working capital interest and the actual working capital interest incurred, since this is a controllable parameter, as clearly stipulated in the MERC Tariff Regulations as reproduced below:

> *"17.6.2 Some illustrative variations or expected variations in the performance of the applicant which may be attributed by the Commission to controllable factors include, but are not limited to, the following:*
>
> …
>
> *(d) Variations in working capital requirements;…"*

By virtue of the above provision in the MERC Tariff Regulations, it follows that if the actual working capital requirement is higher/lower than the normative level of working capital, then the difference between the actual working capital requirement and the normative working capital requirement will have to be treated as a loss/gain as the case may be. Thus, in case the actual working capital requirement and hence, actual working capital interest incurred is zero, then the entire normative working capital interest is considered as a controllable efficiency gain and shared between the licensee and the consumers. Similarly, in the case of BEST, the actual interest on working capital is significantly higher than the normative interest on working capital, and hence, the difference between actual and normative working capital interest has been considered as a controllable efficiency loss, and hence, shared between BEST and the consumers. The details of the sharing have been elaborated later in this Section.

Further, the MERC Tariff Regulations stipulates that rate of interest on working capital shall be considered on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on the date on which the application for determination of tariff is made. As the short-term Prime Lending Rate of State Bank of India at the time when BEST filed the Petition for tariff determination for FY 2007-08 was 11.50%, the Commission has considered the interest rate of 11.50% for estimating the normative interest on working capital, which works out to Rs 1.12 Crore.

The summary of Interest on Working Capital and Interest on consumer security deposit approved in the APR Order, actuals and approved after truing up for FY 2007-08 has been shown in the following Table:

Table: Interest on Working Capital and Interest on Consumer Deposit

(Rs Crore)

Particular	APR Order	Actuals	Allowed after truing up
Interest on Working capital	**4.64**	**19.52**	**1.12**
Normative	4.64	1.26	1.12
Actual	-	18.26	-
Interest on Consumers' Security Deposit	**12.46**	**12.84**	**12.59**

3.11 PROVISIONING FOR BAD DEBTS

BEST submitted that against the provisioning of bad debts of Rs. 0.06 crore approved in the APR Order for FY 2007-08, BEST has written off Rs. 0.04 Crore as bad debts in FY 2007-08, which has been considered by the Commission under the truing up exercise for FY 2007-08.

3.12 INCOME TAX

BEST, in its Petition, submitted that under Section 10(20) of the Income Tax Act, the income of local authority is exempted. Hence, no income tax is payable.

The Commission has hence, not considered any income tax under the truing up exercise.

3.13 CONTRIBUTION TO CONTINGENCY RESERVE

BEST, in its APR Petition, included an amount of Rs 5.76 Crore towards Contribution to Contingency Reserve for FY 2007-08 under A&G expenses. The Commission has deducted this amount from the A&G Expenses as explained in an earlier sub-section, and treated this as a separate component of ARR. The Commission has allowed provisioning towards contingency reserve for FY 2007-08 at Rs 5.79 Crore (i.e. 0.5% of Opening GFA), under the truing up exercise, in accordance with MERC Tariff Regulations.

3.14 NON TARIFF INCOME

BEST submitted that the non-tariff income in FY 2007-08 was higher at Rs. 51.66 Crore, as against Rs. 46.18 Crore considered by the Commission in the APR Order. BEST submitted that this additional income is mainly because of increase in income from advertisement (Rs 3.74 Crore out of the total increase of Rs 5.48 Crore). The analysis of the components of non-tariff income considered by BEST indicates that the interest on contingency reserve investments have been considered as nil by BEST. The Commission has considered the interest on contingency reserve investments at the rate of around 7% on the average balance of contingency reserves during the year, and included the same under the non-tariff income. The non-tariff income considered by the Commission under the truing up exercise is shown in the Table below:

Table: Non-tariff income for FY 2007-08 ***(Rs Crore)***

Particulars	APR Order	Actuals	Allowed after truing up
Non-tariff Income	46.18	51.66	55.53

3.15 SHARING OF GAINS AND LOSSES IN FY 2007-08

The relevant provisions under the MERC Tariff Regulations stipulating sharing of gains/losses due to controllable factors are reproduced below:

> *"17.6.2 Some illustrative variations or expected variations in the performance of the applicant which may be attributed by the Commission to controllable factors include, but are not limited to, the following:*

(a) Variations in capital expenditure on account of time and/ or cost overruns/efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;
(b) Variations in technical and commercial losses, including bad debts;
(c) Variations in the number or mix of consumers or quantities of electricity supplied to consumers as specified in the first and second proviso to clause (b) of Regulation 17.6.1;
(d) Variations in working capital requirements;
(e) Failure to meet the standards specified in the Standards of Performance Regulations, except where exempted in accordance with those Regulations;
(f) Variations in labour productivity;
(g) Variations in any variable other than those stipulated by the Commission under Regulation 15.6 above, except where reviewed by the Commission under the second proviso to this Regulation 17.6.
…
19.1 The approved aggregate gain to the Generating Company or Licensee on account of controllable factors shall be dealt with in the following manner:
(a) One-third of the amount of such gain shall be passed on as a rebate in tariffs over such period as may be specified in the Order of the Commission under Regulation 17.10;
(b) In case of a Licensee, one-third of the amount of such gain shall be retained in a special reserve for the purpose of absorbing the impact of any future losses on account of controllable factors under clause (b) of Regulation 19.2; and
(c) The balance amount of gain may be utilized at the discretion of the Generating Company or Licensee.

19.2 The approved aggregate loss to the Generating Company or Licensee on account of controllable factors shall be dealt with in the following manner:
(a) One-third of the amount of such loss may be passed on as an additional charge in tariffs over such period as may be specified in the Order of the Commission under Regulation 17.10; and
(b) The balance amount of loss shall be absorbed by the Generating Company or Licensee."

BEST, in its original APR Petition, did not consider any impact on account of the sharing of gains and losses due to controllable factors. In response to the Commission's query, BEST submitted the computation of sharing of gains and losses due to controllable factors by considering all expenses except power purchase related expenses, as controllable, and worked out the total efficiency losses as Rs. 46.89 crore (48.17 – 1.28), and proposed to share the losses in accordance with Regulation 19 of the MERC Tariff Regulations. Thus, BEST proposed to absorb Rs. 32.11 crore of the efficiency losses, and pass on the remaining amount of Rs. 16.06 crore to the consumers. Similarly, BEST proposed to pass on Rs. 0.43 crore of efficiency gain to the consumers, Rs. 0.43 crore to the special reserve, and retain Rs. 0.43 crore of the efficiency gain. BEST did not propose to the share the efficiency gains on account of achievement of lower distribution losses as compared to normative distribution losses.

The Commission has considered the various expenses for computing the sharing of gains/losses in accordance with the MERC Tariff Regulations, as elaborated below:

O&M Expenditure

The actual O&M expense for FY 2007-08 as approved by the Commission after final true-up is Rs 227.51 Crore as against earlier approved expense of Rs 235.99 Crore and the actual expenditure of Rs. 257.55 crore as submitted by BEST. The efficiency gain/loss has been computed for each of the heads of O&M expenses, and shared according to the MERC Tariff Regulations.

In accordance with the philosophy adopted by the Commission in this regard, the difference between the allowed and actual employee and R&M expenses have been shared in accordance with the MERC Tariff Regulations. The total efficiency loss works out to Rs. 17.15 crore and Rs. 5.01 crore in case of employee expenses and R&M expenses, respectively. In case of A&G expenses, since the Commission has considered the contribution to contingency reserves separately, though it was included under the A&G expenses in the APR Order, the difference has been computed after accounting for the separation of this head of the ARR. The total efficiency gain on account of A&G expenses works out to Rs. 2.09 crore.

The net efficiency loss to be shared with consumers on account of O&M expenses works out to Rs. 6.69 crore.

Interest on Working Capital

In case of BEST, the interest on actual working capital is higher than the interest on normative working capital. Hence, the Commission has considered the difference between normative interest on working capital and actual interest on working capital as an efficiency loss and has considered sharing of 1/3rd of the same with the consumers, 1/3rd has been passed on to the special reserve, and 1/3rd has been considered as absorbed by BEST, in accordance with the MERC (Terms and Conditions of Tariff) Regulations, 2005. Thus, the efficiency loss passed on to the consumers on this account works out to Rs. 6.09 crore.

Efficiency Gain due to Reduction in Distribution Losses

BEST has achieved actual distribution loss of 10.27% as against the normative loss level of 11% for FY 2007-08. The Commission has computed the efficiency gain on this account as under:

Particulars	Units	Commission
Actual Sales	MU	3939.64
Actual Distribution Loss	%	10.27%
Normative Distribution Loss	%	11.00%
Energy Input at InSTS	MU	4389.95
Normative Sales with 11% Distribution Loss	MU	3907.05
Increase/(Reduction) in sales	MU	32.59
Average Billing Rate	Rs/kWh	5.91
Revenue Gain/(Loss)	Rs. Crore	19.26
BEST's Share of Gain/(Loss)	Rs. Crore	6.42
Gain/(Loss) to be transferred to Special Reserve	Rs. Crore	6.42
Gain/(Loss) to be passed on to consumers	Rs. Crore	6.42

Total Amount of Efficiency Losses

Accordingly, the total addition to the ARR for FY 2007-08 due to sharing of efficiency gains and losses works out to Rs. 6.36 crore.

3.16 AGGREGATE REVENUE REQUIREMENT AND REVENUE GAP FOR FY 2007-08 AFTER TRUING UP

The net revenue entitlement for BEST for FY 2007-08 works out to Rs. 2554.73 Crore, as compared to the revenue requirement of Rs. 2600.67 Crore allowed to BEST in the APR Order dated June 6, 2008.

Further, total revenue from retail tariff after final true-up for FY 2007-08 amounts to Rs 2328.94 Crore. Accordingly, there is a revenue gap of Rs 225.79 Crore for FY 2007-08 after final true-up for FY 2007-08, as shown in the Table below, which has been included in the ARR of FY 2009-10, while determining the tariffs for FY 2009-10.

Table: Summary of Truing up for FY 2007-08 including sharing of efficiency gains (Rs Crore)

Sl.	Particulars	APR Order	Petition	Commission
1	Power Purchase Expenses	1900.99	1885.15	1866.36
2	Operation & Maintenance Expenses	235.98	257.55	227.51
2.1	Employee Expenses	128.15	150.35	133.20
2.2	Administration & General Expenses	81.91	76.26	68.38
2.3	Repair & Maintenance Expenses	25.93	30.94	25.93
3	Depreciation, including advance against depreciation	41.65	40.39	40.39
4	Interest on Long-term Loan Capital & Short Term Finance	4.79	7.97	9.31
5	Interest on Working Capital (Normative)	4.64	1.26	1.12
5.1	Interest on Working Capital (Actual - Normative)		18.26	0.00
5.2	Interest on Consumer Deposits	12.46	12.84	12.59
6	Bad Debts Written off	0.06	0.04	0.04
7	Income Tax	0.00	0.00	0.00
8	Stand-by charges payable to MSEDCL	114.63	114.63	114.63
9	Transmission Charges payable	97.61	97.61	97.61
10	Annual SLDC fees & charges	0.80	0.80	0.80
11	Contribution to contingency reserves	0.00	0.00	5.79
12	Under recovered FAC of TPC	123.70	123.70	123.70
13	Total Revenue Expenditure	2537.33	2560.20	2499.85
14	Return on Equity Capital	101.15	102.91	99.16

Sl.	Particulars	APR Order	Petition	Commission
15	Return as Interest on Internal funds	8.37	11.07	4.90
16	Sharing of (gains)/losses due to efficiency incl distr loss			6.36
20	Aggregate Revenue Requirement	2646.84	2674.19	2610.26
21	Less: Non Tariff Income	46.18	51.66	55.53
22	Aggregate Revenue Requirement from Retail Tariff	2600.66	2622.53	2554.73
23	Revenue from sale of electricity		2320.78	2328.94
24	**Revenue Gap/(Surplus) of FY 2007-08 after final truing up**		**301.75**	**225.79**

4 PERFORMANCE REVIEW OF FY 2008-09 AND DETERMINATION OF AGGREGATE REVENUE REQUIREMENT FOR FY 2009-10

4.1 PERFORMANCE PARAMETERS

Regulation 16.1 of the MERC (Terms and Conditions of Tariff) Regulations, 2005, stipulates,

> *"The Commission may stipulate a trajectory, which may cover one or more control periods, for certain variables having regard to the reorganization, restructuring and development of the electricity industry in the State.*
>
> *Provided that the variables for which a trajectory may be stipulated include, but are not limited to, generating station availability, station heat rate, transmission losses, distribution losses and collection efficiency."*

4.1.1 <u>Distribution Losses</u>

For FY 2008-09 and FY 2009-10, the Commission has specified the distribution loss trajectory at 10.50% and 10.00%, respectively, in the MYT Order for BEST dated April 3, 2007 in Case No. 66 of 2006, by considering a target loss reduction of 0.5% for every year in the Control Period. The target of 10.5% for FY 2008-09 was based on the base target level of distribution loss of 11.0% in FY 2007-08 as discussed in Section 3 of this Order.

BEST submitted that it has continued to maintain its distribution losses at lower levels in FY 2008-09 also. In the first half of FY 2008-09, BEST billed a total of 2135.09 MU as against an energy requirement of 2371.21 MU at the T< >D interface, which implies a distribution loss of 9.90%, which is well within the target loss level of 10.5%. BEST submitted that it would not be appropriate to consider the distribution losses figure obtained midway as the distribution losses are clear only after the year is completed. Therefore, for the purpose of estimation of energy requirement BEST considered distribution losses of 10.5%, in line with the trajectory approved by the Commission in the MYT Order.

For FY 2009-10, BEST submitted that though BEST would work towards attaining the target loss level approved by the Commission, it is as extremely difficult task to reduce the losses any further given that BEST's distribution losses are already the lowest in the country. BEST submitted that achieving the target of 10% for FY 2009-10 would be difficult, and hence, for the purpose of computation of energy input requirement, BEST has considered distribution loss at 10.5% for FY 2009-10, as shown in the Table below:

Table: Distribution losses considered by BEST for FY 2008-09 and FY 2009-10

Year	Distribution Losses Approved (%)	Energy requirement at T<>D interface (MU)	Energy Sales (MU)	Distribution Losses (%)
FY 2008-09	10.5%	4565	4085.52	10.5%
FY 2009-10	10.0%	4757	4257.11	10.5%

In this context, as discussed in the previous Section on truing up for FY 2007-08, the actual distribution losses in FY 2007-08 at 10.27%, are significantly lower than even the target loss level of 10.5% for FY 2008-09. Also, the actual distribution losses indicated for the first half of FY 2008-09 are even lower, at 9.90%. However, the Commission has considered the distribution losses in FY 2008-09 in accordance with the losses specified under the MYT trajectory, viz., 10.5%. Any sharing of gains due to better performance of BEST as regards this controllable parameter will be undertaken at the time of final truing up for FY 2008-09.

For FY 2009-10, the Commission has considered the distribution losses of 10.00% in accordance with the loss level specified under the MYT trajectory, as there appears to be no merit in BEST's argument that the loss levels should be considered at 10.5% for the purpose of projecting the energy input requirement, given that the actual losses in FY 2007-08 were 10.27%, and the actual losses in the first half of FY 2008-09 were 9.90%.

4.2 CONTROL PERIOD

The first Control Period for Multi-Year Tariff (MYT) has been stipulated as April 1, 2007 to March 31, 2010 in the MYT Order.

4.3 PROVISIONAL TRUING-UP FOR FY 2008-09

BEST, in its APR Petition for FY 2008-09 and ARR and Tariff Petition for FY 2009-10, submitted the performance for FY 2008-09 based on actual performance for the first half of the year, i.e., April to September 2008, and estimated performance for the second half of the year, i.e., October 2008 to March 2009. BEST submitted the comparison of each element of expenditure and revenue with that approved by the Commission in its Order dated June 6, 2008 on BEST Annual Performance Review for FY 2007-08 and Tariff Determination for FY 2008-09.

The Commission will undertake the final truing up of the revenue requirement and Revenue for FY 2008-09 once the audited accounts of BEST for FY 2008-09 are available, i.e., during Annual Performance Review for the third year of the Control Period, viz., FY 2009-10. However, the Commission in this Order on APR for FY 2008-09 and determination of ARR and tariff for FY 2009-10 has considered provisional truing up of certain elements of the revenue requirement and revenue, in cases where the impact is very high, or there is a change in principles/methodology, and due to revision in capital expenditure/capitalisation figures. The revised estimate of performance of BEST during FY 2008-09 and FY 2009-10 as compared to the Commission's MYT/APR Order for BEST is discussed in the following paragraphs.

The Commission clarifies that the final truing up and the computation of sharing of gains and losses due to controllable factors will be undertaken only after the audited expenses and revenue are available. Further, for computing sharing of efficiency gains/losses for FY 2008-09, the revised expenses approved for FY 2008-09 in this Order under the provisional truing up exercise will be considered as base expenses.

4.4 SALES

BEST submitted that the sales for FY 2008-09 have been estimated on the basis of the actual sales in H1 of FY 2008-09 and projections for H2 of FY 2008-09. BEST submitted that the revised estimated sales for FY 2008-09 at 4086 MU are lower by about 278 MU than the sales of 4363 MU approved by the Commission in the APR Order.

For FY 2009-10, BEST submitted that it has considered 5-year CAGR of 4.2% for projecting sales. BEST has apportioned the increase in sales arrived by applying 5-

year CAGR to categories and slabs based on the individual growth rates assumed based on past trend and current demand observed by BEST.

For FY 2008-09, the Commission obtained the details of category-wise sales for the 12-month period from April 2008 to March 2009. As shown in the Table below, the actual sales in FY 2008-09 have been lower than that considered by the Commission in the APR Order, as a result of which, the power purchase has also reduced to that extent, after considering the distribution losses on the sales.

For FY 2009-10, the Commission has verified the sales projections made by BEST on the basis of 5-year CAGR and keeping in view the recent trend. Since there was no significant difference between the sales projected by BEST and that projected by the Commission, the Commission has accepted the sales projected by BEST for FY 2009-10.

The category-wise sales projected by BEST and approved by the Commission in this Order are given in the Table below:

Table: Approved sales for FY 2008-09 and FY 2009-10 (MU)

Customer Category	FY 2007-08	FY 2008-09				FY 2009-10	
		APR Order	BEST Revised Estimate	Actual	Provisional Truing Up	Petition	Approved
LT I: BPL	0.10	0.11	0.04	0.04	0.04	0.04	0.04
LT I: Residential	1671	1818	1715	1733	1733	1774	1774
LT II A: Non-residential or commercial < 20 kW	953	1210	948	1006	1006	974	974
LT-II B: Non-residential or commercial > 20 kW & < 50 kW	154	164	156	134	134	172	172
LT-II C: Non-residential or commercial > 50 kW	491	410	514	469	469	564	564
LT-III: Advertisement & Hoardings	2	25	2	3	3	2	2
LT IV: Industry < 20 kW	77	74	76	73	73	77	77
LT-V A: Industry > 20 kW & upto 100 kW	57	46	46	48	48	46	46
LT-V B: Industry > 100 kW	44	38	47	48	48	48	48
LT-VI: Streetlights	30	22	23	29	29	23	23
LT-VII: Crematorium & Burial Grounds	1	4	1	1	1	1	1
LT-VIII: Temporary	21	22	19	23	23	19	19

Customer Category	FY 2007-08	FY 2008-09				FY 2009-10	
		APR Order	BEST Revised Estimate	Actual	Provisional Truing Up	Petition	Approved
Others							
LT-IX: Temporary Religious	0.07	0.02	0.06	0.09	0.09	0.06	0.06
HT-I: Industry	183	185	175	176	176	178	178
HT-II: Commercial	299	308	309	321	321	321	321
HT-III: Group Housing Society	35	37	56	40	40	59	59
Total	**4020**	**4363**	**4086**	**4103**	**4103**	**4257**	**4257**

Note: Above represent existing Tariff Categories, which have been renamed as elaborated subsequently in this Order

Thus, the total sales estimated by the Commission for FY 2008-09 and FY 2009-10 is 4103 MU and 4257 MU, as compared to BEST's estimate of 4086 MU and 4257 MU, respectively, in the APR Petition.

4.5 DISTRIBUTION LOSSES AND ENERGY INPUT REQUIREMENT

As discussed earlier, BEST submitted that it had considered the distribution losses of 10.5% for both FY 2008-09 and FY 2009-10 for computing the energy input requirement. As discussed in earlier paragraphs, the Commission has considered the distribution losses for FY 2008-09 and FY 2009-10, as 10.5% and 10.0%, respectively, in accordance with the distribution loss trajectory specified in the MYT Order for BEST.

The Energy Balance for FY 2009-10 is given in the Table below:

Table: Energy Balance for FY 2009-10

Particulars	Units	FY 2009-10	
		BEST APR Petition	Commission
Sales	**MU**	4257	4257
Distribution Loss	%	10.50%	10.00%
Energy Requirement at T<>D interface	MU	4757	4730
Transmission Loss	**%**	4.85%	4.85%
Total Energy Requirement	**MU**	4999	4971

Thus, the total energy input required to be purchased by BEST in FY 2009-10 has been approved as 4971 MU.

4.6 ENERGY AVAILABILITY AND POWER PURCHASE COST FOR FY 2008-09 AND FY 2009-10

4.6.1 <u>Power Purchase from TPC-G</u>

As regards purchase from TPC-G for FY 2008-09 and FY 2009-10, BEST submitted that the Commission, in its Combined Order dated November 6, 2007 in Case No. 87 of 2006, Case No. 88 of 2006 and Case N0. 30 of 2007 approved the Power Purchase Arrangement (PPA) between TPC-G and BEST with percentage allocation from various Units of TPC-G to BEST. BEST submitted that the Commission considered the PPA between TPC-G and BEST for estimation of power purchase expenses for FY 2008-09. Accordingly, BEST has considered the power purchase for FY 2008-09 from generating stations of TPC-G based on the allocation of generation from the various Units as per the approved PPA.

As regards the purchase quantum from TPC-G during FY 2008-09, BEST submitted that during the first half of FY 2008-09, the actual generation from TPC-G has declined, while at the same time cost per unit has increased, which is mainly on account of two reasons:

1. Unprecedented rise in the global crude oil prices due to which Unit-4 (Oil based 150 MW unit) was shut down for 15 days. Further in July 2008, Unit-7, which is the cheapest source of energy (Rs 0.69/kWh) was on outage and was put into service only in second week of October 2008.
2. Due to shut down of Unit-7, generation from TPC-G reduced to the extent of 160.64 MU. At the same time, cost of generation also increased from Rs 3.13/kWh to Rs 4.27/kWh, i.e., 36.42%, on account of increase in fuel costs.
3. During the first half of FY 2008-09, the total generation from hydel generating stations of TPC-G was only 506 MU whereas during the same period in the previous year, i.e., FY 2007-08, hydro generation was 913 MU. BEST submitted that this shortfall of 407 MU from hydro generation (with average approved tariff of Rs 1.85/kWh) has been supplemented by expensive thermal generation by TPC-G (approved tariff Rs 3.13/kWh), i.e., incremental cost added to increase in power purchase cost.

4. BEST submitted that from July 2008, Unit 7 went on outage on account of major maintenance, and as a result the load has to be increasingly met by Unit-4. BEST submitted that due to this event, the cheapest source of power (Rs 0.69/kWh) was replaced with expensive power of Unit-4 (average price Rs 10.06/kWh).
5. BEST further submitted that the Commission envisaged the total estimated generation from Unit-4 during FY 2008-09 to be 237.25 MU (45% share of BEST). However, due to the Unit-7 outage, during the first six months, Unit-4 has already generated 77% (182.36 MU) of its total generation target for the year, which has lead to a significant change in the generation mix (Unit-4 being the most expensive unit) of TPC-G's Generating Units.
6. BEST further added that the Commission had envisaged that Unit-8 would be generating for 182 days during FY 2008-09 starting from the month of October 2008. However, the same has not been yet been commissioned. BEST submitted that this non availability of expected generation from Unit-8 has to be made up by external sources, which leads to increase in cost.
7. BEST submitted that during this period, it had no choice but to procure additional expensive power on account of the above shortfall, from external sources to avoid load shedding in BEST licence area.

The summary of power purchase quantum and costs as considered by BEST for FY 2008-09 is shown in the Table below:

Table: Summary of Power Purchase from TPC-G for FY 2008-09

Particulars	Quantum (MU)	Cost (Rs crore)
TPC-G: Existing	4655.67	2228.64*

**(including hydel rebate)*

As regards the power purchase requirement during FY 2009-10, BEST submitted that based on its sales forecast and grossing up of the energy requirement based on estimated Distribution Loss of 10.5% and Transmission Loss of 4.85%, it estimated the gross energy requirement for FY 2009-10 as 4999 MU.

The summary of the power purchase requirement as submitted by BEST is shown in the Table below:

Estimation of Power purchase source for FY 2009-10 (in MU)

Power Purchase Quantum for FY 2009-10	Gross Energy Requirement	Transmission Losses	Energy Requirement at T< >D interface	Source		
				TPC-G	RPS	Net External Purchase
Apr-09	431.35	4.85%	410.43	363.4	25.88	42.11
May-09	459.37	4.85%	437.09	385.8	27.56	45.97
Jun-09	441.76	4.85%	420.34	370.1	26.51	45.15
Jul-09	438.70	4.85%	417.42	372.2	26.32	40.13
Aug-09	420.48	4.85%	400.09	360.3	25.23	34.98
Sep-09	420.81	4.85%	400.40	356.5	25.25	39.04
Oct-09	456.18	4.85%	434.05	383.7	27.37	45.07
Nov-09	413.61	4.85%	393.55	351.9	24.82	36.94
Dec-09	387.73	4.85%	368.92	338.7	23.26	25.73
Jan-10	362.00	4.85%	344.44	321.8	21.72	18.46
Feb-10	345.66	4.85%	328.89	300.6	20.74	24.31
Mar-10	421.35	4.85%	400.92	360.8	25.28	35.23
TOTAL	**4999.00**	**4.85%**	**4756.54**	**4265.93**	**299.94**	**433.12**

BEST submitted that despite the allocation from TPC-G, BEST shall continue to face peak time shortage of power, as its peak demand is more than the capacity available from TPC-G.

BEST submitted that the peak availability from TPC-G has been computed at 676 MW at T< >D interface after assuming auxiliary consumption at 4.5% and peak availability of 85% of all TPC-G Generating Units. The MU shortfall has been computed based on a 4 hour peak time requirement for every day of the month. Accordingly, peak shortfall in MU has been considered for purchase from external sources.

As regards the power purchase cost for purchase from TPC-G, BEST submitted that as directed by the Commission, it has referred to TPC-G's APR Petition for FY 2008-09 to estimate the per unit average cost of power for FY 2009-10.

As regards the purchase from hydel generating stations, BEST submitted that the Commission has considered the peak period to be 09:00 hours to 12:00 hours and 18:00 hours to 22:00 hours, however, this period does not match with Mumbai peak which normally occurs between 11:30 hours to 15:30 hours. Accordingly, BEST requested the Commission to change the peak period to coincide with the timing of Mumbai peak.

As regards the fixed cost, BEST submitted that fixed cost payable to TPC-G for FY 2009-10 has been estimated based on the fixed cost as estimated by TPC-G in its APR

Petition in Case No. 111 of 2008. The total fixed charge is estimated by BEST for FY 2008-09 as Rs. 186.38 crore and for FY 2009-10 as Rs. 429.50 crore.

For provisional truing up for FY 2008-09, the Commission has considered the power purchase quantum and cost from TPC-G as estimated by BEST and hence, approves power purchase of 4655.67 MU at an estimated cost of Rs. 2228.64 crore (including hydel rebate). The Commission will undertake the final truing up of power purchase from TPC-G for FY 2008-09 based on actual data for the entire year during the APR process for FY 2009-10.

As regards the purchase from TPC-G for FY 2009-10, the Commission observed that though BEST has considered the cost as projected by TPC-G in its APR Petition in Case No. 111 of 2008, however, it has not considered the energy generation as projected by TPC-G from existing stations. Moreover, BEST has also not considered the energy availability from Unit-8 as well as the cost of the same during FY 2009-10. Considering the fact that Unit-8 has been commissioned on March 31, 2009, the Commission has also considered the impact of the energy availability from Unit-8 considering the capacity share of BEST.

For estimating the quantum and cost of power purchase from TPC-G's existing stations and Unit-8 during FY 2009-10, the Commission has considered the net generation and tariff approved by the Commission in its Order dated May 28, 2009 in Case No. 111 of 2008 on TPC-G's APR Petition for FY 2008-09. Considering the fact that the tariff for FY 2009-10 for generating stations of TPC-G is applicable from June 1, 2009, the Commission has considered the fixed and energy charges for 10 months on the basis of charges approved in the Order dated May 28, 2009 in Case No. 111 of 2008, and considered the fixed charges and energy charges for 2 months on the basis of charges approved for FY 2008-09 in the Order dated April 2, 2008 in Case No. 68 of 2007.

The summary of the approved quantum and cost of power purchase by BEST from TPC-G for FY 2009-10 is given in the following Table:

Table: Quantum and Variable Cost for Purchase of Power from TPC-G in FY 2009-10

Particulars	Quantum	Variable Cost
	MU	Rs Crore
Unit-5, 6 & 7	4,002.99	1353.17
Unit- 4	32.47	17.64

Particulars	Quantum	Variable Cost
	MU	Rs Crore
Hydel	671.69	122.58
Unit-8	725.55	76.18
Total	**5,432.72**	**1,569.57**

Table: Other Costs for Purchase of Power from TPC-G in FY 2009-10

Particulars	Rs Crore
Fixed Charges-Thermal	241.82
Unit-8 Fixed Charges	83.28
Incentive at Projected Generation	10.70
Less Rebate-Hydel Excess Recovery	(40.32)
Total	**295.48**

4.6.2 Renewable Purchase Specification

For FY 2008-09, BEST in its Petition, projected a total quantum of 59.29 MU at an estimated cost of Rs. 31.35 crore as against approved quantum and cost of 256.20 MU and Rs. 89.67 crore, respectively. For FY 2009-10, BEST submitted that as per the RPS Order of the Commission dated August 16, 2007 in Case No. 6 of 2006, BEST is obliged to purchase 6% of its energy requirement from renewable energy sources in FY 2009-10. Accordingly, BEST has projected the power purchase of 299.94 MU (i.e., 6% of 4999 MU) for FY 2009-10.

BEST further submitted that for FY 2008-09, the Commission had assumed a rate of Rs. 3.50/kWh to meet its entire RPS obligation. BEST submitted that in spite of its best efforts, it has not been able to find any supplier. BEST submitted that it endeavours to buy RE, which would be made available in the coming months which would substitute costly power from TPC-G. As regards the purchase from RE sources in FY 2009-10, BEST submitted that the RE procurement has been projected to cost Rs. 5/kWh based on the current price that it has been able to procure through a competitive bidding process.

For FY 2008-09, the Commission has considered power purchase quantum and cost from renewable sources as estimated by BEST and has accordingly considered 59.29 MU at an estimated cost of Rs. 31.35 crore for provisional truing up purposes. However, the Commission clarifies that it would deliberate on the issue of meeting RPS and other related issues during the final truing-up of FY 2008-09, and this approval should not be construed as approval for the rate of purchase of RE as projected by BEST.

For FY 2009-10, the Commission has considered the power purchase from Renewable Energy Sources as per RPS obligation, i.e., 6% of the total energy input. Based on the total energy input approved by the Commission, the RPS obligation of BEST for FY 2009-10 works out to 298.75 MU and corresponding cost works out to Rs. 113.52 crore, assuming an average rate of Rs 3.80/kWh. Though the Commission has considered the purchase rate of Rs. 3.80/kWh from renewable sources, the Commission clarifies that it would consider the actual power purchase cost considering the actual purchase and effective purchase rate in accordance with the tariff approved for such RE source from where BEST would purchase RE, while undertaking the truing up for FY 2009-10.

4.6.3 Short Term Power Purchase, Imbalance Pool Purchase and Sale to Outside License Area

BEST has estimated a purchase from bilateral sources on short-term and imbalance pool purchase of 82.54 MU at an estimated cost of Rs. 67.06 crore for FY 2008-09. BEST submitted that the Commission in its APR Order dated June 6, 2008 in Case No. 73 of 2007 had envisaged the sale of surplus energy of 297.14 MU by BEST and revenue approved for BEST from such sale was reduced from overall estimated power purchase cost. BEST submitted that this included estimated 359.54 MU of generation from Unit-8 at a rate of Rs. 2.85/kWh. BEST submitted that Unit-8 has not been commissioned in FY 2008-09 and as such surplus on account of commissioning of this Unit has not yet available to BEST.

BEST further submitted that that due to the non-availability of TPC-G's generation from Unit -7 and non-availability of Unit-8, it has not estimated any surplus revenue during FY 2008-09. BEST further added that in view of the shortfall both in terms of energy requirements and peak time shortages, the surplus revenue as envisaged by the Commission has not materialized, even though there has been reduction in the total power procurement. As regards purchase from bilateral sources during FY 2009-10, BEST submitted that it has computed the peak requirement based on 4 hour peak time requirement for every day of the month and energy requirement in MU thus computed has been considered to be procured from bilateral sources.

As regards the purchase from bilateral sources and imbalance pool during FY 2008-09, the Commission has accepted BEST's projections and considered purchase of power of 82.54 MU at an estimated cost of Rs. 67.06 crore during FY 2008-09. However, the Commission will undertake the truing up based on actual purchase from external sources and imbalance pool settlement for the entire year based on actual data and prudence check during APR process for FY 2009-10.

The power purchase quantum available to BEST for FY 2009-10, after considering the power available from existing and new generating stations of TPC-G and RPS, works out to be higher than the energy input requirement, resulting in surplus energy of 759.76 MU. For estimating the power purchase cost for FY 2009-10 in this Order, the Commission has considered the average rate of Rs. 7.00/kWh for sale of this surplus power, considering the fact that the Central Electricity Regulatory Commission (CERC) has notified the CERC (Unscheduled Interchange charges and related matter) Regulations, 2009, wherein it has revised the ceiling of Unscheduled Interchange (UI) charge to Rs. 7.35/kWh as against the earlier ceiling of Rs 10/kWh. Therefore, it is expected that the cost of power available on short-term basis would reduce, and accordingly, the Commission has assumed the rate of Rs. 7.00/kWh. However, the Commission clarifies that it would consider such purchase/sale based on actuals subject to prudence check during the truing up for FY 2009-10.

The summary of power purchase/sale from bilateral sources/imbalance pool as projected by BEST and as approved by the Commission for FY 2008-09 and FY 2009-10 is given in the Table below:

Table: Purchase of Power from bilateral sources in FY 2008-09 and FY 2009-10

Particulars	Unit	FY 2008-09			FY 2009-10	
		APR Order	Revised Estimate	Approved after Provisional truing up	APR Petition	Approved
Additional PP/Sale	MU	(297.14)	82.54	82.54	433.12	(759.76)
	Rs Crore	(163.43)	67.06	67.06	355.16	(531.83)

4.6.4 <u>Month-wise Power Purchase Quantum for FY 2009-10</u>

The summary of month wise power purchase quantum approved by the Commission based on trends of month-wise energy input requirement in previous is given in Table below:

Table: Month-wise Power Purchase Quantum (MU) for FY 2009-10

BEST	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Power Purchase (MU)	428.95	456.82	439.31	436.26	418.15	418.48	453.64	411.31	385.57	359.99	343.74	419.01	**4971.23**

4.6.5 Demand Side Management (DSM) Mechanism

The Commission, in the MYT Order, had deliberated on the need for DSM and opined that the distribution licensees need to take steps toward meeting their energy requirement by Supply Side measures as well as Demand Side Management (DSM). Traditionally, the distribution licensees have been looking at the supply side alone. Since, there has been no significant capacity addition in the State for last several years, the licensees in the State of Maharashtra have had to resort to purchase of power from other sources at a very high rate and this has resulted in a higher retail tariff for the consumers.

The Commission, in its MYT Order, ruled that 2% of the costly power purchase requirement will have to be reduced by implementation of DSM as an initial step. Accordingly, the Commission in the APR Order for FY 2007-08 reduced 2% of the costly power purchase, to be saved through DSM measures, which translated to 0.15% of the total power purchase quantum and reduction in power purchase cost by Rs. 3.38 crore. Therefore, the Commission has considered the reduction in power purchase cost of Rs. 3.38 crore as approved in the APR Order for FY 2007-08 for the purpose of provisional truing up for FY 2008-09.

For FY 2009-10, considering the energy input requirement and energy availability, there is no requirement for costly power purchase, therefore, the Commission has not considered any reduction of the expenditure on account of DSM measures.

4.6.6 Standby Charges

BEST, in its Petition, submitted that it has estimated the Standby Charges payable to MSEDCL at Rs. 108.78 crore for FY 2008-09 and FY 2009-10 based on the Standby Charges approved by the Commission in its APR Order in Case No. 73 of 2007 for BEST for FY 2007-08.

For FY 2008-09, the Commission has considered the Standby Charges approved in the APR Order for FY 2007-08, i.e., Rs. 108.78 crore. For FY 2009-10, in accordance with the philosophy adopted in the MYT Order and the APR Order, the Commission has allocated the Standby Charges between the three Distribution Licensees in Mumbai in proportion to the coincident peak demand for the last one year, i.e., for the period from October 2007 to September 2008 and the Standby Charges allocated to

BEST works out to Rs. 112.13 crore. BEST will hence, pay Standby Charges of Rs. 112.13 crore to MSEDCL during FY 2009-10.

4.6.7 Transmission Charges and MSLDC Charges

BEST, in its Petition, submitted that the Commission in its Order dated May 31, 2008 in the matter of Determination of Transmission Tariff for Intra-State Transmission System (InSTS), determined the manner in which the transmission charges are to be paid by the Transmission System Users (TSUs) for FY 2008-09. Accordingly, BEST has considered the approved transmission charges payable by BEST for FY 2008-09. As regards the MSLDC charges, BEST submitted that it has considered the approved MSLDC charges in the APR Order in Case No. 73 of 2007 for FY 2008-09. Accordingly, the total charges on account of transmission and MSLDC charges for FY 2008-09 as projected by BEST are Rs. 109.61crore and Rs. 0.74 crore, respectively. For FY 2009-10 also, BEST has considered the same transmission charges and MSLDC charges of Rs. 109.61crore and Rs. 0.74 crore, respectively.

As regards the MSLDC charges for FY 2008-09, the Commission has considered the approved share of BEST of the MSLDC charges, i.e., Rs 0.74 Crore for FY 2008-09 as approved in the MSLDC Budget for FY 2008-09 vide Order dated May 30, 2008 in Case No. 88 of 2007. As regards the MSLDC charges for FY 2009-10, the Commission, in its Order dated April 29, 2009 in Case No. 117 of 2008, in the matter of approval of MSLDC Budget for FY 2009-10, has determined the mechanism for the recovery of MSLDC Fees and Charges for FY 2009-10. The Commission has considered BEST's share of the approved MSLDC Budget for FY 2009-10 in accordance with the above-said Order, however, the Commission has considered the MSLDC Operating charges for 11 months based on the Order dated April 29, 2009 and for 1 month, the Commission has considered MSLDC Operating Charges as approved in the Order dated May 30, 2008 in Case No. 88 of 2007. The total MSLDC Fees and Operating Charges payable by BEST during FY 2009-10 works out to Rs. 0.53 crore.

For FY 2008-09, the Commission has considered the transmission charges of Rs. 109.61 crore as projected by BEST for FY 2008-09. For FY 2009-10, the Commission vide its Order dated May 28, 2009 in Case No. 155 of 2008 on determination of Transmission Tariff for the Intra-State Transmission System, has approved the revised Transmission Charges for FY 2009-10 with effect from June 1, 2009. Accordingly, the Commission has considered the approved monthly transmission charges for FY

2009-10 payable by BEST as approved in the Order dated May 28, 2009 in Case No. 155 of 2008 for 10 months and has considered the approved monthly transmission charges for 2 months as approved in the Order in Case No. 104 of 2007. Accordingly, the total transmission charges payable by BEST for FY 2009-10 as approved by the Commission works out to Rs. 91.38 crore.

4.6.8 Summary of Power Purchase Related Cost

The summary of the total power purchase cost as approved in the APR Order for FY 2007-08, as estimated by BEST in its APR Petition and as approved by the Commission based on provisional truing up for FY 2008-09, is shown in the Table below:

Table: Approved Power Purchase cost for FY 2008-09

SL. No	Source	APR Order		BEST APR Petition		Approved	
		Quantum	Total Cost	Quantum	Total Cost	Quantum	Total Cost
		MU	Rs Crore	MU	Rs Crore	MU	Rs Crore
1	TPC-G: Thermal excl Unit 4	3952.28	1575.94				
2	TPC-G: Unit 4	237.25	168.82				
	TPC-G Hydel	615.87	112.40	4655.67	2273.48	4655.67	2273.48
2	TPC-G : Unit 8	359.54	104.56				
3	RPS	256.20	89.67	59.29	31.35	59.29	31.35
4	Additional PP/Sale	(297.14)	(163.43)	82.54	67.06	82.54	67.06
5	Standby Charges		108.78		108.78	0	108.78
6	Less Hydel Rebate		(44.85)		(44.84)	0	(44.84)
	sub-total (Power Purchase)	**5124.00**	**1951.90**	**4797.50**	**2435.83**	**4797.50**	**2435.83**
7	Transmission Charges		109.61		109.61		109.61
8	SLDC Charges		0.74		0.74		0.74
9	Reduction of Cost (DSM)		(3.38)				(3.38)
	Total	**5124**	**2058.87**	**4798**	**2546.18**	**4797.50**	**2542.80**

The summary of the total power purchase cost considered by the Commission during FY 2009-10 is shown in the Table below:

Table: Approved Power Purchase cost for FY 2009-10

S.No	Source	APR Petition		Approved	
		Quantum	Total Cost	Quantum	Total Cost

		MU	Rs Crore	MU	Rs Crore
1	TPC-G: Thermal excl Unit 4	4,265.93	1,801.31	4,002.99	1,605.69
2	TPC-G: Unit 4			32.47	17.64
3	TPC-G Hydel			671.69	122.58
4	TPC-G : Unit 8			725.55	159.46
5	RPS	299.94	149.97	298.75	113.52
6	Additional PP/Sale	433.12	355.16	(759.76)	(531.83)
7	Standby Charges		108.78	-	112.13
8	Less Hydel Rebate		(44.85)	-	(40.32)
	sub-total (Power Purchase)	**4,998.99**	**2,370.37**	**4,971.23**	**1,558.69**
9	Transmission Charges		109.61		91.38
10	SLDC Charges		0.74		0.53
	Total	**4,998.99**	**2,480.72**	**4,971.23**	**1,650.60**
11	Impact of the ATE Judgment		**218.00**		31
	Total		**2,698.72**	**4,971.23**	**1,681.60**

The steep reduction in the power purchase cost for FY 2009-10 is primarily on account of the following reasons:

§ Energy available from TPC-G's existing Units has been considered in accordance with the generation projected under the APR Order for TPC-G in Case No. 111 of 2008

§ Energy available from TPC-G's Unit 8 has been considered in accordance with the generation projected under the APR Order for TPC-G in Case No. 111 of 2008

§ As a consequence of the inclusion of the above additional generation from TPC-G, the Commission has assessed that BEST will have energy surplus as compared to the power purchase from costly sources as projected by BEST in its APR Petition. This surplus energy has been considered as additional revenue, and has been used to reduce the effective power purchase cost.

4.7 O&M EXPENSES FOR FY 2008-09 AND FY 2009-10

Operation and Maintenance (O&M) expenditure comprises employee related expenditure, Administrative and General (A&G) expenditure, and Repair and Maintenance (R&M) expenditure.

Relevance of Multi-Year Tariff

In this context, the Commission observes that during the public regulatory process on the APR Petitions, several consumers have expressed their opinion that revising tariff on an annual basis is against the principles of MYT. While this is not incorrect if one goes by the pure concept of MYT, in Maharashtra, parameters like sales and power purchase have not been stipulated in the MYT Orders, due to the uncertainty on account of the prevailing supply shortages in the State and the respective licence area. Consequently, the tariff has been specified for only one year, rather than the Control Period, which is also in accordance with the MERC Tariff Regulations, which specifies that tariff will be determined annually.

Consequently, in the MYT Orders, the Commission has primarily stipulated the following parameters separately for each year of the Control Period, viz.

(a) <u>Performance trajectory</u>

i. Station Heat Rate (SHR), auxiliary consumption, transit losses and secondary oil consumption for Generating Companies;

ii. Availability for Transmission Licensees; and

iii. Distribution loss for Distribution Licensees

(b) <u>Cost elements</u>

i. Operation & Maintenance (O&M) expenses have been approved as a whole for Generating Companies, and for individual elements, viz., employee expenses, A&G expenses, and R&M expenses, for Transmission Licensees and Distribution Licensees

ii. Interest on Working capital

However, even though the O&M expenses have been approved by the Commission for each year of the Control Period, wherein, by and large, the Utility's projections have been accepted, most Utilities have projected significant further annual increase in the O&M expenses for each year in the Control Period. If this increase in O&M expenses is allowed as sought by the Utilities, then the MYT framework created by the MERC in its MYT Orders will have no sanctity. Hence, the Commission rules that for FY 2008-09 and FY 2009-10, the O&M expenses allowed by the Commission for FY 2007-08 under the final truing up for FY 2007-08, after considering the base as audited expenses for FY 2006-07, will be considered as the base and increase will be allowed strictly as per the CPI/WPI growth as applicable, which incidentally, is higher than the growth rate projected by the Utilities in their respective original Petitions.

The variation between allowed expenses and actual expenses will be considered as a controllable gain/loss, and will be shared between the Utilities and the respective consumers, in accordance with Regulation 19 of the MERC (Terms and Conditions of Tariff) Regulations, 2005.

4.7.1 Employee Expenses

BEST submitted that for FY 2008-09 and FY 2009-10, BEST has projected revised expenses of Rs. 155.06 crore and Rs. 171.30 crore, respectively as compared to the approved expenses of Rs. 130.89 crore and Rs. 99.43 crore for FY 2008-09 and FY 2009-10, respectively, in the APR and MYT Orders. BEST submitted the detailed assumptions for employee expenditure for FY 2008-09 as under:

- Salaries, wages and Allowance – Based on the number of employees on the rolls of BEST as on 1st April of the current year.
- Dearness Allowance – The calculations are based on the last three years trend of the fixed average DA Index, i.e., Mumbai Consumer Price Index.
- Contribution to PF – Calculated at 12% of Basic Pay + DA
- Gratuity – Based on the estimated number of staff likely to retire
- Cost of bus token & passes – Calculated at Rs. 173/- per person per month.
- LTA – Calculated on the basis of the Basic Pay on a graded scale.

BEST submitted that the increase in employee expenses in FY 2008-09 as compared to actual employee expenses in FY 2007-08 was primarily on account of regularisation of 100 employees in FY 2008-09, which will result in incremental employee expense of Rs 4.71 Crore. BEST added that the revised estimate for FY 2009-10 is on account of the wage agreement due in FY 2009-10 and also considering the impact of inflation.

For FY 2008-09, for each sub-head of employee expenditure, the Commission has considered an increase of around 7.31% p.a. on account of inflation factor corresponding to increase in Consumer Price Index (CPI) over the revised level of employee expenses as approved for FY 2007-08 under the truing up exercise in this Order. The Commission has considered the point to point inflation over CPI numbers for Industrial Workers (as per Labour Bureau, Government of India) for a period of 3 years, i.e., FY 2006-07 to FY 2008-09 (upto December 2008), to smoothen the inflation curve. The Commission will undertake the final truing up of employee expenses for FY 2008-09 based on actual employee expenses for the entire year and prudence check, during the APR process for FY 2009-10.

Similarly, for FY 2009-10, for each sub-head of employee expenditure, the Commission has considered an increase of around 7.31% p.a. on account of inflation over the revised level of employee expenses as approved for FY 2008-09 under the provisional truing up exercise in this Order, based on the increase in Consumer Price Index (CPI). Accordingly, the approved employee expenses for FY 2008-09 and FY 2009-10 is summarised in the following Table:

Table: Employee Expenses for FY 2008-09 and FY 2009-10 (Rs. Crore)

Particulars	**FY 2008-09**			**FY 2009-10**		
	APR Order	**Revised Estimate by BEST**	**Approved After provisional truing up**	**MYT Order**	**Revised Estimate by BEST**	**Approved**
Net employee expenses	**130.89**	**155.06**	**142.94**	**99.43**	**171.30**	**153.39**

4.7.2 <u>A&G Expenses</u>

BEST submitted that for FY 2008-09 and FY 2009-10, BEST has projected revised expenses of Rs. 83.53 crore and Rs. 88.70 crore, respectively, as compared to the approved expenses of Rs. 85.23 crore and Rs. 95.93 crore for FY 2008-09 and FY 2009-10, respectively. BEST submitted the break-up of A&G expense and other expenses within A&G expenses, and requested the Commission to allow the same.

For FY 2008-09, the Commission has considered an increase of around 6.04% p.a. on account of inflation factor corresponding to increase in Wholesale Price Index (WPI) and Consumer Price Index (CPI) over the revised level of A&G expenses as approved for FY 2007-08 in this Order. The Commission has considered the point to point inflation over WPI numbers (as per Office of Economic Advisor of Govt. of India) and CPI numbers for Industrial Workers (as per Labour Bureau, Government of India) for a period of 3 years, i.e., FY 2006-07 to FY 2008-09 (upto December 2008), to smoothen the inflation curve. The Commission has considered a weight of 60% to WPI and 40% to CPI, based on the expected relationship with the cost drivers. This also considers the deduction made by the Commission on account of contribution to contingency reserve, which has been allowed separately. The Commission will undertake the final truing up of A&G expenses for FY 2008-09 based on actual A&G expenses for the entire year and prudence check, during the APR process for FY 2009-10.

Further, as regards appointment of consultants, the Commission directs BEST that in future, any appointment of consultants where the estimated cost for the engagement of the Consultants is more than Rs. 1 crore, it should ensure that the selection is made through a competitive bidding process, proper Terms of Reference are prepared, cost benefit analysis is stated upfront and the deliverables of the consultancy assignment are properly defined. BEST should submit the following details for all consultancy assignments of more than Rs 1 Crore in its APR and Tariff Petition:

- Process followed for appointment of Consultant including number of bids received along with bid documents
- Stated Cost-Benefit analysis and assessment of cost benefit analysis after completion of the assignment
- List of Deliverables submitted by Consultant

For FY 2009-10, for each sub-head of A&G expenditure, the Commission has considered an increase of around 6.04% p.a. on account of inflation over the revised level of A&G expenses as approved for FY 2008-09 under the provisional truing up exercise in this Order, based on the increase in Wholesale Price Index (WPI) and Consumer Price Index (CPI). Accordingly, the approved A&G expenses for FY 2008-09 and FY 2009-10 are summarised in the following Table:

Table: A&G Expenses for FY 2008-09 and FY 2009-10 (Rs. Crore)

Particulars	FY 2008-09	FY 2009-10

	APR Order	Revised Estimate by BEST	Approved After provisional truing up	MYT Order	Revised Estimate by BEST	Approved
Net A&G expenses	**85.23**	**83.53**	**72.51**	**95.93**	**88.70**	**76.89**

4.7.3 R&M Expenses

BEST submitted that for FY 2008-09 and FY 2009-10, BEST has projected revised expenses of Rs. 33.42 crore and Rs. 34.70 crore, respectively, as compared to the approved expenses of Rs. 28.03 crore and Rs. 8.97 crore for FY 2008-09 and FY 2009-10, respectively, in the APR and MYT Orders.

For FY 2008-09, the Commission has considered an increase of around 5.19% p.a. on account of inflation factor corresponding to increase in Wholesale Price Index (WPI) over the revised level of R&M expenses as approved for FY 2007-08 under the truing up exercise in this Order. The Commission has considered the point to point inflation over WPI numbers (as per Office of Economic Advisor of Govt. of India) for a period of 3 years, i.e., FY 2006-07 to FY 2008-09 (upto December 2008), to smoothen the inflation curve. The Commission will undertake the final truing up of R&M expenses for FY 2008-09 based on actual R&M expenses for the entire year and prudence check, during the APR process for FY 2009-10.

For FY 2009-10, for each sub-head of R&M expenditure, the Commission has considered an increase of around 5.19% p.a. on account of inflation over the revised level of R&M expenses as approved for FY 2008-09 under the provisional truing up exercise in this Order, based on the increase in Wholesale Price Index (WPI), as detailed above. Accordingly, the approved R&M expenses for FY 2008-09 and FY 2009-10 is summarised in the following Table:

Table: R&M Expenses for FY 2008-09 and FY 2009-10 (Rs. Crore)

Particulars	FY 2008-09	FY 2009-10

	APR Order	Revised Estimate by BEST	Approved After provisional truing up	MYT Order	Revised Estimate by BEST	Approved
Net R&M expenses	28.03	33.42	27.28	8.97	34.70	28.69

4.7.4 O&M expenses

The total O&M expenses approved by the Commission for FY 2008-09 and FY 2009-10 is summarised in the following Table:

Table: O&M Expenses for FY 2008-09 & FY 2009-10 (Rs. Crore)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by BEST	Approved After provisional truing up	MYT Order	Revised Estimate by BEST	Approved
Net employee expenses	130.89	155.06	142.94	99.43	171.30	153.39
Net A&G expenses	85.23	83.53	72.51	95.93	88.70	76.89
Net R&M expenses	28.03	33.42	27.28	8.97	34.70	28.69
Total O&M expenses	**244.15**	**272.01**	**242.72**	**204.33**	**294.7**	**258.97**

4.8 CAPITAL EXPENDITURE AND CAPITALISATION

Capital expenditure and capitalisation are two important variables that influence the computation of various critical parameters such as depreciation, interest on long term debt and return on equity. Accordingly, variation between the approved values and actual performance during the Control Period needs to be evaluated carefully during Annual Performance Review. The capital expenditure and capitalisation considered by the Commission for FY 2008-09 and FY 2009-10 in the APR Order for FY 2007-08 and MYT Order, respectively, and the revised estimates submitted by BEST are given in the Table below:

Table: Capital Expenditure and Capitalisation projected by BEST for FY 2008-09 and FY 2009-10 (Rs. Crore)

Particulars	FY 2008-09		FY 2009-10	
	APR Order	Revised Estimate by BEST	MYT Order	Revised Estimate by BEST
Capital Expenditure	NA	268.69	NA	214.39
Capitalisation	107.36	129.24	120.00	140.01

BEST has submitted the following schemes to be capitalised during FY 2008-09 and FY 2009-10:

- New (Receiving Substation) RSS commissioning
- Augmentation and replacement of existing RSS
- 120 numbers of new Distribution Substation (DSS) and Augmentation & alteration to existing DSS
- Extension of Distribution network
- SCADA, Digitisation and Automation.

The revision in ARR/tariff sought by different Utilities as a part of the Annual Performance Review (APR) process for FY 2008-09 can be attributed primarily to increase in power purchase cost of distribution licensees and the steep increase in capital expenditure and capitalisation being undertaken by the Utilities in recent years. The issue of increase in power purchase expenses is being dealt with in the Orders of the respective distribution licensees, since the reasons for the increase are different for different distribution licensees. However, the issue of steep increase in capital expenditure and capitalisation is a generic issue and relevant for all the Utilities.

The Commission appreciates that the investment on capex schemes is an ongoing process for any Utility/Licensee. Capital expenditure is required for healthy system development with tangible and intangible benefits. The scope, objective and benefits are identified while formulating DPRs. After implementation of the scheme, before capitalisation, the benefits are to be demonstrated by the Utility. The Utility is required to execute the capex schemes in a phased manner so as to minimise tariff shock attributable to capex implementation. The Commission can permit capex in the ARR only after prudence check as there is an impact on tariff.

To understand the significance of the capitalisation claimed by BEST, the actual capitalisation over the last four to five years vis-à-vis the opening GFA prevailing around 5 years ago have been compiled as under:

Year	Opening. GFA	Capex in the Year	Total Works Capitalized
2004-05	953	73.40	69.64
2005-06	1023	63.49	63.77
2006-07	1085	99.69	73.87
2007-08	1157	121.12	156.15
2008-09	1309	268.69	120.0*
2009-10	1435	214.39	130.0*

*The figures are excluding IDC

The above table shows that GFA has increased over the past 5 years, i.e., since FY 2004-05. The capital expenditure and capitalisation during FY 2009-10 as estimated by BEST is Rs. 214.39 Crore and Rs 130 Crore, respectively, as compared to actual capitalisation of Rs 63.77 Crore during FY 2005-06 and Rs. 73.40 Crore during FY 2006-07 which marks an increase of about 2 times in assets capitalised during a year.

In the regulated business, the returns to the investors are linked to the equity invested in the business, which in turn is directly linked to the existing asset base and assets added every year. The steep increase in the asset base every year has been suggested by the consumers to be an attempt by the Utilities to increase the returns from the regulated business, as has been suggested by the consumers during the Public Hearing conducted by the Commission on the APR Petitions filed by the Utilities.

The Commission has conducted a Public Hearing on the Petitions filed by different Utilities to ascertain the views of the consumers and other stakeholders on the Petition and the tariff increase sought by the Utility. During the Public Hearings, there was a huge resistance to the proposed tariff increase and one of the common objections put forth by the consumers and the public have been that the increase in ARR/tariff being sought by the Utilities is exorbitant and the capital expenditure should not be allowed to the extent sought by the Utilities, since there has not been any noticeable increase in the sales quantum or any significant improvement in some cases deterioration in the service quality over the period.

Further, as regards capital expenditure, the Commission has instituted a process of giving in-principle approval for the capital expenditure schemes costing above Rs. 10 Crore (together known as DPR Schemes), wherein the Utility has to submit Detailed Project Report (DPR) as well as the expected cost-benefit analysis, pay back period, etc., as per well laid out guidelines. Schemes costing less than Rs. 10 Crore are considered as non-DPR schemes and the Utilities are not required to submit any DPR for the approval of the same. It is often observed that at the time of obtaining in-principle approval of the Commission for the DPR schemes, the Utilities indicate several quantifiable benefits and a short payback period. However, the Utilities are not able to substantiate the benefits once the capital investment is actually undertaken and the assets are added to the Gross Fixed Assets (GFA). As a result, the costs and hence, the tariffs are increased, but the expected benefits to the system do not accrue.

In this regard, the in-principle approval given by the Commission to the DPR Schemes has certain standard covenants. One such in-principle approval given to a scheme submitted by MSETCL is reproduced below, for reference:

> *"…*
>
> *2. Please* ***note that this in-principle clearance should not be construed as final approval for ARR purpose and the scheme will be open for scrutiny during the tariff determination process/ARR review, particularly in the context of actual cost incurred, scope and objective achieved etc. ex post after implementation of the scheme****. MSETCL will be required to submit the status of implementation of the scheme with cost incurred till date, likely completion date etc. along with their ARR petition or during the tariff determination process at the appropriate time.*
>
> *3. MSETCL should submit half yearly report giving the status of implementation of the scheme in terms of expenditure incurred and item wise physical progress achieved during the implementation of the scheme.*
>
> *4. Assets created after execution of the scheme should be maintained separately in the Asset register.*
>
> ***5. Immediately after completion / commissioning of the respective scheme, MSETCL should communicate to the Commission the date of completion of the scheme, actual cost incurred, escalation in cost, if any with reasons, the scope and objectives of the scheme and to what extent they have been achieved, etc. so as to facilitate a comparison between the in-principle clearance and the actual.****"****(emphasis added)***

However, the Utilities have not been able to submit any evidence that the scope and objective of the scheme have been achieved.

In this context, the recent Report by Forum of Regulators on Multi-Year Framework has also emphasized that the capital expenditure plans of Utilities should clearly bring out cost benefit analysis and targeted reduction in technical losses.
Also, the quantum of capital expenditure under non-DPR schemes should not be very high, as compared to the DPR schemes, as this defeats the very purpose of classifying schemes costing above Rs. 10 Crore as DPR schemes and requiring regulatory scrutiny of the schemes.

In this regard, the Commission in its APR Order for Maharashtra State Electricity Transmission Company Limited (MSETCL) for FY 2007-08 as well as the MYT Orders for Utilities had observed as under:

> *"However, the Commission would like to reiterate that in-principle approval of the scheme does not absolve the senior management of MSETCL of their responsibility to prioritise various schemes and undertake cost benefit analysis and financial analysis to validate the commercial prudence of each scheme. MSETCL should ensure that the projected benefits actually accrue for the benefit of the stakeholders. It would be essential to monitor progress of each scheme as well as track expenditure and benefits accrued as per the scheme."*
>
> …
>
> *"The increase in quantum of Non-DPR schemes indicates an unhealthy trend, as the Commission feels that there is a tendency to split distribution scheme so that capital outlay of the scheme is below Rs. 10 Crore, to escape regulatory scrutiny. The Commission will take a review of the schemes being classified under Non-DPR category, and in case it is found that these schemes should have ideally been classified under DPR category, then that capex and the related capital charges will be disallowed till the DPR is submitted and the scheme is approved by the Commission."*

In view of the above, as a general rule, the Commission has decided that the total capital expenditure and capitalisation on non-DPR schemes in any year should not exceed 20% of that for DPR schemes during that year. To achieve the purpose, the purported non-DPR schemes should be packaged into larger schemes by combining similar or related non-DPR schemes together and converted to DPR schemes, so that the in-principle approval of the Commission can be sought in accordance with the guidelines specified by the Commission.

Further, in the absence of documentary evidence that the stated purpose and objective of the capex schemes have been achieved, the Commission is restricting the capitalisation considered for the purposes of determination of ARR and tariff. Once the Utilities submit the necessary justification to prove that the scope and objective of the capex scheme has been achieved as projected in the DPR, the same may be considered in future Orders. BEST is directed to prioritise the capex schemes based on importance and the schemes may be implemented in a phased manner to minimise the impact on distribution cost.

For the purpose of APR exercise for FY 2008-09 and revised projection for FY 2009-10, the Commission has considered only 50% of the capitalisation of the DPR schemes for which in-principle approval has been granted by the Commission and have also considered capitalisation of Non-DPR schemes as proposed by BEST. Accordingly, the Commission has considered capitalisation of Rs 69.00 Crore during FY 2008-09 and Rs 70.01 Crore during FY 2009-10 as against projected capitalisation of Rs 129.24 Crore as claimed by BEST for FY 2008-09 and Rs 140.01 Crore for FY 2009-10, respectively. The Commission shall review the need for revision in capitalisation at the time of final truing-up for FY 2008-09 and annual performance review for FY 2009-10.

Accordingly, approved capitalisation for FY 2008-09 and FY 2009-10 is summarised in the following Table:

Table: Approved Capital Expenditure and Capitalisation for FY 2008-09 and FY 2009-10
(Rs. Crore)

Particulars	**FY 2008-09**	**FY 2009-10**

	APR Order	Revised Estimate by BEST	Approved after provisional truing up	MYT Order	Revised Estimate by BEST	Approved
Capitalisation	107.36	129.24	69.00	120.00	140.01	70.01

4.9 DEPRECIATION

The Commission, in its APR Order, had considered depreciation expenditure of Rs 44.90 Crore for FY 2008-09 and in its MYT Order had considered depreciation of Rs 55.65 Crore for FY 2009-10, which amounts to 3.61% and 4.13% of Opening level of Gross Fixed Assets (GFA) of BEST for FY 2008-09 and FY 2009-10, respectively. The opening GFA was considered as Rs 1244.13 Crore and Rs 1349.00 Crore for FY 2008-09 and FY 2009-10, respectively, and the depreciation rates were considered as prescribed under MERC Tariff Regulations.

BEST, in its APR Petition, submitted the revised estimate of depreciation expenditure for FY 2008-09 and FY 2009-10 as Rs 45.02 Crore and Rs 49.66 Crore, respectively. BEST has submitted that most of the rates for depreciation are as per the Tariff Regulations. However, there are certain assets in electric supply business where depreciation rates adopted were changed in 1993-94. Therefore, for any assets created / acquired before this period, the old depreciation rates are applicable. However, if any asset is created or acquired thereafter, the new depreciation rates are applicable. The method of computation of depreciation adopted by BEST is provided as under

- The depreciation is worked out on straight line method on the fixed asset in use at the beginning of the year.
- The depreciation is based on the original cost, estimated life and residual life

Accordingly, BEST has projected revised estimate of the depreciation expenditure for FY 2008-09 and FY 2009-10 as summarised in the following Table:

Table: Depreciation expenditure projected by BEST for FY 2008-09 and FY 2009-10 ***(Rs. Crore)***

Particulars	FY 2008-09		FY 2009-10	
	APR Order	Revised Estimate by BEST	MYT Order	Revised Estimate by BEST

Particulars	FY 2008-09		FY 2009-10	
	APR Order	Revised Estimate by BEST	MYT Order	Revised Estimate by BEST
Depreciation	44.90	45.02	55.65	49.66
Opening GFA	1244.13	1308.81	1349.00	1435.03

The Commission reiterates that the depreciation Rates stipulated under Annexure-1 (Depreciation Schedule) of the MERC Tariff Regulations are applicable and depreciation has to be computed in accordance with Regulation 76.4 and 63.4 of MERC Tariff Regulations as applicable for the distribution business. The Commission has examined the depreciation and actual capitalisation claimed by BEST in detail as against the various capex schemes approved by the Commission. Further, BEST in its submissions confirmed that depreciation has not been claimed beyond 90% of the asset value in line with the MERC Tariff Regulations. The Commission has considered the depreciation on the opening GFA only and not on the assets added during the year in line with the MERC Tariff Regulations. In view of revised value of capitalisation as approved under previous paragraphs, the approved depreciation expenditure for FY 2008-09 and FY 2009-10 is summarised in the following Table:

Table: Approved Depreciation expenditure for FY 2008-09 and FY 2009-10

(Rs. Crore)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by BEST	Approved	MYT Order	Revised Estimate by BEST	Approved
Depreciation	44.90	45.02	42.78	55.65	49.66	45.30
Opening GFA	1244.13	1308.81	1244.08	1349.00	1435.03	1310.06
Depn as % of Op. GFA	**3.61%**	**3.44%**	**3.44%**	**4.13%**	**3.46%**	**3.46%**

The Commission will undertake the truing up of Depreciation based on actual capitalisation during the entire year, subject to prudence check, during Performance Review for the third year of Control Period, i.e., FY 2009-10.

4.10 INTEREST EXPENSES

The Commission, in its APR Order, had allowed interest expenses of Rs 4.38 Crore for FY 2008-09 and in its MYT Order, allowed interest expenses of Rs 32.54 Crore for FY 2009-10, with a weighted average interest rate of around 10.7% p.a. and 9.75% p.a., respectively.

BEST, in its APR Petition, has submitted revised estimate of interest expenses for FY 2008-09 and FY 2009-10 as Rs 24.60 Crore and Rs 38.60 Crore, respectively. BEST has considered loan addition of Rs. 85.00 Crore during FY 2008-09 and Rs. 150 Crore during FY 2009-10.

Table: Interest expenditure projected by BEST for FY 2008-09 and FY 2009-10

(Rs. Crore)

Particulars	FY 2008-09		FY 2009-10	
	APR Order	Revised Estimate by BEST	MYT Order	Revised Estimate by BEST
Op. balance of loan	42.69	195.50		274.45
Loan Addition	0.00	85.50		150.00
Loan Repayment	(3.24)	(6.05)		(103.55)
Closing Balance of loan	39.45	274.45	333.80	320.90
Interest expenses	**4.38**	**24.60**	**32.54**	**38.60**

As highlighted under earlier sub-section, the Commission has considered loan addition of only Rs 82.53 Crore during FY 2007-08 against the claim of Rs 150 Crore by BEST for the reasons highlighted therein. However, the Commission has considered existing outstanding loans as claimed by BEST.

Besides, interest on loan capital will have to be provided corresponding to the assets put to use (capitalised) and not on the capital expenditure. Further, interest on capital expenditure will have to be treated as interest during construction (IDC) and the same should be capitalised in accordance with Regulation 72.2, 72.4, 72.7 of MERC Tariff Regulations for the purpose of allowable capital cost of the project scheme; whereas, the interest expenditure towards such capitalised schemes beyond the date of capitalisation will have to be treated as interest expenditure chargeable to revenue account in accordance with Regulation 76.3 of MERC Tariff Regulations.

In this context, the capitalisation during FY 2008-09 as claimed by BEST amounts to Rs 129.24 Cr and as per BEST's submissions under Form-8; the same is funded by way of contributions from consumer (Rs 7 Crore), grant from Government (Rs 5 Crore), additional equity capital on normative basis at 30% (Rs 35.17 Crore) and normative debt component at 70% (Rs 82.07 Cr). As regards the capitalisation of Rs 140.01 Crore during FY 2009-10, BEST has proposed to fund the same by way of contributions from consumer (Rs 7 Crore), grant from Government (nil), additional equity capital on normative basis at 30% (Rs 39.90 Crore) and normative debt component at 70% (Rs 93.11 Cr).

Further, under the replies to queries raised by the Commission, BEST submitted that for raising any long term loan, it has to follow the provisions of MMC Act, 1888 and procedure laid down in the said Act, i.e., approval of BEST Committee and Corporation and thereafter State Governments approval, which is very time consuming owing to which BEST plans to roll over short term finance till such time long term finance is available. Thus, BEST has considered short term loans for FY 2008-09 and FY 2009-10 to the extent of Rs. 85 Crore and Rs. 150 Crore respectively.

For the purposes of revised projections during APR exercise for FY 2008-09 and FY 2009-10, the Commission has considered the capitalisation during FY 2008-09 and FY 2009-10 of Rs 69.00 Crore and Rs 70.01 Crore, respectively. The same is funded by way of contributions from consumer (Rs 7 Crore during FY 2008-09 and FY 2009-10), grant from Government (Rs 5 Crore during FY 2008-09 and nil during FY 2009-10), additional equity capital on normative basis at 30% (Rs 17.10 Crore during FY 2008-09 and Rs 30.11 Crore during FY 2009-10) and debt component at 70% (Rs 39.90 Cr during FY 2008-09 and Rs 44.10 Cr during FY 2009-10). The interest expenditure on debt component have been envisaged to be funded through actual short term loans (to be converted into long term loans subsequently) from Canara Bank/Vijaya Bank at rates of 10.75% p.a. and 10% p.a. as claimed by BEST.

The Commission has considered the interest expenditure on the existing loans (public loans, MMRDA loans for MegaCity project and DPDC loans) as claimed by BEST in accordance with Regulations 76.3.1 and 76.3.2 of the MERC Tariff Regulations.

Accordingly, interest expenses approved for FY 2008-09 and FY 2009-10 is summarised in the following Table:

Table: Approved Interest expenditure for FY 2008-09 and FY 2009-10 (Rs. Crore)

Particulars	**FY 2008-09**			**FY 2009-10**		
	APR Order	**Revised Estimate by BEST**	**Approved After provisional truing up**	**MYT Order**	**Revised Estimate by BEST**	**Approved**
Op. balance of loan	42.69	195.50	128.03		274.45	161.88
Loan Addition	0.00	85.50	39.90		150.00	44.10
Loan Repayment	(3.24)	(6.05)	(6.05)		(103.55)	(3.55)
Cl. Balance of loan	39.45	274.45	161.88	333.80	320.90	202.43
Interest expenses	**4.38**	**24.62**	**14.83**	**32.54**	**38.60**	**19.42**

4.11 INTEREST ON INTERNAL FUNDS

The Commission, in its APR Order, had allowed interest expenditure at 6% p.a. on internal funds at Rs 9.11 Crore for FY 2008-09 and in its MYT Order, allowed interest expenses of Rs 5.21 Crore for FY 2009-10.

Subsequently, BEST in its APR Petition has revised its estimates for FY 2008-09 and FY 2009-10 as Rs 9.82 Crore and Rs 10.79 Crore, respectively. The Interest on Internal funds, at the rate of 6% for the period FY 2008-09 to FY 2009-10 as projected by BEST is given below:

Table: BEST's Estimation of Interest on Internal funds (Rs. Crore)

Particulars	**FY 2008-09**	**FY 2009-10**
Capital expenditure during the year	129.24	140.01
Less: Consumer Contribution received during the year	7.00	7.00
Less: Govt. Grant Received during the year	5.00	0.00
Allowable Capital cost	117.24	133.01
Cumulative Grants at the end of the year	**81.75**	**86.75**
Interest on Internal funds (at 6%)		

Particulars	FY 2008-09	FY 2009-10
Normative debt component	*4.92*	*5.59*
On Government assistance at the start of the year	*4.90*	*5.21*
Returns as Interest on Internal funds	**9.82**	**10.79**

The ATE, in its Judgment dated August 27, 2007 in Appeal 13 of 2007 had directed the Commission to take into consideration interest on government grant as well as interest on internal funds, which is not included in the calculation of the Capital Base or notional equity in any way.

Accordingly, the Commission has considered BEST's claim for interest on internal funds (including grant on Government, as normative debt is assumed to be nil) during FY 2008-09 and FY 2009-10. However, the Commission has modified the same to the extent of capitalised cost considered as Rs 69.00 Crore during FY 2008-09 and Rs 70.01 Crore during FY 2009-10, instead of capital expenditure of Rs 129.24 Crore and Rs 140.01 Crore as claimed by BEST during respective years. To that extent, allowable capital cost is revised to Rs 57.00 Crore and Rs 63.01 Crore during FY 2008-09 and FY 2009-10 respectively (against BEST's claim of Rs 81.75 Crore and Rs 86.75 Crore). The normative debt part is considered as nil for FY 2008-09 and FY 2009-10 as BEST is availing actual loan (proposed to convert existing short term borrowings into long term loans) during the period and hence, no interest on normative debt is considered. The interest on internal funds as approved by the Commission for FY 2008-09 and FY 2009-10 is summarised in the following Table:

(Rs Crore)

Particulars	FY 2008-09	FY 2009-10
Capitalised Cost during the year	69.00	70.01
Less: Consumer Contribution received during the year	7.00	7.00
Less: Govt. Grant Received during the year	5.00	5.00
Allowable Capital cost	**57.00**	**63.01**
Cumulative Grants at the end of the year	**81.75**	**86.75**
Interest on Internal funds (at 6%)		

Particulars	FY 2008-09	FY 2009-10
Normative debt component	*0.00*	*0.00*
On Government assistance at the start of the year	*4.91*	*5.21*
Returns as Interest on Internal funds	**4.91**	**5.21**

4.12 RETURN ON EQUITY (ROE) FOR FY 2008-09 AND FY 2009-10

The Commission, in its earlier MYT Order dated April 3, 2007, had not approved any return on equity *per se*; however, the Commission, in its APR Order, had permitted return on equity to the extent of Rs 105.54 Crore for FY 2008-09 at a rate of return of 16% in accordance with Regulation 63.1 of MERC (Terms and Conditions of Tariff) Regulations, 2005.

BEST, in its APR Petition, submitted the revised estimate of Return on Equity for FY 2008-09 and FY 2009-10 as Rs 109.76 Crore and Rs 116.22 Crore and the computation is as given below:

Table: BEST's Estimation of RoE for the period FY 2008-09 and FY 2009-10

(Rs. Crore)

Particulars	FY 2008-09	FY 2009-10
Opening Equity	**666.61**	**705.38**
Annual allowable capital cost for the year	129.24	140.01
Normative equity (30%)	38.77	42.00
Closing Equity	**705.38**	**747.38**
Computation of RoE		
Return @ 16% on equity capital at commencement of year	106.66	112.86
Return @ 16% on 50% of equity portion of annual allowable cost for the year	3.10	3.36
RoE for the year	**109.76**	**116.22**

As highlighted under earlier paragraphs, the ATE in its Judgment dated August 27, 2007 in Appeal 13 of 2007 had directed the Commission that the Return on Equity already allowed by the Commission be retained.

Accordingly, the Commission has computed return on equity in line with the principles outlined under MERC Tariff Regulations. Further, the Commission has modified the same to the extent of capitalised cost considered as Rs 69.00 Crore during FY 2008-09 and Rs 70.01 Crore during FY 2009-10 instead of capital expenditure of Rs 129.24 Crore and Rs 140.01 Crore as claimed by BEST during respective years. The Commission has also deducted consumer contribution and Government grants and to that extent, allowable capital cost to be recovered through tariffs is revised to Rs 57.00 Crore and Rs 63.01 Crore during FY 2008-09 and FY 2009-10 and equity portion of allowable capitalised cost at 30% amounts to Rs 17.10 Crore and Rs 18.90 Crore during FY 2008-09 and FY 2009-10, respectively. The Return on Equity as approved by the Commission for FY 2008-09 and FY 2009-10 is summarised in the following Table:

Particulars		FY 2008-09	FY 2009-10
Opening Equity	A	**619.76**	**636.86**
Annual allowable capital cost for the year	B	69.00	70.01
Less: Contribution made by consumers	C	(7.00)	(7.00)
Less: Government Assistance	D	(5.00)	(0)
Net allowable capital cost	E=B-C-D	57.00	63.01
Normative equity (30%)	F = E*30%	17.10	18.90
Closing Equity	G = A+F	**636.86**	**655.76**
Computation of RoE			
Return @ 16% on equity capital at commencement of year	H=A*16 %	99.16	101.90
Return @ 16% on 50% of equity portion of annual allowable cost for the year	I=F*16% *50%	1.37	1.51

Particulars		FY 2008-09	FY 2009-10
RoE for the year	G=E+F	**100.53**	**103.41**

Thus, total interest on internal funds and return on equity approved by the Commission vis-à-vis that claimed by BEST for FY 2008-09 and FY 2009-10 is summarised under the following Table:

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by BEST	Approved	MYT Order	Revised Estimate by BEST	Approved
Returns as Interest on Internal funds	9.11	9.82	4.91	46.61	10.79	5.21
Return as Return on equity	105.54	109.76	100.53	Nil	116.22	103.41
Total	**114.65**	**119.58**	**105.43**	**46.61**	**127.01**	**108.61**

4.13 INTEREST ON WORKING CAPITAL AND CONSUMERS' SECURITY DEPOSIT FOR FY 2007-08 AND FY 2008-09

As explained in Section 3.10, while truing up interest on working capital for FY 2007-08, BEST has submitted that on account of the consistent revenue gap over the last 3 years, sharp rise in power purchase cost along with un-recovered FAC has led to severe scarcity of working capital for BEST. In addition to its OD facilities (with Canara Bank) and its opening working capital loan of Rs 92 Cr, BEST has raised various shot term loans/financial arrangement in FY 2007-08 and FY 2008-09 to maintain proper liquidity, caused due to blockage of funds in power purchase. BEST submitted that the interest on such working capital loans taken by BEST was estimated as Rs. 40.15 crore and Rs. 25.93 crore for FY 2008-09 and FY 2009-10, respectively.

Further, BEST submitted that for FY 2008-09 and FY 2009-10, the interest on normative working capital in accordance with the MERC Tariff Regulations works out to Rs. 6.77 crore and Rs. 3.31 crore, respectively, by considering the rate of interest as 12.75% for both the years.

In its APR Petition, BEST claimed the interest on normative working capital as well as the difference between the interest on actual working capital loans and interest on normative working capital, as a part of its Aggregate Revenue Requirement for FY 2008-09 and FY 2009-10.

Further, BEST projected the Interest on Consumers' security deposit for FY 2008-09 and FY 2009-10 as Rs. 12.84 crore at the same level as that incurred in FY 2007-08, by considering an interest rate of 6%.

The Commission has estimated the working capital requirement of BEST for FY 2007-08 in accordance with the MERC Tariff Regulations, after considering the provisional truing up of various expenditure heads.

However, the Commission has not considered the interest on actual working capital loans incurred by BEST at this stage, since only interest on normative working capital loans can be allowed in accordance with the MERC Tariff Regulations. At the time of final truing up, in case the interest on actual working capital loans is higher than the interest on normative working capital loans, then the difference between the two would have to be allowed under the mechanism of sharing of efficiency losses, since this is a controllable parameter, as clearly stipulated in the MERC Tariff Regulations.

The MERC Tariff Regulations stipulates that the rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on the date on which the application for determination of tariff is made. Accordingly, the Commission has considered the short-term Prime Lending Rate of State Bank of India of 12.75% and 13% for FY 2008-09 and FY 2009-10, respectively, for estimating the interest on working capital, which works out to Rs. 3.94 crore and Rs. 8.14 crore, respectively.

The Commission has considered a 10% increase in the Consumers' Security Deposit in FY 2008-09 and FY 2009-10, over FY 2007-08 and FY 2008-09 levels, respectively, and the interest on the same has been estimated as Rs. 14.13 crore and Rs. 15.54 crore, respectively.

The revised interest on working capital and consumers' security deposit for BEST for FY 2008-09 and FY 2009-10 is given in the following Table:

Table: Interest on Working Capital and Consumers' Security Deposit for FY 2008-09 and FY 2009-10 (Rs Crore)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by BEST	Approved After provisional truing up	MYT Order	Revised Estimate by BEST	Approved
Interest on Normative Working Capital	15.68	6.77	3.94	-	3.31	8.14
Interest on actual working capital loans, less normative interest	0.00	33.38	0.00	-	22.62	0.00
Interest on consumers' security deposits	12.46	12.84	14.13	-	12.84	15.54
Total	**28.14**	**52.99**	**18.07**	-	**38.77**	**23.68**

4.14 PROVISIONING FOR BAD DEBTS

BEST submitted that for FY 2008-09 and FY 2009-10, BEST has estimated the provisioning for write-off of bad debts at Rs. 0.12 crore and Rs. 0.13 crore, respectively.

The Commission has retained the provisioning for write-off of bad debts for FY 2008-09 and FY 2009-10 at the same level as approved for FY 2007-08 under the truing up exercise, at Rs. 0.04 crore.

4.15 INCOME TAX

BEST, in its Petition, submitted that under Section 10(20) of the Income Tax Act, the income of local authority is exempted. Hence, no income tax is payable.

The Commission has hence, not considered any income tax for FY 2008-09 and FY 2009-10.

4.16 NON TARIFF INCOME

BEST submitted that the non-tariff income for FY 2008-09 and FY 2009-10 was estimated as Rs. 50.13 crore and Rs. 53.75 crore, respectively, as compared to the actual non-tariff income of Rs. 51.66 crore in FY 2007-08.

The Commission has considered the non-tariff income for FY 2008-09 and FY 2009-10 at the same level as that approved for FY 2007-08 under the truing up exercise, at Rs. 55.53 crore.

4.17 DEMAND SIDE MANAGEMENT (DSM) EXPENSES FOR FY 2008-09 AND FY 2009-10

BEST had included in its APR petition, a proposal for DSM programmes/activities with a corresponding budget totalling Rs. 4 crore and Rs. 3.65 crore for FY 2008-09. and FY 2009-10, respectively. It is envisaged that this budget will be funded out of the load management charge amount remaining as balance with BEST.

The Commission has been approving these initiatives, through a separate procedure. The Commission has approved the funding of these DSM initiatives out of the load management charge (LMC) amount available with BEST, and hence, there is no impact on the ARR of BEST for FY 2008-09 and FY 2009-10.

4.18 REVENUE FROM EXISTING TARIFF FOR FY 2008-09 AND FY 2009-10

In its APR Petition, BEST estimated the revenue from sale of electricity for FY 2008-09 as Rs. 2736.88 crore, and submitted the computations of the same for H1 and H2 of FY 2008-09 as a part of the Formats submitted along with the APR Petition, after considering the impact of the additional FAC of Rs. 91.84 crore allowed to be recovered over the period from November 2008 to March 2009, and after adding back the deduction of around Rs. 8 crore on account of Power Factor incentive, since the same has already been considered as an expense under A&G expenses. For FY 2009-10, BEST estimated the revenue from sale of electricity as Rs. 2639.55 crore, based on the existing tariffs and the projected category-wise sales and demand, and after adding back the deduction of around Rs. 8 crore on account of Power Factor incentive, since the same has already been considered as an expense under A&G expenses.

For FY 2008-09, the Commission obtained the details of actual revenue earned by BEST from sale of electricity during the year, which was submitted by BEST as Rs. 2832.8 crore. The same has been accepted by the Commission under the provisional truing up exercise, for computing the revenue gap/(surplus) for FY 2008-09 as discussed in the next sub-section. Based on audited results submitted at the time of APR of FY 2009-10, the Commission will true up the actual expenses and revenue for FY 2008-09, subject to prudence check.

For FY 2009-10, the Commission has computed the category-wise revenue based on the existing tariffs and the category-wise sales and demand as approved by the Commission, and after considering all components of tariff, which works out to Rs. 2884.65 crore.

4.19 AGGREGATE REVENUE REQUIREMENT AND REVENUE GAP OF BEST FOR FY 2008-09 AND FY 2009-10

Based on analysis of each element discussed above, the Aggregate Revenue Requirement and Revenue Gap of BEST for FY 2008-09 and FY 2009-10 as approved by the Commission in its APR Order, MYT Order, as estimated by BEST in the APR Petition and as approved by the Commission in this Order is given in the following Tables:

Table: Aggregate Revenue Requirement for FY 2008-09 (Rs Crore)

Sl.	Particulars	FY 2008-09		
		Petition	APR Order	Commission
1	Power Purchase Expenses (including External Power Purchase)	2327.05	1837.04	2323.67
2	Operation & Maintenance Expenses	272.01	244.14	242.72
2.1	Employee Expenses	*155.06*	*130.89*	*142.94*
2.2	Administration & General Expenses	*83.53*	*85.23*	*72.51*
2.3	Repair & Maintenance Expenses	*33.42*	*28.03*	*27.28*
3	Depreciation, including advance against depreciation	45.02	44.90	42.78
4	Interest on Long-term Loan Capital & Short Term Finance	24.62	4.38	14.83
5	Interest on Working Capital (Normative)	6.77	15.68	3.94
5.1	Interest on Working Capital (Actual -	33.38	0.00	0.00

Sl.	Particulars	FY 2008-09		
		Petition	APR Order	Commission
	Normative)			
5.2	Interest on Consumer Deposits	12.84	12.46	14.13
6	Bad Debts Written off	0.12	0.08	0.04
7	Income Tax	0.00	0.00	0.00
8	Stand-by charges payable to MSEDCL	108.78	108.78	108.78
9	Transmission Charges payable	109.61	109.61	109.61
10	Annual SLDC fees & charges	0.74	0.74	0.74
11	Contribution to contingency reserves	0.00	0.00	3.11
12	Under recovered FAC of TPC	0.00	0.00	
13	**Total Revenue Expenditure**	**2940.94**	**2377.79**	**2864.35**
14	Return on Equity Capital	109.76	105.54	100.53
15	Return as Interest on Internal funds	9.82	9.11	4.91
16	Truing up for FY 2004-05 & FY 2005-06 - ATE ROE	72.62		72.62
17	Truing up for FY 2006-07	276.38		276.38
18	Surplus received from TPC for FY 2006-07	-38.76		-38.76
19	Aggregate Revenue Requirement	**3370.76**	**2492.45**	**3280.03**
20	Less: Non Tariff Income	**50.13**	**49.72**	**55.53**
21	**Aggregate Revenue Requirement from Retail Tariff**	**3320.63**	**2442.73**	**3224.50**
22	Revenue from sale of electricity	2736.88		2832.28
23	**Revenue Gap/(Surplus) of FY 2008-09 after provisional truing up**	**583.76**		**392.22**

Based on provisional truing up of various elements for FY 2008-09 as discussed in above paragraphs, the Aggregate Revenue Requirement for FY 2008-09 works out to Rs 3224.50 Crore. After considering the revenue from sale of electricity in FY 2008-09, the Commission has estimated that BEST will have a revenue gap of Rs. 392 crore, as compared to a revenue gap of Rs. 583.8 crore estimated by BEST. The primary reasons for the reduction in revenue requirement are the reduction in O&M expenses on account of allowance on normative basis, and reduction in capital expenditure related heads, viz., depreciation, interest on loans, and return on equity, on account of the reduced capitalisation considered by the Commission, and disallowance of interest on actual working capital loans at this point in time.

The revenue gap of Rs 392 Crore during FY 2008-09 after provisional truing up has been considered along with the revenue gap for FY 2007-08 after final truing up, for determination of ARR for FY 2009-10, as shown below:

Table: Aggregate Revenue Requirement for FY 2009-10 (Rs Crore)

Sl.	**Particulars**	**FY 2009-10**	
		Petition	**Commission**
1	Power Purchase Expenses (including External Power Purchase)	2479.59	1477.56
2	Operation & Maintenance Expenses	294.70	258.97
2.1	Employee Expenses	*171.30*	*153.39*
2.2	Administration & General Expenses	*88.70*	*76.89*
2.3	Repair & Maintenance Expenses	*34.70*	*28.69*
3	Depreciation, including advance against depreciation	49.66	45.30
4	Interest on Long-term Loan Capital & Short Term Finance	38.60	19.42
5	Interest on Working Capital (Normative)	3.31	8.14
5.1	Interest on Working Capital (Actual - Normative)	22.62	0.00
5.2	Interest on Consumer Deposits	12.84	15.54
6	Bad Debts Written off	0.13	0.04
7	Income Tax	0.00	0.00
8	Stand-by charges payable to MSEDCL	108.78	112.13
9	Transmission Charges payable	109.61	91.38
10	Annual SLDC fees & charges	0.74	0.53
11	Contribution to contingency reserves	0.00	3.28
12	Total Revenue Expenditure	3120.59	2032.31
13	Return on Equity Capital	116.22	103.41
14	Return as Interest on Internal funds	10.79	5.21
15	**Aggregate Revenue Requirement**	**3247.60**	**2140.93**
16	Less: Non Tariff Income	**53.75**	55.53
17	**Aggregate Revenue Requirement from Retail Tariff**	**3193.85**	**2085.40**

18	Revenue Gap/(Surplus) of FY 2007-08 after final truing up	301.75	225.79
19	Revenue Gap/(Surplus) of FY 2008-09 after provisional truing up	583.76	392.22
20	**Total Revenue Requirement in FY 2009-10**	**4079.35**	**2703.40**

The Aggregate Revenue Requirement for FY 2009-10 is significantly lower than that projected by BEST primarily due to the following reasons:

- Reduction in power purchase expenses due to consideration of revenue from sale of surplus power in imbalance pool. In this regard, BEST, in its APR Petition, submitted that in the event of any surplus generated from any trading of excess allocated units from TPC-G, the benefit so accrued on this account under IBSM/FBSM would be covered under APR truing up mechanisms for FY 2009-10 and will be passed on to the consumers at that stage. However, the Commission is of the view that given the commencement of operations of Unit 8 and due to variation in energy requirement through the day, BEST will have surplus energy at certain points of time during the day, and the same have been considered by the Commission while estimating the net power purchase expenses, rather than adjusting for the revenue from sale of this surplus energy at the time of truing up as suggested by BEST. In case of any variation in the quantum of surplus and the revenue from the sale of the surplus energy, the impact of the same can be considered at the time of truing up based on actuals.
- Reduction in power purchase expenses due to reduction in cost of power purchase from TPC-G, due to the revision in the tariff applicable for TPC-G, as determined in a separate Order for TPC-G in Case No. 111 of 2008. Hence, this does not affect BEST.
- Reduction in transmission tariff payable by BEST, due to the downward revision in the transmission tariff, as determined in a separate Order in Case No. 155 of 2008. Hence, this does not affect BEST.
- Reduction in proposed capitalisation and consequent reduction in interest costs and return on equity components, adjustments of revenue gap due to final true-up of FY 2007-08 and provisional true-up of FY 2008-09. These being adjustments from other heads do not affect BEST.
- Reduction in the impact on account of the ATE Judgment, in accordance with the rationale elaborated in the APR Order for TPC-G in Case No. 111 of 2008.

Accordingly, the Commission approves Aggregate Revenue Requirement for FY

2009-10 as Rs 2703.40 Crore.

5 TARIFF PHILOSOPHY AND CATEGORY-WISE TARIFFS FOR FY 2009-10

5.1 APPLICABILITY OF REVISED TARIFFS

The revised tariffs will be applicable from June 1, 2009. In cases, where there is a billing cycle difference for a consumer with respect to the date of applicability of the revised tariffs, then the revised tariff should be made applicable on a pro-rata basis for the consumption. The bills for the respective periods as per existing tariff and revised tariffs shall be calculated based on the pro-rata consumption (units consumed during respective period arrived at on the basis of average unit consumption per day multiplied by number of days in the respective period falling under the billing cycle).

The Commission has determined the tariffs and revenue from revised tariffs as if the revised tariffs are applicable for the entire year. The Commission clarifies that any shortfall/surplus in actual revenue vis-à-vis the revenue requirement approved after truing up, due to the applicability of the revised tariffs for only ten months of FY 2008-09, will be trued up at the end of the year.

The Commission will undertake the Annual Review of BEST's performance during the last quarter of FY 2009-10. BEST is directed to submit its Petition for Annual Review of its performance during the first half of FY 2009-10, as well as truing up of revenue and expenses for FY 2008-09, with detailed reasons for deviation in performance, latest by November 30, 2009.

5.2 REVENUE GAP FOR FY 2008-09 AND FY 2009-10

In the APR Petition, BEST submitted that the total cumulative revenue gap till FY 2008-09 is estimated at Rs. 798.71 crore, primarily on account of the following reasons:

§ Exorbitant increase in power purchase cost, by Rs. 745 crore, as against estimated revenue surplus of Rs. 482 crore

§ Decrease in revenue, on account of the lower overall sales as well as the lower consumption in the higher slabs

§ Under-recovery of FAC, due to the prevalent FAC cap

§ Recovery of revised tariff for only 10 months of FY 2008-09

For FY 2009-10, BEST estimated the revenue gap as Rs 1361.58 Crore on a cumulative basis, after considering the revenue gap of previous years, based on the difference between the total revenue requirement of Rs. 3992.55 crore and estimated revenue from existing tariffs of Rs. 2631 crore.

As elaborated in Section 4.19 of this Order, the Commission has recomputed the revenue gap in FY 2008-09 after considering the ARR approved by the Commission for FY 2008-09 after provisional truing up and the estimated revenue for FY 2008-09.

This works out to a revenue gap of Rs. 392 crore, which has been added to the revenue gap of Rs. 225.79 crore for FY 2007-08, and the revenue requirement for FY 2009-10, in order to determine the overall revenue requirement for FY 2009-10.

The total revenue requirement for FY 2009-10 has been estimated as elaborated in Section 4.19 of this Order, by adding the revenue requirement of FY 2009-10 on a stand-alone basis, revenue gap for FY 2007-08 after final truing up, and revenue gap for FY 2008-09 after provisional truing up.

The total revenue from the existing tariffs is projected at Rs. 2884.65 crore vis-à-vis the revenue requirement of Rs. 2703.40 Crore, which has enabled the Commission to reduce the average tariffs by around 6%.

5.3 TARIFFS PROPOSED BY BEST

BEST submitted that the resultant gap to be recovered in FY 2009-10 is Rs. 1361.6 Crore. BEST submitted that it had adopted the following philosophy while proposing the Tariff:

§ The entire revenue gap of Rs. 1361.6 crore is proposed to be recovered through the revised tariffs, in order to ensure the financial stability of BEST.

§ The tariff of the lowest consumption slab under residential category is only 10% of BEST average cost of supply, and in order to reduce the cross-subsidy, BEST proposed to increase the tariff to Rs. 1.5 per kWh, in line with that prevalent in other distribution licensees operating in Mumbai

§ The concept of Reliability Charges for recovery of expensive power charges and standby charges, is proposed to be continued; the expensive power charges have been proposed as Rs. 2.62 per kWh for selected categories, and the standby charges have been proposed as Rs. 0.256 per kWh for all categories

§ The FAC under-recovery for FY 2007-08 and FY 2008-09 of Rs. 88.05 crore and Rs. 166.75 crore, respectively, is proposed to be recovered through a one-time surcharge of 59 paise/kWh that would be levied only during FY 2009-10

§ In the event of any surplus generated from any trading of excess allocated units from TPC-G, the benefit so accrued under Balancing and Settlement Mechanism would be recovered and is proposed to be passed on to the consumers under the truing up process for FY 2009-10

- BEST has not proposed any modification to the existing tariff categories
- The cross-subsidy has been reduced, in accordance with the EA 2003

The average cost of supply as computed by BEST for FY 2009-10, including truing up requirements, is given in the Table below:

Table: Revenue Gap to be recovered in FY 2009-10 (Rs Crore)

Sl.	Particulars	Recovery Proposed
1	Total Expenses	3193.84
2	True up of past years	798.79
3	Expenses to be considered of FY 2009-10	3992.63
4	Unit Sale Projected during the year (MUs)	4257
5	**Average Cost of Supply**	**9.38**
6	Purchase of Expensive Power in FY 2009-10 (External purchase)	355.16
7	Standby Charges payable in FY 2009-10	108.78
8	Expenses for FY 2009-10 (w/o Expensive Power & Stand by Charges)	3528.69
9	**Average Cost of Supply (w/o Expensive power of FY 09-10 and Standby Charge of FY 09-10)**	**8.29**

5.4 COMMISSION'S TARIFF PHILOSOPHY

The Commission has been deeply concerned for the past few years, about the increasing tariffs to consumers of Maharashtra. While previously, the Commission has attempted to rationalise the categories and slabs, this year, the Commission has been able to reduce the tariffs in general, while at the same time, reducing the cross-subsidy over that prevailing in the previous year.

As discussed in Section 5.2 of this Order, the Commission has determined the total revenue requirement for FY 2009-10 as Rs. 2703.40 Crore after considering the revenue gap of FY 2007-08 and impact of provisional truing up for FY 2008-09, which indicates that there is a need to reduce the tariffs by around 6%.

The Commission has determined the tariffs in line with the tariff philosophy adopted by it in the past, and the provisions of law. The tariffs and tariff categorisation have been determined so that the cross-subsidy is reduced without subjecting any consumer category to a tariff shock, and also to consolidate the movement towards uniform tariff categorisation throughout the State of Maharashtra.

Rationalisation of Tariff Categories

As enunciated by the Commission in the previous APR Order, the Commission is of the view that it is not feasible to have uniform tariffs across different licensees, due to inherent differences, such as revenue requirement, consumer mix, consumption mix, LT:HT ratio, etc. It is also, not appropriate to compare category-wise tariffs across different licensees for the same reasons. However, in the APR Order for FY 2007-08, the Commission had initiated the move to gradually rationalise and make uniform the tariff categorisation and applicability of tariffs for licensees in the State, and these efforts have been continued in this Order also. The differences exist because of historical reasons and differences in management policies and approach across licensees. There will of course, be some differences, on account of certain consumer categories being present only in certain licence areas, such as agricultural category, power looms, etc., which will exist only in certain licence areas.

At the same time, the Commission has attempted to ensure that the changes due to rationalisation are such that the impact on consumer categories is minimised, to the extent possible, and also, that the modifications are undertaken in small incremental steps, rather than making wholesale changes to the tariff structure. Also, the fact that the consumers may not be aware of the modifications proposed to be undertaken by the Commission has also been kept in mind, in view of certain Judgments given by the ATE in this regard, though the ATE has also ruled that the Commission has all the powers to determine the tariff categories and category-wise tariffs, irrespective of whether the distribution licensee has specifically asked for the same in its Petition, which has been published for public comments. Hence, the categorisation has by and large, been retained in accordance with the prevailing consumer categories, save for any rationalisation required on account of differences prevailing in different licence areas, and in case the licensee has specifically asked for any category, the same has also been considered in accordance with the provisions of Section 62(3) of the EA 2003.

While undertaking the rationalisation of tariff categories, the Commission has borne in mind the provisions of Section 62(3) of the Electricity Act, 2003, which stipulates as under:

> *"The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required."*

It should be noted that it is not possible to apply all the above specified criteria at the same time, for designing the tariff categories; else, with many permutations and combinations, there will be too many categories.

If any specific consumer category has to be created then it has to be done according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required. All these criteria may not exist for a consumer at the same time. Any one criteria is sufficient to be there for differentiating in tariffs.

Thus, it will be seen from the elucidation given below, as to how different criteria have been used to categorise different types of consumers:

§ The 'load factor' and 'power factor' criteria have been used to provide rebates and disincentives, such as load factor incentive for load factor above certain specified levels, and power factor rebates and disincentives are provided to consumers who are able to maintain their power factor above specified levels.

§ The consumer categories are broadly classified under High Tension (HT) and Low Tension (LT) categories, in accordance with the 'voltage' criteria under Section 62(3) reproduced above.

§ The 'time of supply' criteria has been used to specify time of day (ToD) tariffs, so that the consumers are incentivised to shift their consumption to off-peak periods and thus, reduce the burden on the system during peak hours.

§ The 'nature' of supply criteria has been used to specify differential tariff for continuous (non-interruptible) and non-continuous supply (interruptible)

§ The criteria of 'purpose' of supply has been used extensively to differentiate between consumer categories, with categories such as residential, non-residential/commercial purposes, industrial purpose, agricultural purpose, street lighting purpose, etc.

In this context, quite a few consumers have been representing before the Commission during and after the Public Hearings, stating that they are not undertaking any ‘commercial’ activity or activities for making ‘profit’ within their premises, and hence, they should not be classified under the ‘commercial’ category. It is clarified that the ‘commercial’ category actually refers to all ‘non-residential, non-industrial’ purpose, or which has not been classified under any other specific category. For instance, all office establishments (whether Government or private), hospitals, educational institutions, airports, bus-stands, multiplexes, shopping malls, small and big stores, automobile showrooms, etc., are all covered under this categorisation. Clearly, they cannot be termed as residential or industrial. In order to bring clarity in this regard, the Commission has renamed this category as ‘non-residential or commercial’ in this Order.

A similar impression is conveyed as regards the ‘Industry’ categorisation, with the Commission receiving several representations during and after the Public Hearings, from the hotel industry, leisure and travel industry, etc., stating that they have also been classified as ‘industry’ for the purpose of taxation and/or other benefits being extended by the Central Government or State Government, and hence, they should also be classified as ‘industry’ for the purpose of tariff determination. In this regards, it is clarified that classification under Industry for tax purposes and other purposes by the Central or State Government shall apply to matters within their jurisdiction and have no bearing on the tariffs determined by the Commission under the EA 2003, and the import of the categorisation under Industry under other specific laws cannot be applied to seek relief under other statutes. Broadly, the categorisation of ‘Industry’ is applicable to such activities, which entail ‘manufacture’.

While appreciating the anxiety of different classes of consumers to reduce their payments on account of use of electricity, the reasonable costs incurred by the Utilities have to be met, and irrespective of the number of consumer categories or the sub-classification considered in accordance with the provisions of Section 62(3) of the EA 2003, the cross-subsidies have to be reduced gradually and the tariff differential between categories cannot be very significant in the long-run.

In addition, the Commission has also made the following changes:

§ ‘HT IV: HT Temporary Supply’ has been created

§ ‘LT II: Commercial’ has been renamed as ‘LT II: Non-residential or Commercial’

- LT Industry upto 20 kW sanctioned load and LT Industry above 20 kW sanctioned load have been renumbered as LT III and LT IV, respectively, due to the renumbering of LT Advertisement & Hoardings as LT V
- LT Temporary Supply (Religious) and LT Temporary Supply (Others) have been renumbered as LT VII (A) and LT VII (B), respectively.
- LT Crematorium & Burial Grounds has been renumbered as LT VIII
- The applicability for different consumer categories has been addressed in the approved Tariff Schedule, which is annexed as a part of this Order (**Annexure II).**

Rationalisation of Tariff Components

In the MYT Order and the APR Order for FY 2007-08, the Commission had separately indicated the component of standby charges and expensive power charges chargeable to specific consumer categories, as a part of the energy charges, with the intention of sensitising the consumers about the consequences of the rapid increase in consumption and the ever-increasing demand-supply gap. The Commission is of the view that the desired objective has been achieved to some extent, since there have been several representations regarding these charges, and the need to separately show these charges, which indicate that the desired awareness has been created. In this Tariff Order, the Commission has discontinued the practice of indicating the standby charges and expensive power charges separately (also called as reliability charges), and has specified a unified energy charge applicable for the energy consumed.

The Commission has continued to determine 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, on account of the higher telescopic tariffs applicable for the higher consumption slabs, while at the same time ensuring that even the consumers falling in the higher consumption slabs are charged lower for the consumption corresponding to the lower consumption slab.

The Commission has retained the fixed charges/demand charges applicable for different consumer categories at the previous year's level.

The applicability of the BPL category tariffs has been retained same as that specified in the previous APR Order, read with any clarification thereon. The eligibility criteria has been retained at an annual limit of 360 units. The applicability of BPL category will have to be assessed at the end of each financial year. In case any BPL consumer has consumed more than 360 units in the previous financial year, then the consumer will henceforth, be considered under the LT-I residential category. Once a consumer is classified under the LT-I category, then he cannot be classified under BPL category.

The Commission has ensured that the HT tariffs are lower than the LT tariffs, as the cost of supply is lower than the cost of supply at lower voltages, due to the lower losses at higher voltages, and the lower network related costs since the electricity does not have to stepped down to lower voltages.

The Time of Day (ToD) tariffs will be applicable compulsorily to HT I and HT II categories, LT II (B) and (C) and LT IV category consumers having TOD meters, as well as optionally available to LT–II (A) and LT III category consumers, who have TOD meters. The TOD tariffs have been retained at the existing levels as under:

- Five time slots, viz., (a) 2200 to 0600 hours, (b) 0600 to 0900 hours, (c) 0900 to 1200 hours, (d) 1200 to 1800 hours, and (e) 1800 to 2200 hours.
- Additional peak hour tariff will be payable for consumption during the peak hours in the State, viz., 0900 to 1200 hours – morning peak, and 1800 to 2200 hours – evening peak, in the following manner:
    - 0900 to 1200 hours : Additional 0.50 Rs/kWh
    - 1800 to 2200 hours : Additional 1.00 Rs/kWh
- For consumption during night off-peak hours, viz., 2200 to 0600 hours, a rebate of 0.75 Rs/kWh will be available
- Neither additional tariff nor rebate will be applicable for consumption during 0600 to 0900 hours and 1200 to 1800 hours

Additional demand charges of Rs 20 per kVA per month would be chargeable for the stand by component, for CPPs, only if the actual demand recorded exceeds the Contract Demand.

The Billing Demand definition has been retained at the existing levels, i.e.,

Monthly Billing Demand will be the higher of the following:

(a) Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours;

(b) 75% of the highest billing demand/Contract Demand, whichever is lower, recorded during the preceding eleven months;

(c) 50% of the Contract Demand.

Fuel Adjustment Cost (FAC) Charges

The existing FAC Charge has been brought to zero, on account of the adoption of the existing fuel costs for projection of the fuel expenses. In case of any variation in the fuel prices with respect to these levels, BEST will be able to pass on the corresponding increase to the consumers through the existing FAC mechanism, subject to the stipulated ceiling of 10% of average energy charges, which works out to 59.6 paise/kWh. The FAC will be charged on a monthly basis, and the details of the computation and recovery from the same will have to be submitted to the Commission for post-facto approval, on a quarterly basis.

Average Cost of Supply and Cross-Subsidy

The average cost of supply (CoS) is given below:

Table: Average Cost of Supply for FY 2009-10

Sl.	Particulars	Amount
1	Total Revenue Requirement (Rs. Crore)	2703.40
2	Total Sales (MU)	4263.87
3	**Average Cost of Supply (Rs/kWh)**	**6.34**

The prevailing cross-subsidy and the reduction in cross-subsidy considered by the Commission are given in the Table below:

Category	Average Cost of Supply (Rs./unit)	Average Billing Rate (Rs./kWh)			Ratio of Average Billing Rate to Average Cost of Supply (%)			Percentage increase in tariff (%)
		Existing Tariff	Tariff Proposed by BEST	Revised Tariff	APR Order for FY08	Existing Tariff to current ACOS	Revised Tariff to current ACOS	
LT Category								
LT I – BPL	6.34	1.84	1.19	1.20	15%	29%	19%	-35%
LT I - Residential		3.88	5.66	4.22	62%	61%	67%	9%
LT II A – Comml. upto 20 kW		8.09	11.39	7.28	129%	128%	115%	-10%

Category	Average Cost of Supply (Rs./unit)	Average Billing Rate (Rs./kWh)			Ratio of Average Billing Rate to Average Cost of Supply (%)			Percentage increase in tariff (%)
		Existing Tariff	Tariff Proposed by BEST	Revised Tariff	APR Order for FY08	Existing Tariff to current ACOS	Revised Tariff to current ACOS	
LT II B - Comml > 20 kW & <=50 kW		11.34	14.12	9.42	153%	179%	149%	-17%
LT II C - Comml > 50 kW		11.84	15.16	10.36	159%	187%	163%	-13%
LT III - Advt & Hoardings		16.06	19.56	13.56	221%	253%	214%	-16%
LT IV - LT Indl. upto 20 kW		7.70	10.05	6.72	106%	121%	106%	-13%
LT-V A - LT Indl >20 kW & < 100 kW		9.42	12.39	7.92	122%	149%	125%	-16%
LT-V B - LT Indl > 100 kW		8.24	11.10	7.51	106%	130%	118%	-9%
LT-VI - Street Lighting		8.61	11.39	6.61	117%	136%	104%	-23%
LT-VII - Crematorium & Burial Grounds		2.67	2.87	2.67	30%	42%	42%	0%
LT VIII - Temporary - Others		11.13	15.54	10.63	157%	176%	168%	-4%
LT IX - Temporary Religious		2.66	2.85	2.85	30%	42%	45%	7%
HT Category								
HT I - Industrial		6.92	9.86	6.42	96%	109%	101%	-7%
HT II - Commercial	6.34	7.40	9.67	6.90	102%	117%	109%	-7%
HT III - Group Housing Society		5.17	7.86	4.37	61%	82%	69%	-15%

In the above Table,

(a) 'Existing Tariff' refers to the tariff approved by the Commission in the APR Order dated June 6, 2008

(b) 'Revised Tariff' refers to the tariff approved by the Commission in the present APR Order

(c) Ratio of Average Billing Rate (ABR) to Average Cost of Supply (ACOS)

i) 'APR Order for FY08' refers to the ratio of ABR to ACOS as envisaged in the APR Order for FY 2007-08 dated June 6, 2008

ii) 'Existing Tariff to current ACOS' refers to the ratio of ABR approved in the APR Order for FY 2007-08 to the ACOS approved in the present APR Order, i.e., Rs. 6.34 per kWh

iii) 'Revised Tariff to current ACOS' refers to the ratio of ABR approved in this APR Order for FY 2008-09 to the ACOS approved in the present APR Order, i.e., Rs. 6.34 per kWh

The above Table clearly shows that the Commission has reduced the cross-subsidy levels for most consumer categories, while at the same reducing the tariff for most consumer categories, since the reference tariff and cross-subsidy levels have to be considered based on the APR Order for FY 2007-08. Further, except for a few categories/sub-categories, the cross-subsidy levels are within the levels of ± 20% of ACOS specified by the Tariff Policy as the target cross-subsidy levels to be achieved by the year 2010-11. Further, as regards LT III – Advertisements & Hoardings, and LT VIII – Temporary Others, the consumption is not very significant and the consumption pattern is difficult to estimate, and the actual ABR could differ based on the consumption pattern. Moreover, the tariff for all categories has been reduced, except for residential category consumers, wherein the opportunity to reduce the cross-subsidy has been utilised, while at the same tariff ensuring against any tariff shock.

While the tariffs have been determined such that the revenue gap considered for the year is met entirely through the revision in tariffs, it is possible that the actual revenue earned by BEST may be higher or lower than that considered by the Commission, on account of the re-categorisation and creation of new consumer categories. The revenue shortfall/surplus if any, will be trued up at the time of provisional truing up for FY 2008-09 and final truing up for FY 2009-10.

5.5 REVISED TARIFFS WITH EFFECT FROM JUNE 1, 2009

Sl.	Consumer category & Consumption Slab	Tariffs	
		Fixed/ Demand Charge	**Energy Charge (Rs/kWh)**
	LOW TENSION CATEGORIES		
1	**LT I - Residential (BPL)**	Rs. 3 per month	0.40
	LT I - Residential		
	0-100 units	Rs. 30 per month	1.80
	101-300 units	Rs. 50 per	3.70

Sl.	Consumer category & Consumption Slab	Tariffs	
		Fixed/ Demand Charge	Energy Charge (Rs/kWh)
	301 to 500 units	month$^{\$\$}$	5.90
	Above 500 units (balance units)	Rs. 100 per month$^{\$\$}$	7.90
2	**LT II -** LT Non-residential or Commercial		
(A)	0-20 kW		
	0 – 300 units	Rs. 200 per month	5.10
	301 – 500 units		6.80
	501 – 1000 units		7.90
	Above 1000 units		8.30
(B)	> 20 kW and < 50 kW	Rs. 150 per kVA per month	8.90
(C)	> 50 kW		9.80
3	**LT III -** LT Industry below 20 kW load		
	0 – 300 units	250	4.30
	301 – 500 units	300	5.80
	501 – 1000 units	350	6.60
	Above 1000 units	350	7.50
4	**LT IV (A) -** LT Industry above 20 kW and upto 100 kW load	Rs 150 per kVA per month	7.19
5	**LT IV (B) -** LT Industry above 100 kW load	Rs 150 per kVA per month	7.00
6	**LT V - Advertisement & Hoardings, incl. floodlights & neon signs**	Rs. 300 per month	12.92
7	**LT VI - Streetlights**	Rs 150 per kVA per month	6.09
8	**LT VII – Temporary Supply**		
	A) TSR – Temporary Supply Religious	Rs 150 per connection per month	2.85
	B) TSO - Temporary Supply Others	Rs 150 per connection per month	10.59
9	**LT VIII – Crematoriums and Burial Grounds**	Rs 100 per connection per month	2.66

Sl.	Consumer category & Consumption Slab	Tariffs	
		Fixed/ Demand Charge	Energy Charge (Rs/kWh)
	TOD Tariffs (in addition to above base tariffs) – compulsory for LT II (B) and (C), and LT IV category, and optional for LT II (A) and LT III category		
	0600 hours to 0900 hours		0.00
	0900 hours to 1200 hours		0.50
	1200 hours to 1800 hours		0.00
	1800 hours to 2200 hours		1.00
	2200 hours to 0600 hours		-0.75
	HIGH TENSION CATEGORIES		
10	**HT I - Industry**	Rs 150 per kVA per month	5.81
11	**HT II – Commercial**	Rs 150 per kVA per month	6.36
12	**HT III – Group Housing Society**	Rs 150 per kVA per month	3.61
13	**HT IV – Temporary Supply**	Rs 200 per connection per month	9.00
	TOD Tariffs (in addition to above base tariffs) for HT I and HT II categories		
	0600 hours to 0900 hours		0.00
	0900 hours to 1200 hours		0.50
	1200 hours to 1800 hours		0.00
	1800 hours to 2200 hours		1.00
	2200 hours to 0600 hours		-0.75

Notes:

1. Fuel Adjustment Cost (FAC) will be applicable to all consumers and will be charged over the above tariffs, on the basis of the FAC formula prescribed by the Commission, and computed on a monthly basis.
2. $$: Fixed charge of Rs. 100 per month will be levied on residential consumers availing 3 phase supply. Additional Fixed Charge of Rs. 100 per 10 kW load or part thereof above 10 kW load shall be payable.

The detailed computation of category-wise revenue with revised tariffs has been given as **Annexure I** to this Order.

The approved Tariff Schedule has been given as **Annexure II** to this Order

5.6 INCENTIVES AND DISINCENTIVES

Power Factor Incentive (Applicable for all HT categories, LT II (B), LT II (C) and LT IV categories)

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 bill including energy charges, reliability charges, FAC, and Fixed/Demand Charges, 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 monthly bill and for unity PF, the effective incentive will amount to 7% (seven percent) reduction in the monthly bill.

Power Factor Penalty (Applicable for all HT categories, LT II (B), LT II (C) and LT IV categories)

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 bill including energy charges, reliability charges, FAC, and Fixed/Demand Charges, but excluding Taxes and Duties for the first 1% (one percent) fall in the power factor below 0.9, beyond which the 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 monthly 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 having load factor over 75% upto 85% will be entitled to a rebate of 0.75% on the energy charges 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 charges 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. This incentive is limited to HT I and HT II categories only. Further, the load factor rebate will be available only if the consumer has no arrears with BEST, and payment is made within seven days from the date of the bill. However, this incentive will be applicable to consumers where payment of arrears in instalments has been granted by BEST, and the same is being made as scheduled. BEST has to take a commercial decision on the issue of how to determine the time frame for which the payments should have been made as scheduled, in order to be eligible for the Load Factor incentive.

The Load Factor has been defined as following:

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

Maximum consumption possible = Contract Demand (kVA) x Actual Power Factor x (Total no. of hrs during the month less planned load shedding hours*)

* - Interruption/non-supply to the extent of 60 hours in a 30 day month has been built in the scheme.

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. 22:00 hrs to 06:00 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).

5.7 APPLICABILITY OF ORDER

This Order for the third year of the first Control Period, i.e., for FY 2009-10, shall come into force with effect from June 1, 2009. The Commission will undertake the Annual Review of BEST performance during the last quarter of FY 2009-10 and determine the revised revenue requirement for FY 2010-11, if required. BEST is directed to submit its Petition for Annual Review of its performance during the first half of FY 2009-10, as well as truing up of revenue and expenses for FY 2008-09 based on audited accounts, with detailed reasons for deviation in performance, latest by November 30, 2009.

The Commission acknowledges the efforts taken by the Consumer Representatives and other individuals and organisations for their valuable contribution to the APR process for BEST for FY 2008-09 and determination of revised revenue requirement for FY 2009-10.

Sd/-	Sd/-	Sd/-
(S. B. Kulkarni)	(A. Velayutham)	(V.P. Raja)
Member	Member	Chairman

(P.B. Patil)
Secretary, MERC

ANNEXURE I

REVENUE WITH REVISED TARIFFS

Tariff Category	Slab	No. of consumers	Components of tariff		Variable charge (Rs. / kWh)	Relevant sales & load/demand data for revenue calculation		Revenue from fixed charges (Rs. Crore)			Revenue from variable charges (Rs. Crore)	Total Revenue (Rs. Crore)	Average Billing Rate (Rs/kWh)
		Single phase	Single phase meter (Rs./ connection / month)	Demand charge (Rs./ kVA / month)		Energy consumpt -ion (MU)	Billing Demand (kVA)	Fixed charge (Single phase)	Fixed charge for kVA demand	Total Fixed charge			
LT category													
LT-I Residential (BPL)	0-30	857	3		0.40	0.04		0.0031		0.0031	0.0015	0.005	1.20
LT-I (Residential)	0-100	245206	10		1.80	675		2.9425		2.9425	121.35	124.29	1.84
	101-300	348770	30		3.70	575		12.5557		12.5557	212.59	225.15	3.92
	301-500	61212	60		5.90	171		4.4072		4.4072	100.89	105.29	6.15
	>500	48132	100		7.90	377		5.7758		5.7758	298.07	303.85	8.05
	Sub-total	**703320**				**1799**		**26**		**26**	**733**	**759**	**4.22**
LT-II A Commercial 0-20 kW	0-300	184585	200		5.10	438		44.3003		44.3003	223.45	267.75	6.11
	301-500	24844	200		6.80	124		5.9625		5.9625	84.07	90.03	7.28
	501-1000	20821	200		7.90	160		4.9969		4.9969	126.26	131.26	8.21
	>1000	17319	200		8.30	317		4.1565		4.1565	263.34	267.50	8.43
	Sub-total	**247567**				**1039**		**59**	**0**	**59**	**697**	**757**	**7.28**

Tariff Category	Slab	No. of consumers	Components of tariff		Variable charge (Rs. / kWh)	Relevant sales & load/demand data for revenue calculation		Revenue from fixed charges (Rs. Crore)			Revenue from variable charges (Rs. Crore)	Total Revenue (Rs. Crore)	Average Billing Rate (Rs/kWh)
		Single phase	Single phase meter (Rs./ connection / month)	Demand charge (Rs./ kVA / month)		Energy consumpt -ion (MU)	Billing Demand (kVA)	Fixed charge (Single phase)	Fixed charge for kVA demand	Total Fixed charge			
LT-II B Commercial >20 kW & <50 kW	all units	4044		150	8.90	134	0	0.0000	6.93	6.9331	118.92	125.85	9.42
LT-II C Commercial >50 kW	all units	3979		150	9.80	507	0	0.0000	28.23	28.2308	496.83	525.06	10.36
LT-III Industry < 20 kW	0-300	8248	250		4.30	23		2.4744		2.4744	9.75	12.23	5.39
	301-500	1252	300		5.80	9		0.4506		0.4506	5.34	5.79	6.29
	501-1000	1595	350		6.60	15		0.6699		0.6699	9.69	10.36	7.05
	>1000	1781	350		7.50	28		0.7480		0.7480	21.17	21.92	7.76
	Sub-total	**12876**				**75**		**4**	**0**	**4**	**46**	**50**	**6.72**
LT-IV (A) Industry > 20 kW & < 100 kW	all units	1291		150	7.19	48	0	0.0000	3.52	3.5238	34.39	37.91	7.92
LT-IV (B) Industry > 100 kW	all units	138		150	7.00	53	0	0.0000	2.67	2.6732	36.88	39.56	7.51

Tariff Category	Slab	No. of consumers	Components of tariff		Variable charge (Rs. / kWh)	Relevant sales & load/demand data for revenue calculation		Revenue from fixed charges (Rs. Crore)			Revenue from variable charges (Rs. Crore)	Total Revenue (Rs. Crore)	Average Billing Rate (Rs/kWh)
		Single phase	Single phase meter (Rs./ connection / month)	Demand charge (Rs./ kVA / month)		Energy consumpt -ion (MU)	Billing Demand (kVA)	Fixed charge (Single phase)	Fixed charge for kVA demand	Total Fixed charge			
LT-V Advertisement & Hoardings	all units	594	300		12.92	3		0.2137		0.2137	4.28	4.49	13.56
LT-VI Streetlights	all units	486		150	6.09	29	8610	0.0000	1.55	1.5500	17.92	19.47	6.61
LT-VII (A) - Temporary Religious	all units	0	150		2.85	0		0.0000		0.0000	0.03	0.03	2.85
LT-VII (B) - Temporary Others	all units	537	150		10.59	23		0.0967		0.0967	23.96	24.06	10.63
LT-VIII - Crematorium & Burial Grounds	all units	11	100		2.66	1		0.0013		0.0013	0.29	0.29	2.67
HT category		0											
HT-I Industry	all units	50		200	5.81	176	0	0.0000	10.71	10.7145	102.20	112.91	6.42
HT-II Commercial	all units	67		200	6.36	335	0	0.0000	18.22	18.2220	213.09	231.32	6.90
HT-III Group Housing	all units	5		200	3.61	43	0	0.0000	3.25	3.2471	15.39	18.64	4.37

Tariff Category	Slab	No. of consumers	Components of tariff		Variable charge (Rs. / kWh)	Relevant sales & load/demand data for revenue calculation		Revenue from fixed charges (Rs. Crore)			Revenue from variable charges (Rs. Crore)	Total Revenue (Rs. Crore)	Average Billing Rate (Rs/kWh)
		Single phase	Single phase meter (Rs./ connection / month)	Demand charge (Rs./ kVA / month)		Energy consumpt -ion (MU)	Billing Demand (kVA)	Fixed charge (Single phase)	Fixed charge for kVA demand	Total Fixed charge			
Total		**975823**				**4264**		**90**	**75**	**165**	**2540**	**2704.99**	**6.34**

ANNEXURE II

THE BEST UNDERTAKING

(Of the Brihan Mumbai Mahanagarpalika)

SCHEDULE OF ELECTRICITY TARIFFS

(With Effect from June 1, 2009)

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 June 15, 2009 in Case No. 118 of 2008, the tariff for supply of Electricity by BEST Undertaking for various classes of consumers as applicable from June 1, 2009.

General

1. These tariffs supersede 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 June 1, 2009) and directions, if any that may be issued by the Commission from time to time.
7. Unless specifically stated to the contrary, the figures of Energy Charge relate to Rupees per unit (kWh) charge for energy consumed during the month.
8. Fuel Adjustment Costs (FAC) Charge 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.

LOW TENSION (LT) - TARIFF

LT I: Residential (BPL)

Applicability

Residential consumers who have a sanctioned load of upto and less than 0.1 kW, and who have consumed less than 360 units per annum in the previous financial year. The applicability of Below Poverty Line (BPL) category will have to be assessed at the end of each financial year. In case any BPL consumer has consumed more than 360 units in the previous financial year, then the consumer will henceforth, be considered under the LT-I residential category. Once a consumer is classified under the LT-I category, then he cannot be classified under BPL category.

The categorisation of such BPL consumers will be reassessed at the end of the financial year, on a pro-rata basis. Similarly, the classification of BPL consumers who have been added during the previous year would be assessed on a pro-rata basis, i.e., 30 units per month.

All the new consumers subsequently added in any month with sanctioned load of upto and less than 0.1 kW and consumption between 1 to 30 units (on pro rata basis of 1 unit/day) in the first billing month, will be considered in BPL Category.

Rate Schedule

Consumption Slab (kWh)	**Fixed /Demand Charge**	**Energy Charge (Rs./kWh)**
BPL Category	Rs. 3 per month	0.40

LT I: LT – Residential

Applicability

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,

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

c) All Students Hostels affiliated to Educational Institutions.

d) All Ladies Hostels, such as Students (Girls) Hostels, Working Women Hostels, etc.

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

f) Telephone booth owned/operated by handicapped person 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 but shall not include Nursing Homes and any Surgical Wards or Hospitals.

<u>Rate Schedule</u>

Consumption Slab (kWh)	**Fixed/Demand Charge**	**Energy Charge (Rs./kWh)**
0-100 units	Rs. 30 per month	1.80
101 – 300 units	Rs. 50 per month[$$]	3.70
301 – 500 units		5.90
Above 500 units (balance units)	Rs. 100 per month[$$]	7.90

<u>Note:</u>

a) [$$]: Above fixed charges are for single phase connections. Fixed charge of Rs. 100 per month will be levied on residential consumers availing 3 phase supply.

Additional Fixed Charge of Rs. 100 per 10 kW load or part thereof above 10 kW load shall be payable.

LT II: LT- Non-Residential or Commercial

Applicability

Electricity used at Low/Medium Voltage in all non-residential, non-industrial premises and/or commercial premises for commercial consumption meant for operating various appliances used for purposes such as lighting, heating, cooling, cooking, washing/cleaning, entertainment/leisure, pumping in following places:

a) Non-Residential, Commercial and Business premises, including Shopping malls
b) All Educational Institutions, Hospitals and Dispensaries
c) Combined lighting and power services for Entertainment including film studios, cinemas and theatres, including multiplexes, Hospitality, Leisure, Meeting Halls and Recreation places.
d) Electricity used for the external illumination of monumental/historical/heritage buildings approved by MTDC.

Rate Schedule

Consumption Slab (kWh)	Fixed/ Demand Charge	Energy Charge (Rs./kWh)
(a) 0-20 kW		
0-300 units	Rs.200 per month	5.10
301- 500 units		6.80
501-1000 units		7.90
Above 1000 units (balance units)		8.30
(b) > 20 kW and ≤ 50 kW	Rs. 150 per kVA per month	8.90
(c) > 50 kW		9.80
TOD Tariffs (in addition to above base tariffs)		
0600 to 0900 hours		0.00
0900 to 1200 hours		0.50
1200 to 1800 hours		0.00

1800 to 2200 hours		1.00
2200 to 0600 hours		-0.75

Note:

a) The ToD tariff is available to LT-II (b) and (c) category, and optionally available to LT- II (a) having ToD meter installed.

LT III: LT Industry upto 20 kW

Applicability

Electricity used at Low/Medium Voltage in premises 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 (26.8 HP). This consumer category also includes IT industry and IT enabled services (as defined in the Government of Maharashtra Policy).

Rate Schedule

Consumption Slab (kWh)	**Fixed/Demand Charge**	**Energy Charge (Rs./kWh)**
0-20 kW		
0-300 units	Rs. 250 per month	4.30
301- 500 units	Rs. 300 per month	5.80
501-1000 units	Rs. 350 per month	6.60
Above 1000 units (balance units)		7.50
TOD Tariffs (in addition to above base tariffs)		
0600 to 0900 hours		0.00
0900 to 1200 hours		0.50
1200 to 1800 hours		0.00
1800 to 2200 hours		1.00
2200 to 0600 hours		-0.75

Note:

a) The ToD tariff is optionally available to LT – III category consumers having ToD meter installed.

<u>LT IV: LT– Industrial above 20 kW load</u>

<u>Applicability</u>

Electricity used at Low/Medium Voltage in premises for purpose of manufacturing including that used within these premises for general lighting, heating/cooling, etc., and having sanctioned load greater than 20 kW(26.8 HP). This consumer category also includes IT industry and IT enabled services (as defined in the Government of Maharashtra Policy).

<u>Rate Schedule</u>

Consumption Slab (kWh)	**Fixed/Demand Charge**	**Energy Charge (Rs./kWh)**
(a) Above 20 kW and upto 100 kW	Rs. 150 per kVA per month	7.19
(b) Above 100 kW		7.00
TOD Tariffs (in addition to above base tariffs)		
0600 to 0900 hours		0.00
0900 to 1200 hours		0.50
1200 to 1800 hours		0.00
1800 to 2200 hours		1.00
2200 to 0600 hours		-0.75

LT V: LT - Advertisements and Hoardings

<u>Applicability</u>

Electricity used for the 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 as well as electricity used for the external illuminations of monumental, historical/heritage buildings approved by MTDC, which shall be covered under LT-II category depending upon Sanctioned Load.

<u>Rate Schedule</u>

Consumption Slab	**Fixed / Demand Charge**	**Energy Charge**

(kWh)		(Rs./kWh)
All Units	Rs. 300 per month	12.92

Note

a) The electricity, that is used for the purpose of indicating /displaying the name and other details of the shops or Commercial premises, for which electric supply is rendered, shall not be under LT V Tariff Category. Such usage of electricity shall be covered under the prevailing tariff of such shops or commercial premises.

LT VI: LT- 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.

Rate Schedule

Consumption Slab (kWh)	Fixed/Demand Charge	Energy Charge (Rs./kWh)
All Units	Rs. 150 per kVA per month	6.09

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 'Recorded Demand'

LT VII: LT-Temporary Supply

Applicability

LT VII (A) – Temporary Supply Religious (TSR)

Electricity supplied at Low/Medium Voltage for temporary purposes during public religious functions like Ganesh Utsav, Navaratri, Eid, Moharam, Ram Lila, Ambedkar Jayanti, Diwali, Christmas, Guru Nanak Jayanti, etc., or areas where community prayers are held.

LT VII (B) - Temporary Supply Others (TSO)

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

Consumption Slab (kWh)	Fixed/Demand Charge	Energy Charge (Rs./kWh)
LT VII (A) – All Units	Rs. 150 per connection per month	2.85
LT VII (B) – All Units	Rs. 150 per connection month	10.59

Note

- In case of LT VII (B) the Additional fixed charges of Rs. 150 per 10 kW load or part thereof above 10 kW load shall be payable.

LT VIII: LT- Crematorium and Burial Grounds

Applicability

Electricity used at Low/Medium Voltage in Crematorium and Burial Grounds for all purposes including lighting, and will be applicable only to the portion catering to such activities, and in case part of the area is being used for other commercial purposes, then a separate meter will have to be provided for the same, and the consumption in this meter will be chargeable under LT-II Commercial rates as applicable.

Rate Schedule

Consumption Slab	Fixed/Demand Charge	Energy Charge

(kWh)		**(Rs./kWh)**
All Units	Rs. 100 per connection per month	2.66

HIGH TENSION (HT) - TARIFF

HT I: HT- Industry

Applicability

This category includes consumers taking 3-phase electricity supply at High Voltage for purpose of manufacturing. This Tariff shall also be applicable to IT Industry & IT enabled services (as defined in the Government of Maharashtra policy), taking 3-phase electricity supply at High Voltage.

Rate Schedule

Consumption Slab (kWh)	Fixed/ Demand Charge	Energy Charge (Rs./kWh)
All Units	Rs 150 per kVA per month	5.81
TOD Tariffs (in addition to above base tariffs)		
0600 to 0900 hours		0.00
0900 to 1200 hours		0.50
1200 to 1800 hours		0.00
1800 to 2200 hours		1.00
2200 to 0600 hours		-0.75

HT II: HT- Commercial

Applicability

This category includes consumers of electricity such as all Educational Institutions, Hospitals, and religious and charitable institutions taking supply at High Voltage.

This category also includes consumers taking electricity supply at High Voltage for commercial purposes, including Hotels, Shopping Malls, film studios, cinemas and theatres, including multiplexes.

The Consumers belonging to HT II 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. These downstream entities will pay appropriate tariff as applicable as per BEST Tariff Schedule i.e. LT II.

Rate Schedule

Consumption Slab (kWh)	Fixed/ Demand Charge	Energy Charge (Rs./kWh)
All Units	Rs 150 per kVA per month	6.36
TOD Tariffs (in addition to above base tariffs)		
0600 to 0900 hours		0.00
0900 to 1200 hours		0.50
1200 to 1800 hours		0.00
1800 to 2200 hours		1.00
2200 to 0600 hours		-0.75

HT III: HT– Group Housing Society

Applicability

This category includes Group Housing Societies taking single point electricity supply at High Voltage for consumption by individual dwellings. Such individual dwellings will pay appropriate tariff LT I: LT- Residential as per BEST Tariff Schedule in force.

Rate Schedule

Consumption Slab (kWh)	Fixed/ Demand Charge	Energy Charge (Rs./kWh)
All Units	Rs. 150 per kVA per month	3.61

HT IV- HT - Temporary Supply

Applicability

Electricity used at High Voltage on a temporary basis of supply for any construction work, decorative lighting for exhibitions, circus, film shooting, marriages, etc.

This category also includes electricity supplied at High Voltage for temporary purposes during public religious functions like Ganesh Utsav, Navaratri, Eid, Moharam, Ram Lila, Ambedkar Jayanti, Diwali, Christmas, Guru Nanak Jayanti, etc. or areas where community prayers are held.

Rate Schedule

Consumption Slab (kWh)	**Fixed/Demand Charge**	**Energy Charge (Rs./kWh)**
Temporary Supply - All units	Rs. 200 per connection per month	9.00

MISCELLANEOUS AND GENERAL CHARGES

Fuel Adjustment Cost (FAC) Charges

The FAC charge will be determined based on the approved Formula and relevant directions, as may be given by the Commission from time to time and will be applicable to all consumer categories for their entire consumption. The FAC Formula takes into account any change in the cost of own generation and power purchase due to variations in the fuel cost. Fuel Price shall mean the landed cost of fuel at power station battery limits and will consist of only following components:

a) Basic Fuel Price including statutory taxes, duties, royalty as applicable

b) Transportation (freight) cost by rail/road/pipeline or any other means including transportation service charges for bringing fuel up to the Power Station boundary.

c) Fuel Treatment Charges such as washing/cleaning charges, Sizing Crushing Charges, Fuel Analysis Charges etc. for making fuel up to the required grade /quality

d) Fuel Handling Charges, including that towards loading and unloading charges for bringing fuel to the power station boundary.

Besides above, the Commission specifies a ceiling on ‘transportation service charge’, at 2% of the freight charge.

The FAC charge shall be computed and levied/refunded, as the case may be, on a monthly basis. The following Formula shall be used for computing FAC:

FAC = C + I + B where,

FAC = Total Fuel Cost and Power Purchase Cost Adjustment

C = Change in cost of own generation and power purchase due to variation in the fuel cost,

I = Interest on Working Capital,

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

The details for each month shall be available on BEST website at www.bestundertaking.com.

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 (Applicable for all HT categories, LT II (B) and (C), and LT IV categories)

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 bill including energy charges, reliability charges, FAC, and Fixed/Demand Charges, 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 monthly bill and for unity PF, the effective incentive will amount to 7% (seven percent) reduction in the monthly bill.

Power Factor Penalty (Applicable for all HT categories, LT II (B) and (C), and LT IV categories)

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 bill including energy charges, reliability charges, FAC, and Fixed/Demand Charges, but excluding Taxes and Duties for the first 1% (one percent) fall in the power factor below 0.9, beyond which the 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 monthly 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.

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 per annum (%)
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

There is a Load factor incentive for consumers having Load Factor above 75% based on Contract Demand. Consumers having load factor over 75% upto 85% will be entitled to a rebate of 0.75% on the energy charges 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 charges 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. This incentive is limited to HT I and HT II categories only. Further, the load factor rebate will be available only if the consumer has no arrears with BEST, and payment is made within seven days from the date of the bill. However, this incentive will be applicable to consumers where payment of arrears in instalments has been granted by BEST, and the same is being made as scheduled. BEST has to take a commercial decision on the issue of how to determine the time frame for which the payments should have been made as scheduled, in order to be eligible for the Load Factor incentive.

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:

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

Maximum consumption possible = Contract Demand (kVA) x Actual Power Factor x (Total no. of hrs during the month less planned load shedding hours*)

* - Interruption/non-supply to the extent of 60 hours in a 30 day month has been built in the scheme.

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. 22:00 hrs to

06:00 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 intimation to the consumer, if different from such person.
8) A consumer - (i) with a consumption of electricity of not less than one lakh (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.

Definitions:

Maximum Demand

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.

Contract Demand

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).

Sanctioned Load

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

Billing Demand (for LT categories):

Monthly Billing Demand will be the higher of the following:

a) 65% of the actual Maximum Demand recorded in the month during 0600 hours to 2200 hours.
b) 40% of the Contract Demand.

Note:

c) Demand registered during the period 0600 to 2200 Hrs. will only be considered for determination of the Billing demand.
d) In case of change in Contract Demand, the period specified in Clause (a) above will be reckoned from the month following the month in which the change of Contract Demand takes place.

Billing Demand (for HT categories):

Monthly Billing Demand will be the higher of the following:

a) Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours.
b) 75% of the highest billing demand recorded during preceding eleven months subject to limit of contract demand.

c) 50% of the Contract Demand.

Note:

d) Demand registered during the period 0600 to 2200 Hrs. will only be considered for determination of the Billing demand.

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

APPENDIX 1

List of Persons who attended the Technical Validation Session held on January 22, 2009

S.No.	Name
BEST Officials	
1	Shri S.A. Puranik
2	Shri S.P. Bedekar
3	Shri D.B. Biwalkar
4	Shri A.G. Patil
5	Shri K. Vinod Raj
6	Shri K.N.Rajagopal
7	Shri S.R. Surve
8	Shri S.D. Pawar
9	Shri K. Pavithran
10	Shri Bilal A. Shaikh
11	Shri M.R. Dharaskar
12	Shri V.K. Rokade
13	Shri A.J. John
14	Shri R.J. Singh
15	Shri S.V. Varadkar
16	Shri R.M. Pradhan
17	Shri S.M. Sakpal
18	Shri U.Y. Vajandar
19	Shri S.D. Darne
20	Shri B.K. Chavan
21	Shri A.B. Kandase
22	Shri S.B. Dhule
23	Shri M.V. Bhingere
24	Shri S.R. Khelkar
25	Shri R.D. Waikar
26	Shri G.P. Pradhan
27	Shri G.G. Gokhale
28	Shri D.N. Pawar
29	Shri M.T Nair
30	Shri P.S. Kirtikar
31	Shri M.B. Urunkar
Consultants of	

BEST	
32	Shri Amit Ramnani
Consultants to Commission	
33	Shri Palaniappan M
34	Shri M.N. Bapat
35	Shri Saurabh Gupta
36	Shri M.M. Dahake
37	Shri Anand Kulkarni

APPENDIX 2

List of Objectors

S.No	**Name of Person /Official**	**Designation**	**Institution**
Consumer Representative Organisations			
1	Dr. Ashok Pendse		Mumbai Grahak Panchayat
Objectors			
1	Shri Alexander V. Mantytsky	Consul General	Consulate General of the Russian Federation in Mumbai
2	Shri R.N.Engineer	President	Urjavaran Foundation
3	Shri Pravin Velji Chheda	President	BEST Undertaking (BEST Committee)
4	Shri G.V. Karandikar	E.E.Mech.(s) W.S.	Municipal Corporation of Greater Mumbai (MCGM)
5	-	Partner	Central Tin Works
6	Shri Suresh Jivrajani	Hospital Administrator	Pramukhswami Eye Hospital
7	Col. M. Masand	President	The Association Of Hospitals
8	Shri Vasant Shetty	Vice President	Indian Hotel & Restaurant Association
9	Adv. C.D. Prabhu		Individual
10	Shri Dhirajlal P. Gala	Partner	Premsons Bazaar
11	Shri Jeet Gulati	Chairman	Maker Arcade Premises Co-Operative Society Ltd.
12	Dr. Shatadru Sengupta	Director-Legal and Company Secretary	Hardcastle Restaurants Private Limited
13	Shri A.R. Bapat	Chartered Engineer	Individual
14	Shri Jimmy S. Bengali		Individual
15	Shri Adi F. Merchant		Individual
16	Shri Vishwas Deshpande	Managing Trustee	Vidyalankar Dnyanapeeth Trust
17	Shri Guruprasad Shetty		Association of Hotels & Restaurant
18	Shri D.V. Savla	President	Dadar Merchant's Association
19	Mrs. Shweta A. Abrol	Chief Co-oridinator	BhartiyaUdhami Avam Upbhokta Sangh
20	-	Executive Engineer	Mumbai Housing & Area Development Board (MHADA)
21	Shri N. Ponrathnam		Vel Induction Hardenings

22	Shri M.S. Chhabaria		Individual
23	Shri Hiroo P. Malkani		Individual
24	Shri Mahesh Barbhaya	Proprietor	Lata Enterprises
25	Shri H.S. Kamath		Power Age Engineering Consultants Pvt. Ltd.
26	Shri. S.M. Korde	Secretary General	Hotel and Restaurant Association (Western India)
27	Shri A.V. Shenoy	Convenor	Energy Study Goup

List of Objectors who attended the Public Hearing on March 25, 2009

S.No.	Name of Person /Official	Institution
1	Dr. Ashok Pendse	Mumbai Grahak Panchayat
2	Ms. Maria Telyatnikova	Consulate General of the Russian Federation in Mumbai
3	Ms. Nataliya Yegorovskaya	Consulate General of the Russian Federation in Mumbai
4	Mrs. Dhun Baldawala	Urjavaran Foundation
5	Shri Pravin Velji Chheda	BEST Undertaking (BEST Committee)
6	Shri K.V. Mehta	The Association Of Hospitals
7	Representative	Indian Hotel & Restaurant Association
8	Shri Bharat Gala	Premsons Bazaar
9	Dr. Shatadru Sengupta	Hardcastle Restaurants Private Limited
10	Shri Vishwas Deshpande	Vidyalankar Dnyanapeeth Trust
11	Shri Guruprasad Shetty	Association of Hotels & Restaurant
12	Shri Rakshpal Abrol	BhartiyaUdhami Avam Upbhokta Sangh
13	Shri Mahesh M. Jamsandekar	Mumbai Housing & Area Development Board (MHADA)
14	Shri N. Ponrathnam	Vel Induction Hardenings
15	Shri H.S. Kamath	Power Age Engineering Consultants Pvt. Ltd.
16	Shri K.J. Sabastian	Power Age Engineering Consultants Pvt. Ltd.
17	Shri Himanshu Chandrakar	Power Exchange India Limited
18	Mrs. Deepa Chawan	Hotel and Restaurant Association (Western India)
19	Shri Bhavjit Vaishnav	Individual
20	Shri Sharad Nath	Individual
21	Shri Umesh S. Bhagat	MSETCL

S.No.	Name of Person /Official	Institution
22	Shri R.M. Ranade	The Tata Power Company Limited
23	Shri I.P. Gandhi	Jaslok Hospital
24	Shri A.V. Shenoy	Energy Study Goup
25	Shri Shashank Rao	Mid-Day
26	Shri Shaji Zacharia	Hotel Marine Plaza
27	Shri R.S. Bedi	Hotel Diplomat
28	Shri Shivprasad Bale	Hardcastle Restaurants Private Limited
29	Shri Sunil Saraf	Electrical Contractors Association of Maharashtra
30	Shri Bheemeshwar	Tata Institute of Social Sciences
31	Shri Chittaranjan Temshekar	Times of India
32	Shri Kupesh Shah	Individual
33	Shri Sanjay V. Deshpande	Individual
34	Shri Girish	Association of Hotels & Restaurant
35	Shri Sailesh D. Doctor	Individual
36	Shri Shaswat S. Doctor	Individual
37	Shri Kaustubh Jadhav	Individual
38	Shri Geevarghese	Individual
39	Shri Jaiprakash	Individual
40	Shri K.B. Gargund	Mumbai Housing & Area Development Board (MHADA)
41	Shri Amol Maokar	Economic Times
42	Shri Mihir V. Sanghvi	Individual