Before the

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

World Trade Centre, Centre No.1, 13th Floor, Cuffe Parade, Mumbai – 400 005

Tel. 22163964/ 65/69 Fax 22163976

Email: mercindia@mercindia.org.in

Website: www.mercindia.org.in

Case No. 73 of 2007

IN THE MATTER OF

Brihan-Mumbai Electricity Supply and Transport Undertaking's (BEST) Annual Performance Review for FY 2007-08 and Petition for Tariff Determination for FY 2008-09

Dr. Pramod Deo, Chairman

Shri A. Velayutham, Member

Shri S. B. Kulkarni, Member

O R D E R

Dated: June 6, 2008

In accordance with the MERC Tariff Regulations and upon directions from the Maharashtra Electricity Regulatory Commission (Commission), the Brihan-Mumbai Electricity Supply and Transport Undertaking (BEST)), submitted its application for approval of Annual Performance Review for FY 2007-08 and Tariff Determination for FY 2008-09, under affidavit. 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 objections and comments of the public, responses of BEST, issues raised during the Public Hearing, and all other relevant material, determines the revenue requirement and tariff for BEST for FY 2008-09 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	Annual Revenue Requirement
AS	Accounting Standard
ATE	Appellate Tribunal for Electricity
BE	Budget Estimates
BEST	Brihanmumbai Electric Supply & Transport Undertaking
BMC	Brihanmumbai Municipal Corporation
BSES	BSES Limited
BSSIA	Bombay Small Scale Industries Association
CAGR	Compounded Annual Growth Rate
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGRF	Consumer Grievances Redressal Forum
CIBS	Consumer Information and Billing System
COS	Cost of Supply
CPI	Consumer Price Index
CPP	Captive Power Plant
Commission/ MERC	Maharashtra Electricity Regulatory Commission
Cr	Crore
CSMVS	Chhatrapai 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
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
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
NTP	National Tariff Policy
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	Revised Energy
REL	Reliance Energy Limited
RPO	Renewable Purchase Obligation
RPS	Renewable Energy Purchase Specification
RoE	Return on Equity
Rs.	Indian Rupees
SLDC	State Load Despatch Centre
STU	State Transmission Utility
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 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. These Regulations superseded the MERC (Terms and Conditions of Tariff) Regulations, 2004.

1.2 Commission's Order on ARR and Tariff Petition for FY 2004-05 and FY 2005-06 & Review Petition on Commission's Order

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. The Commission, in exercise of the powers vested in it under Section 61 and Section 62 of the Electricity Act, 2003 and all other powers enabling it in this behalf, and after taking into consideration all the submissions made by BEST, all the objections, responses of the BEST, issues raised during the Public Hearing, and all other relevant material, determined the ARR and tariff for retail supply of electricity by the BEST vide its Operative Order dated February 25, 2006 and subsequent Detailed Order dated March 9, 2006.

Subsequently, BEST filed a Petition with the Honourable Appellate Tribunal for Electricity (ATE) on April 18, 2006 (Appeal No. 61 of April 2006), challenging the operative Order and detailed Order of the Commission. The ATE pronounced its Judgement in Appeal No. 61 on August 18, 2006, giving specific relief on certain points of the detailed Order of the Commission dated March 9, 2006.

In compliance thereof, 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, in line with the various directives issued/ relief granted by the Appellate Tribunal in its judgment.

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.

1.3 Commission's 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. The Commission, in exercise of the power vested in it under Sections 61 and 62 of the Electricity Act, 2003, and all other powers enabling it in this behalf, and after taking into consideration all the submissions made by BEST, all the objections, responses of BEST, issues raised during the Public Hearing, and all other relevant material, issued the Order on the ARR and Tariff Petition of BEST for FY 2006-07 on January 18, 2007.

1.4 Commission's 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. The Commission, in exercise of the power vested in it under Sections 61 and 62 of the Electricity Act, 2003, and all other powers enabling it in this behalf, and after taking into consideration all the submissions made by BEST, all the objections, responses of BEST, issues raised during the Public Hearing, and all other relevant material, 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.

1.5 Petition for Annual Performance Review for FY 2007-08 and Tariff Determination for FY 2008-09

As per the MERC Tariff Regulations, the application for the determination of tariff has to be made to the Commission not less than 120 days before the date from when the tariff is intended to be made effective. The Commission had directed BEST to submit the Petition for Annual Performance Review latest by November 30 of each year in line with the Regulation 9.1 of the Tariff Regulations.

Subsequently, as per the request made by BEST to grant an extension of 15 days in view of the recent Order dated November 6, 2007 in Case No. 87 and 88 of 2006 and Case No 30 of 2007 issued by the Commission on Power Purchase Agreement (PPA) between BEST and TPC, the Commission vide letter dated December 3, 2007 allowed an extension of 15 days, i.e., by December 15, 2007 for submission of the APR Petition. BEST submitted its Petition for Annual Performance Review for FY 2007-08 and Tariff Determination for FY 2008-09 for its Distribution business on December 17, 2007, based on actual audited expenditure for FY 2006-07, actual expenditure for first half of FY 2007-08, i.e., from April to September 2007, revised estimate of expenses for October 2007 to March 2008, and projections for FY 2008-09. BEST, in its Petition, requested the Commission to

- Undertake truing up for FY 2006-07;
- Approve revised Annual Revenue Requirement for FY 2007-08;
- Approve revenue gap arising out from previous years as detailed in the Petition;
- Approve the revised ARR for FY 2008-09 considering the revenue gap of previous years and proposed tariff for FY 2008-09.

The Commission, vide its letter dated December 24, 2007, forwarded the preliminary data gaps and information required from BEST. BEST submitted its replies to preliminary data gaps and information requirement on December 31, 2007.

The Commission held a **Technical Validation Session** (TVS) on BEST's APR for FY 2007-08 and Tariff Petition for FY 2008-09, on January 2, 2008, in the presence of authorised Consumer Representatives. 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 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.

1.6 Admission of Petitions and Public Process

BEST submitted its responses to the queries raised during the TVS, on January 14, 2008, and the Commission admitted the APR Petition of BEST on January 14, 2008 for further public process.

In accordance with Section 64 of the EA 2003, the Commission directed BEST to publish its application in the prescribed abridged form and manner, to ensure public participation. The Commission also directed BEST to reply expeditiously to all the suggestions and comments from stakeholders on its Petition. BEST issued the public notices in newspapers inviting comments/suggestions from stakeholders on its APR Petition. The Public Notice was published in The Times of India, Indian Express, Loksatta and Maharashtra Times newspapers on January 15 and 16, 2008. 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) and also on the web site of the Commission (www.mercindia.org.in) in downloadable format. The Public Notice specified that the suggestions/objections, either in English or Marathi, may be filed in the form of affidavits along with proof of service on BEST.

The Commission received written objections expressing concerns on procedural issues and other issues in case of BEST's Petition. The Public Hearing was conducted in Mumbai on February 15, 2008 at 11:00 hours at **Mahila Vikas Mandal Sabhagriha, Colaba, 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, contemplated under law to ensure transparency and public participation has been 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 2006-07, Annual Performance Review of FY 2007-08 and tariff determination of BEST for FY 2008-09. Various objections that were raised on BEST's Petition after issuing the public notice both in writing as well as during the public hearing, along with BEST's response and Commission's rulings have been detailed in Section 2 of this Order.

1.7 Organisation of the Order

This Order is organised in the following 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 objections raised by the objectors in writing as well as during the Public Hearing before the Commission. The various objections have been summarized, followed by the response of BEST and the ruling of the Commission on each of the points.
- **Section 3** of the Order details the truing up of expenses and revenue of BEST for FY 2006-07.
- **Section 4** of the Order comprises the Review of Performance for FY 2007-08, covering both physical performance and expenditure heads. This Section also comprises the Commission's analysis on various components of revenue requirement of BEST for FY 2008-09, including sales projections, distribution losses, energy balance, power purchase, etc.
- **Section 5** of the Order comprises the Tariff Philosophy adopted by the Commission and the category-wise tariffs applicable for FY 2008-09.

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

2.1 Procedural Issues

Bombay Small Scale Industries Association (BSSIA) and several others submitted that the Commission cannot exceed the powers given to it under the EA 2003 and that the Commission should abide by its own Regulations. They referred to Regulation 64 (a) of MERC (Conduct of Business) Regulations, 2004 dated June 10, 2004, and submitted that adequate time of three weeks as stipulated in the Regulations were not provided to the public to study the documents and submit the responses. They pointed out that BEST issued the Public Notice on January 15 and 16, 2008, and the copies of the Petition were not made available on the date of publication in the newspapers. Shri. N. Ponrathnam and several others requested the Commission to reject the Petition and direct BEST to comply with the guidelines and Regulations framed by the Commission.

Shri. Gautam Damani submitted that the Commission should follow the principles laid down under clause 5.0 (h) (3) of National Tariff Policy (NTP) for determination of tariff. They objected to proposed tariff hike and submitted that under MYT regime, the tariff should be revised only at the end of the first Control Period.

BEST's Response

BEST clarified that the time frame of three weeks for inviting comments/suggestions was finalised by the Commission. BEST further submitted that the copies of the Petition were made available in hard and soft form in its Colaba and Dadar offices from January 16, 2008 onwards as mentioned in the Public Notice.

Commission's Ruling

As mentioned in Section 1 of the Order, BEST submitted its Petition for Annual Performance Review for FY 2007-08 and determination of revenue requirement for FY 2008-09 on December 17, 2007. The Commission communicated the data gaps in the Petition and held a Technical Validation Session on BEST's Petition in the presence of authorised Consumer Representatives. Upon submission of revised Petition by BEST incorporating the additional information and replies to queries raised by the Commission, the Petition was admitted for further public process on January 14, 2008. The Commission directed BEST to host the detailed Revised APR Petition and formats in MS Excel on its website for easy download by interested stakeholders.

The Public Notice was published on January 15 and 16, 2008, in leading newspapers and the public hearing was originally scheduled to be held on February 6, 2008. Considering the requests made by the stakeholders for additional time and allegations that the Petition documents were not available at the concerned offices on the due dates, the Commission postponed the Public Hearing, which was finally held on February 15, 2008. Thus, adequate time, as envisaged under the Regulations has been provided to stakeholders to submit their views/suggestions before the Public Hearing, and additional time of 7 days was also provided to file rejoinders.

As regards determination of tariff on annual basis, the Commission in its MYT Order for BEST dated April 3, 2007 has approved the Aggregate Revenue Requirement and trajectory of performance parameters for BEST for the Control Period from FY 2007-08 to FY 2009-10 and determined the tariff for FY 2007-08. Regulation 20.1 of the MERC (Terms and Conditions of Tariff) Regulations, 2005, stipulates that the tariff will be determined on an annual basis. Hence, in this Order, the Commission is approving the revised revenue requirement and tariff of BEST for FY 2008-09. Further, the Commission is of the view that the provisions of the National Tariff Policy referred by the objectors do not stipulate that the tariff cannot be determined on an annual basis.

2.2 Sales Forecast

Shri A.R. Bapat submitted that BEST has revised sales projections for FY 2007-08 from 3850 MU to 4151 MU, and further projected sales of 4340.18 MU for FY 2008-09, which appears to be higher side.

BEST's Response

BEST submitted that the sales during the first half of FY 2007-08 was significantly higher than the sale of electricity over the corresponding months of the previous year due to extremely hot summer season and higher usage of power intensive equipments, like Air Conditioners. BEST further submitted that growth rate would be evened out in the long run, as the annual growth rate for FY 2008-09 is based on the demand estimation studies carried out by BEST.

Commission's Ruling

The Commission has estimated the sales for FY 2007-08, based on actual sales over the period from April 2007 to February 2008, and has proportionately considered the sales in March 2008, based on past trend of consumption in that month. The sales for FY 2008-09 have been projected on the basis of the revised sales estimate for FY 2007-08, considering the past trends in sales. The details of category-wise sales considered by the Commission have been elaborated in Section 4 of this Order.

2.3 Employee Expenses

Shri A.R.Bapat pointed out that that approved employee expenses have reduced from Rs.114 Crore in FY 2006-07 to Rs.92 Crore for FY 2007-08 and actual employee expenses have reduced from Rs.138 Crore for FY 2006-07 to Rs.130 Crore for FY 2007-08, in spite of wage revision.

Shri Suhas Bane submitted that employee expenses estimated for FY 2008-09 have been projected much higher than the employee expenses incurred for past three years.

BEST's Response

BEST submitted that actual employee expenses of Rs.138 Crore for FY 2006-07 has been reduced to Rs.130 Crore for FY 2007-08 in spite of wage revision, as the higher expense in FY 2006-07 was due to arrears paid for the previous years in FY 2006-07.

BEST submitted that increase in employee expenses during FY 2008-09 is due to effect of wage revision and payment of past arrears approved by BEST Committee.

Commission's Ruling

In this Order, the Commission has undertaken truing up of the actual expenses for FY 2006-07 vis-à-vis the expenses approved in the Tariff Order for FY 2006-07, subject to prudence check. As regards FY 2007-08, the Commission has undertaken provisional truing up of the expenses only in certain circumstances, as elaborated in Section 4 of this Order. The approved employee expenditure for FY 2008-09 has been determined by applying the appropriate inflation indices on the provisionally trued up expenditure for FY 2007-08. The final truing up of the employee expenditure for FY 2007-08 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 relevant Sections of this Order on truing up and revised revenue requirement for FY 2007-08 and FY 2008-09.

2.4 Repair and Maintenance (R&M) Expenses

Shri Suhas Bane submitted that R&M expenses estimated for FY 2008-09 are higher by Rs.22 Crore as compared to R&M expenses incurred for past three years.

BEST's Response

BEST submitted that the increase in R&M expenses is due to increase in Reinstatement Charges payable to Brihan-Mumbai Municipal Corporation.

Commission's Ruling

In this Order, the Commission has undertaken truing up of the actual expenses in FY 2006-07 vis-à-vis the expenses approved in the Tariff Order for FY 2006-07, subject to prudence check. As regards FY 2007-08, the Commission has undertaken provisional truing up of the expenses only in certain circumstances, 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 2007-08. The final truing up of the R&M expenditure for FY 2007-08 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 relevant Sections of this Order on truing up and revised revenue requirement for FY 2007-08 and FY 2008-09.

2.5 Power Generation

Shri S.V.Shiralkar submitted that BEST should establish alternate sources of sourcing energy, primarily by setting up its own power generating stations. He suggested that

BEST, under directions of the Commission, should set-up a task force to explore feasible options of establishing coastal power plants including tidal power, barge mounted power plants based on gas/refinery residues/washed coal, among others. Shri Shiralkar further submitted that long term planning for retaining the power reliability of Mumbai is essential for the entire nation. Shri S.V.Shiralkar proposed that BEST should adopt power generation from solid-waste and liquid sewage as Mumbai generates about 7000 TPD of solid waste and a large quantity of liquid sewage.

BEST's Response

BEST replied that it has signed a long term PPA for 800 MW with TPC-G. BEST acknowledged the need for establishing generating stations of its own or under any joint venture, to ensure assured source of electricity to its consumers. BEST further submitted that it is exploring the avenues for such ventures with MSPGCL and other prospective parties.

BEST submitted that the there is a proposal from Brihan-Mumbai Municipal Corporation to produce electricity from landfill at the dumping grounds at Gorai and Deonar. BEST submitted that it is taking keen interest in partnering in these projects apart from purchasing the entire energy generated from these plants.

Commission's Ruling

The Commission has taken note of suggestions made and BEST's views on the same. 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.

2.6 Power Purchase Cost

Shri A.R. Bapat submitted that there was a variation in power purchase cost and quantum for FY 2006-07 to the extent of Rs.184 Crore and 282 MU, respectively, and variation projected in power purchase cost and quantum for FY 2007-08 is to the extent of Rs.171 Crore and 327 MU, respectively. He submitted that power purchase cost for FY 2008-09 should be reduced. Shri Bapat pointed out that under Table No. 22 of the Petition, power purchase expenses for FY 2008-09 are shown as Rs.300

Crore, whereas under Table No. 71, the expensive power charges for FY 2008-09 have been shown as Rs. 444 Crore. Energy Study Group (ESG) submitted that Reliability Charges have increased exorbitantly due to increase in rate of expensive power. ESG proposed that BEST should renegotiate the rate of power purchase and search for alternative power suppliers.

BEST's Response

BEST submitted that most of the power purchased in the second half of FY 2006-07 was from external sources and was costly power under UI at weighted system average marginal price. BEST submitted that the Power Management Group (PMG), comprising BEST, TPC and REL, has been successful in procuring more quantum of external power during FY 2007-08 at a relatively lower cost than the weighted average system marginal price, which has reduced the average rate for first half of FY 2007-08. BEST further submitted that the power availability for first half of FY 2008-09 appears to be very bleak and CERC has already fixed UI rates at Rs.10 per kWh at low frequency, and therefore, the power purchase expenses are unlikely to reduce in FY 2008-09.

BEST submitted that the revised power purchase expenses of Rs. 300.83 Crore proposed for FY 2008-09, under Table No. 22 of the Petition, is the estimated cost for power procurement from external sources. BEST added that the total expensive power purchase expenses shown as Rs.444.07 Crore for FY 2008-09 under Table No.71 includes the external power procurement cost of Rs.300.83 Crore and cost for energy supplied from Unit No.4 of TPC-G, costing Rs.143.24 Crore. Power supplied by Unit No.4 is considered as costly power by the Commission and the same is considered for computing Reliability Charge in line with principle adopted by the Commission.

Commission's Ruling

In this Order, the Commission has undertaken truing up of the actual power purchase expenses in FY 2006-07 vis-à-vis the expenses approved in the Tariff Order for FY 2006-07, subject to prudence check. As regards FY 2007-08, the Commission has undertaken provisional truing up of the expenses, as elaborated in Section 4 of this Order. The power purchase expenditure for FY 2008-09 has been approved considering the PPA executed by BEST with TPC-G and approved by the Commission. The Commission's computations in this regard have been elaborated in the relevant Sections of this Order on truing up and revised revenue requirement for FY 2007-08 and FY 2008-09.

2.7 Transmission System

Shri A.R.Bapat submitted that since TPC-T is the transmission agency for most of the supply to BEST, MSETCL should not be charging anything from BEST.

BEST's Response

BEST submitted that the Commission had issued an Order in Case No.58 of 2005 dated June 27, 2006 regarding transmission pricing framework and defined intra-State Transmission System (InSTS). InSTS comprises MSETCL transmission system, TPC transmission system and REL transmission system. This presupposes that generated power flows into the composite State grid, and hence from October 2006 onwards, BEST being user of State transmission system, is paying its share of the approved total transmission capacity cost.

Commission's Ruling

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

2.8 Capital Expenditure

Shri A.R.Bapat requested for publishing scheme-wise cost break-up of capital expenditure as submitted to the Commission.

BEST's Response

BEST submitted that the schemes wise cost break-up of capital expenditure has been provided as per the directives issued by the Commission under its Tariff Order April 3, 2007.

Commission's Ruling

All the distribution licensees have to submit their scheme-wise capital expenditure for the approval of the Commission separately. The determination of ARR and tariff for the ensuing year is based on the capital expenditure and capitalisation projected by the licensee, and the prudence assessment of the same by the Commission, related to approved capital expenditure schemes and phasing of the same.

2.9 Truing Up for FY 2004-05 and FY 2005-06

Shri A.R. Bapat submitted that the truing up figures for FY 2004-05 and 2005-06 provided under Table No. 7 of the advertisement published in newspapers should have been covered under earlier ARR and Tariff proposals. Shri Bapat submitted that RoE of approx. Rs. 200 Crore for the period FY 2004-05 to FY 2008-09 should not be loaded on consumers under a single tariff revision.

BEST's Response

BEST submitted that the truing up for FY 2004-05 and FY 2005-06 is being carried out due to Return on Equity (RoE) claimed by BEST in view of the Appellate Tribunal for Electricity (ATE) Judgment dated August 27, 2007, which was not included in earlier ARR and Tariff proposals. BEST submitted that the claim for RoE for FY 2004-05, FY 2005-06, FY 2007-08 and FY 2008-09 is bunched for recovery in FY 2008-09 in accordance with the ATE's Judgment on Appeal No.13 of 2007 dated August 27, 2007 and is reproduced as under:

> *"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."*

Commission's Ruling

The truing up of ARR for FY 2004-05 and FY 2005-06 has been undertaken at this stage to allow the justified RoE to BEST in accordance with the ATE Judgement.

2.10 Total Revenue Expenditure for FY 2008-09

Shri A.R.Bapat submitted that total approved revenue expenditure provided on page no. 19 of the Petition as Rs. 281.95 Crore for FY 2008-09 varies significantly from total revenue expenditure of Rs. 2158 Crore for FY 2008-09.

BEST's Response

BEST submitted that the amount of Rs. 281.95 Crore provided under ARR on Page No.19 of the Petition, is not the total revenue expenditure for FY 2008-09 as approved under BEST MYT Tariff Order dated April 3, 2007. BEST pointed out that the Commission, under its MYT Order, has not approved any amount against power purchase expenses for FY 2008-09 whereas, the total expenditure includes estimated power purchase cost along with Standby Charges and Transmission Charges.

Commission's Ruling

The Commission's computation for estimating total revenue expenditure and ARR for FY 2008-09 has been elaborated in Section 4 of the Order.

2.11 INCOME FROM OTHER SOURCES

Shri Suhas Bane submitted that income from other sources estimated for FY 2008-09 is lower as compared to past three years, and requested the Commission to verify the same.

BEST's Response

BEST has not given any specific response to this objection.

Commission's Ruling

In this Order, the Commission has undertaken truing up of the actual non tariff income in FY 2006-07 vis-à-vis the income approved in the Tariff Order for FY 2006-07, subject to prudence check. The approved non tariff income for FY 2008-09 has been revised considering the actual non tariff income in FY 2006-07, and the income for FY 2007-08, determined after provisional truing up. The final truing up of the non tariff income 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 relevant Sections of this Order on truing up and revised revenue requirement for FY 2008-09.

2.12 Revenue Gap

Shri Suhas Bane submitted that BEST has estimated the revenue gap of Rs.485 Crore whereas, as per existing tariff structure, total income for FY 2008-09 works out to Rs. 2601 Crore, resulting in revenue surplus of Rs. 26 Crore. He stated that the revenue gap estimated by BEST has increased due to additional expenses incurred in past four years, and requested the Commission to verify the same.

BEST's Response

BEST submitted that it has already submitted detailed explanation for revenue gap in its Tariff Petition, which is being scrutinised by the Commission.

Commission's Ruling

The Commission's computations for estimating ARR, Revenue at existing tariffs and revenue gap for FY 2008-09, has been elaborated in the Sections 4 and 5 of the Order.

2.13 Reliability Charge

Shri A.R.Bapat submitted that proposed Reliability Charges of Rs. 2.48 per unit to be charged from consumers consuming above 300 Units/month are more than double than that of FY 2007-08 and unbearable for consumers.

Shri Ponrathnam and others submitted that MERC (Standards of Performance of Distribution Licensees, Period of Giving Supply and Determination of Compensation) Regulations, 2005 does not support charging Reliability Charges, Standby Charges and expensive power charges and they further submitted that BEST should pay compensation for failure to meet Standards of Performance.

BEST's Response

BEST submitted that the Commission has introduced the concept of Reliability Charge to recover the cost of expensive power and the same principle has been adopted for working out Reliability Charges in its tariff proposal. The proposal is based on the actual expenses incurred in first half of FY 2007-08 and estimated expensive power for second half of FY 2007-08 and FY 2008-09 required to meet the peak demand charges. Further, BEST submitted even though BEST has entered into Power Purchase Agreement (PPA) with TPC-G for 800 MW, the Commission has allocated only 36.88 % of TPC-G's generation to BEST during FY 2007-08 instead of 45% as provided in PPA. BEST further submitted that due to lower allocation of power and increased demand during summer months of FY 2007-08, BEST had to procure huge quantum of external power at a very high cost, as compared to the cost specified by the Commission in its Tariff Order dated April 3, 2007.

BEST further submitted that they are submitting the relevant information to the Commission about adherence to the Standards of Performance and abiding by the Regulation. BEST further submitted that determination of Reliability Charges for expensive power purchase and Standby Charges is under jurisdiction of the Commission.

Commission's Ruling

The Commission has determined the energy charges and reliability charges on the basis of the revenue gap and the consumption mix. The detailed tariff philosophy is given in a Section 5 of this Order. The reliability charges, standby charges and expensive power charges are all different forms of energy charges and are just structured in such a manner to sensitise the consumers that the tariffs are high and increasing due to the dependence on expensive power purchase from other sources, and hence, it is essential to conserve electricity. The structuring of energy charges into three different charges is not illegal. The Commission's detailed philosophy in this regard has been elaborated in detail in the Commission's MYT Order for BEST.

2.14 Expenses in Billing and Collection

Shri A.R. Bapat submitted that BEST has referred to introduction of monthly billing under consumer service improvements, and enquired about the expenses involved in monthly meter reading, billing and cash collection.

BEST's Response

BEST submitted that it has embarked upon monthly billing from April 2007 as per the directives issued by the Commission, which called for augmentation of the staff strength and infrastructure. BEST further stated that monthly billing activity has improved the liquidity position of BEST, and has also helped in early detection of the billing errors and prompt replacement of defective meters.

Commission's Ruling

All the expenses involved in meter reading, billing and collection are part of employee expenses, and Administration & General (A&G) expenses and the Commission has dealt with the approval of A&G expenses in detail in Section 4 of the Order.

2.15 Demand Side Management

Shri S.V. Shiralkar submitted that demand of power is increasing rapidly with the rapid growth infrastructure in Mumbai city and proposed that BEST should review the viability of establishing micro-gas turbines providing power and cooling to the large establishments, which would improve demand side management and efficient utilisation of resources. Shri Shiralkar pointed out that these large establishments need to provide sufficient space to BEST for installing of substations.

BEST's Response

BEST responded that the suggestion is very innovative and would be helpful in demand side management. BEST submitted it would take up the suggestion with the Commission under initiatives of demand side management.

Commission's Ruling

The Commission in its MYT Order has deliberated the need for DSM and opined that the distribution licensees need to take steps toward meeting their energy requirement by Supply Side as well as Demand Side Management (DSM). Traditionally, the distribution licensees have been looking at the supply side alone. The Commission has noted the suggestion made and advises BEST to work out the detailed cost benefit analysis of such schemes and approach the Commission under demand side management initiatives.

2.16 Collection Efficiency

Shri A.R. Bapat pointed out the abnormality in collection efficiency figures stated in the Petition (88%) and figures which appear in the Public Notice in newspapers (98%).

BEST's Response

BEST submitted that the collection efficiency for the FY 2006-07 is 98%, whereas, the collection efficiency for the first half of FY 2007-08 works out to 88%. BEST pointed out that collection efficiency reduced in the months of April 2007 and May 2007 due to change in tariff structure.

Commission's Ruling

The Commission has taken note of reduction in collection efficiency figure pointed out by objector and reasons submitted by BEST for same.

2.17 Increase in Tariff

K.E.M. Hospital requested the Commission to exempt them from tariff hike, as they provide medical services at very nominal rates. Shri Subas Bane requested the Commission not to approve any tariff hike for residential consumers consuming less than 300 units.

BEST's Response

BEST submitted that K.E.M Hospital is charged under LT-1 consumer category for which the tariff is lowest in Tariff Schedule except the BPL category. BEST further submitted that the same tariff is applicable to all Government aided educational institutions, hospitals and dispensaries.

BEST submitted that NTP states that tariff should reflect cost to serve and cross subsidy should be reduced in a specified time frame.

Commission's Ruling

As regards steep increase in tariffs, the tariffs have to be determined such that the licensees' costs are recovered through tariffs. The allowable revenue requirement of BEST has increased significantly in recent years, over and above the levels originally approved by the Commission. Further, it would not be appropriate to exempt any particular consumer or consumer category from increase in tariffs as the tariffs have to be designed in a manner to meet the total annual revenue requirement and to reduce the cross-subsidy amongst categories in a gradual manner. The Commission's detailed tariff philosophy has been elaborated in Section 5 of the Order.

2.18 Renewable Purchase (RPS)

Shri S.V.Shiralkar proposed that BEST should comply with the RPS targets specified by the Commission under its RPS Order dated August 16, 2006.

BEST's Response

BEST responded that it is endeavouring to source the renewable energy (RE) from various sources to meet its obligation as per RPS target specified by the Commission. BEST further pointed out that due to the current paucity of RE in the State of Maharashtra, the prices of RE are higher than those specified by the Commission and the same has been incorporated in the APR Petition.

Commission's Ruling

The Commission in this Order has considered the purchase of power by BEST from renewable energy sources in FY 2007-08 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 2007-08. For FY 2008-09, the Commission has considered purchase of renewable energy equivalent to 5% of energy input requirement as per RPS obligation for FY 2008-09.

2.19 Cost of Supply and Cross Subsidy

Shri Ponrathnam referred to Section 62 (3) of EA 2003 and objected to tariff discrimination between consumer categories, which affects the cross-subsidy levels. Shri Ponrathnam submitted that as per clause 5.3 of MERC (Standards of performance of distribution licensees, period for giving supply and determination of compensation) Regulation, 2005, consumer categorisation should be based on classification of installation. Shri Ponrathnam added that the tariffs should reflect cost of supply at respective voltages.

Shri N. Ponrathnam pointed out that there is no provision in EA 2003 and the Commission's Tariff Regulations to create separate category for Advertisement & Hoardings and Malls & Multiplexes, and these consumers should fall under commercial category. The Association of Hospitals (TAH) proposed to categorize charitable hospitals under LT- I category and HT- I category as per nature of supply.

Chhatrapai Shivaji Maharaj Vastu Sangrahalaya (CSMVS) requested for levy of tariffs applicable to educational institutions instead of commercial tariff as Museum galleries are used for public/educational display.

ESG proposed to merge slabs of 101-300 units and 301-500 units for residential consumers.

BEST's Response

BEST submitted that the cost of supply is generally high at lower voltages as compared to that at higher voltages.

Commission's Ruling

The Commission is well aware of the need to reduce the cross-subsidies between different consumer categories, and has been successfully reducing the cross-subsidy over successive Tariff Orders. However, in recent times, due to the increase in demand and shortage of generation capacity available to the distribution licensees in Mumbai, the licensees are having to source expensive power from other sources. Hence, in order to sensitise the consumers, the Commission has segregated the reliability charges which comprise the standby charges payable by BEST to MSEDCL and the expensive power charges required to meet the expenditure on costly power purchase. The Commission has attempted to ensure that the cross-subsidy in the base energy charges is reduced; however, the reliability charges have been applied to most of the categories.

The Commission has attempted to ensure that the categorisation of consumers and the applicability of tariffs across different licensees is uniform, though the tariffs are varying, depending on the revenue requirement and consumption mix. The categorisation has been rationalised depending on the historical classification, voltage of supply, and purpose for which electricity is supplied, amongst other aspects.

Moreover, in order to provide certain relief to the consumers who have lower load factor, the Commission has significantly reduced the fixed charges and demand charges payable by these categories, and correspondingly increased the consumption related charges such as energy charges, reliability charges, etc., so that the consumers are billed more for their actual consumption rather than the load, and the licensees also have an incentive to ensure that continuous 24 hour supply is given to the consumers.

As regards the proposals regarding charitable hospitals getting supply at LT and HT voltages, the Commission does not find any merit in the suggestion. The suggestion given by the Association of Hospitals appears to be with the sole objective of reducing the applicable tariff. The classification under the revised LT-II category is appropriate for such consumers, and hence, the Commission has not modified the tariff applicability for such consumers. For hospitals getting supply at HT voltages, the Commission has classified all such hospitals under HT II commercial category, irrespective of ownership. Moreover, the Commission would not like to comment on whether such charitable hospitals are really charitable in nature and 'not for profit' as suggested by the objectors.

The Commission's detailed tariff philosophy has been elaborated in Section 5 of the Order.

2.20 TOD Tariff

Shri Ponrathnam proposed that ToD incentive should be provided for night-time usage.

BEST's Response

BEST submitted that ToD slots have been decided by the Commission and BEST is abiding by directives given by the Commission for charging the appropriate ToD tariff.

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 of this Order on Tariff Philosophy.

2.21 Discrepancies in Petition

Shri Ponrathnam and several others submitted that load factor incentive, penalty for increase in demand and revenue from DPC has not been indicated in the revenue calculations. Shri Ponrathnam and several others pointed out that on Page No.135 of the Petition in the estimated revenue at existing tariff the calculation of the load factor for LT-6 B works out to more than unity.

BEST's Response

BEST submitted that they have incorporated necessary correction in demand for tariff in LT-6 B. BEST submitted that the impact of this error is very small, i.e., increase in the revenue of around Rs.3 Crore (1 % of ARR).

Commission's Ruling

The Commission has accepted BEST's explanation on the discrepancies highlighted by the objectors. As regards the computational mistakes, BEST is directed to ensure that such mistakes do not occur in future Petitions, so that the Petition that is published has all the correct data and is complete.

3 TRUING UP of ANNUAL REVENUE REQUIREMENT for FY 2006-07

BEST, in its Petition for Annual Performance Review for FY 2007-08 and tariff determination for FY 2008-09 has included a section on final truing up of expenditure and revenue for FY 2006-07 based on actual expenditure and revenue for FY 2006-07 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. BEST also requested the Commission to true up certain aspects of expenses in FY 2004-05 and FY 2005-06 in accordance with the Judgment of the Honourable Appellate Tribunal for Electricity (ATE).

In this Section, the Commission has analysed all the elements of actual revenue and expenses for FY 2006-07, and has carried out the truing up of expenses and revenue after prudence check. The Commission has also undertaken the truing up of the RoE and Interest on internal funds for FY 2004-05 and FY 2005-06 in accordance with the Judgment of the ATE in this regard.

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 ARR and Tariff petition for FY 2006-07, BEST had forecasted energy sales of 3741.89 MU for FY 2006-07, whereas the actual sales has been slightly higher at 3799.73 MU (indicated as 3798.53 in text petition), indicating an overall growth of 4.23% in sales over the sales in FY 2005-06. The actual sales over H1 and H2 of FY 2006-07 are given in the Table below:

Table: BEST's Actual Sales in FY 2006-07 (MU)

Sl.	Particulars	Tariff Order	Actuals		
			H1	H2	Total
1	Sales	3725.03	1923.40	1876.33	3799.73

The actual sales have been higher than the sales considered in the Tariff Order, by around 75 MU. The Commission has considered the actual sales under the truing up process.

3.2 DISTRIBUTION LOSSES AND ENERGY INPUT REQUIREMENT

In the Tariff Order for FY 2006-07, the Commission directed BEST to reduce the distribution losses to 11.5%, from the level of 12.4% allowed by the Commission for FY 2005-06 under the truing up exercise.

In the APR Petition, BEST submitted that the actual distribution losses in FY 2006-07 were 11.48%, as compared to the approved distribution losses of 11.5%, as given in the Table below:

Table:Distribution Losses for FY 2005-06 and FY 2006-07 as submitted by BEST

Year	Units Purchased (MU)	Units Sold (MU)	Distribution Losses (%)	Distribution Losses Approved (%)
FY 2005-06	4156	3615	13.02%	12.40%
FY 2006-07	4293	3800	11.48%	11.50%

BEST submitted that it had achieved a steady reduction in the distribution losses 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.

In the Tariff Order dated January 18, 2007, the Commission had determined the Energy Input requirement, by grossing up the sales with the approved distribution losses. However, since the intra-State transmission losses and tariff and the power purchase from TPC-G directly (rather than bulk purchase from TPC), and the interim balancing and settlement code in the State was implemented with effect from October 1, 2006, the energy input requirement to be considered under the truing up exercise has also be considered separately for the two halves of the year. Accordingly, BEST was asked to submit the data for the two halves of the year separately, after taking into consideration the SLDC Settlement for H2 of FY 2006-07. However, BEST has not filled in the Table completely, and has left some cells blank, as shown below:

Table: Energy Input of BEST for FY 2006-07 (as submitted by BEST)

Particulars	Unit	Order	Actuals		
			H1	H2	Total
Total Sales	MU	3,725.03	1923.40	1876.33	3799.73
Distribution Losses	MU	484.04			
Distribution Losses	%				11.49%
Energy Input to Distribution System	MU	4209.07	2208.61	2084.40	4293.01
Intra-State Transmission System Losses	%			6.15%	
Intra-State Transmission System Losses	MU				
Energy Input Required	**MU**	**4209**	**2208.61**	**2221.07**	**4429.68**
Power Purchase Quantum	**MU**	**4209**	**2208.61**	**2221.07**	**4429.68**

Note: shaded cells have been left blank by BEST

Since the total losses (distribution and transmission combined) can be computed as the difference between the actual sales and the power purchase quantum, the Commission has completed the above table for the two halves of the year, in order to assess the total losses and the break-up of transmission and distribution losses for the same period, as shown in the Table below:

Table: Energy Input of BEST for FY 2006-07 (as computed by the Commission)

Particulars	Unit	Order	Actuals					
			H1		H2		Total	
			BEST	Commission	BEST	Commission	BEST	Commission
Total Sales	MU	3,725	1,923	1,923	1,876	1,876	3,800	3,800
Distribution Losses	MU	484	285	285	208	228	493	513
Distribution Losses	%		12.91%	12.91%	9.98%	10.84%	**11.49%**	**11.90%**
Energy Input to Distribution System	MU	4209	2209	2209	2084	2104	4,293	4,313

Intra-State Transmission System Losses	%				6.15%	5.25%		
Intra-State Transmission System Losses	MU				137	117	137	117
Energy Input Required	**MU**	**4209**	**2209**	**2209**	**2221**	**2221**	**4430**	**4430**
Power Purchase Quantum	**MU**	**4209**	**2209**	**2209**	**2221**	**2221**	**4430**	**4430**

The above analysis clearly shows that the actual distribution losses in BEST's system are actually higher than the levels being claimed by BEST. BEST has considered a higher transmission loss of 6.15% for the energy settlement, though the actual losses for the second half as reported by SLDC based on metering of all energy interchange points is 5.25%. The Commission has hence, restated the above Energy Balance Statement by considering the actual intra-State transmission loss of 5.25% over the period from October 2006 to March 2007. The restated distribution loss works out to 11.90%, as compared to the level of 11.49% indicated by BEST, and as compared to the actual loss level of 12.40% in FY 2005-06, and the target of 11.5% stipulated by the Commission. However, since BEST has shown improvement in the distribution losses by 0.5%, and has projected further reduction in distribution losses in FY 2007-08 and FY 2008-09, the Commission has, for FY 2006-07, neither reduced any expenditure on account of the higher distribution losses of BEST, nor considered any additional revenue due to the imputed benefit of loss reduction.

3.3 POWER PURCHASE QUANTUM AND COST FOR FY 2006-07

The Commission, in its Order on BEST's ARR and Tariff Petition for FY 2006-07, approved the total quantum of power purchase of 4209 MU from The Tata Power Company (TPC)-Generation Business, RPS and short term power purchase. However, the actual quantum of power purchase by BEST from various sources during FY 2006-07 as submitted in the APR Petition, is slightly higher at 4408 MU.

The Commission, in its Order on BEST's ARR and Tariff Petition for FY 2006-07, approved total power purchase costs of Rs 1310.36 Crore, excluding standby charges. The actual power purchase cost for FY 2006-07 as submitted by BEST in its APR Petition is Rs 1342.31 Crore.

BEST submitted that during first half of FY 2006-07, TPC was billing BEST based on the principle agreed in the previous power purchase agreement. However, subsequent to the Tariff Order issued by the Commission dated October 3, 2006, TPC has billed BEST based on the mechanism specified in the said Tariff Order.

BEST further submitted that the Commission has introduced the Interim Energy Balance Settlement System in the State from October 1, 2006 vide its Order on "Determination of Transmission tariff for Intra-State transmission system (InSTS) for FY 06-07". The said Order also specified that SLDC shall undertake the activity of Energy Balancing and Settlement in the State.

The summary of the power purchase expenses as submitted by BEST for first half of FY 2006-07 is given in Table below:

Table: Power purchase expense in H1 of FY 2006-07 as submitted by BEST

(Rs Crore)

PARTICULARS	Actual power purchase expense
Demand charges	155.81
Energy charges	408.38
Fuel adjustment charges	46.38
Total	**610.57**

The summary of the power purchase expenses as submitted by BEST for second half of FY 2006-07 is given in the Table below:

Table: Power purchase expense in H2 of FY 2006-07 as submitted by BEST

(Rs Crore)

PARTICULARS	Units billed (MU)	Actual power purchase expense (Rs Crore)
Fixed charges paid to TPC-G		81.30
Energy charges paid to TPC-G	1917.38	513.89
External purchases	282.10	183.85
Thermal incentive paid to TPC-G		5.59
Hydro incentive paid to TPC-G		5.39
Transmission charges paid to MSETCL		51.17
Stand-by charges paid to MSEDCL		60.75
(Less)Rebate on Hydro usage recd. from TPC-G		*(21.31)*
(Less) FAC excess recovery		*(36.97)*
Total	**2199.48**	**843.67**

The Commission has validated the actual power purchase cost of BEST from generating stations of TPC for FY 2006-07 with the details of revenue break-up submitted by TPC in its APR for FY 2007-08 and found that TPC has shown a different value for revenue from sale of power to BEST in FY 2006-07. A similar difference was observed between the value shown by REL for power purchase from TPC in its APR Petition and revenue shown by TPC from sale to REL in its APR Petition. In order to reconcile the power purchase quantum and cost amongst the Mumbai Distribution Licensees for FY 2006-07, the Commission convened a common meeting between representatives of the three distribution licensees of Mumbai and Maharashtra State Load Despatch Centre on April 30, 2008. During the meeting it was confirmed by TPC, BEST and BEST that they have not considered the impact of the SLDC's final energy balance statement for FY 2006-07 dated September 13, 2007 in their respective workings. In the said meeting, it was agreed by all the three distribution licensees that the truing up of power purchase quantum and cost and revenue towards bilateral sale by Distribution Licensees and revenue to TPC for FY 2006-07 should be considered based on SLDC's final energy balance statement dated September 13, 2007. Subsequently, all the three distribution licensees submitted the jointly reconciled statements for power purchase quantum and cost for FY 2006-07 considering the impact of the SLDC's final energy balance statement.

Therefore, the Commission has considered the revised energy availability and costs thereof for FY 2006-07 for purchase from generating stations of TPC, bilateral sources, imbalance pool and additional sales to MSEDCL for truing up purposes. The summary of the purchase of power from various sources considering the impact of SLDC's final settlement is shown in the Table below:

Table: Summary of Power Purchase Expenses for Purchase from different sources

Source	Quantum (MU)	Total Cost (Rs Crore)
Purchase from TPC-G	4147.62	1177.19
Purchase from Bilateral sources	60.73	37.73
Purchase through UI	221.36	142.4
Sales to MSEDCL	-49.88	-24.75
Total	**4379.83**	**1332.57**

The Commission, in its Order on ARR and Tariff Petition for FY 2006-07, considered the standby charge of Rs 60.75 Crore payable by BEST to MSEDCL for second half of FY 2006-07 in proportion to the average non-coincidence peak demand of the Distribution licensees in Mumbai system during FY 2005-06. The actual standby charge included by BEST in its Petition as part of the total purchase costs for FY 2006-07 is Rs 60.75 Crore for second half of FY 2006-07 and the Commission has accepted the same for truing up.

BEST has not procured any power from renewable sources as stipulated under the RPS framework. The Commission in its Order in the matter of long term development of renewable energy sources and associated regulatory (RPS) framework dated August 16, 2006 while stipulating the enforcement of the RPS framework vide Para 3.1.9 stipulated as:

> ***"Enforcement****: The Eligible Persons will have to comply with their RPS obligations as stipulated under Clause 2.6.8 of this Order subject to conditions stipulated under cl. 2.10.7 and cl. 2.10.8. Shortfall in RE procurement by Eligible Persons shall be treated as non-compliance with the Commission's directives, and shall attract action as per appropriate provisions of EA 2003. The Commission directs MEDA to report such incidences of failure to comply by Eligible Persons, to the Commission.* ***During first year of RPS operating framework, i.e., 2006-07, there shall not be any charge towards enforcement.*** *However, the Eligible Persons shall be liable to pay at the rate of Rs 5.00 per unit of shortfall in 2007-08, Rs 6.00 per unit of shortfall in 2008-09, and Rs 7.00 per unit of shortfall for 2009-10. Such charges towards shortfall in renewable energy procurement levied on distribution licensees will not be allowed as 'pass through' expenses under their Annual Revenue Requirement." (***emphasis added***)*

Accordingly, the Commission has not considered any charge towards enforcement of RPS framework. However, the Commission directs BEST to expedite its activities to procure power from possible renewable sources to meet the targets as specified by the Commission for FY 2007-08 in its MYT Order and for FY 2008-09 in this Order.

As regards transmission charges payable during FY 2006-07, BEST submitted that the Order dated September 29, 2006 in the matter of determination of Intra State Transmission Tariff, introduced the mechanism of pooling of transmission cost of all the Transmission Utilities, i.e., REL-T, MSETCL and TPC-T which was made applicable from October 2006 onwards. During the first half of FY 2006-07, transmission charges were paid as a part of bulk supply tariff and for second half of FY 2006-07 as per the above referred Commission's Order, the transmission charges were paid through Total Transmission System Cost (TTSC) sharing mechanism.

The Commission has considered the transmission charges paid during second half of FY 2006-07 as per the Order dated September 29, 2006 in the matter of determination of Intra State Transmission Tariff and accordingly has considered an amount of Rs 51.17 Crore for FY 2006-07.

The summary of power purchase quantum and costs including standby charges and transmission charges for FY 2006-07 is given in following Table:

Table: Power Purchase Quantum and Costs for FY 2006-07

S.No	Source	Tariff Order		APR Petition		Allowed after truing up	
		Quantum	Total Cost	Quantum	Total Cost	Quantum	Total Cost
		MU	Rs Crore	MU	Rs Crore	MU	Rs Crore
1	TPC-G	4209.07	1310.36	4125.99	1158.46	4147.62	1177.19
2	Purchase from external sources			282.1	183.85	60.73	37.73
3	RPS						
4	Other Sources (UI)					221.36	142.40
5	Standby Charges		60.75		60.75		60.75
6	Transmission Charges		51.17		51.17		51.17
7	Sale to MSEDCL					-49.88	-24.75
8	**Total**	**4209.07**	**1422.28**	**4408.09**	**1454.23**	**4379.83**	**1444.49**

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 2006-07 was Rs. 138.38 crore as compared to the approved expenses of Rs. 114.62 crore. BEST submitted the main reasons for the higher employee expenditure as under:

- Impact of Wage settlement agreement with employees for the period FY 2001-02 to 2005-06 leading to an increased outgo of Rs. 19.65 crore during FY 2006-07.
- This wage settlement has simultaneously led to increased expense on account of P.F. contribution by Rs. 3.56 crore and Gratuity payment by Rs. 3.04 crore.
- BEST has also paid Interim D.A. for the next agreemental period (FY 2006-07 to 2010-11) leading to increased expense.
- HRA has increased by a marginal amount of Rs. 0.56 crore
- Earned leave encashment has increased by Rs. 1.81 crore
- Additional medical expenses of Rs. 2.42 crore have been incurred.
- Overtime payment has increased by Rs. 0.29 crore.
- Bonus/ Ex-gratia payment has increased by Rs. 0.13 crore

BEST submitted that it had adopted a fair and transparent cost allocation statement of joint and common cost between its Licensed Business and other departments and same are separately identifiable in the Books of Accounts of BEST. The employee cost of Rs. 8.51 crore of these departments, namely, CAS, Telecommunication & Electronics (50%) and Street lighting Department has been deducted from the employee expenses of the Supply department

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 prior to 2004-05	27.09
Interim Relief paid in 2004-05	9.17
Interim Relief paid in 2005-06	9.17

Particulars	Electric Supply
Interim Relief paid in 2006-07	15.89
Balance to be paid in the future	17.98
Total	79.30

Regarding the balance amount of Rs. 17.98 crore to be paid in future, BEST submitted that the balance payment pertaining to the ex-employees payment as well as Medical Allowance to the Officers and difference in Encashment of Leave for the last Agreemental period has been claimed at actuals in FY 2007-08.

The Commission has obtained the actual employee expenses for FY 2006-07 under various heads and analysed the increase in expenses for FY 2006-07 over actual expenses in FY 2005-06. The main reason for the increase in employee expenses is the wage revision, which has had an impact of around Rs. 35.5 crore. Considering the details of actual employee expenses and reasons submitted by BEST for increase in employee expenses, the Commission has accepted the actual employee expenses for FY 2006-07 under the truing up exercise. 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	Tariff Order	Actuals	Allowed after truing up
Gross Employee Expenses		146.89	146.89
Less: Establishment of Other Departments		8.51	8.51
Net Employee Expenses	**114.62**	**138.38**	**138.38**

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

BEST submitted that the actual A&G expenditure in FY 2006-07 was Rs. 91.79 crore as compared to the approved expenses of Rs. 82 crore. BEST submitted various reasons for the higher A&G expenditure vis-à-vis the expense approved in the Order, as elaborated in BEST's Petition. BEST also provided the details of A&G expenses under the sub-head 'Others'.

The Commission asked BEST to clarify the rationale for certain expenses booked under 'Others' under A&G expenses, viz., expenditure of Rs. 13.05 Crore against the subhead of 'Mains and Aerial Mains', as well as certain expenses booked directly under A&G expenses, viz., dead stock, stock adjustment, Receiving and Distribution Substations, etc., which was submitted by BEST. On perusal of BEST's reply, it is observed that most of these expenses are actually in the nature of repair and maintenance expenses, and hence, the Commission has deducted expenses of Rs 18.98 crore on mains and aerial mains, receiving and distribution substations, etc., from A&G expenses. However, the same amount has been added to the Repair & Maintenance expenses, so that the expenses are reflected appropriately.

The summary of A&G expenses approved in the Order, actual A&G expenses and A&G expenses approved after truing up for FY 2006-07 has been shown in the following Table:

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

Particular	Tariff Order	Actuals	Allowed after truing up
A&G Expenses	82.00	91.79	72.81

3.4.3 R&M Expenses

BEST submitted that the actual R&M expenditure in FY 2006-07 was Rs. 24.56 crore as compared to the approved expenses of Rs. 20 crore. BEST submitted that Reinstatement Charges payable to MCGM for cable laying schemes for system augmentation, amounting to Rs. 19.88 crore comprises 80% of the R&M expenses while the other components of R&M expenses contribute only 20% of the total expenses. Moreover, Rs. 10.71 crore of RI charges has been paid towards the RI charges for past year i.e. FY 2005-06. BEST added that Rs. 31.40 crore of RI charges pertaining to past years is yet to be liquidated by MCGM, which shall be claimed in subsequent years as when liquidation notices are issued by MCGM.

The Commission has considered actual R&M expenses while truing up for FY 2006-07, and has added the expense of Rs. 18.98 crore deducted above from A&G

expenses, in order to ensure proper accounting of expenses. The summary of R&M expenses approved in the Order, actual R&M expenses and R&M expenses approved after truing up for FY 2006-07 has been shown in the following Table:

Table: R&M Expenses (Rs Crore)

Particular	Tariff Order	Actuals	Allowed after truing up
R&M Expenses	20.00	24.56	43.54

3.5 Depreciation

The Commission, in its earlier Order dated January 18, 2007, had permitted depreciation to the extent of Rs 41.44 Crore for FY 2006-07, which amounts to 3.82% of Opening level of Gross Fixed Assets (GFA) of BEST for FY 2006-07, which was stated at Rs 1085 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 2006-07 was Rs 39.92 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 2006-07 amounts to Rs 1084.79 Crore in line with that considered by the Commission in its Tariff Order. However, the Commission observes that as per BEST's submission under Form 4, BEST has claimed depreciation of Rs 2.13 Crore corresponding to the assets added during FY 2006-07. The Commission has considered depreciation only on Opening GFA and not on the assets added during the year in line with its earlier Orders. In addition, the Commission has considered reduction in depreciation to the extent of Rs 2.04 Crore during FY 2006-07 on account of withdrawal/adjustment as claimed by BEST under its Form-4 of APR submission.

Accordingly, for the purposes of truing-up exercise for FY 2006-07, the Commission has considered opening GFA for BEST's distribution business at Rs 1084.79 Crore and depreciation of Rs 35.77 Crore. The depreciation expenditure approved by the Commission for FY 2006-07 has been summarised in the following Table:

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

Particulars	Tariff Order	Actuals	Allowed after truing up
Depreciation	41.44	39.92	35.77
Opening GFA	1085	1084.79	1084.79

3.6 Interest Expenses

The Commission, in its earlier Order dated January 18, 2007, had approved interest expenditure of Rs 6.01 Crore, based on estimate of average outstanding loan balance during FY 2006-07 and actual interest paid until September 2006. The Commission had considered the interest expenditure towards actual loans availed by BEST comprising public loans, MMRDA loans for MegaCity project, DPDC loans and APDRP loan.

BEST submitted that the interest on debt for FY 2006-07 is around Rs 7.61 Crore as against Rs 6.01 Crore approved by the Commission. 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 bank loans of Rs 92 Crore considered by BEST. BEST has submitted that the said loan was intended to fund capital expenditure under APDRP schemes, however, during FY 2006-07, due to shortfall in the working capital; a loan was raised by hypothecating assets and the same was utilised for working capital. The Commission observes that interest on working capital will have to be considered in accordance with Regulation 76.8 of MERC (Terms and conditions of tariff) Regulations, 2005. Besides, 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, 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 the Regulations 76.3 of MERC Tariff Regulations.

In this context, the Commission observes that the capitalisation during FY 2006-07 as claimed by BEST amounts to Rs 73.87 Cr (much lower than Rs 92 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 6.36 Crore), grant from Government (Rs 25 Crore), additional equity capital on normative basis at 30% (Rs 12.65 Crore) and normative debt component at 70% (Rs 29.86 Cr).

Accordingly, for the purposes of truing-up exercise for FY 2006-07, the Commission has considered the capitalisation during FY 2006-07 of Rs 75.42 Cr (including IDC of Rs 1.55 Crore); and considered the funding as contributions from consumer (Rs 6.36 Crore), grant from Government (Rs 25 Crore), additional equity capital on normative basis at 30% (Rs 13.22 Crore) and normative debt component at 70% (Rs 30.84 Cr). The interest expenditure on normative debt envisaged to be funded through internal funds and grant from government is considered at 6% p.a. as claimed by BEST in accordance with judgement of Appellate Tribunal for Electricity dated August 27, 2007 in the matter of Appeal 13 of 2007.

The Commission has considered the interest expenditure on the existing loans (public loans, MMRDA loans for MegaCity project, DPDC loans and APDRP loan) as claimed by BEST in accordance with Tariff Regulations 76.3.1 and 76.3.2. As regards assets put to use during FY 2006-07, the Commission has considered interest expenditure on normative loan funded through internal funds as claimed by BEST; as covered under subsequent paragraph. The Commission has not considered interest expenditure of Rs 2.16 Crore corresponding to loan addition of Rs 92 Crore as considered by BEST for the reasons cited under earlier paragraphs, viz., working capital interest has to be allowed on normative basis in accordance with the norms. For remaining loans, the Commission has considered interest rates as stated by BEST under its Petition, for the purpose of interest expenditure computation for FY 2006-07.

Table: Interest Expenses (Rs Crore)

Particulars	Tariff Order	Actuals	Allowed after truing up
Opening balance of loan	NA	55.93	55.93
Additions		92.00	0.00

Repayment		(5.43)	(5.43)
Closing balance of loan		142.50	50.50
Interest expenditure	**6.01**	**7.61**	**5.43**

3.7 Interest on Internal Funds

The Commission, in its earlier Order dated January 18, 2007, had approved interest expenditure on internal funds at Rs 51.96 Crore, at 6% p.a. based on estimation of internal funds during FY 2006-07, in accordance with ATE Judgement 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 dt. 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, the Interest on Internal funds at the rate of 6% for the period FY 2004-05 to FY 2006-07 is as given below:

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

Particulars	FY 2004-05	FY 2005-06	FY 2006-07
Capital expenditure during the year	69.64	63.78	73.52
Less: Consumer Contribution received during the year	0	(3.12)	(6.36)
Less: Govt. Grant Received during the year	0	(10.88)	(25.00)
Allowable Capital cost	69.64	49.78	42.16
Cumulative Grants at the end of the year	**45.63**	**56.51**	**81.51**
Interest on Internal funds (at 6%)			
Normative debt component	*2.92*	*2.09*	*1.77*

Particulars	FY 2004-05	FY 2005-06	FY 2006-07
On Government assistance at the start of the year	*1.65*	*2.74*	*3.39*
Returns as Interest on Internal funds	**4.57**	**4.83**	**5.16**

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."*

Accordingly, the Commission has considered BEST's claim for interest on internal funds (including normative debt and grant on Government grants) during FY 2004-05 and FY 2005-06 and approves the same under the truing-up exercise. As regards claim for interest on internal funds during FY 2006-07, the Commission has modified the same to the extent of capitalised cost considered as Rs 75.42 Crore instead of capital expenditure of Rs 73.52 Crore as claimed by BEST. To that extent, allowable capital cost is revised to Rs 44.06 Crore (BEST's claim of Rs 42.16 Crore) and interest on revised normative debt is approved as Rs 1.85 Crore as against BEST's claim of Rs 1.77 Crore. The interest on internal funds as approved by Commission for FY 2004-05 to FY 2006-07 is summarised in the following Table:

Table: Approved Interest on Internal funds (Rs. Crore)

Particulars	FY 2004-05	FY 2005-06	FY 2006-07
Capitalised Cost during the year	69.64	63.78	75.42
Less: Consumer Contribution received during the year	0	(3.12)	(6.36)
Less: Govt. Grant Received during the year	0	(10.88)	(25.00)
Allowable Capital cost	**69.64**	**49.78**	**44.06**
Cumulative Grants at the end of the year	**45.63**	**56.51**	**81.51**
Interest on Internal funds (at 6%)			
Normative debt component	*2.92*	*2.09*	*1.85*
On Government assistance at the start of the year	*1.65*	*2.74*	*3.39*
Returns as Interest on Internal funds	**4.57**	**4.83**	**5.24**

3.8 Return on Equity (RoE)

The Commission, in its earlier Order dated January 18, 2007, had not approved any return on equity *per se*; however, the Commission had approved returns in the form of interest on internal funds at Rs 51.96 Crore, at 6% p.a. based on estimation of internal funds during FY 2006-07 in accordance with 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 Appellate Tribunal on Electricity vide its order dt. August 27, 2007, has approved Return on Equity as provided under MERC (Terms and Conditions of Tariff Regulations, 2005) from FY 2004-05 onwards. Further, BEST submitted that the Commission vide its Order dt. November 8, 2006 in Case No. 32 of 2006 has allowed interest on internal funds at the rate of 6% in lieu of Return on Equity. BEST has now proposed to charge the following returns as applicable under the MERC Tariff Regulations:

- Prescribed Return on Equity on 100% of the opening Regulatory Equity in the financial year
- Additional Return on Equity, as per prescribed rate, on 50% of the incremental Regulatory Equity deployed in that year in the electricity distribution business (based on the approved capital cost)

- Additional Interest on Internal funds (at the rate of 6%) deployed in that year in the electricity distribution business (based on approved capital cost)

Accordingly, BEST computed return on equity for the period from FY 2004-05 to FY 2006-07 as given below:

Table: RoE estimated by BEST for the period FY 2004-05 to FY 2006-07 (Rs. Crore)

Particulars		FY 2004-05	FY 2005-06	FY 2006-07
Opening Equity	A	**570.72**	**591.61**	**606.54**
Annual allowable capital cost for the year	B	69.64	63.78	73.52
Less: Contribution made by consumers	C	0.00	3.12	6.36
Less: Government Assistance	D	0.00	10.88	25.00
Net allowable capital cost	E=B-C-D	69.64	49.78	42.16
Normative equity (30%)	F = E*30%	20.89	14.93	12.65
Closing Equity	G = A+F	**591.61**	**606.54**	**619.19**
Computation of RoE				
Return @ 16% on equity capital at commencement of year	H=A*16%	91.31	94.66	97.05
Return @ 16% on 50% of equity portion of annual allowable cost for the year	I=F*16%* 50%	1.67	1.19	1.01
RoE for the year	G=E+F	**92.99**	**95.85**	**98.06**

As highlighted in 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 (in the earlier Order and subsequently restated), be retained.

Accordingly, the Commission has considered BEST's claim for return on equity during FY 2004-05 and FY 2005-06 and approved the same under the truing-up exercise. As regards claim for Return on Equity during FY 2006-07, the Commission has modified the same to the extent of capitalised cost considered as Rs 75.42 Crore instead of capital expenditure of Rs 73.52 Crore claimed by BEST. To that extent, allowable capital cost is revised to Rs 44.06 Crore (against BEST's claim of Rs 42.16 Crore) and equity portion of allowable capitalised cost at 30% amounts to Rs 13.22 Crore as against BEST's claim of Rs 12.65 Crore. The Return on Equity as approved by Commission for FY 2004-05 to FY 2006-07 is summarised in the following Table:

Particulars		**FY 2004-05**	**FY 2005-06**	**FY 2006-07**
Opening Equity	A	**570.72**	**591.61**	**606.54**
Annual allowable capital cost for the year	B	69.64	63.78	75.42
Less: Contribution made by consumers	C	0.00	3.12	6.36
Less: Government Assistance	D	0.00	10.88	25.00
Net allowable capital cost	E=B-C-D	69.64	49.78	44.06
Normative equity (30%)	F = E*30%	20.89	14.93	13.22
Closing Equity	G = A+F	**591.61**	**606.54**	**619.76**
Computation of RoE				
Return @ 16% on equity capital at commencement of year	H=A*16%	91.31	94.66	97.05
Return @ 16% on 50% of equity portion of annual allowable cost for the year	I=F*16%* 50%	1.67	1.19	1.06
RoE for the year	G=E+F	**92.99**	**95.85**	**98.10**

Thus, total interest on internal funds and return on equity approved by the Commission vis-à-vis that claimed by BEST for the period from FY 2004-05 to FY 2006-07 is summarised in the following Table:

Particulars	**FY 2004-05**	**FY 2005-06**	**FY 2006-07**

	Tariff Order	Revised Estimate by BEST	Allowed after true-up	Tariff Order	Revised Estimate by BEST	Allowed after true-up	Tariff Order	Revised Estimate by BEST	Allowed after true-up
Returns as Interest on Internal funds	63.15	4.57	4.57	62.47	4.83	4.83	51.96	5.16	5.24
Return as Return on equity		92.99	92.99		95.85	95.85		98.06	98.10
Total	**63.15**	**97.56**	**97.56**	**62.47**	**100.68**	**100.68**	**51.96**	**103.22**	**103.34**

Thus, the additional revenue gap claimed by BEST on account of the Judgment of the ATE on the Appeal filed by BEST, amounts to Rs. 34.41 crore (Rs. 97.56 crore – Rs. 63.15 crore) for FY 2004-05 and Rs. 38.21 crore (Rs. 100.68 crore – Rs. 62.47 crore) for FY 2005-06. The total additional revenue gap claimed for FY 2004-05 and FY 2005-06 on this account amounts to Rs. 72.62 crore, which has been added to the revenue requirement of FY 2008-09, to determine the total revenue requirement and revenue gap, as discussed in Section 5 of this Order. In addition, there is an impact of Rs. 51.38 crore for FY 2006-07, which has been considered as a part of the truing up for FY 2006-07, and is hence, not separately indicated.

3.9 INTEREST ON WORKING CAPITAL AND CONSUMERS' SECURITY DEPOSIT

BEST submitted that for FY 2006-07, BEST had not provided for any interest on working capital since the working capital needs of BEST are being met through internal resources. BEST added that the Commission had approved interest on consumers' security deposits at Rs. 11.70 crore based at the opening level of consumer deposits of Rs. 194.92 crore for FY 2006-07. However, the consumer security deposits at the end of FY 2006-07 has risen to Rs. 207.71 crore, hence the Interest on Consumers' security deposit has been revised to Rs. 12.46 crore for FY 2006-07.

For FY 2006-07, the Commission has not considered any interest on working capital, in accordance with the Commission's Tariff Regulations, since BEST's working capital requirement is negative as per the Tariff Regulations. The Commission has approved the expense of Rs. 12.46 crore on account of interest on consumers' security deposits, since it is in accordance with the Tariff Regulations and the increase is on account of increase in the consumers' security deposits.

3.10 PROVISIONING FOR BAD DEBTS

BEST submitted that against the approved provisioning of bad debts of Rs. 0.04 crore in the Tariff Order for FY 2006-07, BEST had not written off any bad debts in FY 2006-07. The Commission has hence, not considered any provisioning for bad debts under the truing up exercise.

3.11 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 was payable.

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

3.12 NON TARIFF INCOME

BEST submitted that the actual non-tariff income in FY 2006-07 was Rs. 42.89 crore, as compared to the Commission's approved income of Rs. 82.70 crore for FY 2006-07. BEST submitted that the non-tariff income has reduced in FY 2006-07 on account of the following reasons:

§ Contract charges comprise all-in hire charges for Street lighting Poles owned by BEST and maintenance charges for street lighting poles owned by MCGM, and are based on the expenses of BEST for providing and maintaining the street lighting poles and other public lighting on behalf of MCGM. Since this activity is not directly related to the distribution activity, BEST adjusts the expenditure after taking into account revenue earned on account of carrying out the said activity. Due to this, non-tariff income has reduced to the extent of Rs. 11.45 crore.

§ The 'Other Receipts' head mainly comprises delayed payment charges, which has witnessed a reduction of Rs. 22.31 crore due to the change in the method of charging DPC.

§ BEST clarified that no assets of Electric Supply Division are used for any other purpose and neither are the assets of the Electric Supply division used for generating other income except street lighting poles, which are used for kiosks, i.e., advertisement on street lighting poles. Further, the rental charges of street lighting poles are considered as non-tariff income.

In view of the above explanation, the Commission has considered the non-tariff income equal to the actual non-tariff income reported by BEST, as shown in the Table below:

Table: Non-Tariff Income (Rs Crore)

Particulars	Tariff Order	Actuals	Allowed after truing up
Non-Tariff Income	82.70	42.89	42.89

3.13 SHARING OF GAINS AND LOSSES IN FY 2006-07

BEST submitted the actual expenditure under various heads of expenditure and the reasons for variation between the approved expenditure and the actual expenditure. However, BEST has not considered any expenditure head as controllable and hence, did not compute the gains and losses for the controllable expenditure.

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."

Since there is neither efficiency gain nor loss due to controllable factors, and the variation in expenses has been allowed as uncontrollable, the question of computing the sharing of gains/losses in accordance with the provisions of Tariff Regulations in respect of BEST does not arise.

3.14 AGGREGATE REVENUE REQUIREMENT IN FY 2006-07 AFTER TRUING UP

S.No.	Particulars	Previous Year (FY 06-07)		
		April - March (Audited)	Order	Approved after truing up
1	Power Purchase Expenses	1403.06	1371.11	1393.32
1.1	TPC-G	1158.46	1310.36	1177.19
1.2	TPC-D	183.85	0.00	37.73
1.3	RPS	0.00	0.00	0.00
1.4	Other Sources	0.00	0.00	142.40
1.5	Reduction due to sale to MSEDCL			-24.75
1.9	Standby Charges	60.75	60.75	60.75
2	Operation & Maintenance Expenses	254.73	216.62	254.73
2.1	Employee Expenses	*138.38*	*114.62*	*138.38*
2.2	Administration & General Expenses	*91.79*	*82.00*	*72.81*
2.3	Repair & Maintenance Expenses	*24.56*	*20.00*	*43.54*
3	Depreciation, including advance against depreciation	39.92	41.44	35.77
4	Interest on Long-term Loan Capital	7.61	6.01	5.43
5	Interest on Working Capital and on consumer security deposits	12.46	11.70	12.46
6	Bad Debts Written off	0.00	0.04	0.00
7	Other Expenses			
8	Income Tax			
10	Intra-State Transmission Charges	51.17	51.17	51.17
12	Adjustment for profit/loss on account of controllable/uncontrollable factors			
16	Total Revenue Expenditure	**1768.95**	**1698.09**	**1752.88**
17	Return on Equity Capital	98.06	0.00	98.10
18	Return as Interest on Internal funds	5.16	51.96	5.24
20	Aggregate Revenue Requirement	**1872.17**	**1750.05**	**1856.22**
21	Less: Non Tariff Income	42.89	82.7	42.89
26	**Aggregate Revenue Requirement from Retail Tariff**	**1829.28**	**1667.35**	**1813.33**

3.15 REVENUE GAP

BEST submitted that the revenue gap in FY 2006-07 was equal to the difference between the revenue earned from tariff and the actual ARR, i.e., Rs. 292.33 crore. The

Commission has recomputed the revenue gap, by considering the ARR approved under the truing up exercise and the actual revenue earned by BEST. Thus, the revenue gap for FY 2006-07 works out to Rs. 276.38 crore, which has been added to the ARR of FY 2008-09, as discussed in the subsequent Section. The revenue gap has primarily arisen because of non-implementation of the tariff revision in FY 2006-07, due to various reasons, and the deferment of the same to subsequent year.

4 PERFORMANCE REVIEW OF FY 2007-08 AND DETERMINATION OF REVENUE REQUIREMENT FOR FY 2008-09

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 Distribution Losses

For FY 2007-08, the Commission specified the distribution loss levels at 11.00% and considered target loss reduction of 0.5% every year thereafter in the Control Period. The target of 11.0% was based on the base target level of distribution loss of 11.5% in FY 2006-07 as discussed in Section 3 of this Order.

BEST submitted that in FY 2007-08, BEST has continued to maintain its distribution losses at low levels, and a major initiative was undertaken by BEST during the year with an aim to reduce commercial losses even further with the implementation of monthly billing across all tariff categories from April 1, 2007.

BEST submitted that due to the shift to monthly billing from bi-monthly billing, it has estimated that around 84.3 MU can be considered to be a one time adjustment to the energy sales data to correct for the impact of the change in billing cycles. BEST projected a distribution loss level of 10.2% for the first half of the year which is well within the approved loss level of 11.0%. However, this figure remains tentative as the entire impact of the switch in billing cycle cannot be evaluated precisely. BEST submitted that a clearer picture regarding the actual level of distribution loss will emerge by the end of the current financial year and the same can be considered at the time of final truing-up of FY 2007-08. For estimating the energy input requirement, BEST has considered the distribution losses as 10.54% and 10.5% for FY 2007-08 and FY 2008-09, respectively.

In this context, as discussed in the previous Section on truing up for FY 2006-07, the actual distribution losses in FY 2006-07 at 11.90%, are significantly higher than the 11.49% indicated by BEST. However, the Commission has considered the distribution losses in FY 2007-08 and FY 2008-09 in accordance with the losses specified under the MYT trajectory, viz., 11% and 10.5%, respectively. BEST is directed to ensure that the distribution losses are reduced at the earliest, and brought down to the levels specified by the Commission in the MYT Order, if not below. The Commission will undertake the final truing up of the distribution losses for the respective years at the time of APR for FY 2008-09 and FY 2009-10, respectively.

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 TR UING-UP FOR FY 2007-08

BEST, in its APR Petition for FY 2007-08 and Tariff Petition for FY 2008-09, submitted the performance for FY 2007-08 based on actual performance for the first half of the year, i.e., April to September 2007, and estimated performance for the second half of the year, i.e., October 2007 to March 2008. BEST submitted the comparison of each element of expenditure and revenue with that approved by the Commission in its Order dated April 3, 2007 on BEST's Multi Year Tariff petition for the Control Period from FY 2007-08 to FY 2009-10.

BEST, in its Petition, requested that the estimated revenue gap for FY 2007-08 be considered while revising the tariffs for FY 2008-09.

The Commission will undertake the final truing up of the revenue requirement and Revenue for FY 2007-08 once the audited accounts of BEST for FY 2007-08 are available, i.e., during Annual Performance Review for the second year of the Control Period, viz., FY 2008-09. However, the Commission in this Order on APR for FY 2007-08 and determination of Tariff for FY 2008-09 has considered provisional truing up of certain elements of the revenue requirement 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 2007-08 and FY 2008-09 as compared to the Commission's MYT 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 2007-08, the revised expenses approved for FY 2007-08 in this Order under the provisional truing up exercise will be considered as base expenses.

4.4 SALES

BEST submitted that in the MYT Petition, BEST had forecast energy sales of 3850.75 MU for FY 2007-08 based on past trends in consumer and sales growth. However, the actual sales during the period April 2007 to September 2007 has been recorded at 2184.98 MU, indicating a much higher than anticipated growth in energy demand in the current year.

BEST submitted that in the first six months of the year, BEST bills 52.14% of the overall annual sales during the year. However, for the purpose of projections, BEST has considered the percentage power purchase of the five month period from May 2007 to September 2007, which comes to 43.56%. This is so because the sales in the month of April are atypically high which would lead to an inflated projection of energy sales for the year. Thus, considering that the actual sales of 1790.3 MU for the period from May to September 2007 would normally be 43.56% of the total annual sales while the sales for H2 would be 47.86%, BEST has projected the sales figure for the second half of FY 2007-08 as 1966.97 MU. Thus, for the entire year, the total sales based on actuals from April to September 2007 and the above projections from October to March 2008 is projected at 4151.96 MU, i.e., 2184.98 MU (actuals for H1 of FY 2007-08) + 1966.97 MU (projection for H2 of FY 2007-08).

BEST submitted that the sales projection for H2 of FY 2007-08 have been allocated to each month based on the past percentage weightage witnessed, and further allocated to each tariff slab based on the average contribution of each tariff slab to the monthly sales in H1 of FY 2007-08. The revised projections for FY 2007-08 are higher by 7.8% than those submitted in the MYT petition but given the 10.15% rise already registered in H1 of FY 2007-08, this growth seems reasonable. Further, this number also includes the additional sales registered in the month of April-07 on account of the switch from bi-monthly to monthly billing by BEST.

For projecting sales of FY 2008-09, BEST submitted that it has taken the overall growth rate in energy sale from the load forecasting study undertaken by it, and based on the most likely scenario, an overall growth rate of 4.46% has been assumed over the sales in FY 2007-08. This amounts to a total sales figure for FY 2008-09 at 4249 MU. BEST added that there is also considerable re-development of mill land in the BEST licensee area which is expected to give a further impetus to the demand in FY 2008-09. As per the bulk load requests made to BEST by such developments, it is expected that in FY 2008-09 additional load of about 52 MW shall be added to the network of BEST. As this load is likely to materialise in a phased manner, 20% annual loading factor is considered, resulting in additional sale of 91 MU, which has been added to the projection for energy sale as calculated above to arrive at the total energy sale figure for FY 2008-09 at 4340 MU. These have been apportioned to various tariff categories and slabs based on the individual growth rates assumed by BEST depending on past trend and current demand observed by BEST.

For FY 2007-08, the Commission obtained the details of category-wise sales for the 10-month period from April 2007 to January 2008 and pro-rated the same for the entire FY 2007-08, by considering the share of sales in February and March of the previous year, for each consumer category separately. As shown in the Table below, the actual sales in FY 2007-08 have been higher than that considered by the Commission in the MYT Order, as a result of which, the power purchase has also increased to that extent, after considering the distribution losses on the sales.

For FY 2008-09, the Commission has considered the 5-year CAGR of sales for each category, by considering the period from FY 2001-02 to FY 2007-08, for projecting the sales for all categories. 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 2007-08 and FY 2008-09

Consumer Category & Consumption Slab	Slabs	FY 2006-07	n (FY 2007-08) (Actual / Estimates) (MU)				FY 2008-09	
			MYT Order	BEST	Actual till Jan 08 pro-rated for entire year	Commission	BEST	Commission
BPL	0 - 30	2083556	0.135	0.13	0.11	0.11	0.13	0.11
LT I	0 - 100	360471480		599.52			623.54	
	101-300	507990768		559.07			578.61	
	301-500	225394004		188.18			193.80	
	> 501	495216150		415.68			429.12	
Total LT I (MU)		**1589**	**1643**	**1762.45**	**1726.79**	**1762.45**	**1825.08**	**1818.35**
LT II	0 - 300	283809211		398.10			413.29	
	301 - 500	110162704		124.38			128.79	
	501- 1000	175117688		177.38			183.47	
	> 1000	852077378		756.03			816.50	
Total LT II (MU)		**1421**	**1432**	**1455.88**	**1368.89**	**1455.88**	**1542.04**	**1514.49**
LT III	all units	72851295	69	181.57	**263.06**	**263.06**	192.46	**268.89**
LT IV	all units	1565613	1	2.09	**25.06**	**25.06**	2.04	**24.59**
LT V	0 - 300	14826266		22.19			21.57	
	301 - 500	6371865		8.80			8.55	
	501- 1000	10792247		13.92			13.51	
	> 1000	22990062		30.78			30.85	
Total LT V (MU)		**55**	**173**	**75.70**	**76.30**	**76.30**	**74.48**	**74.45**
LT VI-A	all units	114061543	5	66.13	**43.92**	**43.92**	67.38	**45.96**
LT VI-B	all units	6599940		37.19	**44.24**	**44.24**	37.13	**37.89**
LT VII-A	all units	34369949	36	18.16	**0.00**	18.16	18.10	**18.37**
LT VII-B	all units	4432284		4.16	**29.08**	4.16	4.49	**4.23**
LT VIII	all units	1240870	1	1.03	**3.94**	**3.94**	1.00	**3.62**
LT IX	all units	12240993	13	15.60	**14.96**	**14.96**	16.76	**17.51**
LT X	all units	6293277	7	4.51	**4.14**	**4.14**	4.69	**4.41**
LT XI	all units	496058	0.1	0.03	**0.02**	**0.02**	0.04	**0.02**
TOTAL LT (MU)		**3321**	**3381**	**3625**	**3600.51**	**3716.41**	**3786**	**3832.90**
HT Category								
HT I	all units	9533400	13	10.64	10.52	**10.52**	11.42	**11.53**
HT II	all units	20977970	21	24.60	21.27	**21.27**	26.40	**24.15**
HT III	all units	277919767	252	266.30	264.08	**264.08**	286.36	**272.02**
HT IV	all units	137386702	151	183.37	190.83	**190.83**	184.73	**185.38**
HT V	all units	31263776	33	42.41	35.62	**35.62**	45.47	**37.39**
TOTAL HT (MU)		**477**	**470**	**527**	**522.32**	**522.32**	**554**	**530**
Total		3799	3850.74	4151.96	4122.83	4238.73	**4340.18**	**4363.37**

Thus, the total sales estimated by the Commission for FY 2007-08 and FY 2008-09 is 4239 MU and 4363 MU, as compared to BEST's estimate of 4152 MU and 4340 MU, respectively.

4.5 DISTRIBUTION LOSSES AND ENERGY INPUT

As discussed earlier, BEST submitted that it had considered the distribution losses for FY 2007-08 and FY 2008-09 as 10.54% and 10.5%, respectively, for computing the energy input requirement. As discussed in earlier paragraphs, the Commission has considered the distribution losses for FY 2007-08 and FY 2008-09, as 11.00% and 10.5%, respectively, in accordance with the distribution loss trajectory specified in the MYT Order for BEST.

The corresponding Energy Balance is given in the Table below:

Particulars	Units	FY 2007-08			FY 2008-09	
		MYT Order	BEST APR Petition	Approved after provisional truing up	BEST APR Petition	Approved
Sales	**MU**	**3,851**	**4,152**	**4,239**	**4,340**	**4,363**
Distribution Loss	%	11.00%	10.54%	11.00%	10.50%	10.50%
Energy Requirement at T<>D interface	MU	4,327	4,641	4,763	4,849	4,875
Transmission Loss	**%**	**4.85%**	**4.85%**	**4.85%**	**4.85%**	**4.85%**
Total Energy Requirement	**MU**	**4,547**	**4,878**	**5,005.38**	**5,097**	**5,123.78**

Thus, the total energy input required to be purchased by BEST in FY 2007-08 and FY 2008-09, has been approved as 5005 MU and 5124 MU, respectively.

4.6 ENERGY AVAILABILITY AND POWER PURCHASE COST DURING FY 2007-08 AND FY 2008-09

BEST submitted that the power purchase expenses have increased in comparison to the approved cost in the MYT Order on account of the higher sales recorded in the current year till date as well as the increase in the power purchase cost per unit from all sources from the approved cost.

4.6.1 Power Purchase from TPC-G

BEST submitted that most of the increase in the power purchase cost for FY 2007-08 is on account of the higher rates of power purchase borne by BEST. BEST submitted that the average power purchase rate from TPC-G (excluding Unit 4) during first six months of FY 2007-08 was Rs 2.77/unit as compared to the approved rate of Rs 2.71 (as per the Corrigendum Order dated 30th November, 2007). As for Unit 4 of TPC-G, the average power purchase price in the first half of the current year was Rs 6.06/ unit as against approved rate of Rs. 5.28 / unit for FY 2007-08.

BEST further submitted that the Commission in the MYT Order dated April 3, 2007 in Case no. 66 of 2006 on BEST's ARR for FY 2007-08, approved Rs 2.45 per unit as energy rate for energy purchase from TPC-G excluding Unit-4 whereas, in TPC's MYT Order this was considered as Rs 2.91 per unit. BEST approached the Commission for clarification in the matter and the Commission vide its Corrigendum Order dated November 30, 2007 approved that the energy rate for purchase from TPC-G as Rs 2.71 per unit. Accordingly, BEST submitted that due to this correction in purchase rate from TPC-G, impact of additional amount of Rs 27 Crore has been approved for FY 2007-08.

Further, BEST mentioned that it submitted a Petition to the Commission for approval of increase in the power purchase cost for the first quarter of FY 2007-08. The Commission during the hearing held on December 5, 2007 mentioned that this expenditure can be incorporated by the licensee in the revised ARR and the Commission would deal with it at the time of the APR.

For second half of FY 2007-08, BEST has considered the power purchase quantum from TPC-G as per the approved quantum of supply for FY 2007-08 in the MYT Order and has considered the balance quantum to be procured from external sources including renewable energy sources.

BEST submitted that the power purchase cost per unit from TPC-G units (including Unit-4) for the purpose of projecting the total power purchase for the second half of FY 2007-08 has been considered same as the per unit cost paid by BEST in the month of September 2007, which is the latest actual cost of power purchase from these sources.

As regards projections for purchase of energy from TPC-G during FY 2008-09, BEST submitted that as the Commission's Order in the matter of PPA between BEST and TPC-G for 800 MW comes into effect from 1st April, 2008, BEST has made all its procurement projections based on the allocation of generation capacity from TPC-G as per PPA. BEST has considered the per unit purchase cost from TPC-G plants based on the Commission's MYT order of TPC-G.

For provisional truing up for FY 2007-08, the Commission has considered the power purchase quantum and cost from TPC-G as projected by BEST and hence, approves power purchase of 4143 MU at an estimated cost of Rs 1399.10 Crore. The Commission has also considered an impact of Rs 27 Crore on account of the Corrigendum Order. The Commission will undertake the final truing up of power purchase from TPC-G for FY 2007-08 based on actual data for the entire year during the APR process for FY 2008-09.

The Commission issued its Order in Case No. 86 of 2006, Case No. 87 of 2006 and Case No. 30 of 2007 on November 6, 2007 in the matter of BEST's Petition for Approval of Revised Power Purchase Agreement between BEST and TPC; TPC's Petition seeking approval of Power Purchase Arrangement between TPC-G and TPC-D; and dispute raised by REL for adjudication under the provisions of Section 86(1)(f) of the Electricity Act, 2003. The Commission, in its Order, approved the PPA between BEST and TPC and the internal capacity allocation from the generation division of TPC to its own distribution division, with effect from April 1, 2008.

Subsequently, the Appellate Tribunal for Electricity passed its Judgment in the matter of Appeal No. 41 of 2007, Appeal No. 51 of 2007, Appeal No. 143 of 2007, Appeal No. 145 of 2007, Appeal No. 159 of 2007 and Appeal No. 14 of 2008 on May 6, 2008. The relevant extract of the said judgment has been reproduced below:

> *"103. We conclude from the aforementioned that the Commission has wide powers to regulate the quantity of energy that may be supplied by a generating company to a distribution licensee when both are under the jurisdiction of the same Commission.*
>
> *104. It is not in dispute that the claims of REL have not been considered by the Commission while approving the PPA between the TPC(G) and BEST and arrangement between TPC(G) and TPC(D). It is also not in dispute that the approval of PPA and the arrangement has affected the allocation of power to REL. The interests of REL have been adversely affected by the Commission in violation of the principle of natural justice. The Commission ought to have considered the claim of REL for allocation of power while considering the*

approval of PPAs between TPC(G) and BEST and arrangement between TPC(G) and TPC(D).

105. In the circumstances, appeal No. 143 of 2007 is allowed and order dated November 06, 2007 of the MERC approving the PPA of TPC and BEST and arrangement between TPC and TPC(D) with reference to allocation of power to BEST and TPC(D) is set aside. The Commission is directed to consider the question of approval of PPA and the arrangement afresh after taking into consideration the claims of BEST, REL and TPC(D). While considering the case of the parties the Commission shall have regard to the fact that the consumers of respective areas have been bearing the Depreciation and Interest on Loan elements of the Fixed Cost of tariff and also consider all other submissions of the parties which are permissible in the law.

106. Since we have held that the Commission has wide powers to regulate the quantity of energy that may be supplied by a generating company to Distribution Licensees when both are under its jurisdiction, appeal No. 159 of 2007 and appeal No. 14 of 2008 are liable to be dismissed. Accordingly, appeal No. 159 of 2007 and appeal No. 14 of 2008 are hereby dismissed."

Thus, the ATE set aside the Commission's Order approving the PPA between TPC-G and BEST and the Power Purchase Arrangement between TPC-G and TPC-D. However, subsequent to the ATE Judgment on the said issue, TPC filed an appeal with the Hon'ble Supreme Court against the ATE Judgment. The Hon'ble Supreme Court in its Interim Judgment dated May 14, 2008, stayed the ATE Judgment in the matter of Appeal No. 41 of 2007, Appeal No. 51 of 2007, Appeal No. 143 of 2007, Appeal No. 145 of 2007, Appeal No. 159 of 2007 and Appeal No. 14 of 2008. In effect, since the ATE Judgment setting aside the Commission's Order has been stayed, the Commission's Order dated November 6, 2007, is still in force and can be given effect.

TPC-G, in its Petition for Annual Performance Review for FY 2007-08 and Tariff Petition for FY 2008-09, submitted that the PPAs between TPC-G with BEST and between TPC-G and TPC-D have been approved by the Commission. As per the approved PPAs, out of the existing capacity of 1777 MW, 800 MW has been allocated to BEST, while a capacity of 477 MW has been allocated to TPC-D. TPC, in its submission dated March 25, 2008, submitted that out of the 250 MW capacity of Unit-8, as per the approved PPA, 100 MW has been allocated to BEST and 50 MW has been allocated to TPC-D.

Considering the fact that the ATE Judgment dated May 6, 2008 on appeals filed against the Commission's Orders on approval of PPA between TPC-G and BEST and internal arrangement between TPC-G and TPC-D, has been stayed by the Hon'ble Supreme Court, the Commission has considered the allocation of power for FY 2008-09 with effect from April 1, 2008 based on the approved PPA between TPC-G and BEST and the internal capacity allocation from the generation division of TPC to its own distribution division. Accordingly, from the existing capacity of TPC-G, the Commission for FY 2008-09 with effect from April 1, 2008 has considered the power availability of 800 MW for BEST from existing TPC-G Stations. From Unit 8 the Commission has considered the capacity of 100 MW for BEST as per the PPA.

For estimating the cost of power purchase from TPC-G, the Commission has considered the tariff approved by the Commission in its Order dated April 2, 2008 in Case No. 68 of 2008 on TPC-G's APR Petition for FY 2007-08. The summary of the estimated power purchase quantum and cost of power purchase by BEST from TPC-G in FY 2008-09 is given in the following Table:

Table: Energy & Variable Cost for Purchase of Power from TPC-G in FY 2008-09

Particulars	Quantum	Variable Cost
	MU	Rs Crore
Unit-5, 6 & 7	3952.28	1317.29
Unit- 4	237.25	168.82
Hydel	615.87	112.40
Unit-8	359.54	63.10
Total	**5164.94**	**1661.61**

Table: Other Costs for Purchase of Power from TPC-G in FY 2008-09

Particulars	Rs Crore
Fixed Charges-Thermal	243.12
Unit-8	38.77
Incentive at Projected Generation	15.53
Less Rebate-Hydel Excess Recovery	(44.85)
Total	**252.58**

4.6.2 Renewable Purchase Specification

Regarding purchase from renewable sources for FY 2007-08, BEST submitted that due to the shortage of availability of renewable sources of power, the power has to be procured at a rate of Rs 5 per unit, which is much higher than the Commission's approved rate of Rs 3.45 per unit.

BEST submitted that it has also been seeking to procure power from renewable sources continuously. However, there has been a dearth of suppliers of power from renewable sources in the market. BEST submitted that it has been able to locate a supplier of wind power from whom, about 40 MU is proposed to be procured at the rate of Rs 5/ unit during FY 2007-08. BEST submitted that it has proportionately decreased the quantum of power of 40 MU from Unit-4 of TPC-G and power purchase from external sources proportionately. BEST further submitted that it continues to endeavour to procure all its RPS obligations and it shall move swiftly to procure the balance quantum from renewable sources as soon as it is able to locate a suitable supplier for the same.

For FY 2008-09, BEST in its Petition submitted that in line with the Commission's direction to procure 5% of its energy requirement from renewable sources by each distribution licensee, BEST has projected the required quantum of 254.83 MU from renewable sources. BEST has projected the procurement cost at Rs 5 / unit based on the current price that BEST has been able to get through a competitive bidding process as indicated above. BEST further submitted that it has also initiated a project to set up its own wind farm of 51 MW capacity on account of lack of suppliers of power from renewable sources. BEST submitted that a detailed project report for the same will be submitted to the Commission shortly.

For FY 2007-08, the Commission has considered power purchase quantum and cost from renewable sources, as projected by BEST and accordingly for provisional truing up purposes has considered 40 MU at an estimated cost of Rs 20 Crore. However, this should not be construed as the Commission having granted approval for the rate of Rs. 5 per kWh indicated by BEST, which has been discovered through a competitive bidding process undertaken by BEST as submitted by BEST. The rate of power purchase from renewable sources by BEST and other distribution licensees will have to be in accordance with the rates approved by the Commission trough its various

Orders, or through a competitive bidding process approved by the Commission. The Commission clarifies that it would deliberate the issue considering the final settlement of RPS for FY 2007-08, during the final truing-up of FY 2007-08.

For FY 2008-09, the Commission has considered the power purchase from Renewable Energy Sources as per RPS obligation, i.e., 5% of the total energy input. Based on the total energy input approved by the Commission in this Order for FY 2008-09, the RPS obligation of BEST for FY 2008-09 works out to 256.20 MU and corresponding total cost of meeting the RPS obligation works out to Rs 89.67 Crore by assuming an average rate of Rs 3.50/kWh.

4.6.3 Short Term Power Purchase

As regards the purchase from external sources during FY 2007-08, BEST submitted that the increased reliance on external sources to meet the demand in its supply area has resulted in a sharp increase in the power purchase cost to the tune of Rs 120 Core as compared to the cost approved by the Commission. Further, BEST submitted that the actual average rate for purchase from external sources during the first half of FY 2007-08 works out Rs 5.61 /unit as compared to the approved rate of Rs 4.41/unit.

BEST submitted that for the month of October 2008, the per unit purchase rate has been considered as the average cost per unit over the period from April to September, 2007. From November onwards, BEST has considered the purchase rate of power from external sources at Rs 6.01 per kWh as per the latest tender floated by the Power Management Group (a consortium of BEST, REL-D and TPC-D) to purchase short term power where the average cost of power being offered for a period of November, 2007 to October 2008 comes to Rs. 6.01 per unit.

BEST further submitted that during FY 2008-09 despite the higher allocation from TPC-G at 800 MW, BEST will continue to face peak time shortage of power on account of sharply increase in demand in the recent past, which is expected to continue to rise steadily in the next year also. BEST submitted the projected peak time shortage of power during FY 2008-09 in MW and MU terms as shown in the Table below

.

Table: Estimation of Demand (in MW) for FY 2008-09

Units Purchased FY 2008-09	Energy Requirement at T-D Interface	Grossed up Energy Requirement at InSTS	Grossed up Demand in MW	Peak Availability of TPC-G (MW)	Peak Shortfall (MW)	Peak Shortfall (MU)
APR	416.00	437.21	1029	649	380	47
MAY	444.35	467.00	1064	649	414	51
JUN	427.39	449.18	1057	649	408	51
JUL	425.81	447.52	1019	649	370	46
AUG	406.45	427.17	973	649	324	40
SEP	408.45	429.27	1011	649	361	45
OCT	442.67	465.24	1060	649	410	51
NOV	401.15	421.59	992	649	343	43
DEC	376.61	395.81	902	649	252	31
JAN	352.10	370.04	843	649	194	24
FEB	339.31	356.61	899	649	250	31
MAR	409.06	429.91	979	649	330	41
TOTAL	**4849.36**	**5096.55**				**500.55**

BEST further submitted that the peak availability of TPC-G's 800 MW allocation to BEST has been calculated after assuming auxiliary consumption at 4.5% and peak availability of 85% of all TPC-G plants. The MU shortfall has been calculated based on a 4 hour peak time requirement. BEST submitted that the MU thus computed has been considered for purchase from external sources. The balance quantum of power (after RPO purchase) has been considered to be procured from TPC-G plants. As regards rate for purchase from external sources, BEST submitted that the external purchase has been assumed at Rs. 6.01/ unit for the entire year although the quotes for the current tender, as indicated in the above section, are till October 2008. BEST submitted that for projecting the power purchase from external sources for FY 2008-09, it has considered the purchase rate of Rs 6.01/kWh and accordingly projected the purchase of 500.55 MU from external sources at an estimated cost of Rs 300.83 Crore.

For FY 2007-08, the Commission has considered the power purchase quantum and cost under bilateral sources based on the total energy input requirement approved in this Order and has accordingly estimated power purchase of 822.35 MU at an estimated cost of Rs 452.29 Crore. For estimation purposes for FY 2007-08, the Commission considering the recent trends for bilateral power purchase has considered an average rate of Rs 5.5/kWh for FY 2007-08. However, the Commission will carry out the final truing up of power purchase from bilateral sources for FY 2007-08 based on actual data during the APR of FY 2008-09.

For FY 2008-09, the Commission in accordance with the methodology adopted in previous Tariff Orders has not carried out the load balancing in MW terms and has carried out the energy balance in MU terms. The Commission observed that the BEST in its Petition while estimating the energy to be procured from external sources has not considered the 100 MW capacity and corresponding energy from Unit 8 of TPC-G. Further, the estimated energy purchase from TPC-G existing stations during FY 2008-09 as estimated by BEST is substantially lower than the estimated energy available to BEST as considered by the Commission.

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 into energy of surplus of 297.14 MU. For estimating the power purchase cost for FY 2008-09, the Commission has considered the rate of Rs 5.50/kWh for sale of this surplus power, assuming that substantial part of this surplus power will be utilised by other distribution licensees and will be treated as part of Intra State Energy Balance Settlement.

The summary of power purchase from other sources/sale of surplus energy as projected by BEST and as approved by the Commission for FY 2008-09 is given in the Table below:

Table: Power from bilateral sources in FY 2007-08 & FY 2008-09

Particulars	Unit	FY 2007-08			FY 2008-09	
		MYT Order	Revised Estimate	Approved after Provisional truing up	Petition	Approved
Bilateral ources/Sale of Surplus Energy	MU	231.09	582.44	822.35	500.55	(297.14)
	Rs Crore	99.87	318.15	452.29	300.83	(163.43)

4.6.4 Costly Power Purchase

The Commission has considered the power purchase from Unit-4 of TPC-G as costly power. The summary of purchase cost (variable charges) from the costly source of power as approved by the Commission for FY 2008-09 is given in the Table below:

Table: Summary of Costly Power Purchase in FY 2008-09

Source	Quantum (MU)	Variable Cost (Rs Crore)

TPC-G (Unit-4)	237.25	168.82

4.6.5 Demand Side Management (DSM) Mechanism

The Commission, in its MYT Order, has deliberated on the need for DSM and opined that the distribution licensees need to take steps toward meeting their energy requirement by Supply Side as well as Demand Side Management (DSM) measures. Traditionally, the distribution licensees have been looking at the supply side alone. Since there has been no capacity addition in the State for last many 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, in the form of reliability charges, which comprises expensive power charges and standby charges.

The Commission, in its MYT Order, ruled that 2% of the costly power purchase requirement will have to be reduced as an initial step by implementation of DSM. Accordingly, the Commission reduced 2% of the costly power purchase, which will be saved though DSM measures. This translated to 0.36% of the total power purchase cost and reduction in power purchase cost by Rs 5.39 Crore. Therefore, the Commission has considered the reduction in power purchase cost of Rs 5.39 Crore as approved in the MYT Order for FY 2007-08 for the purpose of provisional truing up for FY 2007-08.

For FY 2008-09, the Commission in line with the philosophy adopted in its MYT Order has considered reduction to the extent of 2% of the expenditure on costly power purchase for DSM measures. This translates to 0.16% of the total power purchase and reduction in power purchase cost by Rs 3.38 Crore.

4.6.6 Standby Charges

BEST, in its Petition, submitted that it has estimated the standby charges payable at Rs 114.63 Crore to MSEDCL for FY 2007-08 based on the approved standby charges by the Commission in its Order dated May 18, 2007 on MSEDCL MYT Petition. For FY 2008-09, BEST submitted that it has considered an escalation of 3.55% on the approved standby charges at Rs 114.63 Crore payable in FY 2007-08 as per the Central Electricity Regulatory Commission's (CERC) notified escalation rates for indexed capacity charges dated September 24, 2007. Accordingly, BEST projected the standby charges payable to MSEDCL at Rs. 118.05 Crore.

For FY 2007-08, the Commission has considered the standby charges approved in the MYT Order for MSEDCL dated May 18, 2007, i.e., Rs 114.63 Crore. For FY 2008-09, the Commission in line with the philosophy adopted in the MYT Order has allocated the standby charges between the three Distribution Licensees in Mumbai in proportion to the coincident peak demand for the last one year and the standby charges allocated to BEST works out to Rs 108.78 Crore..

4.6.7 SLDC Charges

The Commission has considered the approved share of BEST of the SLDC charges, i.e., Rs 0.80 Crore for FY 2007-08 as approved in the SLDC Budget for FY 2007-08 vide Order dated March 28, 2007 in Case No. 77 of 2006.

The Commission in its Order dated May 31, 2008 in the matter of Approval of SLDC Budget for FY 2008-09 (Case No. 88 of 2007) has determined the mechanism for the recovery of SLDC Fees and Charges for FY 2008-09 and accordingly, the Commission has considered TPC-D's share of the approved SLDC Charges for FY 2008-09, which works out to Rs 0.74 Crore.

4.6.8 Transmission Charges

BEST, in its Petition, submitted that the Commission in its Order dated April 02, 2007 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 (TSU's) for FY 2007-08. Accordingly, BEST has considered the approved transmission charges of Rs 97.6 Crore payable by BEST for FY 2007-08.

For FY 2008-09, BEST submitted that in the aforesaid Order, the Commission determined the ARR of the three Transmission Utilities for FY 2008-09 and BEST has assumed that the percentage share of the distribution utilities will remain same for FY 2008-09 as well, and computed the transmission charges at Rs 103.47 Crore for FY 2008-09.

For FY 2007-08, the Commission has considered the transmission charge of Rs 97.6 Crore as approved by the Commission in its MYT Order for BEST.

The Commission vide its Order dated May 31, 2008 in Case No. 104 of 2007 on determination of Transmission Tariff for the Intra-State Transmission System has approved the revised Transmission charges for FY 2008-09. The total transmission charges payable by BEST for FY 2008-09 as approved by the Commission works out to Rs 109.61 Crore.

4.6.9 Summary of Power Purchase Related Cost

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

Table: Power purchase cost for FY 2007-08

S.No	Source	MYT Order		BEST APR Petition		Approved after Provisional Truing up)	
		Quantum (MU)	Cost (Rs Crore)	Quantum (MU)	Cost (Rs Crore)	Quantum (MU)	Cost (Rs Crore)
1	TPC-G: Existing	4134.62	1325.98	4143.04	1399.10	4143.04	1399.10
2	TPC-D(Short Term)	231.09	99.87	582.44	318.15	822.35	452.29
3	RPS	181.89	62.75	40	20	40.00	20.00
4	Standby Charges		146.1		114.63	0.00	114.63
5	Transmission Charges		97.64		97.61	0.00	97.61
6	SLDC Charges		0.80		0.80	0.00	0.80
7	Reduction of DSM		-5.39				-5.39
8	TPC FAC of previous years		123.7		123.70		123.70
10	Under-recovery of FAC for previous years		8.00		8.00		8.00
11	True-up due to Corrigendum order				27.00		27.00
	Total	**4547.6**	**1859.45**	**4765.48**	**2108.98**	**5,005.38**	**2237.73**

The summary of the total power purchase cost considered by the Commission during FY 2008-09 is shown in the Table below:

Table: Power purchase cost for FY 2008-09

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	4341.17		3952.28	1575.94
2	TPC-G:Unit 4		1511.83	237.25	168.82
3	TPC-G Hydel			615.87	112.40
4	TPC-G : Unit 8			359.54	101.87
	Sub-total TPC-G	**4341.17**	**1511.83**	**5164.94**	**1959.03**
5	RPS	254.83	127.41	256.20	89.67
6	Additional PP/Sale	500.55	300.83	-297.14	-163.43
7	Standby Charges		118.05		108.78
8	Less Hydel Rebate				44.85
	sub-total (Power Purchase)	**5096.55**	**2058.12**	**5124.00**	**1949.20**
9	Transmission Charges		103.47		109.61
10	SLDC Charges				0.74
11	Reduction of Cost (DSM)				-3.38
	Total	**5096.55**	**2161.59**	**5124**	**2056.18**

4.7 O&M EXPENSES FOR FY 2007-08 AND FY 2008-09

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 O&M expenditure heads are detailed below.

4.7.1 Employee Expenses

BEST submitted that for FY 2007-08 and FY 2008-09, BEST has projected revised expenses of Rs. 130.95 crore and Rs. 129.73 crore, respectively as compared to the approved expenses of Rs. 92.42 crore and Rs. 95.75 crore for FY 2007-08 and FY 2008-09, respectively. BEST submitted that the revision in employee expenses has arisen due to the following reasons:

§ In the MYT order, there is no provision related to impact of Wage Agreement for the Control Period. BEST has now signed a Wage Agreement with its employees, because of which it has already incurred an additional expenditure of Rs 15.35 crore in H1 of FY 07-08 and is likely to incur similar expenditure in H2 of FY 07-08. Thus the wage settlement has lead to an additional burden of Rs. 33.70 crore in FY 2007-08. Similarly, BEST shall be incurring an expense of Rs. 14.28 crore for Gratuity payments in FY 07-08 as compared to actuals of Rs. 6.71 crore in FY 2006-07. BEST has envisaged a provision of Rs. 1.00 crore under VRS scheme

- For FY 2008-09, the revision in employee expenses is being requested due to the impact of Wage agreement, which has not been provided in the MYT order for FY 2008-09. The wage settlement shall lead to an additional burden of Rs. 33.70 crore and increase in terminal benefits applicable under Gratuity payments.

BEST added that the Commission's directive to commence monthly meter readings requires a substantial increase in the number of meter readers and bill collectors, as BEST has substantial number of residential consumers being read on bi-monthly basis. To comply with the above directive, there had to be substantial increase in the number of meter readers and bill collectors along with simultaneous increase in bill collection & processing facilities.

For FY 2007-08, for each sub-head of employee expenditure, the Commission has considered an increase of around 6.26% on account of inflation over the revised level of employee expenses as approved for FY 2006-07 under the truing up exercise in this Order, based on the increase in Consumer Price Index (CPI). 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 2004-05 to FY 2006-07, to smoothen the inflation curve. The Commission will undertake the final truing up of employee expenses for FY 2007-08 based on actual employee expenses for the entire year and prudence check, during the APR process for FY 2008-09. However, for heads like basic salary, DA, interim bonus/ex-gratia, interim DA, and gratuity payment, etc., the Commission has accepted BEST's projections, since the impact of the wage revision has already been incorporated.

For FY 2008-09, for each sub-head of employee expenditure, the Commission has considered an increase of around 6.26% on account of inflation over the revised level of employee expenses as approved for FY 2007-08 under the provisional truing up exercise in this Order, based on the increase in Consumer Price Index (CPI). However, for heads like basic salary, DA, and interim bonus/ex-gratia, the Commission has accepted BEST's projections Accordingly, the approved employee expenses for FY 2007-08 and FY 2008-09 is summarised in the following Table:

Table: Approved Employee Expenses for FY 2007-08 & FY 2008-09 (Rs. Crore)

Particulars	**FY 2007-08**			**FY 2008-09**		
	MYT Order	**Revised Estimate by BEST**	**Approved After provisional truing up**	**MYT Order**	**Revised Estimate by BEST**	**Approved**
Gross employee expenses	92.42	139.32	137.19	95.75	138.32	140.49
Less: Other Divisions		8.37	9.04		8.59	9.61
Net employee expenses	**92.42**	**130.95**	**128.15**	**95.75**	**129.73**	**130.89**

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

BEST submitted that for FY 2007-08 and FY 2008-09, BEST has projected revised expenses of Rs. 98.48 crore and Rs. 104.10 crore, respectively, as compared to the approved expenses of Rs. 86.40 crore and Rs. 91.04 crore for FY 2007-08 and FY 2008-09, respectively. BEST submitted the break-up of A&G expense and other costs within A&G expenses, and requested the Commission to allow the same.

For FY 2007-08, the Commission has considered an increase of around 5.29% on account of inflation over the revised level of A&G expenses as approved for FY 2006-07 in this Order, based on the increase in Wholesale Price Index (WPI) and Consumer Price Index (CPI). 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 2004-05 to FY 2006-07, 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. Further, as discussed during truing up for FY 2006-07, certain R&M related expenses have been transferred to R&M expenses, by deducting them from A&G expenses. The Commission will undertake the final truing up of A&G expenses for FY 2007-08 based on actual A&G expenses for the entire year and prudence check, during the APR process for FY 2008-09.

For FY 2008-09, for each sub-head of A&G expenditure, the Commission has considered an increase of around 5.29% on account of inflation over the revised level of A&G expenses as approved for FY 2007-08 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 2007-08 and FY 2008-09 is summarised in the following Table:

Table: Approved A&G Expenses for FY 2007-08 & FY 2008-09 (Rs. Crore)

Particulars	FY 2007-08			FY 2008-09		
	MYT Order	Revised Estimate by BEST	Approved After provisional truing up	MYT Order	Revised Estimate by BEST	Approved
Net A&G expenses	86.40	98.48	81.91	91.04	104.10	85.23

4.7.3 <u>R&M Expenses</u>

BEST submitted that for FY 2007-08 and FY 2008-09, BEST has projected revised expenses of Rs. 14.41 crore and Rs. 16.32 crore, respectively, as compared to the approved expenses of Rs. 5.73 crore and Rs. 7.25 crore for FY 2007-08 and FY 2008-09, respectively. BEST submitted that the projections for Repair and Maintenance (R&M) are based on past trends, wherein the fair season available for BEST to undertake major R&M activities happens in the second half of the financial year. Further, expenditure of Rs. 10.00 core has been estimated for H2 against RI charges payable to MCGM, which includes an estimation of Rs. 7 crore of past RI charges being liquidated. Similarly, in FY 2008-09, Rs. 8 Crore has been estimated as past RI charge claim, while the balance Rs. 4 Crore shall be payable for the same year.

BEST submitted that MCGM has issued new levies towards Re-Instatement/cable laying charges for electrical cabling on BEST and other utilities in Mumbai area. The new policy to this effect is applicable from March 14, 2005 and this has resulted in increased R&M expenses over the last two years. Further, in the MYT filling by BEST last year, it had asked for considerably lower amount of R&M expenses as a percentage of GFA as compared to past trends due to its lower estimation of the RI charges levied by MCGM.

For FY 2007-08 and FY 2008-09, the Commission has accepted BEST's projections of R&M expenses, since the R&M expense as a percentage of opening GFA is quite reasonable. Further, the Commission has added the expenditure that was originally kept aside from A&G expenses, as discussed above. The Commission will undertake the final truing up of R&M expenses for FY 2007-08 based on actual R&M expenses for the entire year and prudence check, during the APR process for FY 2008-09. Accordingly, the approved R&M expenses for FY 2007-08 and FY 2008-09 is summarised in the following Table:

Table: Approved R&M Expenses for FY 2007-08 & FY 2008-09 (Rs. Crore)

Particulars	FY 2007-08			FY 2008-09		
	MYT Order	Revised Estimate by BEST	Approved After provisional truing up	MYT Order	Revised Estimate by BEST	Approved
Net R&M expenses	**5.73**	**14.41**	**25.93**	**7.25**	**16.32**	**28.03**

4.8 CAPITAL EXPENDITURE AND CAPITALISATION FOR FY 2007-08 AND FY 2008-09

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 in the MYT Order and the revised estimates submitted by BEST are given in the Table below:

Table: Capital Expenditure & Capitalisation projected by BEST for FY 2007-08 & FY 2008-09 (Rs. Crore)

Particulars	FY 2007-08	FY 2008-09

	MYT Order	Revised Estimate by BEST	MYT Order	Revised Estimate by BEST
Capital Expenditure	NA	323.47	NA	266.64
Capitalisation	100.00	120.00	110.00	120.00

The Commission notes that BEST has submitted around 12 schemes for in-principle approval amounting to total capital outlay of Rs 442.99 Crore out of which 7 schemes involving capital outlay of Rs 352.85 Crore have already been approved. Various capex schemes as approved by the Commission include RSS, New Distribution sub-station and augmentation schemes, extension of distribution network, SCADA/digitisation and energy meters.

For the purpose of APR exercise for FY 2007-08 and revised projection for FY 2008-09, the Commission has considered capital expenditure and capitalisation of the DPR schemes that have already been approved by the Commission. However, the Commission has taken into consideration the phasing plan as proposed while approving the capex schemes and the Commission has also considered BEST's track record of achieving capitalisation in the past.

Accordingly, the Commission has considered capitalisation of Rs 89.88 Crore during FY 2007-08 and Rs 107.36 Crore during FY 2008-09 as against projected capitalisation of Rs 120 Crore as claimed by BEST for FY 2007-08 and FY 2008-09, respectively. The Commission shall review the need for revision in capitalisation at the time of final truing-up for FY 2007-08 and annual performance review for FY 2008-09.

Accordingly, approved capital expenditure and capitalisation for FY 2007-08 and FY 2008-09 is summarised in the following Table:

Table: Approved Capital Expenditure & Capitalisation for FY 2007-08 & FY 2008-09

(Rs. Crore)

Particulars	FY 2007-08	FY 2008-09

	MYT Order	Revised Estimate by BEST	Approved after provisional truing up	MYT Order	Revised Estimate by BEST	Approved
Capitalisation	100.00	120.00	89.88	110.00	120.00	107.36

4.9 DEPRECIATION

The Commission, in its MYT Order, had considered depreciation expenditure of Rs 44.73 Crore and Rs 50.01 Crore for FY 2007-08 and FY 2008-09, respectively. The opening GFA was considered as Rs 1173 Crore and Rs 1261 Crore for FY 2007-08 and FY 2008-09, respectively, and the depreciation rates were considered as prescribed under MERC (Terms and Conditions of Tariff) Regulations, 2005.

BEST, in its APR Petition, submitted the revised estimate of depreciation expenditure for FY 2007-08 and FY 2008-09 as Rs 54.45 Crore and Rs 50.46 Crore, respectively. The depreciation rates prescribed under the IT Act and /or life of the assets are used by BEST. Most of the rates for depreciation are as per the Tariff Regulations, while in some cases, it is lower than that specified in the Tariff Regulations. The method of computation of depreciation adopted by BEST is provided as under

- The depreciation is worked out on straight line method.
- In the case of Electric Supply Division, life of asset as provided in the Electricity (Supply) Act, 1948, is generally adopted for working out the depreciation on the assets
- The depreciation is provided from the year in which the asset is acquired.
- Depreciation is provided on the acquisition/purchase cost of the assets after taking into consideration the residual value of the assets which is estimated at 10% of the acquisition / purchase cost.

However, for calculating the depreciated value of the asset to be scrapped/disposed off, 10% residual value need not be considered.

Depreciated value = Acquisition cost/(Estimated service life of the asset as per the Income Tax Act/ Electric (Supply) Act, 1948) * Unexpired life of the asset

Accordingly, BEST has projected revised estimate of the depreciation expenditure for FY 2007-08 and FY 2008-09 as summarised in the following Table:

Table: Depreciation expenditure projected by BEST for FY 2007-08 & FY 2008-09

(Rs. Crore)

Particulars	**FY 2007-08**		**FY 2008-09**	
	MYT Order	**Revised Estimate by BEST**	**MYT Order**	**Revised Estimate by BEST**
Depreciation	44.73	54.55	50.01	50.46
Opening GFA	1173.00	1155.67	1261.00	1476.16

Depreciation Rates stipulated under Annexure-1 (Depreciation Schedule) under 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 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 Tariff Regulations. In view of revised value of capitalisation as approved under previous paragraphs, the approved depreciation expenditure for FY 2007-08 and FY 2008-09 is summarised in the following Table:

Table: Approved Depreciation expenditure for FY 2007-08 & FY 2008-09

(Rs. Crore)

Particulars	**FY 2007-08**			**FY 2008-09**		
	MYT Order	**Revised Estimate by BEST**	**Approved**	**MYT Order**	**Revised Estimate by BEST**	**Approved**
Depreciation	44.73	54.55	41.65	50.01	50.46	44.90
Opening GFA	1173.00	1155.67	1157.23	1261.00	1476.16	1244.13
Depn as % of Op. GFA	**3.81%**	**4.80%**	**3.60%**	**3.97%**	**3.42%**	**3.61%**

The Commission will undertake the truing up of Depreciation based on actual expenditure during the entire year, subject to prudence check, during Performance Review for the second year of Control Period, i.e., FY 2008-09.

4.10 INTEREST EXPENSES

The Commission, in its MYT Order, had allowed interest expenses of Rs 19.31 Crore and Rs 26.12 Crore for FY 2007-08 and FY 2008-09, respectively, at weighted average interest rate of 9.52% and 9.48%, respectively.

BEST, in its APR Petition, has submitted revised estimate of interest expenses for FY 2007-08 and FY 2008-09 as Rs 14.68 Crore and Rs 20.72 Crore, respectively. BEST has not considered any loan addition during FY 2007-08 but has considered loan addition of Rs 60 Crore during FY 2008-09.

Table: Interest expenditure projected by BEST for FY 2007-08 & FY 2008-09

(Rs. Crore)

Particulars	FY 2007-08		FY 2008-09	
	MYT Order	Revised Estimate by BEST	MYT Order	Revised Estimate by BEST
Op. balance of loan		142.50		134.69
Loan Addition		0.00		60.00
Loan Repayment		(7.81)		(3.24)
Closing Balance of loan	202.71	134.69	275.71	191.45
Interest expenses	**19.31**	**14.68**	**26.12**	**20.72**

As highlighted under earlier section, the Commission has not considered loan addition of Rs 92 Crore during FY 2006-07 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 the Regulations 76.3 of MERC Tariff Regulations.

In this context, the capital expenditure during FY 2007-08 as claimed by BEST amounts to Rs 100 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 0.12 Crore), additional equity capital on normative basis at 30% (Rs 27.86 Crore) and normative debt component at 70% (Rs 65.02 Cr). As regards the capital expenditure of Rs 110 Crore during FY 2008-09, 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 30.90 Crore) and normative debt component at 70% (Rs 72.10 Cr).

For the purposes of revised projections during APR exercise for FY 2007-08 and FY 2008-09, the Commission has considered the capitalisation during FY 2007-08 and FY 2008-09 of Rs 89.88 Crore and Rs 107.36 Crore respectively. The same is funded by way of contributions from consumer (Rs 7 Crore during FY 2007-08 and FY 2008-09), grant from Government (Rs 0.12 Crore during FY 2007-08 and nil during FY 2008-09), additional equity capital on normative basis at 30% (Rs 24.83 Crore during FY 2007-08 and Rs 30.11 Crore during FY 2008-09) and normative debt component at 70% (Rs 57.93 Cr during FY 2007-08 and Rs 70.25 Cr during FY 2008-09). The interest expenditure on normative debt envisaged to be funded through internal funds and grant from government is considered at 6% p.a. as claimed by BEST in accordance with the Judgment of ATE dated August 27, 2007 in the matter of Appeal 13 of 2007. The Commission has considered the same as elaborated under subsequent paragraphs covering interest on internal funds.

The Commission has considered the interest expenditure on the existing loans (public loans, MMRDA loans for MegaCity project, DPDC loans and APDRP loan) as claimed by BEST in accordance with Tariff Regulations 76.3.1 and 76.3.2. As regards assets put to use during FY 2007-08 and FY 2008-09, the Commission has considered interest expenditure on normative loan funded through internal funds as claimed by

BEST; as covered under subsequent paragraph. The Commission has not considered projected interest expenditure of Rs 9.89 Crore during FY 2007-08 and FY 2008-09 corresponding to loan addition of Rs 92 Crore and projected interest expenditure of Rs 6.45 Crore during FY 2008-09 corresponding to loan addition of Rs 60 Crore as considered by BEST for the reasons cited under earlier paragraphs. For remaining loans, the Commission has considered interest rates as stated by BEST under its Petition, for the purpose of interest expenditure computation for FY 2007-08 and FY 2008-09.

Accordingly, interest expenses approved for FY 2007-08 and FY 2008-09 is summarised in the following Table:

Table: Approved Interest expenditure for FY 2007-08 & FY 2008-09 (Rs. Crore)

Particulars	**FY 2007-08**			**FY 2008-09**		
	MYT Order	**Revised Estimate by BEST**	**Approved After provisional truing up**	**MYT Order**	**Revised Estimate by BEST**	**Approved**
Op. balance of loan		142.50	50.50		134.69	42.69
Loan Addition		0.00	0.00		60.00	0.00
Loan Repayment		(7.81)	(7.81)		(3.24)	(3.24)
Cl. Balance of loan	202.71	134.69	42.69	275.71	191.45	39.45
Interest expenses	**19.31**	**14.68**	**4.79**	**26.12**	**20.72**	**4.38**

4.11 Interest on Internal Funds

The Commission, in its earlier MYT Order dated April 3, 2007, had approved interest expenditure at 6% p.a. on internal funds at Rs 49.97 Crore and Rs 47.52 Crore for FY 2007-08 and FY 2008-09 respectively, based on estimation of internal funds during these years.

Subsequently, BEST in its APR Petition has 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, the Interest on Internal funds, at the rate of 6% for the period FY 2004-05 to FY 2006-07 as projected by BEST is given below:

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

Particulars	FY 2007-08	FY 2008-09
Capital expenditure during the year	100.00	110.00
Less: Consumer Contribution received during the year	(7.00)	(7.00)
Less: Govt. Grant Received during the year	(0.12)	
Allowable Capital cost	92.88	103.00
Cumulative Grants at the end of the year	**81.63**	**81.63**
Interest on Internal funds (at 6%)		
Normative debt component	*3.90*	*4.33*
On Government assistance at the start of the year	*4.89*	*4.90*
Returns as Interest on Internal funds	**8.79**	**9.23**

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 normative debt and grant on Government) during FY 2007-08 and FY 2008-09. However, the Commission has modified the same to the extent of capitalised cost considered as Rs 89.88 Crore during FY 2007-08 and Rs 107.36 Crore during FY 2008-09, instead of capital expenditure of Rs 100 Crore and Rs 110 Crore as claimed by BEST during respective years. To that extent, allowable capital cost is revised to Rs 82.76 Crore and Rs 100.36 Crore during FY 2007-08 and FY 2008-09 respectively (BEST's claim of Rs 92.88 Crore and Rs 103 Crore) and interest on revised normative debt of Rs 8.37 Crore during FY 2007-08 and Rs 9.11 Crore during FY 2008-09 as against BEST's claim of Rs 8.79 Crore and Rs 9.23 Crore respectively. The interest on internal funds as approved by Commission for FY 2007-08 and FY 2008-09 is summarised in the following Table:

Particulars	**FY 2007-08**	**FY 2008-09**
Capitalised Cost during the year	89.88	107.36
Less: Consumer Contribution received during the year	(7.00)	(7.00)
Less: Govt. Grant Received during the year	(0.12)	(0)
Allowable Capital cost	**82.76**	**100.36**
Cumulative Grants at the end of the year	**81.63**	**81.63**
Interest on Internal funds (at 6%)		
Normative debt component	*3.48*	*4.21*
On Government assistance at the start of the year	*4.89*	*4.90*
Returns as Interest on Internal funds	**8.37**	**9.11**

4.12 RETURN ON EQUITY (ROE) FOR FY 2007-08 & FY 2008-09

The Commission, in its earlier MYT Order dated April 3, 2007, had not approved any return on equity *per se*; however, the Commission had approved returns in the form of interest on internal funds at Rs 49.97 Crore during FY 2007-08 and Rs 47.52 Crore during FY 2008-09, at 6% p.a. based on estimation of internal funds during respective years.

BEST in its APR Petition submitted that the ATE vide its Judgment dt. August 27, 2007, has approved Return on Equity as provided under MERC (Terms and Conditions of Tariff Regulation, 2005) from FY 2004-05 onwards. Further, BEST submitted that the Commission vide its order dt. 8th November, 2006 in regard to Case no. 32 of 2006 has allowed Interest at the rate of 6% in lieu of Return on Equity. BEST now proposed to charge the following returns as applicable under the MERC (Terms and Conditions of Tariff) Regulations, 2005:

- Prescribed Return on Equity on 100% of the opening Regulatory Equity in the financial year
- Additional Return on Equity, as per prescribed rate, on 50% of the incremental Regulatory Equity deployed in that year in the electricity distribution business (based on the approved capital cost)
- Additional Interest on Internal funds (at the rate of 6%) deployed in that year in the electricity distribution business (based on approved capital cost)

Accordingly, BEST computed return on equity for the period FY 2007-08 and FY 2008-09 as given below:

Table: BEST's Estimation of RoE for the period FY 2007-08 and FY 2008-09 ***(Rs. Crore)***

Particulars		FY 2007-08	FY 2008-09
Opening Equity	A	**619.19**	**647.06**
Annual allowable capital cost for the year	B	100.00	110.00
Less: Contribution made by consumers	C	(7.00)	(7.00)
Less: Government Assistance	D	(0.12)	(0.00)
Net allowable capital cost	E=B-C-D	92.88	103.00
Normative equity (30%)	F = E*30%	27.86	30.90
Closing Equity	G = A+F	**647.06**	**677.96**
Computation of RoE			
Return @ 16% on equity capital at commencement of year	H=A*16 %	99.07	103.53
Return @ 16% on 50% of equity portion of annual	I=F*16% *50%	2.23	2.47

Particulars		FY 2007-08	FY 2008-09
allowable cost for the year			
RoE for the year	G=E+F	**101.30**	**106.00**

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 considered computed return on equity in line with principled outlined under Tariff Regulations and as claimed by BEST. Further, the Commission has modified the same to the extent of capitalised cost considered as Rs 89.88 Crore during FY 2007-08 and Rs 107.36 Crore during FY 2008-09 instead of capital expenditure of Rs 100 Crore and Rs 110 Crore as claimed by BEST during respective years. To that extent, allowable capital cost to be recovered through tariffs is revised to Rs 82.76 Crore and Rs 100.36 Crore during FY 2007-08 and FY 2008-09 (BEST's claim of Rs 92.88 Crore and Rs 103.00 Crore) and equity portion of allowable capitalised cost at 30% amounts to Rs 24.83 Crore and Rs 30.11 Crore during FY 2007-08 and FY 2008-09, respectively as against BEST's claim of Rs 27.86 Crore and Rs 30.90 Crore. The Return on Equity as approved by Commission for FY 2007-08 and FY 2008-09 is summarised in the following Table:

Particulars		FY 2007-08	FY 2008-09
Opening Equity	A	**619.76**	**644.59**
Annual allowable capital cost for the year	B	89.88	107.36
Less: Contribution made by consumers	C	(7.00)	(7.00)
Less: Government Assistance	D	(0.12)	(0)
Net allowable capital cost	E=B-C-D	82.76	100.36
Normative equity (30%)	F = E*30%	24.83	30.11
Closing Equity	G = A+F	**644.59**	**674.70**
Computation of RoE			

Particulars		FY 2007-08	FY 2008-09
Return @ 16% on equity capital at commencement of year	H=A*16 %	99.16	103.13
Return @ 16% on 50% of equity portion of annual allowable cost for the year	I=F*16% *50%	1.99	2.44
RoE for the year	G=E+F	**101.15**	**105.54**

Thus, total interest on internal funds and return on equity approved by the Commission vis-à-vis that claimed by BEST for the Period FY 2007-08 and FY 2008-09 is summarised under following table:

Particulars	FY 2007-08			FY 2008-09		
	MYT Order	Revised Estimate by BEST	Approved	MYT Order	Revised Estimate by BEST	Approved
Returns as Interest on Internal funds	49.97	8.79	8.37	47.52	9.23	9.11
Return as Return on equity		101.30	101.15		106.00	105.54
Total	**49.97**	**110.09**	**109.52**	**47.52**	**115.23**	**114.65**

4.13 INTEREST ON WORKING CAPITAL FOR FY 2007-08 AND FY 2008-09

BEST submitted that for FY 2007-08 and FY 2008-09, BEST had provided for interest on working capital in accordance with the Tariff Regulations, though the Commission had not considered any interest on working capital in the MYT Order. BEST projected the interest on working capital for FY 2007-08 and FY 2008-09, as Rs. 4.04 crore and Rs. 7.69 crore, respectively, by considering the rate of interest as 11.25%.

BEST added that the Commission had approved interest on consumers' security deposits at Rs. 11.70 crore based at the opening level of consumer deposits of Rs. 194.92 crore for FY 2007-08 and FY 2008-09. BEST submitted that the Interest on Consumers' security deposit has been revised to Rs. 12.46 crore for FY 2007-08 and FY 2008-09, 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 Tariff Regulations, after considering the provisional truing up of various expenditure heads. The Tariff Regulations stipulates that 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. As the application for determination of tariff for FY 2007-08 was made on December 17, 2007, the Commission has considered the short-term Prime Lending Rate of State Bank of India of 11.5% prevalent at that time for estimating the interest on working capital, which works out to Rs. 4.64 crore.

For FY 2008-09, the Commission has estimated the working capital requirement of BEST after considering the revised expenditure approved in this Order. The Commission has considered the interest rate as 12.75% in accordance with the short-term Prime Lending Rate of State Bank of India prevalent at the time of filing the Petition for FY 2008-09, which works out to Rs. 15.68 crore.

The Commission has approved the expense of Rs. 12.46 crore on account of interest on consumers' security deposits, since it is in accordance with the Tariff Regulations and the increase is on account of increase in the consumers' security deposits.

The revised interest on working capital and consumers' security deposit for BEST for FY 2007-08 and FY 2008-09 is given in the following Table:

Table: Interest on Working Capital and Consumers' Security Deposit for FY 2007-08 & FY 2008-09 (Rs Crore)

Particulars	FY 2007-08	FY 2008-09

	MYT Order	Revised Estimate by BEST	Approved After provisional truing up	MYT Order	Revised Estimate by BEST	Approved
Interest on Working Capital and consumer security deposits	11.70	16.51	17.10	11.70	20.16	28.14

4.14 PROVISIONING FOR BAD DEBTS

BEST submitted that for FY 2007-08 and FY 2008-09, BEST has retained the provisioning for bad debts at Rs. 0.06 crore and Rs. 0.08 crore, respectively, as approved by the Commission in the MYT Order.

The Commission has hence, retained the provisioning for bad debts for FY 2007-08 and FY 2008-09 at the same level as approved in the MYT Petition.

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 2007-08 and FY 2008-09.

4.16 NON TARIFF INCOME

BEST submitted that the non-tariff income for FY 2007-08 and FY 2008-09 was estimated as Rs. 46.18 crore and Rs. 47.31 crore, respectively, as compared to the Commission's approved values of Rs. 73.48 crore for FY 2007-08 and Rs. 73.48 for FY 2008-09. BEST explained the reasons for projecting a reduction in non-tariff income.

In view of the above explanation, the Commission has considered the non-tariff income equal to the actual non-tariff income projected by BEST.

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

BEST had included in its APR petition, a proposal for DSM programmes/activities with a corresponding budget totalling Rs. 372.75 lakh for FY 2008-09. It is envisaged that this budget will be funded out of the load management charge amount remaining as balance with BEST.

Presently BEST is implementing following pilot DSM initiatives:

- Energy efficient lighting pilot project involving promotion of the use of electronic ballast as a replacement for electromagnetic ballasts
- Energy efficiency in water pumping in high rise Domestic/commercial buildings
- Conduct training programme for its officials (Capacity Building)

The Commission has approved these initiatives, involving a total outlay of Rs. 33.0 lakh, 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.

4.18 ANNUAL REVENUE REQUIREMENT OF BEST FOR FY 2007-08 AND FY 2008-09

Based on analysis of each element discussed above, the Aggregate Revenue Requirement of BEST for FY 2007-08 and FY 2008-09 as approved by the Commission in its 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 2007-08 (Rs Crore)

S.No.	Particulars	Current Year (FY 07-08)		
		April - March (Estimated)	Order	Approved after provisional truing up
1	Power Purchase Expenses	2008.95	1761.01	2139.33
1.1	TPC-G	1425.39	1325.98	1426.10
1.2	TPC-D	317.23	99.87	452.29
1.3	RPS	20.00	62.75	20.00
1.4	Other Sources	0.00	0.00	0.00

S.No.	Particulars	Current Year (FY 07-08)		
		April - March (Estimated)	**Order**	**Approved after provisional truing up**
1.5	Reduction due to sale to MSEDCL			
1.9	Standby Charges	114.63	146.10	114.63
2	Operation & Maintenance Expenses	243.84	184.55	235.98
2.1	Employee Expenses	*130.95*	*92.42*	*128.15*
2.2	Administration & General Expenses	*98.48*	*86.40*	*81.91*
2.3	Repair & Maintenance Expenses	*14.41*	*5.73*	*25.93*
3	Depreciation, including advance against depreciation	55.45	44.73	41.65
4	Interest on Long-term Loan Capital	14.69	19.31	4.79
5	Interest on Working Capital and on consumer security deposits	16.51	11.70	17.10
6	Bad Debts Written off	0.06	0.06	0.06
7	Other Expenses	0.97	0.00	0.00
8	Income Tax			
10	Intra-State Transmission Charges	97.61	97.61	97.61
11	Annual SLDC fees & charges	0.80	0.80	0.80
12	Adjustment for profit/loss on account of controllable/uncontrollable factors			
16	Total Revenue Expenditure	**2438.88**	**2119.77**	**2537.33**
17	Return on Equity Capital	101.30		101.15
18	Return as Interest on Internal funds	8.79	49.97	8.37
20	Aggregate Revenue Requirement	**2548.97**	**2169.74**	**2646.84**
21	Less: Non Tariff Income	46.18	73.48	46.18
26	**Aggregate Revenue Requirement from Retail Tariff**	**2502.79**	**2096.26**	**2600.66**

Based on provisional truing up of various elements for FY 2007-08 as discussed in above paragraphs, the Aggregate Revenue Requirement for FY 2007-08 works out to Rs 2601 Crore as against the amount of Rs 2096 Crore approved in the MYT Order, and the amount of Rs. 2502 crore projected by BEST in its APR Petition. This increase in the Aggregate Revenue Requirement is primarily on account of the increase in the power purchase expenses, which has been necessitated by the higher actual and projected sales in FY 2007-08.

The Revenue Requirement for FY 2008-09, as shown below:

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

S.No.	Particulars	Ensuing Year (FY 08-09)	
		Revised Estimate	Approved
1	Power Purchase Expenses	2058.12	1945.82
1.1	TPC-G	1511.83	1914.18
1.2	TPC-D		
1.3	RPS	127.41	89.67
1.4	Other Sources	300.83	-163.43
1.5	Reduction due to sale to MSEDCL		
1.6	Reduction due to DSM		-3.38
1.9	Standby Charges	118.05	108.78
2	Operation & Maintenance Expenses	250.15	244.14
2.1	Employee Expenses	*129.73*	*130.89*
2.2	Administration & General Expenses	*104.10*	*85.23*
2.3	Repair & Maintenance Expenses	*16.32*	*28.03*
3	Depreciation, including advance against depreciation	50.46	44.90
4	Interest on Long-term Loan Capital	20.72	4.38
5	Interest on Working Capital and on consumer security deposits	20.16	28.14
6	Bad Debts Written off	0.08	0.08
7	Other Expenses	3.72	0.00
8	Income Tax		
10	Intra-State Transmission Charges	103.47	109.61
11	Annual SLDC fees & charges		0.74
12	Adjustment for profit/loss on account of controllable/uncontrollable factors		
16	Total Revenue Expenditure	**2506.88**	**2377.79**
17	Return on Equity Capital	106.00	105.54
18	Return as Interest on Internal funds	9.23	9.11
20	Aggregate Revenue Requirement	**2622.11**	**2492.45**

21	Less: Non Tariff Income	47.31	49.72
26	**Aggregate Revenue Requirement from Retail Tariff**	**2574.80**	**2442.73**

The Aggregate Revenue Requirement for FY 2008-09 is lower than that projected by BEST, mainly on account of lower purchase expenses considered by the Commission as compared to that projected by BEST in its Petition, despite considering a higher sales and power purchase quantum as compared to that projected by BEST.

4.19 REVENUE FROM EXISTING TARIFF FOR FY 2007-08 AND FY 2008-09

In the APR Petition, BEST computed the revenue from existing tariffs for FY 2007-08, on the basis of the actual category-wise revenue over the period from April to September 2007, and projected revenue for the period from October 2007 to March 2008 on the basis of the projected sales during this period and the prevailing category-wise tariffs. BEST estimated the revenue for FY 2007-08 as Rs. 2383 crore. For FY 2008-09, BEST estimated the revenue from sale of electricity as Rs. 2601 crore, on the basis of the projected sales during this period and the prevailing category-wise tariffs.

In order to have a realistic estimate of the actual sales and revenue during FY 2007-08, the Commission asked BEST to submit the details of the actual category-wise sales and actual revenue earned through the sales to different consumer categories over the period April 2007 to January 2008, which was submitted by BEST. As discussed earlier in this Section, the actual sales in FY 2007-08 have been higher than the sales projected in the MYT Order, resulting in requirement for additional power purchase and increase in the power purchase cost. At the same time, the revenue from sale of electricity has also increased correspondingly. Based on the actual revenue earned by BEST through sale of electricity over the period from April 2007 to January 2008, the Commission has proportionately considered the revenue as Rs. 2482.7 crore. Based on audited results submitted at the time of APR of FY 2008-09, the Commission will true up the actual expenses and revenue for FY 2007-08, subject to prudence check.

For FY 2008-09, the Commission has estimated the revenue from sale of electricity on the basis of the revised sales projected by the Commission during this period and the prevailing category-wise tariffs. The expected revenue from existing tariffs for FY 2008-09 works out to Rs. 2822.3 crore.

5 TARIFF PHILOSOPHY AND CATEGORY-WISE TARIFFS FOR FY 2008-09

5.1 APPLICABILITY OF REVISED TARIFFS

The revised tariffs will be applicable from June 1, 2008 till March 31, 2009. In cases, where there is a billing cycle difference of 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 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 2008-09. BEST is directed to submit its Petition for Annual Review of its performance during the first half of FY 2008-09, as well as truing up of revenue and expenses for FY 2007-08, with detailed reasons for deviation in performance, latest by November 30, 2008.

5.2 REVENUE GAP FOR FY 2007-08 AND FY 2008-09

In the APR Petition, BEST submitted that the total revenue gap to be addressed through revision in tariffs in FY 2008-09 has the following components:

a) Revenue Gap for FY 2004-05 and FY 2005-06 on account of the difference between the allowable Return on Equity and the returns allowed as interest on own funds, amounting to Rs. 72.62 crore.

b) Revenue Gap for FY 2006-07 of Rs. 292.33 crore, on account of truing up of expenses and revenue for FY 2006-07 based on audited results.

c) Revenue Gap for FY 2007-08 of Rs. 120.34 crore, on account of provisional truing up of expenses and revenue for FY 2007-08 based on revised estimates

d) The cumulative Revenue Gap of above four years of Rs. 485.29 crore to be added to the revenue requirement for FY 2008-09, resulting in a total revenue requirement of Rs. 3060.07 crore in FY 2008-09.

e) The effective revenue gap in FY 2008-09 to be recovered through revision in tariffs is thus, Rs. 459.03 crore.

Based on its analysis, the revenue gap as estimated by the Commission for different years, and the computation of total revenue gap, is detailed below:

a) The revenue gap on account of the truing up of on account of RoE and interest on own funds for FY 2004-05 and FY 2005-06 is Rs. 72.62 crore, as submitted by BEST, which has to be added to the revenue gap projected for FY 2008-09, to determine the total revenue gap.

b) The revenue gap on account of the truing up for FY 2006-07 on the basis of audited accounts and after applying prudence check works out to Rs. 276.38 crore, which has to be added to the revenue gap projected for FY 2008-09, to determine the total revenue gap.

c) The revenue gap on account of the provisional truing up of expenses and revenue for FY 2007-08 is Rs. 171.95 crore (Rs. 2600.64 crore – Rs. 2428.69 crore), which has to be added to the revenue gap projected for FY 2008-09, to determine the total revenue gap.

d) The surplus in FY 2008-09 with existing tariffs on a stand-alone basis is estimated as Rs. 377.2 crore (Rs. 2445.15 crore – Rs. 2822.30 crore).

e) In addition, BEST is due to receive an amount of Rs. 38.76 crore, on account of consolidated truing up of TPC as a whole for FY 2006-07 (refer Commission's Order in Case No. 69 of 2007 dated June 4, 2008). This surplus will be passed on by TPC-G through the power purchase bills, and has been used to reduce the revenue gap in FY 2008-09.

The summary of the revenue gap for FY 2008-09, as computed by the Commission, is given in the Table below:

Table: Total Revenue Gap determined by the Commission (Rs. crore)

Sl.	Particulars	Amount
1	FY 2004-05 and FY 2005-06 truing up	72.62
2	FY 2006-07 Truing up	276.38
3	FY 2007-08 provisional truing up	171.97
4	FY 2008-09 revenue gap	(379.57)
5	**Sub-total**	**141.40**
6	Surplus received from TPC for FY 2006-07	-38.76
7	**Total Revenue Gap**	**102.64**
8	**Average % increase at existing tariffs**	**3.6%**

Thus, the total revenue gap as computed by the Commission, works out to Rs. 102.64 crore, which has to be passed through in the tariffs to be determined for FY 2008-09.

5.3 TARIFFS PROPOSED BY BEST

BEST proposed that the existing philosophy of levy of reliability charges for recovering the cost of expensive power and separate recovery of standby charges be continued. BEST proposed to recover the revenue gap due to un-recovered Return on Equity and other expenses, by increasing the energy charges appropriately for all categories except BPL and the three existing HT categories (HT-2, 3 & 4) which are proposed to be amalgamated into one HT tariff (HT-II) tariff category. The rationale for the proposed tariffs is as under:

§ Expensive Power charges: BEST computed the revised Expensive Power charges as Rs. 2.48 per kWh for all categories except HT-1. For HT-1

Expensive Power charge of Rs. 1.00 per kWh is proposed. Expensive Power charges will be completely exempted for BPL & LT-VIII.

§ Standby charges: The standby charges per unit have been retained as 27 paise per unit and will be applicable to all consumers except BPL consumers.

§ Increase on account of un-recovered Return on Equity (RoE) & other expenses is to be made applicable for all consumers except BPL, and this works out to 40 paise per unit which will be added to the existing tariffs of all slabs of all categories.

BEST also submitted some proposals for tariff rationalization, viz.,

1 Broadening the consumer category under LT-1

BEST proposed that the consumer premises such as Telephone Booths used by Handicapped persons, Public Trust or Religious Institutions for their normal activities, supply used for residential purpose where a part of premises was used by Lawyers, Advocates, Doctors etc., Charitable Institutions and Societies registered with Charitable Commissioner should be covered under LT-1 residential category.

In the existing schedule, consumers registered with Charity Commissioner and running institutions "not for profit" only are eligible to be charged at LT I – Residential tariff category. BEST proposed to remove the word “not for profit” from LT-1 applicability.

2 Electric Supply for Crematorium

Presently, the electric supply for electric crematorium is covered under Tariff LT-VIII, which is concessional tariff, whereas the conventional crematoriums are not covered under this tariff. BEST proposed that Burial grounds/crematorium/cemeteries should be included under the tariff of electric crematoriums to have the benefit of lower tariff.

3 Temporary supply for Religious activities

Presently the consumers using supply for religious purposes are given concessional tariff i.e. LT-XI Tariff which is of a single slab for the entire units consumed. It is observed that, for many of the festivals, electricity is used for decorations and commercial purpose resulting in very high consumption which are presently charged at concessional rate as per above tariff. In order to amend this discrepancy, it is proposed to charge these consumers in slabs similar to LT I – Residential category. This will enable us to charge deserving consumers (low consumption) at concessional rate (upto first 300 units), recover the BEST's purchase cost from the consumption category between 300 to 500 units and recover cost to serve beyond 500 units.

4 Rationalization of HT tariff categories:

BEST proposed to reduce HT categories by amalgamating some of the HT categories, viz.,

- § Combine HT V tariff category (bulk residential purpose for defense installations) with HT I tariff category (supply for Educational Institutions and Hospitals run and aided by Govt. / MCGM)
- § Combine HT II tariff category (Hospitals run and controlled by private / charitable / religious institutions), HT III tariff category (commercial purpose) and HT IV tariff category (industrial purpose).

5.4 TARIFF PHILOSOPHY

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.

As explained earlier in the Order, while ruling on objections filed by certain stakeholders, the Commission has clarified 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, the Commission has observed that the tariff categorisation and applicability of tariffs is different across different licensees in the State, which is not appropriate. The differences exist because of historical reasons and differences in management policies and approach across licensees. However, within one State, the consumer categorisation and applicability of tariffs should not be significantly different, and the Commission has attempted to achieve this objective in this Order and other Orders for the distribution licensees in the State. 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.

The existing Fuel Adjustment Cost (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. 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, on a quarterly basis. It is also clarified that the FAC mechanism will be applicable for both, non-costly sources as well as expensive sources of power purchase.

In the MYT Order, the Commission segregated the standby charges and expensive power charges, which were earlier embedded within the energy charges, and charged to specific categories of consumers. The Commission has continued with this approach, since the genesis for the segregation of the charges still exists. However, it is clarified that these charges are a part of the energy charges, and the Commission has only indicated these charges separately, with the intention of sensitising the consumers about the consequences of the rapid increase in consumption and the ever-increasing demand-supply gap. Thus, the base energy charge determined in this Tariff Order is excluding the cost of standby charge and expensive power.

The two main components of the Reliability Charge are as follows:

- Stand-by Charges
- Approved Cost of Expensive power

As compared to consumers in other parts of the State, consumers in Mumbai have had the privilege of uninterrupted power supply for many years, on account of the existence of a standby power agreement with MSEDCL. This ensures that the city does not face any load shedding in case of an emergency situation in the licensee area. The annual cost implication of the standby arrangement for BEST is around Rs 109 Crore. The average rate of standby charges works out to 21 paise/kWh, and the same has been levied on all consumers for their entire consumption, except BPL category consumers.

Due to increasing energy consumption in its license area and no additional generation capacity, BEST has been purchasing expensive short-term power to meet this demand. Power purchase from Unit 4 of TPC-G has been considered under expensive power, and the total power purchase expense from these sources is around Rs 169 Crore in FY 2008-09, which has been levied to specified consumer categories.

The Commission has made the Reliability Charge applicable in the following manner:

- The stand by charge would be levied uniformly across all categories of consumers except BPL consumers at the rate of 21 paise per unit.
- The cost for expensive power would be levied on all consumers except the Below Poverty Line (BPL) and LT-1 (Residential) consumers consuming less than 300 units, so as to prevent tariff shock for these consumers.

The demand-supply situation in the city of Mumbai is in a fine state of balance, with the licensees barely managing to meet the demand, through a combination of own generation and costly power purchases from outside the State. However, the proportion of expensive power purchase from outside the State, is increasing very rapidly, which not only increases the cost, but also increases the uncertainty of supply, since many times, these contracts are on 'as available' and 'day-ahead' basis. If the demand continues to grow at the current rate, then it is likely that the city of Mumbai, including BEST's consumers, will have to face load shedding during system peak hours, even after paying the Reliability Charges. Hence, 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.

The Commission has reduced the fixed charges/demand charges applicable for different consumer categories, and correspondingly increased the energy charges, so that the bills are more directly linked to the consumption. Economic theory states that the recovery of fixed costs through fixed charges should be increased, so that a reasonable portion of the fixed costs are recovered through the fixed charges. However, the ability of the Licensees to supply cheap power on continuous basis has been eroded due to the stressed demand-supply position in recent times, and hence, the Commission has reduced the fixed charges. This will provide certain relief to the consumers who have lower load factor, as the consumers will be billed more for their actual consumption rather than the load, and the licensees also have an incentive to ensure that continuous 24 hour supply is given to the consumers. As and when sufficient power is available and contracted by the licensees, the fixed charges can again be increased, and energy charges reduced correspondingly.

The applicability of the BPL category tariffs has been modified slightly such that BPL category will be available only to such residential consumers who have a sanctioned load of upto and less than 0.1 kW, and have consumed less than 360 units per annum in the previous financial year. The eligibility criteria has thus, been modified from a monthly limit of 30 units to an annual limit of 360 units, so that it leaves some flexibility in consumption with the BPL consumer. 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 continued with the practice of charging higher tariffs for residential consumers having monthly consumption above 300 units per month and above 500 units per month, since, the Commission feels that in the residential category, such consumption should be classified as luxurious use, and an economic signal in terms of higher tariff has to be given to such consumers to encourage them to make efforts for energy conservation. The tariff for domestic category with a monthly consumption upto 300 units has been increased nominally.

The Commission has accepted BEST's suggestion as regards extending LT-I tariffs to telephone booths operated by handicapped persons and such booths will henceforth, be charged as per tariffs applicable to the LT-1 residential category. Further, the words 'not for profit' have been deleted as suggested by BEST.

The existing LT-II category (non-domestic and commercial below 20 kW and upto and including 100 kW sanctioned load) and LT-III category (commercial above 100 kW sanctioned load) have been merged into the new category revised LT-II. Further, three sub-categories have been created under the revised LT-II category on the basis of sanctioned load, viz., 0 to 20 kW, 21 kW to 50 kW, and above 50 kW sanctioned load. The Commission has determined the tariffs for these two new sub-categories at higher levels. The Commission has retained the consumption slabs under the LT-III category, for the first sub-category, viz., 0 to 20 kW, as follows: 0 to 300 units. 301 to 500 units, 501 to 1000 units, and above 1000 units consumption per month.

The Commission has merged the two sub-categories under LT VII Streetlights, viz., LT VII A (street lighting on public streets) and LT VII B (street lighting in public areas), and has stipulated the same tariffs, comprising demand charges and energy charges. This category has now been renamed as LT VI Street Light category.

The Commission has accepted BEST's suggestion to include all crematoriums and cremation and burial grounds under the existing LT VIII Electric Crematorium category, and the tariffs have been specified at lower levels. This category has now been renamed as LT VII Crematorium and Burial Grounds. However, this lower tariff 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.

The existing LT IX Temporary Supply and LT X Standby (emergency supply) has been merged into one new category LT VIII Temporary Supply Others, and fixed charges and energy charges have been specified at the same rate for this category. The existing LT XI Temporary Religious supply has been renamed as LT IX category, and tariffs have been retained at the existing levels.

The existing HT-II Industrial category has been renamed as HT-I Industrial category, in order to ensure consistency with the nomenclature applicable for other licensees. The existing HT-I Group Housing Society category has also been renamed as HT-III Group Housing Society category, in order to ensure consistency with the nomenclature applicable for other licensees.

The existing HT-I category (educational institutions, hospitals run by Government, etc.), HT-II commercial category (hospitals owned by private institutions, etc.) and HT-III commercial category (commercial purposes) has been merged into a new category HT-II Commercial, to cater to all commercial category consumers availing supply at HT voltages, including hospitals, multiplexes and shopping malls, etc. This category will include Hospitals getting supply at HT voltages, irrespective of whether they are charitable, trust, Government owned and operated, etc. The tariff for such HT-II commercial category consumers has been determined higher than the tariff applicable for HT-I industrial, in line with the philosophy adopted for LT commercial consumers.

The existing HT IV Industrial Category has been renamed as HT I Industrial category. The existing HT V Bulk Residential Supply category has been renamed as HT III Group Housing Society, and will be applicable for group housing societies taking supply at single point for consumption by individual dwellings. The Commission has ensured that the average billing rate for HT Group Housing societies is lower than the average billing rate for LT residential category, since the Group Housing societies take supply at single point and supply it to the individual residences using their own network.

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 category above 20 kW sanctioned load, revised LT V Industrial category above 20 kW sanctioned load, as well as optionally available to LT – II category consumers having sanctioned load below 20 kW, who have TOD meters. The TOD tariffs have been modified as follows:

§ The following time slots have been created, 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, to bring the ToD tariffs in line with those applicable in the rest of the State.

- 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 recorded during the preceding eleven months, subject to the limit of Contract Demand;
(c) 50% of the Contract Demand.

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

Table: Average Cost of Supply for FY 2008-09

Sl.	Particulars	Excluding Expensive Power	Including Expensive Power
1	Total Revenue Requirement (Rs. Crore)	2756	2925
2	Total Sales (MU)	4363	4363
3	**Average Cost of Supply (Rs / kWh)**	**6.32**	**6.70**

The existing cross-subsidy and the reduction in cross-subsidy considered by the Commission, excluding the reliability charges, are given in the Table below:

Category	Average Cost of Supply (Rs./unit)	Average Billing Rate (Rs./unit)		Ratio of Average Billing Rate to Average Cost of Supply (%)		% increase / decrease in Tariff w.r.t Avg. CoS	% increase in tariff (%)
		Existing Tariff	Revised Tariff	Existing Tariff	Revised Tariff		
LT Category							
LT I - Residential	6.32	3.10	3.65	49%	58%	9%	1.6%
LT II - Commercial upto 100 kW		7.35	8.31	116%	132%	15%	3.8%
LT III - Commercial above 100 kW		7.39	10.07	117%	159%	42%	22.3%
LT IV - Hoardings		13.02	14.02	206%	222%	16%	1.3%
LT V - LT Industrial upto 20 kW		5.77	6.42	91%	102%	10%	0.3%
LT-VI A - LT Industrial >20 kW & < 100 kW		6.63	7.72	105%	122%	17%	-0.6%
LT-VI B - LT Industrial above 100 kW		5.51	6.65	87%	105%	18%	0.2%
LT-VII A - Street Lighting - Public Streets		6.62	7.81	105%	124%	19%	0.7%
LT-VII B - Street Lighting - Other Public areas		5.22	7.00	83%	111%	28%	9.5%
LT-VIII - Electric Crematorium		1.50	1.70	24%	27%	3%	1.5%
LT IX - Temporary - Others		10.04	10.02	159%	159%	0%	-9.9%
LT X - Standby Emergency Supply		5.60	10.21	89%	162%	73%	48.4%
HT Category							
HT I - Educational Institutions, Not for profit Inst. Aided by Govt, etc.	6.32	2.77	5.73	44%	91%	47%	47.3%
HT II - Private Hospitals & Charitable trusts		5.02	5.73	79%	91%	11%	-3.0%
HT III - Commercial		5.84	6.11	93%	97%	4%	-8.7%
HT IV - Industrial		4.59	5.73	73%	91%	18%	3.7%
HT V - Bulk Residential Supply		3.94	3.39	62%	54%	-9%	-6.2%

The above Table shows increase in the cross-subsidy levels for certain consumer categories, despite excluding the reliability charges, because the cross-subsidy can only be reduced gradually, and the revenue requirement is increasing significantly every year.

The existing cross-subsidy and the reduction in cross-subsidy considered by the Commission, if the reliability charges are also considered, are given in the Table below:

Category	Average Cost of Supply (Rs./unit)	Average Billing Rate (Rs./unit)		Ratio of Average Billing Rate to Average Cost of Supply (%)		Percentage point increase / decrease in Tariff w.r.t Avg. CoS	% increase in tariff (%)
		Existing Tariff	Revised Tariff	Existing Tariff	Revised Tariff		
LT Category							
LT I - Residential	6.70	4.02	4.09	60%	61%	1%	1.6%
LT II - Commercial upto 100 kW		8.68	9.01	129%	134%	5%	3.8%
LT III - Commercial above 100 kW		8.96	10.95	134%	163%	30%	22.3%
LT IV - Hoardings		14.59	14.79	218%	221%	3%	1.3%
LT V - LT Industrial upto 20 kW		7.02	7.04	105%	105%	0%	0.3%
LT-VI A - LT Industrial >20 kW & < 100 kW		8.20	8.15	122%	122%	-1%	-0.6%
LT-VI B - LT Industrial above 100 kW		7.08	7.09	106%	106%	0%	0.2%
LT-VII A - Street Lighting - Public Streets		8.19	8.25	122%	123%	1%	0.7%
LT-VII B - Street Lighting - Other Public areas		6.79	7.44	101%	111%	10%	9.5%
LT-VIII - Electric Crematorium		1.88	1.91	28%	29%	0%	1.5%
LT IX - Temporary - Others		11.61	10.45	173%	156%	-17%	-9.9%
LT X - Standby Emergency Supply		7.17	10.64	107%	159%	52%	48.4%
HT Category							
HT I - Educational Institutions, Not for profit Inst. Aided by Govt, etc.	6.70	4.34	6.39	65%	95%	31%	47.3%
HT II - Private Hospitals & Charitable trusts		6.59	6.39	98%	95%	-3%	-3.0%
HT III - Commercial		7.41	6.77	111%	101%	-10%	-8.7%
HT IV - Industrial		6.16	6.39	92%	95%	3%	3.7%
HT V - Bulk Residential Supply		4.32	4.05	64%	60%	-4%	-6.2%

The above Table shows increase in the cross-subsidy levels for certain consumer categories, if the reliability charges are also considered, because the cross-subsidy can only be reduced gradually, and the revenue requirement is increasing significantly every year due to the increasing need for external power purchase. Also, due to the merger of some categories, the impact on different categories is different with reference to the existing tariffs.

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 likely that the actual revenue earned by BEST may be higher than that considered by the Commission, on account of tariff changes such as introduction of demand charges for LT commercial category, which could be offset to some extent by the night off-peak rebate introduced by the Commission, depending on the shift in consumption. Any additional revenue/shortfall in revenue due to the impact not being assessed at this stage, will be trued up at the time of final truing up for FY 2008-09.

5.5 REVISED TARIFFS WITH EFFECT FROM JUNE 1, 2008

Sl.	Consumer category & Consumption Slab	Tariffs			
		Fixed/ Demand Charge	Energy Charge (p/kWh)	Reliability Charge (p/kWh)	
				Standby Charge	Expensive Power Charges
	LOW TENSION CATEGORIES				
1	**LT I - Residential**				
	Below Poverty Line (BPL)	Rs. 3 per month	40		
	Other Residential				
	0-100 units	Rs. 10 per month	70	21	
	101-300 units	Rs. 30 per month[$$]	205		
	301 to 500 units	Rs. 60 per month[$$]	470		34
	Above 500 units (balance units)	Rs. 100 per month[$$]	650		56
2	**LT II - LT Commercial**				
(a)	**0-20 kW**			21	
	0-300 units	Rs. 200 per month	350		45
	301 - 500 units		650		

Sl.	Consumer category & Consumption Slab	Tariffs			
		Fixed/ Demand Charge	Energy Charge (p/kWh)	Reliability Charge (p/kWh)	
				Standby Charge	Expensive Power Charges
	501 – 1000 units		830		
	Above 1000 units (balance units)		880		
(b)	**> 20 kW and < 50 kW**	Rs. 150 per kVA per month	940		56
(c)	**> 50 kW**		975		68
3	**LT III – Advertisement & Hoardings**	Rs. 300 per month	1400	21	56
4	**LT IV - LT Industry below 20 kW load**				
	0-300 units	Rs 250 per month	360	21	
	301 - 500 units	Rs 300 per month	475	21	56
	501 – 1000 units	Rs 350 per month	600	21	56
	Above 1000 units (balance units)		800	21	56
5	**LT V - LT Industrial above 20 kW load**				
(a)	Above 20 kW upto 100 kW	Rs 150 per kVA per month	760	21	23
(b)	Above 100 kW		665		23
6	**LT VI – LT Street Lights**	Rs 150 per kVA per month	700	21	23
7	**LT VII – Crematorium & Burial Grounds**	Rs. 100 per month	180	21	
8	**LT VIII – Temporary Supply Others**	Rs. 150 per mth	1000	21	23
9	**LT IX – Temporary Supply Religious**	Rs. 150 per month	180	21	
	TOD Tariffs (in addition to above base tariffs) - for LT II (b) and (c), and LT V category, and optionally available to LT II (a)				
	0600 hours to 0900 hours		0		
	0900 hours to 1200 hours		50		
	1200 hours to 1800 hours		0		
	1800 hours to 2200 hours		100		
	2200 hours to 0600 hours		-75		
	HIGH TENSION CATEGORIES				
6	**HT I – Industry**	Rs 200 per kVA per month	500	21	45
7	**HT II -Commercial**	Rs 200 per kVA per month	555	21	45
8	**HT III – Group Housing Society**	Rs 200 per kVA per month	310	21	45

Sl.	Consumer category & Consumption Slab	Tariffs			
		Fixed/ Demand Charge	Energy Charge (p/kWh)	Reliability Charge (p/kWh)	
				Standby Charge	Expensive Power Charges
	TOD Tariffs (in addition to above base tariffs) for HT I and HT II categories				
	0600 hours to 0900 hours		0		
	0900 hours to 1200 hours		50		
	1200 hours to 1800 hours		0		
	1800 hours to 2200 hours		100		
	2200 hours to 0600 hours		-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.

5.6 INCENTIVES AND DISINCENTIVES

Power Factor Calculation

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

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

Wherein the kVAh is the 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 V 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 III and LT V 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 or within 5 days of the receipt of the bill, whichever is later.

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

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 or within 5 days of the receipt of the bill, whichever is later. 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 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).

6 Applicability of Order

This Order for FY 2008-09 shall come into force with effect from June 1, 2008, and shall continue to be in force till March 31, 2009.

The Commission will undertake the Annual Review of BEST's performance during the last quarter of FY 2008-09. BEST is directed to submit its Petition for Annual Review of its performance during the first half of FY 2008-09, as well as truing up of revenue and expenses for FY 2007-08, with detailed reasons for deviation in performance, latest by November 30, 2008.

The Commission acknowledges the efforts taken by the Consumer Representatives and other individuals and organisations for their valuable contribution to the APR and tariff determination process.

The Commission would also like to put on record, the efforts of its advisors, M/s ABPS Infrastructure Advisory Private Limited.

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

(P B Patil)
Secretary, MERC

APPENDIX 1

List of Persons who attended the Technical Validation Session held on January 2, 2008

S.No	Name
BEST Officials	
1	Shri S.A. Puranik
2	Shri A.V. Kane
3	Shri R.S.Girap
4	Shri S.B. Dhule
5	Shri R.D. Pawar
6	Shri A.G.Patil
7	Shri S.N. Pawar
8	Shri K.N.Rajagopal
9	Shri S.G. Hiwle
10	Shri N.V. Bhandari
11	Shri S.R. Surve
12	Shri K. Vinod Raj
13	Shri R.B. Bhardwaz
14	Shri S.V. Varadkar
15	Shri C.H. Shinde
16	Smt. R.S. Majumdar
17	Shri S.D. Pawar
18	Shri P.P. Kulkarni
19	Shri V.K. Rokade
20	Shri S.R. Khelkar
21	Shri R.D. Waikar
22	Shri S.G. Dhisle
23	Shri R.V. Patil
24	Shri J. Gloria
25	Shri B.A. Shaikh
26	Shri M.R. Dharaskar
Consultants of BEST	
27	Shri Vivek Sharma
28	Shri Manon Shah
Consultants to Commission	

29	Shri Palaniappan M
31	Shri P.G. Phokmare
32	Shri A.N. Vaze
33	Shri M.N. Bapat
34	Shri Saurabh Gupta
35	Shri S.D. Chaudari
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	Shri Shantanu Dixit	Member	Prayas, Energy Group
2	Dr. Ashok Pendse		Mumbai Grahak Panchayat
3	Dr. S.L. Patil	Secretary General	Thane Belapur Ind. Association
4	Shri R.B. Goenka		Vidarbha Industries Association
Objectors			
1	Shri A.R. Bapat		
2	Shri K.V. Mehta	Executive Officer	The Association of Hospitals
3	Shri N. Ponrathnam		Vel Induction Hardenings
4	Shri R. Anil Kumar	Secretary	
5	Shri Vikas Varadkar	General Secretary	Seva Foundation
6	Dr. M. E. Yeolekar	Director (M. E. & H)	KEM Hospital
7	Shri R. Anil Kumar	Secretary	Suraj Venture 'B' CHS Ltd
8	Shri Pramod Mujumdar		Energy Study Group
9	Shri Rakshpal Abrol	President	Bombay Small Scale Ind. Association
10	Shri Sandeep N. Ohri	Co-ordinator – Bijlee	Bombay Small Scale Ind. Association
11	Shri Bankim Mistry		Bharat Traders
12	Shri S.N. Bathia		The Sidhpura Co. op. Indl. Estate Ltd.
13	Shri Suhas Bane	President	Janata Dal (Secular) Mumbai
14	Shri S. V. Shiralkar	Director Technical (Cogen.)	Mitcon Consultancy Services Ltd.
15	Shri Gaurang Damani		
16	Shri Jude G. Tandon		Stafford Infrastructure & Mktg. Co.
17	Shri Vasant Shetty	Vice President	Indian Hotel & Restaurant Association
18	Shri N. S. Prasad	Admn. Officer	Chhatrapati Shivaji Maharaj Vastu Sangrahalaya

19	Shri Vikas D. Pawar		Republican Party of India

List of Objectors who attended the Public Hearing on February 15, 2008

S.No	Name of Person / Official	Designation	Institution
1	Shri Ashok Pendse		Mumbai Grahak Panchayat
2	Shri K.V. Mehta	Executive Officer	The Association of Hospitals
3	Shri N. Ponrathnam		Vel Induction Hardenings
4	Shri Pramod Mujumdar		Energy Study Group
5	Shri Suhas Bane	President	Janata Dal (Secular), Mumbai
6	Shri Jude G. Tandon		Stafford Infrastructure & Mktg. Co.