Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
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Case No. 4 of 2004

IN THE MATTER OF
Determination of Annual Revenue Requirement (ARR) and Tariff for 2004-05 & 2005-06 for
Brihan-Mumbai Electric Supply & Transport Undertaking (BEST)

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

Date of Order: 9th March 2006

O R D E R

Upon directions from the Maharashtra Electricity Regulatory Commission (Commission), Brihan-Mumbai Electric Supply & Transport Undertaking (BEST), submitted its application for approval of Annual Revenue Requirement and Tariff Proposal for 2004-05 and 2005-06, under affidavit. This is the first time that the BEST has submitted a petition for approval of ARR and Tariff Proposal to the Commission. The Commission, in exercise of the powers vested in it under Section 61 and Section 62 of the Electricity Act, 2003 and all other powers enabling it in this behalf, and after taking into consideration all the submissions made by BEST Undertaking, all the objections, responses of the BEST Undertaking, issues raised during the Public Hearing, and all other relevant material, determines the ARR and tariff for supply of electricity by the Brihan-Mumbai Electric Supply & Transport Undertaking for retail distribution as under.

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.

The Brihan-Mumbai Electric Supply & Transport Undertaking (BEST), submitted its application for approval of Annual Revenue Requirement and Tariff for FY 2004-05 and FY 2005-06, on 30th November 2004, under affidavit, in response to the Commission's Interim

Order in the Case No. 4 of 2004 dated 15th July 2004 and subsequent letter dated 29th September 2004 directing BEST to submit the ARR and Tariff proposal.

The Commission asked BEST to submit data in accordance with the 'Data Requirement Formats', and the same was submitted by BEST. However, the Commission was informed that the ARR and Tariff Proposal of BEST was disapproved by the BEST Committee. BEST submitted the revised data formats and the revised ARR and Tariff proposal for FY 2004-05 and FY 2005-06 in their letter dated 11th March 2005.

The data gaps and additional data requirements were highlighted and the Commission directed BEST to provide clarifications and submit the additional data so that it could conduct a technical validation session. Thereafter, BEST submitted various clarifications and additional data vide Affidavits dated 1st June 2005 and 30th June 2005.

On receipt of the clarification and additional data from BEST, the Commission held a Technical Validation Session in the presence of authorized consumer representatives and others on 11th August 2005 (the list of persons who attended the Technical Validation Session is given in **Appendix 1**).

During the Technical Validation session, several discrepancies and data inconsistencies/gaps were identified/pointed out and the Commission directed BEST to submit a consolidated ARR and Tariff Petition along with additional data and clarifications. Subsequently, BEST, vide letter Ref. No. DO/GM/ AGM/ES/53729/2005, submitted the Comprehensive ARR and Tariff Petition (Petition) for FY 2004-05 and FY 2005-06 on 27th September 2005 under affidavit.

Subsequently, based on the instructions from the Commission, a Public Notice appeared in newspapers on October 20, 2005 giving a period of one month to the public to file their objections. The Public Notice was published in the Indian Express, Mid Day, Loksatta and Saamna Newspapers.

Subsequent to the Public Notice, there was a clarification issued in the abovementioned newspapers on October 22, 2005. Copies of BEST's Petition and its summary were made available for inspection/ purchase to members of the public at BEST's Head Office and Zonal Offices and on BEST's website (www.bestundertaking.com). The last date for filing the written objections was fixed as November 21, 2005, which allowed a period of one month to the public to enable them to file their objections. The Public Notice specified that the suggestions/objections, either in English or Marathi, may be filed in the form of affidavits to the Commission along with proof of service on General Manager, BEST Undertaking. It was specifically stated in the Public Notice that if any objector wanted to be heard in person, the Commission would give him an opportunity at the Public Hearing and others were also free to attend the same. BEST was given an opportunity to reply to the party's suggestion/objection by November 30, 2005, and rejoinders to BEST's reply were to be addressed by BEST at the Public Hearing.

The Commission also admitted objections filed during the Public Hearing.

The Commission received written objections and comments regarding the ARR and existing tariff structure of BEST, cross-subsidy, working of BEST and a host of other issues. The Commission received objections/ comments from a total of 7 objectors, none of which were on affidavit. In the interest of the process and to ensure adequate public participation, the Commission has considered the objections, even though they have not been submitted on Affidavit. The objectors, who indicated that they would like to be heard in person, were called for the Public Hearing. The Public Hearing was held on December 21, 2005 at 11:00 hours, at Centrum Hall, Centre I, World Trade Centre, Mumbai.

The list of persons who attended the Public Hearing is given in **Appendix 2**.

The Commission also received one rejoinder from one of the objectors (M/s. EIH Ltd.) based on the response of BEST Undertaking to its objections.

Based on various objections received, the Commission directed BEST to submit clarifications and additional data as agreed during the course of the Public Hearing. BEST submitted the additional data/ clarifications (viz. write up on the least cost method/ solution beneficial to the consumers in the context of the interest rates considered for internal capital and Roadmap with timeframe for segregation of distribution losses into technical and commercial losses and efforts/ methods proposed for further reduction of distribution losses) vide their letter dated 3rd January 2006.

Further, the Commission requested BEST to submit additional data and clarifications with respect to the ARR and tariff proposal, which were subsequently submitted by BEST vide letters dated 25th January 2006 and 6th February 2006.

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.

The Commission, after taking into consideration all the objections, including the submissions and responses of the BEST, issues raised during the Public Hearing, and all other relevant material, issued the following Operative part of the Order on February 25, 2006:

1. The revised electricity tariffs to be charged by BEST to its consumers will be applicable with effect from March 1, 2006, and will continue to remain in force till further revision in tariffs. 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 consumption 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).

2. For projecting the energy requirement, the Commission has considered the Distribution losses as given by BEST for FY 2004-05 as it is based on actuals (10.78%) and FY 2005-06 based on actuals for 9 months and estimates for next 3 months viz. January, February

and March of 2006 (12.4%). The Commission has noted with reservations the explanation given by BEST that the increase in the figure of Distribution losses for 2005-06 is due to the change in accounting practice and billing procedure in line with MERC Regulations. The Commission has asked BEST to conduct a study for segregation of Technical and Commercial Losses and asked it to submit a report on the same by 31st May 2006. The Commission has also considered the sales units as provided by BEST for FY 2004-05 and FY 2005-06 as they are based on actuals and estimates. Thus, the energy requirement for BEST for FY 2004-05 is 3962 MU and for FY 2005-06 is 4164 MU.

Based on the above referred study report, the Commission intends to put a road map with specific target for reduction of technical loss and elimination of commercial loss while considering FY 2006-07 ARR. The Commission directs BEST to reduce the Distribution Losses in a progressive manner. In this respect the Commission also directs BEST to put in place regular substation-wise energy accounting and audit and to submit the break-up of technical and commercial loses.

BEST should prepare a long term plan for customer indexing and distribution transformer-wise energy accounting for consideration of the Commission.

3. BEST procures power from Tata Power Company to meet its demand. The Commission has allowed the Power Purchase expenses given by BEST in FY 2004-05 as they are at actuals and projections in FY 2005-06 as they are based on actuals for 9 months and estimates for the remaining three months.

4. The Commission has considered the employee expenses after taking into account the impact of the Pay Revision Committee Recommendations on the Electric Supply Division. The Commission has disallowed the creation of a Regulatory Asset proposed by BEST to offset the impact of the Pay Revision Committee.

5. The Commission has allowed the Repairs and Maintenance (R&M) expenditure for FY 2004-05 as they are at actuals and the projected R&M expenses for FY 2005-06, as R&M expenditure is required to be incurred to ensure that the system functions efficiently.

6. The general administration expenses given for FY 2004-05 have been allowed by the Commission as they are at actuals. For FY 2005-06, the general administration expenses have been recomputed by the Commission on the basis of past trends.

7. BEST incurs Other Expenses which include various components such as insurance, contingency reserve fund, etc. The Commission has considered the amount shown for contingency reserve fund as given by BEST for FY 2004-05 and FY 2005-06. In case of other expenses, the Commission has considered the expenses as shown by BEST for FY 2004-05 as they are at actuals and have computed the expenses for FY 2005-06 on the basis of past trends.

8. The Commission has projected lower level of depreciation as compared to BEST's projections, as it has made an adjustment to depreciation, assuming that depreciation would be computed on gross fixed assets less grants. The Commission has disallowed additional depreciation in ARR computation.

9. The Commission has allowed the interest expenditure on loans for FY 2004-05 as it is at actuals. For FY 2005-06, the Commission has considered a normative Debt : Equity ratio of 70:30 to fund BEST' fresh capital investments, and has accordingly computed interest expenditure on the normative loan amount.

10. Interest on working capital and consumer security deposits have been recomputed as per the MERC Regulations. Interest on working capital has been computed at 10.25%. The security deposit amount has been recomputed and interest on security deposit has been allowed at 6%.

11. The non-tariff income for FY 2004-05 has been allowed by the Commission as it is at actuals. The Commission has computed the non-tariff income for FY 2005-06 on the basis of past trends.

12. The Commission has considered Return on Equity in the ARR computation. The Commission has disallowed Interest on Internal funds projected by BEST in lieu of Return on Equity. The Commission has computed an opening notional equity for BEST and has computed Return on equity (at 16%) as per Section 76.1 of the MERC (Terms and Conditions of Tariff) Regulations, 2005.

13. The Annual Revenue Requirement (ARR) allowed by the Commission amounts to Rs. 1383.94 crore and Rs. 1496.48 crore for FY 2004-05 and FY 2005-06 respectively.

14. The Commission has disallowed the losses of the Transport Division as a part of the ARR.

15. Based on the existing tariffs and the Commission's projections of the revenues and expenses, the surplus between the Total Revenue of BEST and the Annual Revenue Requirement amounts to Rs. 98 crore for FY 2004-05 and Rs. 23 crore for FY 2005-06. The Commission's tariff philosophy has been not to revise the tariffs retrospectively for past years and has thus revised the tariff of BEST, effective from March 1, 2006.

16. The Commission has estimated the Total Revenue of BEST for FY 2005-06 based on a number of assumptions (viz. projections for last 3 months of FY 2005-06, number of consumers for certain categories, kVA demand in some cases, consumption units for telescopic tariff, etc.). Thus, the Commission notes that the BEST's actual revenue is likely to vary from that estimated by the Commission. The Commission has been unable to determine the revenue impact of certain tariff components due to the lack of adequate data. The Commission feels that BEST's revenues may be lower than estimated. Therefore, the Commission feels that an additional cushion is required to take into account these uncertainties. Thus, the Commission has provided for a cushion/ surplus of ~ Rs. 51.13 Crore through the revised tariff against the ARR for FY 2005-06 of Rs. 1496.48 crore. The surplus, if any, generated out of the revised tariff of BEST over the ARR, as per audited results for 2005-06, shall be used for the Electricity Supply division of BEST only and with prior approval of the Commission. The Commission has instituted a truing up process where in the actual expenses and the actual revenue will be trued up at the end of the year based on audited financial results and subject to a prudence check.

From the Accounting perspective, MERC directs that BEST Undertaking should maintain its accounts from year 2006-07 as per the Companies' Act 1956. This is in addition to the maintenance of accounts for BEST as per MMC Act 1888.

17. 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 have been determined in such a manner that the movement of tariff is toward the average cost of supply, and the cross-subsidy is reduced gradually without subjecting any consumer category to a large tariff shock, and also to initiate a movement towards uniform tariffs throughout Mumbai and its suburbs.

18. The Fuel Adjustment Cost (FAC) has been made zero. The FAC charge will be applicable on the entire sales of BEST, without any exemption to any consumer categories. The earlier method followed by BEST of FAC exemption for the first 200 units of consumption by its existing consumer categories R, S, SN and H and for Temporary Supply Religious (TSR) connections has been done away with. The existing FAC has been merged with the basic tariff since the Commission has considered the prevailing fuel and power purchase prices. Thus, FAC has been equated to zero. The Commission has approved the following FAC formula to account for any change in the cost of power purchase due to variations in the fuel cost:

    FAC = C + I + B where,

    FAC = Fuel Adjustment Cost

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

    I = Interest on Working Capital

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

    The FAC on a monthly basis shall be calculated and charged as per Section 82 of the MERC (Terms and Conditions of Tariff) Regulations 2005.

19. BEST's existing tariff structure is quite complicated with too many consumer categories following no rationale. The Commission has undertaken significant rationalization of categories and subcategories/ slabs as a result of which the billing rate for some categories may have increased, while that of some others have been reduced. This is inevitable in any tariff rationalization exercise. The rationalization has been undertaken in such a way that the categories and slabs are similar to those of the Reliance Energy (REL) and erstwhile Maharashtra State Electricity Board (MSEB) to the extent possible.

20. Gradual reduction in cross-subsidy has been initiated, while at the same time ensuring that no consumer category is faced with a tariff shock.

Revised LT Consumer Tariff Categories

21. The Commission has introduced a new category 'BPL' for consumers below poverty line viz. BPL, with consumption slab of 0-30 units. This is in accordance with the National Electricity Policy, whereby "consumers below poverty line who consume below a specified level, say 30 units per month, may receive a special support through cross

subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply." However, as the existing tariff for these consumers is at a much lower level than the cost of supply (19% of cost of supply), the Commission has specified a lower tariff for this category in order to avoid tariff shock to the BPL consumer category.

22. The Commission directs BEST to gather data regarding the consumption of consumers and identify consumers who consume lower than 30 units per month, who are the real life-line category of consumers, so that the Commission can target the real life-line consumers by specifying lower tariffs (i.e. BPL category tariffs).

23. The consumer categories comprising R, S and SN as per the Existing Tariff Schedule of BEST have been merged into one consumer category, viz. Residential LF-1. For this revised category LF-1, three slabs are introduced viz. 0-100 units, 101-300 units and consumption above 300 units.

24. The consumer categories comprising C1, C2 and H as per the Existing Tariff Schedule of BEST have been merged into one consumer category, viz. Non-residential cum Commercial LF-2. For this revised category LF-2, three slabs are proposed viz. 0-300 units, 301-1000 units and consumption above 1000 units.

25. The consumer category of RC (LV) as per the Existing Tariff Schedule of BEST has been retained as a separate category in the revised tariff schedule viz. LTC-1 (Low Tension Power Commercial – 1) and the existing slab of all units to continue.

26. The consumer category of C (D) (Advertisements and Hoardings) as per the Existing Tariff Schedule of BEST has been retained as a separate category in the revised tariff schedule, and the existing slab of consumption of all units to continue.

27. The consumer categories comprising GP1 and GP2 as per the Existing Tariff Schedule of BEST have been merged into one consumer category, viz. LTP-1 (Low Tension Power Industrial – 1). For this revised category LTP-1, three slabs are proposed, viz. 0-300 units, 301-1000 units and consumption above 1000 units.

28. The consumer category of Ind (LV) as per the Existing Tariff Schedule of BEST has been retained as a separate category in the revised tariff schedule, viz. LTP-2 (Low Tension Power Industrial – 2) and the existing slab of consumption of all units to continue.

29. The various consumer categories comprising GRD SL and PUB SL as per the Existing Tariff Schedule of BEST have been merged into one consumer category, viz. SL (Street Lights). For this revised category SL, there is a single slab for consumption of all units.

30. The consumer category of E (Electric Crematoriums) as per the Existing Tariff Schedule of BEST has been retained as a separate category in the revised tariff schedule, and the existing slab of consumption of all units to continue.

31. The consumer categories comprising TS and SB as per the Existing Tariff Schedule of BEST have been merged into one consumer category, viz. T (Temporary). For this revised category T, there is a single slab for consumption of all units.

32. The consumer category of TS (R) (Temporary Supply for Public Religious Functions) as per the Existing Tariff Schedule of BEST has been retained as a separate category in the revised tariff schedule, and the existing slab of consumption of all units to continue.

Revised HT Consumer Tariff Categories

33. The consumer categories of S (HV) and SN (HV) as per the Existing Tariff Schedule of BEST have been merged into one consumer category, viz. HTP-1 (High Tension Power – 1). For this revised category HTP-1, there is a single slab for consumption of all units.

34. The consumer category of H (HV) as per the Existing Tariff Schedule of BEST has been retained as a separate category in the revised tariff schedule viz. HTP-2 (High Tension Power Commercial – 2) and the existing slab of consumption of all units to continue.

35. The consumer category of RC (HV) as per the Existing Tariff Schedule of BEST has been retained as a separate category in the revised tariff schedule viz. HTP-3 (High Tension Power Commercial – 3) and the existing slab of consumption of all units to continue.

36. The consumer category of Ind (HV) and GP2(HV) as per the Existing Tariff Schedule of BEST have been merged into one consumer category in the revised tariff schedule viz. HTP-4 (High Tension Power Industrial – 4) with a single slab for consumption for all units.

37. The existing category of R(HV) and Defence bulk consumption for commercial have been merged into a new category viz. HT Defence Bulk Consumption HTP-5 (High Tension Power - 5). For this revised category HTP-5, there is a single slab for consumption of all units.

38. The Commission has introduced a two-part tariff for all consumer categories. The Demand charges have been specified in terms of Rs./kVA/month (for LTC-1, LTP-2, SL, HTP-1, HTP-2, HTP-3, HTP-4 and HTP-5 categories) and in terms of Rs./connection/month (for BPL, LF-1, LF-2, E, LTP-1 and C (D) categories). The Fixed Charges for the categories T and TS(R) will be applicable in terms of Rs./ connection per occasion of supply.

39. In case of Residential LF-1, Non-residential cum Commercial LF-2 and LTP-1 category, the connected load data is not easily verifiable, hence the Commission has determined the fixed charges for these categories in terms of Rs./connection/month except in case of connected load above 20 kW or monthly consumption greater than 3000 kWh/ month, in respect of consumers falling in LF-2 and LTP-1 category.

40. To begin with, BEST is directed to start installation of MD meters for all consumers in LF-2 and LTP-1 category with sanctioned load equal to or above 20 kW or using more than 3,000 kWh (units) so that on installation of electronic meters (capable of maximum demand measurement) for these consumers, the demand charges can be made applicable in the next tariff determination exercise to these consumers (LF-2 and LTP-1 category). BEST is also directed to maintain separate data on consumption and demand of consumers having sanctioned load of up to 20 kW and those having load above 20 kW.

41. RkVAh charges will be applicable to consumers of category LF-2, LTP-1, LTP-2, LTC-1 and all HT categories. In case of LF-2 and LTP-1 categories the RkVAh charges will be applicable to consumers whose monthly energy consumption is above 3000 kWh (units) per month.

42. The Commission has abolished meter rent in conformity with the policy already implemented for other licensees, viz. MSEDCL, REL and TPC.

43. The Commission has abolished the minimum charges and the concept of Two Part Tariff, namely Fixed Charge and Variable Charge has been introduced for all consumers, in line with the policy already implemented for other licensees. This will send the correct economic signal to the consumers that all consumers have to contribute towards the fixed cost of the licensee, and will also simplify the bill and make it easier to understand.

44. BEST should ensure strict observation of metering, billing and collection provisions as stipulated in the MERC (Electric Supply Code and other Conditions of Supply) Regulations 2005.

45. The tariffs are telescopic for LF-1, LF-2 and LTP-1 categories, i.e., consumers falling in the higher slabs will have to pay higher tariffs only for the consumption in that slab and not on the total consumption. This will ensure that the effective tariff for consumers in the higher slabs is such that there is no tariff shock.

46. Henceforth, Tax on Sale of Electricity (ToSE) shall not be charged on the consumers separately.

47. The revenue from fixed charges as a percentage of the fixed costs is projected to increase from 8% to 21.5% on account of the increase in fixed/ demand charges determined by the Commission. The Commission intends to increase the recovery of fixed costs through fixed charges in future gradually in order to avoid tariff shock.

48. The Monthly Billing Demand for LT/ HT consumers will be the higher of the following:

    a. Actual established demand recorded in the month during the period of 0800 hours to 2400 hours;

    b. 75% of the highest billing demand or Contract Demand, whichever is lower, during the preceding eleven months;

    c. 50% of the Contract Demand as defined in the Supply Code.

    ("Contract Demand" means demand in kilowatt (kW) / kilovolt ampere (kVA), mutually agreed between BEST and the consumer as entered into in the agreement or agreed through other written communication).

49. The Commission has decided to introduce the Time of the Day (ToD) Tariffs for the Commercial and Industrial consumers with consumption above a certain level. However, it is seen that appropriate meters are not installed for all such consumers. The Commission has therefore directed BEST to install ToD meters for its consumers in categories LF-2, LTP-1, LTP-2, LTC-1 with consumption above 3,000 kWh/month and to all HT categories consumers in a time bound manner so that the ToD tariffs can be

introduced for these consumer categories in the next Tariff Determination exercise for FY 2006-07. To begin with, three Time of the Day Slots are envisaged as ‘0800-1600 Hours’, ‘1600-2400 Hours’ and ‘2400-0800 Hours’. However, in future these shall be scalable for up-gradation to 4 time slots. BEST should keep this in mind, metering being an important area for focused attention and up-gradation, while installing new meters for existing/ new connections in the HT and LT Industrial and Commercial categories mentioned here.

50. The Commission notes that BEST Undertaking has not refunded the excess Security Deposit as per the MERC (Electric Supply Code and other Conditions of Supply) Regulations 2005. Although, as per the Regulations, the excess Security Deposit has to be refunded in a single payment, given the quantum of refund involved the Commission directs BEST to refund the Excess Security Deposit over a period of 6 months from the date of the enforcement of the Operative Order with an interest rate of 6% up to the date of 20th January 2005 (the Date of enforcement of MERC Electric Supply Code and other Conditions of Supply Regulations 2005) and from thereon at a rate of 12% p.a. till the date of refund, on a reducing balance basis.

51. The Commission has found the current level of Consumer Outstandings of BEST to be unacceptable. Therefore, it has directed BEST to make focused efforts in a time bound manner for reducing the outstandings to a reasonable level. The Commission directs BEST to publish a list of defaulters in newspapers and also on its website on a regular basis.

52. Prompt Payment Discount has been revised to the rate of 1% of the energy bill (excluding fixed/demand charges, FAC, and Electricity Duty) for the HT and LT Industrial and Commercial categories, provided the payment of the bill is received by BEST within 7 (seven) days from the date of issue of the energy bill or within 5 (five) days from date of receipt of the energy bill, whichever is later.

53. The Commission has rationalized the charges for power factor maintenance, by eliminating the Power Factor Surcharge in the revised Tariff and retaining only the RkVAh charges.

54. BEST is directed to explore methods such as prepaid meters, advance payment and discount schemes, etc. to reduce the transaction costs for metering, billing and collection from low consumption residential consumers.

55. The State of Maharashtra is passing through a phase of acute power shortage, and even Mumbai city, which so far has been spared of load shedding, is likely to face power shortages in the coming summer months. In the absence of additional capacity in the region, there is an urgent need for energy conservation and load management by all power intensive consumers. In order to achieve this, the Commission has adopted the principle of economic signals for high consumption consumers, i.e., residential (households, which would typically have energy intensive equipment such as air conditioners) and commercial consumers having consumption > 300 units per month and all LT/ HT industrial and HT commercial consumers.

56. The Commission has therefore directed that all the residential and commercial consumers consuming more than 300 units per month and all industrial consumers (irrespective of their level of consumption) in the BEST License area will have to reduce their monthly consumption to a level of 80% of their average corresponding monthly consumption in the past year (January 2005 to December 2005). Penal tariff shall be applicable for the consumption exceeding the 80% limit at the rate of additional 100% of the highest tariff chargeable to the respective category, and will be charged in the energy bill of the consumer in that month.

57. The money collected through the levy of this penal tariff has to be maintained in a separate fund to be used for energy conservation and Demand Side Management (DSM) measures. The Commission proposes to provide overall guidance to the licensees on DSM and assist the licensees in formulating DSM schemes, which is the need of the hour.

    Any reduction in the monthly consumption below the 80% limit prescribed will be incentivised at the rate of 50% of the normal chargeable rate to the kWh units in the tariff slab applicable to the reduced no. of units, by refunding the amount, sourced from the fund mentioned in paragraph 57 above, calculated in the energy bill of the consumer for that month. This is applicable for residential (households, which would typically have energy intensive equipment such as air conditioners) and commercial consumers having consumption greater than 300 units per month and all LT/ HT industrial and HT commercial consumers.

Subsequent to the issue of the Operative Order (dated February 25, 2006), the Commission held a Public Hearing in respect of Case No. 46 of 2005 in the matter of Strategy to bridge the demand-supply gap in the city of Mumbai, on February 27, 2006 at Mumbai in Centrum Hall, First Floor, World Trade Centre at 11:00 hours. During the Public Hearing, several suggestions were received that the reduction in monthly consumption should be in comparison to the corresponding month in the previous year instead of the average consumption in the last year. There were also suggestions that certain category of consumers should be exempted from the levy of penal tariff. Taking into account these suggestions of the public during the course of the Public Hearing, the Operative Order in Case No. 4 of 2004 (dated February 25, 2006) stands amended forthwith on these following aspects mentioned in points (i) to (ix).

(i) All the residential and commercial consumers consuming more than 300 units per month henceforth, and all industrial consumers (irrespective of their level of consumption) in the BEST License area will have to reduce their monthly consumption to a level of 80% of their consumption in the corresponding month in the past year (January 2005 to December 2005). Penal tariff termed as "Load Management Charge" shall be applicable for the consumption exceeding the 80% limit at the rate of additional 100% of the highest tariff chargeable to the respective category, and will be charged in the energy bill of the consumer in that month.

(ii) The money collected through the levy of this penal tariff termed as "Load Management Charge" has to be maintained in a separate fund to be used for energy conservation and Demand Side Management (DSM) measures.

(iii) Any reduction in the monthly consumption below the 80% limit prescribed on a consumption in the corresponding month in the past year (January 2005 to December 2005) will be incentivised with a rebate termed as "Load Management Rebate" at the rate of 50% of the normal chargeable rate to the kWh units in the tariff slab applicable to the reduction in the number of units, vis-à-vis the benchmark consumption of 80% of the consumption in the corresponding month of the previous years, by adjusting the bill accordingly. This would be funded by the fund mentioned in paragraph 'ii' above, calculated in the energy bill of the consumer for that month.

(iv) In case of residential and commercial consumers having consumption greater than 300 units per month henceforth, and all LT/ HT industrial and HT commercial consumers who have already reduced their consumption in the corresponding months in the last year due to the introduction of the Load Management Charge/Rebate, i.e., for consumers who have been given Load Management Rebate last year, the load management target will be at the same level as that of the corresponding month last year, and further reduction to 80% of the consumption in the previous year is not mandatory in such cases.

(v) This monthly consumption reduction target will not be applicable for new consumers and in case of change in occupancy during the last one year for the existing consumers.

(vi) As regards the essential services, it is desirable that they should also try to reduce their monthly consumption, however, in case of failure to reduce the consumption to a level of 80% of their consumption in the corresponding month in the past year (January 2005 to December 2005), penal tariff in the form of levy of "Load Management Charge" as well as incentive of "Load Management Rebate" will not be applicable for the operational installations of following essential services:

a. Railways
b. Water Supply and Sewerage systems operated by Government/local authorities
c. Telephone exchanges
d. Defence Establishments
e. Ports and Harbours
f. Meteorological observatories
g. Hospitals
h. News Agencies
i. TV and Radio Stations
j. Posts & Telegraphs
k. Airports
l. Atomic energy establishments

(vii) In case of the above essential services, the restriction of reducing the monthly consumption to 80% of their consumption in the corresponding month of the past year will however, be applicable for the attached residential colonies and the "Load

Management Charge/ Rebate shall be applicable as mentioned in paragraphs '(i)' to '(v)' above

(viii) The Commission directs BEST to install electronic meters capable of measuring maximum demand and ToD consumption for its consumers in categories LF-2, LTP-1, LTP-2, LTC-1 with sanctioned load equal to or above 20 kW or using more than 3,000 kWh/month and to all consumers in HT category in a time bound manner so that the ToD tariffs and demand charges on kVA basis can be introduced for these consumer categories in the next Tariff Determination exercise for FY 2006-07.

(ix) In case the consumption of 'BPL' category consumers exceeds 30 units in any month, then such consumers will thereafter be automatically considered under 'residential' category LF-1, and will be charged accordingly.

Table 1: Annual Revenue Requirement for FY 2004-05 and FY 2005-06

Rs. Crore

Particulars	FY 2004-05		FY 2005-06	
	BEST Proposal *	**MERC Approval**	**BEST Proposal ***	**MERC Approval**
Power Purchase Cost	1088.50	1088.50	1168.13	1119.93
Employee Expenses	88.26	88.26	85.62	136.41
Repairs & Maintenance	10.19	10.19	11.83	11.83
Share of General Administration Expenses	37.74	37.74	36.03	41.80
Other Expenses (Insurance, Transport, etc.)	44.67	44.67	54.92	49.76
Depreciation	55.44	34.51	59.01	37.57
Interest on Loans	3.81	3.80	6.29	6.97
Interest on Working Capital & Consumer Security Deposits	7.55	13.45	9.00	13.51
Tax on Sale of Electricity (paid to State Government)	-	42.64	-	61.13
Return on Equity	-	92.99	-	95.82
Interest on Internal Funds	59.46	-	51.10	-
Bus division losses	231.08	-	140.30	-
Total Revenue Requirement	**1626.70**	**1456.74**	**1622.23**	**1574.74**
Less Non-Tariff Income	72.79	72.79	83.42	78.26
Annual Revenue Requirement	**1553.91**	**1383.94**	**1538.81**	**1496.48**
Revenue from existing Tariff	1,439.4	1,482.1	1,514.7	1,519.6

** As per BEST ARR and Tariff Proposal for 2004-05 and 2005-06 dated 27th September 2005*

Table 2: Summary of HT and LT Tariff effective from March 1, 2006

Consumer Category and Consumption Slab (Units in kWh Slabs)	**Fixed/ Demand Charge (Rs/connection/month OR Rs/kVA/month)**		**Energy Rate (Paise/kWh)**	**RkVAh Rate (Paise/ RkVAh)**
	Single phase	**Three phase**		
BPL (Below Poverty Line Residential)				
0-30	Rs 3 per connection per month		50	-
LF-1 (Residential)				
0-100	Rs 10 per connection per month		75	-
101-300	Rs 10 per connection per month	Rs 100 per connection per month	215	-
>300 (only balance units)	Rs 50 per connection per month	Rs 100 per connection per month	465	-
LF-2 (Non-residential cum Commercial)				
0-300	Rs 150 per connection per month		415	
301-1000	Rs 150 per connection per month		515	
>1000	Rs 150 per connection per month		630	
RkVAh charges applicable for consumers above 3000 units per months consumption				
PF <0.92				270
0.92< PF <0.95				180
0.95< PF <0.97				120
PF >0.97				0
LTC-1 (LT Power Commercial - 1)				
All units	Rs. 300 per kVA per month		410	
PF <0.92				270
0.92< PF <0.95				180
0.95< PF <0.97				120
PF >0.97				0
C(D) (Advertisements and Hoardings)	Rs 200 per connection per month		1215	-
LTP -1 (LT Power Industrial -1)				
0-300	Rs 300 per connection per month		340	
301-1000	Rs 300 per connection per month		465	
>1000	Rs 300 per connection per month		615	

Consumer Category and Consumption Slab (Units in kWh Slabs)	Fixed/ Demand Charge (Rs/connection/month OR Rs/kVA/month)	Energy Rate (Paise/kWh)	RkVAh Rate (Paise/ RkVAh)
RkVAh charges applicable for consumers above 3000 units per months consumption			
PF <0.92			270
0.92< PF <0.95			180
0.95< PF <0.97			120
PF >0.97			0
LTP-2 (LT Power Industrial - 2)			
All units	Rs. 300 per kVA per month	345	
PF <0.92			270
0.92< PF <0.95			180
0.95< PF <0.97			120
PF >0.97			0
SL (Street Lights)	Rs. 300 per kVA per month	360	-
E (Elec. Crematoriums)	Rs 100 per connection per month	195	-
T (Temporary)	Rs 250 per connection per occasion of supply	865	-
TS (R) (Temporary Supply for Public Religious Functions)	Rs 200 per connection per occasion of supply	215	-
HTP-1 (HT Power -1 Schools, Charitable/ Public Trusts)			
All units	Rs. 300 per kVA per month	270	
PF <0.92			270
0.92< PF <0.95			180
0.95< PF <0.97			120
PF >0.97			0
HTP-2 (HT Power Commercial -2)			
All units	Rs. 300 per kVA per month	435	
PF <0.92			270
0.92< PF <0.95			180
0.95< PF <0.97			120
PF >0.97			0
HTP-3 (HT Power Commercial -3)			

Consumer Category and Consumption Slab (Units in kWh Slabs)	Fixed/ Demand Charge (Rs/connection/month OR Rs/kVA/month)	Energy Rate (Paise/kWh)	RkVAh Rate (Paise/ RkVAh)
All units	Rs. 300 per kVA per month	360	
PF <0.92			270
0.92< PF <0.95			180
0.95< PF <0.97			120
PF >0.97			0
HTP-4 (HT Power Industrial -4)			
All units	Rs. 300 per kVA per month	270	
PF <0.92			270
0.92< PF <0.95			180
0.95< PF <0.97			120
PF >0.97			0
HTP-5 (HT Power Defence Bulk Supply - 5)			
All units	Rs. 100 per kVA per month	270	
PF <0.92			270
0.92< PF <0.95			180
0.95< PF <0.97			120
PF >0.97			0

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. Additional fixed charges of Rs. 100 per 10 kW or part thereof above sanctioned 10kW load shall be payable by consumers in LF-1 category.
3. In case of LF-2 (Non-residential cum Commercial) consumers and Temporary (T) connection consumers, additional fixed charge of Rs. 150 per 10 kW load or part thereof above 10 kW sanctioned load shall be payable.
4. Billing Demand: The Monthly Billing Demand, where applicable, for LT/ HT consumers will be the higher of the following:
    a. Actual established demand recorded in the month during the period of 0800 hours to 2400 hours;
    b. 75% of the highest billing demand or Contract Demand, whichever is lower, during the preceding eleven months;
    c. 50% of the Contract Demand as defined in the Supply Code.

    ("Contract Demand" means demand in kilowatt (kW) / kilovolt ampere (kVA), mutually agreed between BEST and the consumer as entered into in the agreement or agreed through other written communication).

5. Payment of Bills: Bills will be rendered monthly. The due date for the payment of a bill/s shall be mentioned on the bill and such due date shall be not less than twenty-one (21) days from the bill date, in accordance with the provisions of MERC (Electricity Supply Code and Other Conditions of Supply).

6. Prompt Payment Discount at the rate of 1% of the energy bill (excluding fixed/demand charges, FAC, Electricity Duty) for the HT and LT Industrial and Commercial categories, provided the payment of the bill is received by BEST within 7 (seven) days from the date of issue of the energy bill or within 5 (five) days from date of receipt of the energy bill, whichever is later.

7. Delayed Payment Charges: If the payment of the energy bill is not made within the time limit, as specified in Point 5 above, a one-time Delayed Payment Charge of 2% of the amount of monthly Electricity bill (excluding statutory levies) will be payable by the consumer.

8. The Rate of Interest chargeable on arrears will be as given below:

S. No.	**Delay in Months (Span of months)**	**Interest rate per annum (%)**
1	Payment after due date up to 3 months (0-3)	12%
2	Payment made after 3 months and before 6 months (3-6)	15%
3	Payment made after 6 months	18%

The interest will be payable from the second month after the due date of payment, on the amount of bill plus the one-time delayed payment charges.

9. Security Deposit: The Security Deposit payable by consumers shall be equal to the average of 3 months' of billing or of the billing cycle period, whichever is lesser. For determining the average billing for this purpose, the average of the billing to the consumer for the last 12 months or, in cases where supply has been provided for a shorter period, the average of the billing for such shorter period, shall be considered.

10. The electricity duty will be charged as per the Government notification from time to time. However, the rate and the reference number of the Government Resolution/ Order vide which it is made effective, shall be stated in the bill. A copy of the said Resolution/ Order shall be made available on the BEST website.

11. Residential LF-1 Tariff shall be applicable for Residential premises used by professionals like Lawyers, Doctors, Professional Engineers, Chartered Accountants, etc. in furtherance of their professional activity in their residences (but shall not include Nursing Homes and any Surgical Wards)

ORGANISATION OF THE ORDER

The Order of the Commission regarding the determination of tariff is broadly divided into three parts.

The **first part** of the Order, given in the previous pages, consists of a brief history of the tariff determination process and the subsequent quasi-judicial process undertaken by the Commission. It also gives the Operative Order and the tariff schedule. For the sake of convenience, a list of abbreviations with their expanded forms is appended at the end of this Part.

The **second part** of the Order lists out the various objections raised by the objectors in writing as well as during the Public Hearing before the Commission. They have been broadly categorized into eight issues. The various objections have been summarized, followed by the response of BEST and the rulings of the Commission on each of the points have also been given.

The **third part** of the Order comprises the Commission's analysis and its decisions on BEST's ARR and Tariff Petitions for FY 2004-05 and FY 2005-06. It enumerates the sales projections, expenses permitted by the Commission, and the tariff issues involved. The philosophy adopted by the Commission for determination of the tariff for various categories has also been discussed.

List of Abbreviations used in the Tariff Order

A&M	Amarchand & Mangaldas & Suresh A. Shroff & Co.
APDRP	Accelerated Power Development and Reforms Programme
ARR	Annual Revenue Requirement
AS	Accounting Standard
BE	Budget Estimates
BEST	Brihanmumbai Electric Supply & Transport Undertaking
BMC	Brihanmumbai Municipal Corporation
BSES	BSES Limited
BSSIA	Bombay Small Scale Industries Association
CAGR	Compounded Annual Growth Rate
CGRF	Consumer Grievances Redressal Forum
CIBS	Consumer Information and Billing System
Commission/ MERC	Maharashtra Electricity Regulatory Commission
Cr	Crore
DA	Dearness Allowance
EA 2003/ Act	Electricity Act, 2003
EIH	East India Hotels Ltd.
EMM	Ekta Mitra Mandal
ERC Act	Electricity Regulatory Commission Act, 1998
FAC	Fuel Adjustment Cost
FY	Financial Year
GFA	Gross Fixed Assets
GM	General Manager
GoI	Government of India
GoM	Government of Maharashtra
HT	High Tension
kVA	Kilo-Volt Ampere
kW	Kilo Watt
LT	Low Tension
MGP	Mumbai Grahak Panchayat
MMC	Mumbai Municipal Corporation
MMC Act	Mumbai Municipal Corporation Act, 1888
MSEB	Maharashtra State Electricity Board
MU	Million Units (MkWh)
PF	Power Factor
PRC	Pay Revision Committee
RE	Revised Estimates
REL	Reliance Energy Limited
RPO	Renewable Purchase Obligation
Rs.	Indian Rupees

T&D	Transmission and Distribution
TOD	Time of Day
ToSE	Tax on Sale of Electricity
TPC	The Tata Power Company Ltd.
VRS	Voluntary Retirement Scheme

PART II: OBJECTIONS RECEIVED, BEST's RESPONSE AND THE COMMISSION'S RULING

PART III: COMMISSION'S ANALYSIS AND DECISION ON BEST'S PETITION

PART II: OBJECTIONS RECEIVED, BEST's RESPONSE AND THE COMMISSION'S RULING

1. AUTHORITY OF THE BEST COMMITTEE TO DETERMINE TARIFF

1.1 Objection

The Mumbai Grahak Panchayat (MGP) has put in perspective the three constituents in the BEST's ARR process, viz. GM- BEST, Mumbai Municipal Corporation (MMC) and BEST Committee, and their jurisdiction in setting or altering the tariff. The BEST is operating under the MMC Act 1888. However, the Electricity Act, 2003 (EA 2003), which was notified on 10th June 2003, has an overriding effect as far as the electricity sector in India is concerned. MGP submitted that the three constituents in the BEST Undertaking's ARR process need to understand the following legal position with respect to the determination of Tariff under the provisions of the EA 2003:

- The authority to determine the tariff vests with the Regulatory Commission, and its power to do the same is absolute and final. The Supreme Court in *West Bengal Electricity Regulatory Commission v. CESC Ltd.*, [(2002) 8 SCC 715] has directed that the "*object of the (Electricity Regulatory Commissions Act, 1998) is to prevent discrimination in fixation of tariff by imposing cross-subsidy*" and "*consumers should be charged only for electricity consumed by them*." It must be noted that the principles of Section 29 of the ERC Act, 1998 has been restated in Section 61 of the EA 2003 and therefore the principle enunciated in the Supreme Court judgement, holds true for the EA 2003. Besides this, the Mumbai High Court in Case no. 1 of 2001 between Appellant MSEB and Respondents MERC, has remanded the matter to the Commission in respect of determination of Tariff.
- Once the Tariff Order is passed, the tariff becomes applicable immediately.
- There is no authority resting with GM- BEST, MMC and also BEST Committee to make any change, alteration, modification and non-implementation of the Tariff Order. However, any consumer and any of the three constituents can file a review petition as provided under MERC (Conduct of Business) Regulations, 2004, and also move the Appellate Tribunal by following due legal process.
- Non-implementation of Tariff Order will invoke Sections 142 and 146 of the EA 2003.

MGP has said that the moot question is whether the BEST will take a position that it is unable to implement the Tariff Order, as the BEST Committee or MMC is not approving or asking for a change in tariffs. Hence, MGP suggested that it would be advisable for BEST to apprise the three constituents about this legal position.

Subsequent to the Public Hearing, East India Hotels (EIH), represented by M/s Amarchand & Mangaldas & Suresh A. Shroff & Co. (A&M) has submitted a rejoinder with regard to the legal position that the Commission is to be guided by the Tariff Policy notified by the Ministry of Power, Government of India (GoI), in the discharge of its functions, which includes the determination of tariff. In this respect, it stated that; Section 3(1) of the Electricity Act, 2003 empowers the Central Government to formulate the Tariff Policy. Under Section 61(i) of the EA 2003, the State Commission, in specifying the terms and conditions for the determination of tariff, shall be guided by the National Electricity Policy and the Tariff Policy. Further, Section 86(4) of the EA 2003 states that in discharge of its functions, which includes the determination of tariff. Section 86(1)(a) states that the State Commission shall be guided by the National Electricity Policy, National Electricity Plan and Tariff Policy published under Section 3. Therefore, it has been submitted that the Commission, in approving BEST's tariff proposal, be guided by the EA 2003 and its provisions and the Tariff Policy.

1.2 BEST's Response

BEST has responded that Section 460 (I) of the MMC Act read with Section 62 of the EA 2003 makes the legal position very clear. The MGP has wrongly observed that there is a mismatch between the (i) GM- BEST, (ii) BEST Committee and (iii) MMC. Section 460(I) of the MMC Act provides that the proposal for tariff, which is put up by the GM- BEST, after being approved by the BEST Committee is put up for further sanction to the Municipal Corporation. Once this is approved by the Municipal Corporation, the same is implemented by the BEST. There is absolutely no mismatch between these three constituents i.e. the GM-BEST, BEST Committee and the MMC.

1.3 Commission's Ruling

In terms of Sections 62 and 64 of the Electricity Act, read with the MERC (Terms and Conditions of Tariff) Regulations, 2005, each licensee is obliged to file its calculations related to its licensed business for the ensuing financial year regarding (i) its expected aggregate revenue from charges under its currently approved tariff; (ii) its expected cost of service; and (iii) its expected revenue gap (if any) and a general explanation on how it proposes to deal with the revenue gap and the application for tariffs for the ensuing financial year.

Accordingly, the Brihan-Mumbai Electric Supply & Transport Undertaking (BEST), submitted its application for approval of Annual Revenue Requirement and Tariff Proposal for FY 2004-05 and FY 2005-06, under affidavit, in response to the Commission's Interim Order in Case No. 4 of 2004 dated 15th July 2004 and subsequent letter dated 29th September 2004 directing submission of ARR and Tariff proposal.

Section 86 (1) (a) read with Sections 61 and 62 of the EA 2003, empowers the Commission to prescribe terms and conditions of the tariff and to determine the tariff. In accordance with the above under section 86 read with other provisions of the EA 2003, the Commission has the regulatory control over BEST in regard to the tariff, the method of charging the tariff, and the conditions that may be imposed on BEST in regard to charging of tariff. This position is also supported by various decisions of the Supreme Court.

As regards the contention of Mumbai Grahak Panchayat (MGP) and as responded to by BEST, in view of the provisions of The Mumbai Municipal Corporation Act, 1888 (the "MMC Act"), the Commission holds that the levying of charges (as determined by the

Commission) for the supply of electrical energy by BEST is subject to the provisions of the EA 2003 and not the MMC Act. Therefore, the approval of the Mumbai Municipal Corporation is subject to the provisions of the EA 2003, which has effect notwithstanding anything inconsistent therewith contained in any other law for the time being in force or in any instrument having effect by virtue of any law other than the EA 2003 (except the Consumer Protection Act, 1986 or the Atomic Energy Act, 1962 or the Railways Act, 1989). Therefore, the process envisaged under Section 460-I of the MMC Act is really internal to the Brihan Mumbai Electric Supply and Transport Committee and the Mumbai Municipal Corporation and does not affect the tariffs determined by the Commission under the provisions of Section 86 (1) (a) read with section 61 and 62 of the EA 2003.

The EA 2003 does not provide any fetter on the jurisdiction and power of the Commission while dealing with BEST in respect of determination of tariffs. There is no exclusion provided to a "Local Authority" under Section 62 of the EA 2003 from tariff determination by the Commission. Therefore, there is no question of implying any fetter on the Commission's jurisdiction allegedly terming that approval is required from the Mumbai Municipal Corporation for levying charges for supply of electrical energy by BEST. It is therefore, clear that BEST is to be governed by the EA 2003 in respect of tariff determination and is not excluded from the same.

The Commission has determined the ARR for FY 2004-05 and tariffs for FY 2005-06 based on the filings of BEST and after considering the objections/suggestions received/heard from general public, on those filings, through this Order.

2. SUBSIDY AGAINST THE LOSSES OF THE TRANSPORT/ BUS DIVISION

2.1 Objection

With reference to the proposal of BEST that subsidy be granted against the losses of the transport/bus division, MGP, while conveying its objection, has submitted that BEST has been exempted from Section 51 of the EA 2003, which mandates that *"a distribution licensee shall maintain separate accounts for each such business undertaking to ensure that distribution neither subsidises in any way such business undertaking nor encumbers its distribution assets in any way to support such business:"*

MGP has drawn reference to Section 65 of the EA 2003, which states that, *"If the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the State Commission under section 62, the State Government shall, notwithstanding any direction which may be given under Section 108, pay, in advance and in such manner as may be specified, the amount to compensate the person affected by the grant of subsidy in the manner the State Commission may direct….."*

MGP has also drawn reference to Section 181(2) (j) which requires the State Commission to make Regulations, with respect to:

"Reduction and elimination *of surcharge and cross subsidies under second proviso to sub clause (ii) of clause (d) of sub-section (2) of sub section 39."*

MGP has stated that by the spirit of the EA 2003 there is no provision of cross-subsidy. The cross-subsidy has to be eliminated in the manner to be specified by the Commission and subsidy, if required, is to be paid by the State Government in advance. The National Tariff Policy also provides under Section 8.2.1 sub-section (3) that, *"Section 65 of the Act provides that no direction of the state government regarding grant of subsidy to consumers in the tariff determined by the State Commission shall be operative, if the payment on account of subsidy as decided by the State Commission is not made to the utilities and the tariff fixed by the State Commission shall be applicable from the date of issue of orders issued by the Commission in this regard."*

MGP has inferred that Section 51 of the EA 2003 may allow BEST to use the money earned from Electricity business for any other purpose. MGP has submitted that the said provision does not provide the mandate to earn money equal to subsidy required in Transport business through Electricity business.

MGP has suggested that the subsidy to transport division to the tune of about Rs. 200 crore cannot form a part of the ARR.

EIH has objected to the inclusion of the Cross-subsidy to the Transportation Business in the ARR. EIH has said that from the Petition, it is evident that BEST proposes to use a part of the income derived by it from the business of supply of electricity to subsidize the losses incurred by it in its transportation business. The MERC Regulations define Annual Revenue Requirement to mean the requirement of the Licensee for recovery, through tariffs, of allowable expenses and return on capital pertaining to his Licensed Business (the electricity distribution business of BEST Undertaking, in this context), in accordance with the MERC Regulations. EIH has submitted that losses incurred in other businesses of the Distribution Licensee is not one of the allowable components of ARR as per Regulation 69.1 of the MERC Regulations and BEST's policy of cross-subsidization across its different businesses has resulted in higher tariff for the consumers and that such cross-subsidization is unfair, arbitrary, and not permissible under the EA 2003 and the MERC Regulations.

EIH further submitted that one of the objects of the EA 2003 is to prevent discrimination among consumers by imposing the burden of cross subsidization on them. It has mentioned that in determining tariff, the Commission is guided by Section 61(g) of the EA 2003, which states that the tariff shall progressively reflect the cost of supply and also reduce and eliminate cross subsidy.

EIH further mentioned that under Section 61(b) of the EA 2003, tariff has to be determined on commercial principles and under Section 61(d) of the EA 2003, the Commission, in determining tariff, should hold the interest of the consumers as paramount. EIH mentioned that this is evident from the Statement of Object and Reasons of the EA 2003, which enshrines the principle that the EA 2003 is for "promoting competition" and "protecting the interests of consumers". EIH stated that continuation of cross subsidization would defeat the very purpose and object of the EA 2003. EIH further stated that the cross subsidization of the transport business of BEST in excess of Rs. 200 crore would result in its tariffs being fixed in an inefficient and uneconomical manner, contrary to Sections 61, 62, and 86 of the EA 2003, and the MERC Regulations.

EIH mentioned that BEST has stated in its Petition that being a Local Authority, it is exempted from the purview of Section 51 of the EA 2003 and can thus subsidize and support its transport business in public interest. EIH stated that though the third proviso to Section 51 excludes the application of that Section to BEST, it does not exempt it from the purview of the other provisions of the EA 2003.

EIH further mentioned that the third proviso to Section 51 does not exclude application of Sections 61(b), (c), (d) and (g) of the EA 2003, pursuant to which the Commission is required to eliminate cross subsidies.

In addition, EIH mentioned that though BEST may seek to rely upon the third proviso to Regulation 79.1 of the Maharashtra Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2005 which exempts local authorities from the purview of Regulation 79.1, the scope of Regulation 79.1 is limited to the requirement of Distribution Licensees engaged in other businesses to deduct one third of the revenues derived from other businesses from the ARR and hence does not assist BEST in justifying cross-subsidization of its transport business.

EIH also made a reference to Section 65 of the EA 2003, which requires the State Governments to pay in advance any amount of subsidies that such Government may want to be included in the tariff determined by the Commission to benefit any consumer or class of consumers. EIH mentioned that this also shows that the EA 2003 seeks an end to all forms of cross-subsidies and BEST’s interpretation of Section 51 is contrary to the object and purpose of the EA 2003. EIH stated that BEST, therefore, cannot rely upon either third proviso to Section 51 of the EA 2003 or third proviso to Regulation 79.1 of the MERC Regulations to justify continuance of cross-subsidization of its transport business. Hence, EIH has suggested that the amount of loss of the Transport Division should be excluded from the ARR of BEST Undertaking.

Subsequent to the Public Hearing, EIH submitted a rejoinder stating that there should be no exemption for local bodies. In this respect, it has submitted that the provisions of Section 61 of the EA 2003 are applicable for determination of BEST's tariff as the exemption contained in the proviso to Section 51 is limited in its application to Section 51. EIH drew attention to the Tariff Policy notified by the Ministry of Power, GoI stating that the Tariff Policy does not provide for any exemption to the determination of tariff of a Local Authority such as BEST. Hence, the Commission is to be guided by the Tariff Policy and the factors stated in Section 61 of EA 2003 for determination of BEST's tariff and the proviso to Section 51 has limited application.

Adv. S.S. Pawar (S.E.O.) objected that the losses of the Transport Division should not be made up through the surplus from the Electricity Division. He suggested that the profits generated from the Electricity Distribution business of the BEST should be used for the Distribution Division, and the losses of the Transport Division should be legally recovered from the MMC.

Ekta Mitra Mandal (Trust) Mumbai (EMM) objected to the profits of the Electricity Distribution Division of BEST Undertaking being used for taking care of the losses of the Transport Division. EMM suggested that the profits of the Electricity Division should be used for the Electricity Division only or for other profitable business. The losses of the Transport Division should be recovered from the MMC and in turn should be paid for by the Government.

2.2 BEST's Response

BEST submitted that in respect of subsidy to the Transport Division, Section 51 of the EA 2003 excludes a Local Authority, engaged before the commencement of EA 2003 in the business of distribution of electricity, from the provision of Section 51. A distribution licensee under Section 51 is permitted to engage in any other business for optimum utilization of its assets. BEST submitted that Section 51 of the EA 2003 provides that the revenues derived from such other business shall be utilized for reducing its charges of wheeling as specified by the State Commission. Section 51 further requires a Distribution Licensee to maintain separate accounts for each such business while ensuring that the distribution business neither subsidizes any such other business nor encumbers its distribution assets in any way to support such other business. BEST submitted that these provisions apply to non-local Authorities. BEST submitted that, BEST being a Local Authority, engaged in two Public services, viz., electricity and transport, is therefore exempted under Section 51 and is not bound by the restrictions imposed on non-Local Authorities.

BEST submitted in its response that there is nothing legally wrong in mentioning in the ARR the actual amounts transferred to the Transport Division, particularly when there is no legal handicap for such cross-subsidy. It would be a legally incorrect suggestion that Rs.200 crore cannot form a part of the ARR as even the EA 2003 makes no distinction between the two businesses of the Undertaking, which is a Local Authority.

BEST submitted that the provisions of Sections 65, 39(2)(d)(ii) or 181(j) of Electricity Act, 2003 would not strictly apply to a local Authority. They also submitted that BEST does not get any subsidy or any grant from the State Government.

2.3 Commission's Ruling

In the first instance, to fall within the meaning of the term "Local Authority" under sub-section (41) of Section 2 of the EA 2003, BEST should be "… *legally entitled to, or entrusted by the ……. State Government with, the control or management of any area or local fund*".

Section 460Z of the MMC Act stipulates that the BEST Fund shall be held by the Municipal Corporation of Brihan Mumbai in trust for BEST. Section 460AA stipulates that the General Manager of BEST shall always be subject to the general or special directions of the BEST Committee with respect to the BEST Fund. In view of the foregoing, can it be said that BEST is "*… legally entitled to, or entrusted ….. with, the control or management of ………..local fund*" so as to fall within the meaning of the definition of the term "Local Authority" under sub-section (41) of Section 2 of the EA 2003 ?

Even if it is to be assumed, without admitting that BEST is a "Local Authority" as defined in the EA 2003, will it be prudent to infer from the 3rd proviso to Section 51 that Section 51 does not apply in entirety to a Local Authority which is engaged before the commencement of the EA 2003 in the business of distribution of electricity? If such an inference is drawn, that would in the first instance restrict a Local Authority to engage in any other business for optimum utilisation of its assets. The thrust of Section 51 is that the "other business" should support the distribution business and not the other way round as sought for by BEST in its proposal.

To infer that the legislative intent behind Section 51 was that the distribution business of a "Local Authority" should subsidize and/or support any other business engaged in by the "Local Authority" for optimum utilisation of its assets would not only lead to absurdity and make the provisions of the EA 2003 nugatory but also create friction, contradiction and conflict with the provisions of Section 61(g) which makes it mandatory for the Commission, while determining the terms and conditions of tariff, to be guided by the following factor i.e., "*that the tariff progressively reflects the cost of supply of electricity and also, reduces and eliminates cross-subsidies within the period to be specified by the Commission*". It will also tend to defeat and destroy the basic scheme and purpose of the EA 2003, viz., "*An Act ……. generally for taking measures conducive to development of electricity industry…….protecting interest of consumers ……. rationalisation of electricity tariff, ensuring transparent policies regarding subsidies,……..*", enshrined in the preamble.

The inference that exemption from the requirements of Section 51 of the EA 2003 to BEST (if at all BEST can be termed a "Local Authority") allows BEST to pass on Rs. 200 crore for its transport business as expenses to be claimed as a revenue gap for determination of tariff, is incorrect and cannot be accepted. Therefore, the subsidy of approximately Rs. 231 Crore for FY 2004-05 and Rs. 140.3 crore for FY 2005-06, for the Transport Business of BEST Undertaking have not been considered as an expenditure in calculation of the ARR for the Electricity Business of BEST.

3. AVERAGE COST OF SUPPLY, PURCHASE COST AND AVERAGE EARNINGS BY BEST

3.1 Objection

MGP compared the average cost of supply, average power purchase price from TPC and average earnings by BEST. MGP suggested that BEST should not be allowed to charge 134 paise per unit as earnings, which are more than the average earnings of the BEST for the past 3 years from 2003 to 2005 at paise 122, 124 and 121, respectively, as shown in the Table below.

Table: Average Cost of Supply, Purchase Cost and Average Earnings (In Paise)

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Average cost of supply	433	428	457	442	395	408
Average purchase price from TPC	326	315	335	318	274	274
Average earning by BEST	107	113	122	124	121	134

Source: MGP's comments on BEST's ARR Proposal vide letter No. 642/05/ap, dated 12/11/05

3.2 BEST's Response

With respect to MGP's comments on the average purchase price from TPC for the year 2005-06, being 274 Paise per unit, BEST has clarified that it is not aware of the source of this information. As per BEST's calculations, and as seen in Form 15 of the ARR, this figure is 283 Paise per unit for 2005-06. Thus, the average earning by BEST works out to be 125 paise per unit and not 134 paise per unit as worked out by MGP. Further, this figure of 125 Paise per unit is marginally higher, i.e., only 1 paisa higher than that which was allowed in last 5 years, i.e., 124 Paise.

BEST has further submitted that the term 'average earning' by BEST, which works out to be the difference between average cost of supply and average power purchase price from TPC is inappropriate as it does not take into account distribution losses and revenue expenditure required to be made by the Undertaking for distribution of electricity supply from the point of purchase from TPC to the consumers' door step.

3.3 Commission's Ruling

The average purchase price figure for FY 2005-06 considered by the Commission is 283 paise per unit. The Commission directed BEST to submit actual figures for cost of power purchase for FY 2005-06 up to the latest month available. BEST subsequently submitted the month-wise details of actual energy purchase (MU) and cost of power purchased from April 2005 to December 2005, vide their letter dated 25th January 2006 and projections for January to March 2006 vide their letter dated 6th February 2006. The Commission has taken into account the actual power purchase figures from April 2005 to December 2005 and projections for January 2006 to March 2006 in the determination of ARR. The total Energy Purchased in MU and the Value of energy purchase from TPC for FY 2005-06 (P) as per this submission is given in the following Table:

Table: Energy Purchase from TPC in MU and Purchase Cost (in Rs. Cr.): 2005-06 (P)

Energy Purchased from TPC for FY 2005-06 (P) in MU	Cost of Purchase of Energy for FY 2005-06 (P) in Rs. Cr.
4164.27	1119.92

Source: BEST Additional data submittal dated 25/1/06 and 06/02/06

The Commission has undertaken a detailed analysis of the other expenses of BEST, which has been discussed in detail in Part III, and only prudent costs and Return on Equity have been considered by the Commission.

4. DISTRIBUTION LOSSES

4.1 Objection

MGP has objected to distribution losses proposed by BEST (at 12.5%) for the ARR Calculations for FY 2005-06.

MGP has put forth following points based on the analysis of the distribution losses of BEST Undertaking:

Table: Distribution losses

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Distribution loss %	10.4	11.19	12.24	12.76	10.78	12.5
Additional units sold over last year (MU)		40	139	69	148	79
Increase in losses (MU) over last year		37	57	33	80	89

Source: MGP's comments on BEST's ARR Proposal vide letter No. 642/05/ap, dated 12/11/05

MGP submitted that the BEST is capable of achieving lesser distribution loss, which is reflected in the above Table. MGP submitted that the above Table shows that as the sales of BEST has increased, so have the losses, which are approximately equal to the sales. Further, BEST has a better proportion of commercial consumption to residential consumption as compared to Reliance Energy Limited, which shows that the distribution losses in residential segment are higher than the commercial segment in case of BEST.

Hence, MGP has suggested that only 12% distribution loss should be allowed for BEST for FY 2005-06. MGP suggested that the BEST should bring down the distribution losses by 0.5% every year over a period of say 5 years to bring it down to 10%. The initial reduction in distribution losses can be achieved with the help of better management and capital addition may not be required.

MGP also mentioned during the Public Hearing that though the BEST feels that their losses are one of the lowest, it is interesting to note that Bangalore Distribution Company in two years time reduced the losses from 12 % to 9.5%. Bangalore City's consumer base (population) is approximately 90 lakhs. Hyderabad city has T&D losses of approximately 9.5 – 9.8% with a consumer base (population) of 70 lakhs. It is in line with this, that MGP expects BEST to reduce the losses by 0.5% this year, which is not unreasonable, as for an underground distribution system even 10% distribution losses are on the higher side. MGP has stated that it is expecting 0.5% reduction in T&D losses every year for 5 years. This will bring down the distribution losses to 10% at the end of 5 years.

Mr. A. R. Bapat has said that the BEST's area of electricity supply is compact and of high consumption density and yet the losses are 12.5%. Apparently, at least 3% of the distribution losses are commercial losses. Mr. Bapat has raised a question as to what is being done by BEST to reduce the distribution losses and the technical losses?

4.2 BEST's Response

With respect to MGP's comments on distribution losses, BEST has pointed out with regard to the additional units sold over last year for FY 2002-03, 139 MU has been mentioned, the source of which is not known to BEST. However, BEST has specified that as per Section 1.4.1, Table 3 of the ARR (dated 27th September 2005), this figure works out to 102 MU. Similarly, the increase in losses over the last year for FY 2004-05 have been indicated by MGP as 80 MU, whereas BEST's data shows that as per para no. 1.4.1 of the ARR, Table 3, – the losses have actually reduced by 68.5 MU.

In response to MGP's suggestion that BEST should bring down the loss at 0.5% every year over a period of 5 years, so that losses are brought down to 10%, BEST has mentioned that its distribution losses are one of the lowest amongst the distribution utilities in India. BEST has mentioned that for FY 2005-06, due to the change in billing procedures with effect from 1st April, 2005, 37 MU will be required to be accounted for in FY 2005-06 and due to this distribution losses are likely to exceed 12.5%. BEST has further mentioned that it is relatively easy to reduce the distribution losses when distribution losses are very high. However, when the distribution losses are one of the lowest, it becomes increasingly difficult to reduce losses further and therefore it calls for much more intensive efforts and capital inputs like better network design, better and more equipments and metering, etc. However, keeping up with its tradition, BEST will endeavour to reduce the losses further by better metering, better design and maintenance practices. BEST also mentioned that a positive and highly effective action towards this purpose is increasing the number of distribution substations which they are pursuing relentlessly.

In response to Mr. Bapat's point on high losses and commercial losses at 3%, BEST has mentioned that the exercise of segregation of distribution losses into technical loss and commercial loss is underway and the picture will be clear only after this exercise is over.

BEST also submitted a Road Map subsequently, giving the time frame for segregation of distribution losses into technical and commercial losses, and efforts and methods proposed to be taken for further reduction in distribution losses, vide their letter no. DO/GM/AM(ES)/277/2006 dated 3rd January 2006. In this letter, BEST has agreed to submit a report of the study being carried out on segregation of technical and commercial losses by 31st May 2006.

4.3 Commission's Ruling

For projecting the energy requirement, the Commission has considered the Distribution losses as given by BEST for FY 2004-05 as it is based on actuals (10.78%) and FY 2005-06 based on actuals for 9 months and estimates for next 3 months viz. January, February and March of 2006 (12.4%). The Commission has noted with reservation the explanation given by BEST that the increase in the figure of Distribution losses for FY 2005-06 is due to the change in accounting practice and billing procedure. The Commission has asked BEST to conduct a study for segregation of Technical and Commercial Losses and asked it to submit a report on the same by 31st May 2006. The Commission has also considered the sales units as provided by BEST for FY 2004-05 and FY 2005-06 as they are largely based on actuals. Thus, the energy requirement for BEST for FY 2004-05 is 3962.12 MU and for FY 2005-06 is 4164.27 MU.

Based on the above referred study report, the Commission intends to specify a road map with specific target for reduction of technical loss and elimination of commercial loss while considering the FY 2006-07 ARR Petition. The Commission directs BEST to reduce the distribution losses in a progressive manner. In this context, the Commission also directs BEST to put in place regular substation-wise energy accounting and audit and to submit the break-up of technical and commercial loses.

BEST should prepare a long-term plan for customer indexing and distribution transformer-wise energy accounting and submit the same for the consideration of the Commission.

5. THEFT OF ELECTRICITY

5.1 Objection

Mr. A.R. Bapat has raised a query as to how many thefts are detected yearly by BEST and what are the amounts recovered?

5.2 BEST's Response

The number of theft cases detected by BEST and amount recovered for previous five years is given in the Table below:

Table: Number of theft cases detected and amount recovered

Year	No. of detected			Amount recovered Rs. lakh		
	Tampered Meter	Direct Supply	Total	Tampered Meter	Direct Supply	Total
2000-01	152	96	248	114.30	21.22	135.52
2001-02	133	93	226	169.13	42.10	211.23
2002-03	176	66	242	209.19	19.85	229.04
2003-04	248	93	341	240.97	23.04	264.01
2004-05	291	92	383	246.48	41.50	287.98

Source: BEST's reply to comments of Mr. A.R. Bapat, Chartered Engineer, dated 16/12/2005

5.3 Commission's Ruling

While the Commission appreciates that the detection of number of thefts has been on the rise, this would affect the distribution losses. The Commission wishes to understand the Management Information System (MIS) and mechanism to detect thefts, through which the BEST's management can undertake the analysis. As envisaged under the EA 2003, the Commission directs BEST to make continuous efforts to reduce the number of thefts and also undertake more stringent/focused measures for recovery of amounts due, in order to check and control the theft of electricity. In this respect, the Commission directs BEST to submit progress details to the Commission every six months.

6. EXPENDITURE

6.1 Employee Expenditure

6.1.1 Objection

MGP objected to the employee expenditure of BEST, and stated that BEST is trying to project as to how it is working with lesser employees than the sanctioned strength. It gave a comparison of the employee expenditure amongst three utilities (in Mumbai), which are shown in the following table.

Table: Manpower Numbers

	Reliance Energy	MSEB Bhandup Zone	BEST
No of consumers in lakhs	24	12	9
Annual sale in MU	6350	7320	3535
Collection in Rs. (crore)	2400	2040	1400
Manpower in nos. (excluding outsourcing)	4800	2400	7788

Source: MGP's comments on BEST's ARR Proposal vide letter No. 642/05/ap, dated 12/11/05

MGP has also given a comparison of the manpower numbers of the three utilities including manpower required for outsourcing, in response to the explanation given by BEST Undertaking in its reply to it.

Table: Manpower Numbers (including outsourcing)

	Reliance Energy	**MSEB Bhandup Zone**	**BEST**
Manpower in nos. (including outsourcing)	6015	3162	7788

Note: The comparison of manpower (including outsourcing) was given by MGP during the Public Hearing Session

MGP has suggested that there should be reduction of 5% in the employee expenditure starting from this year, for the next three years. It has stated that even a giant utility like MSEB has controlled its manpower and hence the expenditure, thus, there can be no excuse for BEST.

MGP further suggested that BEST should be asked to study the Rajadhyakshya Committee report pertaining to Manpower planning and submit a concrete plan based on that to the Commission within three months.

6.1.2 BEST's Response

In response to the manpower comparison made by MGP, BEST Undertaking has stated that it is observed from the above table that the manpower numbers shown for BEST are higher than that for Reliance Energy and MSEB Bhandup Zone. It is the Undertaking's policy over the years that all activities of the Undertaking which includes labour intensive activities such as cable laying, fault location, testing of fault and repairs, meter reading and billing, bill delivery are necessarily being carried out in house and no out-sourcing is done in order to ensure the quality of workmanship and adherence to standards/norms which ultimately gets reflected in greater reliability and better consumer satisfaction which came to the fore during the deluge on 26th and 27th July, 2005 where BEST could meet all eventualities due to large pool of in-house experts and skilled manpower.

Moreover, BEST has stated that it has learnt that Reliance Energy Limited and MSEB Bhandup Zone are availing out-sourcing facilities for many of their activities, therefore, the overall manpower requirements may not get reflected in staff strength and therefore, quoting manpower figures 'out of context' may be misleading. However, BEST is open to review its manpower requirements and under the APDRP Project, a consultant is being appointed for study of manpower requirement.

In respect of the reference made to Rajadhyakshya Committee by MGP, BEST has stated that Rajadhyakshya Committee was appointed a long time ago and since then; there have been major changes in the power sector. However, BEST's consultants will be requested to refer to the Rajadhyakshya Committee's recommendations also, if considered necessary.

6.1.3 Commission's Ruling

For a more accurate comparison, there is a need to ascertain the extent of outsourcing undertaken by the other Utilities in Mumbai and its implication on overall expenditure and employee expenditure. The employee expenditure considered in FY 2004-05 and FY 2005-06, appears to be in line with past trends. However, the Commission notes that there is a scope for reduction in manpower expenditure. Hence, BEST must act in accordance with a manpower plan and reduce manpower expenditure progressively.

In view of the above, the Commission directs BEST to undertake a review of its manpower requirement through an independent study using norms of not only the adjoining and similar utilities but also using national and international benchmarks. The Commission notes from the response of BEST to MGP (Vide letter no. MERC/ARR & TARIFF/322/2005, dated 01/12/2005), that it is in the process of appointing a consultant. BEST must submit within 6 months from the date of this Order, an action plan for manpower expenditure reduction based on the recommendations made by the consultant appointed.

6.2 Regulatory Asset (due to PRC Impact)

6.2.1 Objection

Mr. A.R. Bapat has raised a point regarding the creation of regulatory asset. The Pay Revision Committee (PRC) recommendation of Rs. 350 Crore includes Rs. 46 Crore for electricity supply division. Mr. A.R.Bapat has enquired about the mechanism, which is used to ensure that only the PRC impact of the electricity division is considered in the ARR calculation.

6.2.2 BEST's Response

BEST has proposed that the impact of the PRC recommendations for the period from FY 2001-02 till FY 2005-06, net of interim relief paid/ to be paid for FY 2004-05 and FY 2005-06 (which amounts to Rs.282.59 Crore), be treated distinctly as "Regulatory Asset" for recovering from consumers in future years in a phased manner. This will prevent a tariff shock to the consumers, which would otherwise happen in case of recovery of the whole amount in one single year.

BEST has submitted that it does not wish to burden the consumers with such a huge increase in tariffs, to recover this entire shortfall in one instance. BEST's intention is to minimize the rate shock to consumers and to maintain a smooth tariff trajectory to recover the cost.

BEST has stated that the treatment of the amount as "Regulatory Asset" has the following advantages:

§ BEST's consumers would not be subjected to a tariff shock as a result of loading the entire shortfall in revenue requirement during previous years in one single year.

§ The concept of regulatory asset has several precedents both internationally as well as within the country.

6.2.3 Commission's Ruling

As per the National Tariff Policy published by the Ministry of Power in the Gazette of India on 6th January 2006, regulatory asset should be created only as an exception and subject to the guidelines given in the subsections (a) to (e) of section 8.2.2 of the National Tariff Policy. The Commission is of the view that only the impact of the PRC on the electric supply division should be considered in the computation of the ARR. The impact of the PRC on the electric supply division amounts to Rs. 67.28 Cr. (as given in the additional data submitted by BEST Undertaking vide their letter dated 25th January 2006), and only this amount is allowed whilst computing the ARR. The impact of PRC on the ARR computation is subsequently discussed in Part III of the Order. There is no need to create a Regulatory Asset for the PRC impact for the electricity supply division, given the National Tariff Policy guidelines and the relatively smaller quantum involved. Reference is also drawn to the observation of the Honourable High Court of Mumbai in Case no. 1 of 2001 between Appellant MSEB and Respondents MERC, where the Honourable High Court has allowed creation of a one time regulatory asset in respect of Tariff fixed for 2001. The High Court has also stated in this order in this respect that *"We agree with the Commission that Regulatory Asset should be created only as an exception. ….We make it clear that this direction of our directing the Commission to consider the creation of a one time Regulatory Asset would not and should not be taken as a precedent for future years."*

6.3 Depreciation and Additional Depreciation

6.3.1 Objection

MGP has raised an objection with respect to the proposed capital expenditure by BEST, as the Commission has still not approved the same. MGP has said that the capital expenditure proposed by BEST in FY 2005-06, is much higher than the trend in the past.

MGP has suggested that at this moment of time depreciation and additional depreciation (for 2005-06) should be equal to past years' figures. As and when the Commission approves capital expenditure, the same should be calculated, and it should be adjusted at the year end, through a truing up mechanism.

MGP has further raised an objection during the Public Hearing regarding additional depreciation being allowed, on the grounds that one cannot depreciate an asset beyond the cost of the asset.

6.3.2 BEST's Response

BEST has drawn attention to the point that it has revised its capital expenditure projected for FY 2005-06 from around Rs. 167 crore to Rs. 122 crore. Subsequent to the technical validation session conducted by MERC, the projected capital expenditure of Rs. 122 crore has been arrived at by BEST through a series of meetings at various levels within BEST. Historical analysis suggests that there is no significant variation between actual and projected depreciation and additional depreciation expenditure. As per BEST, the following table for last three years validates the above analysis.

Table: Depreciation (Rs. Crore)

Financial year	Revised Budget Estimate	Actual	Difference
2002-2003	47.62	47.74	+ 0.12
2003-2004	51.23	52.05	+0.82
2004-2005	55.22	55.41	+ 0.19

Source: BEST's reply to comments of MGP on ARR, dated 01/12/2005

Therefore, the BEST Undertaking has taken revised figures for depreciation and additional depreciation for the ARR of FY 2005-06.

6.3.3 Commission's Ruling

The capital expenditure proposed by BEST for FY 2005-06, amounting to Rs. 122 crore, is high in comparison to the past trends. Hence, the capital expenditure for FY 2005-06 has been estimated based on the budget and actual capital expenditure incurred in 2005-06 till date (discussed separately in Part III of the Order).

In principle, an asset can be depreciated only up to the cost of the asset. Further, as per the Section 76.4.1 of the MERC (Terms and Conditions of Tariff) Regulations 2005, the residual value of the asset shall be considered at 10% of the allowable capital cost, and depreciation shall be allowed up to a maximum of 90 per cent of the allowable capital cost of the asset. Additional depreciation has therefore, not been taken into account in the ARR computation, as it is not a component of ARR as per the MERC (Terms and Conditions of Tariff) Regulations, 2005.

6.4 Other Expenses

6.4.1 Objection

MGP has objected to the increase sought in 'Other Expenses' for FY 2005-06 over the actual level of 'Other Expenses' in FY 2004-05. It has carried out an expenditure head-wise comparison of the budgeted 'Other Expenses' in FY 2005-06 over FY 2004-05, as given in the following table.

Table: Select 'Other Expenses'

Particulars	Actuals 2005 (Rs. '000)	Budget 2006 (Rs. '000)	Factor of increase
Stationery, printing	3309	4703	1.42
Clothing	2271	2870	1.26
Advertisement	1174	1450	1.23

Particulars	**Actuals 2005 (Rs. '000)**	**Budget 2006 (Rs. '000)**	**Factor of increase**
Law charges	1309	2500	1.90
Materials including buses	478	2695	5.63
Stock adjustment	138	1100	7.97
Dead stock	527	1437	2.72
Receiving & Distribution sub-station	34577	64437	1.86
Mains and aerial mains	60969	110780	1.81
Misc. & general expenses	14071	23328	1.65

Source: MGP's comments on BEST's ARR Proposal, vide letter no. 642/05/ap, dated 12/11/05

MGP has said that it can be seen from the above Table that Other expenses projected for FY 2005-06 are increasing at a rate between 1.23 times to 8 times the actual level in 2005 and that there should be a ceiling on the increase.

6.4.2 BEST's Response

BEST's comments on expenses are as follows:

§ For all 'A' category expenses, BEST has taken revised estimates while projecting the ARR for FY 2005-06. For e.g. Capital Expenditure.

§ Further, majority of the expenses have been projected in line with past trends, and therefore there may not be a wide variation between budgets and actuals.

§ In respect of the expenses as mentioned by MGP, it is observed that the revised estimates are much lower than budged figures except stock adjustment, dead stock and miscellaneous and general expenses. The increase in all other expenses are ranging from 0.08% to 47% after taking into account revised estimates. Regarding stock adjustment, the trend in earlier years i.e. 2001-02 and 2003-04, the provision proposed in 2005-06 (RE) is quite comparable. Actually, in FY 2004-05, the expenditure has been booked on the lower side. In case of dead stock, the increasing expenses are based on the trend observed in the last six months of FY 2005-06 of all various supply departments. Similarly, in case of miscellaneous and general expenses, the annual technical support on TSP and Planning and Institutional Research expenses have been included in miscellaneous and general expenses for the first time, while preparing the 2005-06 (RE) Budget Estimates.

§ Moreover, even if the RE estimates for the above expenses are considered, it will have a negligible impact on the ARR.

6.4.3 Commission's Ruling

The Commission is of the view that the expenses in future years should be in line with past trends. Hence, the Commission has computed the other expenses in FY 2005-06 based on the past trends (over the past 5 years from 2000-01 to 2004-05).

6.5 Expenses on Electric Energy for 'Lighting & Power' and on 'Street Lighting'

6.5.1 Objection

MGP has said that street lighting is the legal responsibility of the Municipal Corporation. All over Maharashtra, where the Corporation and Electricity distributors are different, the Corporation pays from its revenue to the Electricity Utility. MGP has objected that the BEST expects Rs. 4.5 crore from electricity consumers, towards this obligation of the Municipal Corporation.

MGP has suggested that the energy charges towards lighting and power (which are shown as a part of 'Other Costs' in Appendix 5 of the ARR submittal dated 27th September 2005) should be disallowed as an expense.

Subsequently, MGP has mentioned during the Public Hearing that if the street lights are metered and charged to the Corporation, then in that case it cannot form a separate head. It will from a part of the money recovered as well as sale of metered units.

6.5.2 BEST's Response

BEST has responded that the observation made by MGP is not clear. BEST has clarified that MCGM pays energy charges for the street lighting to BEST as per the prevalent tariff schedule. In this context, the suggestion that energy charges towards lighting and power should be disallowed is not understood as MCGM is treated as any other consumer of electricity and there is no reason why it should be exempted for payment of electric bills.

Subsequently in reply to the directive for clarification on these two items of Expenditure, BEST in its reply under letter no. DO/GM/AGM(ES)/7141/ 2006 dated 25th January 2006, has stated that the cost head for 'Street Lighting' pertains to expenditure towards materials for street lighting for repairs/and replacement of fixture of lamps and the cost head "Electric energy for Lighting and power" is meant for own consumption for the Offices of Electric Supply Division with share of General Administration Offices.

6.5.3 Commission's Ruling

The Commission asked BEST for clarifications on these expense heads. BEST has replied that the cost head for 'Street Lighting' pertains to expenditure towards materials for street lighting for repairs/and replacement of fixture of lamps and the cost head "Electric energy for Lighting and power" is meant for own consumption for the Offices of Electric Supply Division with share of General Administration Offices.

The Commission has therefore considered the expenses on 'Street Lighting' and 'Electric Energy for lighting and power' in the computation of the ARR.

6.6 Expenses on Consumer Advisory Services

6.6.1 Objection

MGP has objected to BEST claiming expenditure of Rs. 5 lakh towards 'Consumer Advisory Services'. The CGRF has been constituted and the members of CGRF are not employees of BEST. The office expenses and remuneration to CGRF members must be paid for by consumers, so that their independence in judicial process remains intact.

There has been a paradigm change in supply code, conditions of supply and various other issues. Consumers need to be educated under the supervision of the Commission. Also, at no moment of time BEST employees should point out that they are the ones who are supporting this activity.

MGP has suggested that there should be a separate expense head for CGRF as well as consumer education. This should be clearly and separately shown in the ARR. Consumer education should be under the guidance of the Commission. For this financial year, CGRF capital expenditure should be approximately Rs. 10 lakh plus revenue expenditure of Rs. 10 lakh. Also, there should be a revenue expenditure of Rs. 10 lakh per year in the subsequent years. Consumer education expenditure should be approximately Rs. 25 lakh per year.

6.6.2 BEST's Response

In this context, BEST has mentioned that the establishment of present CGRF in the BEST Undertaking, expenditure for infrastructure provided for CGRF and remuneration of Chairman and member of CGRF, are in accordance with the relevant Regulations of MERC and it is felt that it in no way compromises its independence.

BEST has stated that that there appears to be some confusion in the context of expenditure of Rs. 5 lakh on consumer advisory services. BEST has an establishment under the head 'Consumer Advisory Services' which came into existence long back for educating and encouraging public to use electricity more during the early days of introduction of electricity in India, however, this establishment now undertakes work of installation and maintenance of air-conditioning systems, water coolers, refrigerators of BEST. However, the suggestion of MGP is well taken and BEST will consider the suggestion for making budget provision for Consumer Advisory Services separately for consumer education and awareness besides expenditure for CGRF.

6.6.3 Commission's Ruling

BEST should provide for a separate expense head for CGRF as well as Consumer Education and the same will be considered in the subsequent ARR and Tariff determination process. BEST has clarified that although the name of this expenditure head is 'Consumer Advisory

Services', this establishment now undertakes work of installation and maintenance of air-conditioning systems, water coolers, refrigerators of the Undertaking.

6.7 Interest on Internal Funds

6.7.1 Objection

EIH has objected to the expense claimed on account of 'Interest on Internal Funds' being included in the ARR. BEST in its Petition has stated that its funding is mainly done through internal resources of the BEST. In the ARR, BEST has pleaded that the interest of 7% on internal funding should be allowed as an eligible expense for calculating tariff. EIH has further stated that under Section 76.3.1 of the MERC Regulations, the Distribution Licensee is allowed to charge an interest only on loan capital, which should be restricted to borrowings from external lenders and cannot include internal funding arrangements. EIH has submitted that the rationale behind allowing interest on loan capital is to allow the licensee to pass on the cost of funds borrowed for the purposes of carrying on the business of supply of electricity to the consumers. EIH has pointed out that BEST has contended that since it does not have an equity base and consequently, cannot claim any return on equity, which is allowed under the MERC Regulations, it should be allowed to claim interest on internal funds to mirror return on equity. EIH submitted that return on equity represents the cost of funds arranged by a distribution licensee for its business and since BEST is not incurring any cost in raising internal funds, there is no reason to allow BEST to charge interest on internal funds and such interest charges are not in the interest of consumers and in any event it is not permitted under Regulation 76.3.1 of the MERC Regulations. Hence, EIH has suggested that interest on internal funds should be excluded from the ARR.

6.7.2 BEST's Response

BEST has referred to Regulation 2.1(a) of the MERC (Terms and Conditions of Tariff) Regulations 2005, which exempts a "Local Authority" under the proviso contained therein from maintaining accounting statements as per the Companies Act, 1956 and Accounting Standards of the Institute of Chartered Accountants of India. The proviso reads as under:

"…provided that in case of any local authority engaged in the business of the distribution of electricity, the accounting statement shall mean the items, as mentioned above, prepared and maintained in accordance with the relevant Acts or Statues as applicable to such local authority"

Taking this provision into account, BEST has submitted that it is not governed by the Companies Act, 1956, and there is no equity. BEST has submitted that the funding is mainly done through internal sources with the approval of BEST Committee and Corporation as per the Section 460 (II) of MMC Act, 1888. In the ARR at Section 5.2.8, calculation is given to estimate return under the various options and it is observed that the present method (i.e. interest on internal funds) is more beneficial to the consumers. BEST has also explained in Annexure B of the ARR, how the interest on internal fund is a legitimate cost for BEST. The said system was started on the basis of financial consultancy report of M/s. Ghatalia & Cooper. As such, Regulation 76.3.1 of MERC is not applicable to the BEST Undertaking. In the ARR interest/return claim at 7% as per MMC Act, 1888, which is lower than the prescribed return on equity as well as the current interest rate regime in the country. In view of this, BEST, which is a not for profit organization with a social cause, has pleaded that return on internal funds be permitted and included in the ARR.

BEST has stated that the ARR Petition also provides comparison of various approaches other than internal funds namely, normative debt-equity as per the MERC guidelines and Schedule VI of Electricity (Supply) Act, 1948. A comparison of the various approaches for arriving at return on regulatory equity reveals that the interest on internal funds as proposed by BEST is the least cost proposition of all the methods and is most beneficial to the consumers, as given below:

Table: Alternative approaches for computing Return (Rs. Crore)

Approach	Return/Interest applicable	Interest/Return claimed in 2003-04	Interest/Return claimed in 2004-05
Internal Funds	7%	46.42	70.82
Schedule VI of the Electricity (Supply) Act 1948	17%	79.08	88.21
MERC Tariff Regulations	16%	120.45	118.75

Note: The computations of Return/ Interest are as per the data submission made by BEST dated 25.01.2006

6.7.3 Commission's Ruling

For the purpose of ARR computation, the Commission has followed the guidelines as laid down in the MERC (Terms and Conditions of Tariff) Regulations 2005, for computation of Return on notional equity capital and the interest on borrowed funds, details of which are provided subsequently in Part III of this Order.

As regards the contention that BEST is exempted from the requirement to maintain accounting statements as per the Companies Act, 1956 and Accounting Standards of the Institute of Chartered Accountants of India based on the proviso to Regulation 2.1(a) of the MERC (Terms and Conditions of Tariff) Regulations 2005, the said proviso is not intended to serve as an exemption but is in amplification of or in addition to the specific requirements of the said Regulation 2.1(a) so as to enable the Commission to obtain information in such form as may be stipulated by the Commission from time to time, together with the Accounting Statements, extracts of books of account and such other details as the Commission may require to assess the aggregate revenue requirement and expected revenue from tariff and charges.

6.8 Mechanism for allocation of Interest only on the funds used for the Electricity Division vis-à-vis that used for Transport Division

6.8.1 Objection

Mr. A.R. Bapat questioned the mechanism for ensuring that interest only on funds used for electric supply schemes is included in the ARR.

6.8.2 BEST's Response

BEST has stated that the methodology of computing interest on internal funds is given in Annexure "B" of the ARR. The detailed calculations in respect of interest on internal funds charged to Supply division is given in Form 2 in the ARR and Tariff Proposal. Up to FY 2003-04, the interest on internal funds was charged equally to Supply and Transport division. Thereafter, this method was revised from FY 2004-05 and now it is charged on the basis of asset values of each division. In the budget, the provision for this purpose is made on above basis and same is first charged to Revenue accounts of Electric Supply branch. Further, record of interest on loan for electric supply division is separately maintained in the books of accounts.

6.8.3 Commission's Ruling

The Commission has not taken into consideration the method of computation of interest on internal funds while computing the ARR. Instead, the Commission has computed the Return on Notional Equity for BEST Undertaking, as per the MERC (Terms and Conditions of Tariff) Regulations, 2005. (Elaborated in Part III of the Order). The other loans against the electric supply division have been considered for computing interest on loans.

6.9 Return on Capital Base

6.9.1 Objection

MGP has objected that BEST has been all along calculating returns on its capital base at approximately 6% as mandated in the MMC Act. However, Government of India allows 16% return on its capital base. It would be advisable that the BEST recalculates these returns, which will be much higher though not comparable with cross subsidy they had envisaged.

MGP has also mentioned that in the case of TPC and REL, the methodology for determining capital base has already been established. Hence, the same methodology should be used for arriving at BEST's notional capital base.

6.9.2 BEST's Response

BEST has clarified that there is no stipulation in MMC Act about calculating returns. Method of calculation adopted now is as proposed by the BEST Committee and Corporation. More importantly in ARR at Section 5.2.8 an elaborate calculation is given to estimate returns under various options and it is observed that present method (i.e. interest on internal funds) is more beneficial to the consumers. Further as per the MERC (Terms & Conditions of Tariff) Regulations 2005 under Regulation No. 2.1(a) i.e. "Accounting Statements" it states that *"Provided that in case of any local authority engaged in the business of distribution of electricity, the Accounting Statement shall mean the items, as mentioned above i.e. at 2.1(a)(i to v), prepared and maintained in accordance with the relevant Acts or Statutes as applicable to such local authority"*

Taking into account this provision, BEST Undertaking is not governed by the Companies Act, 1956 and does not have an equity base. The funding is done through internal sources, as such recalculation of these returns will not be applicable in the light of above provisions.

6.9.3 Commission's Ruling

The Commission had asked BEST to calculate the return on its electricity business in line with Schedule VI of the Electricity (Supply) Act, 1948, in addition to the calculation of return as per the MERC (Terms and Conditions of Tariff) Regulations 2005 for the purpose of comparison.

As per the MERC (Terms and Conditions of Tariff) Regulation 2005, Return on equity capital is one of the components of ARR. As BEST is an Undertaking of the MMC and not a Company, it does not have 'equity capital'. For the purpose of ARR computation, the Commission has followed the guidelines and computed the Return on notional equity capital. For this purpose, MERC has computed the opening equity base and computed equity capital in the future years as per the MERC (Terms and Conditions of Tariff) Regulations, 2005 (elaborated in Part III of this Order).

The Commission has also kept in mind, the manner of computation of returns in case of TPC and REL in the earlier years, while computing the Returns for BEST. The Commission wants to bring in uniformity, in the method for determination of Return on equity capital for the licensees in the State as per the MERC (Terms and Conditions of Tariff) Regulations, 2005.

S.62 (2) of the EA 2003 also empowers the Commission to direct the licensees to maintain the accounts in a specified manner, as stated below:

"The Appropriate Commission may require a licensee or a generating Company to furnish separate details, as may be specified in respect of generation, transmission and distribution for determination of tariff."

From the Accounting perspective, the Commission directs that BEST Undertaking should maintain proforma accounts for its electricity business separately from FY 2006-07 in the form/formats as applicable to entities under the Companies' Act, 1956. This would be in addition to the maintenance of accounts for BEST as a whole as per MMC Act 1888. This will also bring in transparency and comparability of BEST's financial position in respect of its electricity business with other licensees in the Mumbai region/State.

7. TARIFF RELATED ISSUES

7.1 Reduction and Elimination of Cross-Subsidy across Consumer categories

7.1.1 Objection

EIH has objected to the levels of cross-subsidy across the various consumer categories as per the present tariff of BEST. It has pointed out that the Petition filed by BEST also reveals that it is cross-subsidizing its residential consumers with revenues derived from its commercial and industrial consumers. As per EIH, in the present case, by maintaining its existing tariff schedule, BEST has made no effort to phase out cross-subsidies. Section 61(g) of the EA 2003 requires (i) a reduction of cross-subsidies and (ii) a plan for elimination of cross-subsidies. As per EIH, the ARR filing of BEST does not make any reduction in cross subsidies and does not provide a plan for their elimination of cross subsidies both of which are required to be complied with. In view of the aforesaid, EIH has requested the Commission to rationalize BEST's tariff structure for 2005-06 by reducing the cross-subsidies appropriately. EIH has further requested the Commission to fix a reasonable timeframe, not later than three years from the date of approval of the ARR, for removal/ elimination of all forms of cross-subsidies. Considering that the Commission has been performing its functions since the enactment of the ERC Act, 1998, and the EA 2003 has been in force since 2003, even grant of three years from the date of approval of ARR would effectively give BEST a period of around ten years (since the enactment of ERC Act, 1998) to remove all cross subsidies.

Subsequent to the Public hearing, EIH submitted a rejoinder drawing attention to the National Tariff Policy, which states that for *"achieving the objective that the tariff progressively reflects the cost of supply of electricity, the SERC would notify roadmap within six months with a target that latest by the end of year 2010-11 tariffs are within +/- 20% of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross-subsidy [Tariff Policy, 8.3.3]"*.

Mr. A. R. Bapat has stated that Section 61(g) of the EA 2003, requires tariff to "reflect cost of electricity supply" and also "eliminate cross subsidies". Mr. Bapat has enquired about the efforts taken by BEST in this connection.

7.1.2 BEST's Response

BEST has replied that it is to be borne in mind that BEST is a Public Undertaking and a Local Authority under the B.M.C. Act. BEST caters to two Public Utilities of Transport and Electric Supply in public interest. The transport is one of the most efficient services in the whole country and possibly in the whole of Asia. The benefits of the transport business are utilized not only by the passengers who travel in the area of supply of the distribution licensee but also beyond in the extended suburb up to Bhayander to Dahisar including Vashi, New Mumbai, Bhandup and Mulund. Although, it is true that the commercial consumers do subsidize the residential consumers in the area of supply of the BEST, the rationalization of tariff even as per the EA 2003 ought not to impose a tariff shock on the residential consumers. It is for this purpose that the EA 2003 has contemplated a gradual reduction and finally elimination of such cross-subsides.

BEST has pointed out the difference between the Public Undertaking and the other distribution licensees like REL and TPC is that large profits are earned by the private companies and profits are often ploughed back for infrastructural use and development. In a Public Undertaking, however, the profits are reaped by the passengers traveling in the BEST buses beyond its area of supply and which is a public cause and for public convenience and safety, which is permitted under the provisions of the EA 2003.

The last tariff that was approved by the BEST Committee has been placed before the Commission for approval, since the legal provision is that after the tariff is approved by the Committee and Corporation, the same has to be submitted to the State Commission for final approval.

BEST has clarified that if in the process of rationalization the tariff is marginally modified by the Commission, the Undertaking would in utmost deference to the orders passed by the Commission; accept the Tariff Order so determined by the Commission.

With regard to Mr. Bapat's comments, BEST has clarified that the cost to serve of Rs. 4.00/- per kWh consists of purchase cost and expenditure for distribution of electric supply, whereas the revenue variation between Rs. 1.8 to 4.9 per kWh is in respect of revenue realization per unit for residential and commercial respectively.

The electricity tariff of the Undertaking was last revised in 1997. BEST had proposed to rationalize its tariff structure (categories, slabs and rates) in the original ARR submitted vide letter dated 30th November 2004 which was subsequently rejected by the BEST Committee in their meeting held on 28th January 2005. Therefore, the revised ARR Petition does not include any tariff rationalization proposal. BEST has stated that the implementation of the suggestion in respect of elimination of cross subsidies depends on the tariff that would be approved by the Commission.

7.1.3 Commission's Ruling

The Commission has designed the tariff structure with the aim of gradual reduction in cross subsidies, while at the same time, ensuring that there is no tariff shock for any consumer category, which is discussed subsequently in Part III of this Order.

7.2 Level of Tariff for Commercial Establishments

7.2.1 Objection

EIH has objected that the current tariff charged by BEST to the Oberoi is approximately 50% more (over the last few years) than the tariff charged by REL, to similar hotels within its distribution zone. As BEST is the sole licensee to supply electricity in the zone of Greater Mumbai in which EIH is situated and due to the monopoly in supply of power enjoyed by BEST, EIH is forced to purchase electricity at the arbitrary, unduly excessive and unjustifiable rates at which the BEST is currently supplying electricity. Therefore, EIH has requested the Commission to kindly re-determine the tariff on the basis of submissions made by it and the EA 2003 and the MERC (Terms and Conditions of Tariff) Regulations, 2005.

7.2.2 BEST's Response

BEST has carried out the comparison of the actual tariff billing for EIH for electricity supply for the month of September 2005 and October 2005 by BEST Undertaking and compared the same with that of REL. It has stated that it is seen from the comparison tables for the months of September 2005 and October 2005, that the bill amount of REL is less than the bill amount of BEST, only in the range of 15% to 25% (depending upon the power factor maintained) and not 50% as mentioned by EIH.

7.2.3 Commission's Ruling

The Commission has taken into account the tariff for Commercial Establishments by other utilities in the State, while determining the tariff for Commercial establishments by BEST. However, in order to avoid a tariff shock to any consumer category, the Commission has followed a phased approach to reduction of cross subsidy.

7.3 Fixed Charges

7.3.1 Objection

MGP has suggested that the Tariff should be a 'two part tariff'. MGP has represented that the EA 2003 allows two part tariff and the whole of Maharashtra except BEST has got two part tariff. As per MGP, presently, disallowing money transfer to Transport division, the fixed cost of BEST is approximately 20% of the ARR, and almost all the utilities have higher fixed cost than BEST.

MGP has suggested that the fixed cost should be charged from all the consumers approximately to the tune of 20%.

7.3.2 BEST's Response

BEST has mentioned that in their existing tariff schedule, consumers who have contracted for demand are charged a two-part tariff, i.e., charges for MD per kVA and energy charges. To the remaining category of consumers, only energy charges are levied. BEST has clarified that levy of two-part will depend on the tariff that would be approved by the Commission.

7.3.3 Commission's Ruling

The Commission has introduced two-part tariff for all consumer categories in line with the philosophy adopted for other licensees in the State, as detailed subsequently in Part III of this Order.

7.4 Tariff based on Sanctioned Load

7.4.1 Objection

MGP has suggested that the tariff should be based on the sanctioned load and not connected load. The sanctioned load violation, if any, should be measured by a meter. There should be penal tariff charges for the portion by which consumer exceeds the sanctioned load.

7.4.2 BEST's Response

In response to the suggestion that the tariff should be based on sanctioned load and not on connected load, BEST has specified that this requires the meters to be static meters and it will involve replacement of existing conventional meters by static meters on a very large scale. It would, therefore, be necessary to decide the criteria of kW and consumption, above which the tariff is to be based on the sanctioned load. It will also be necessary to have a time frame for replacement of meters in a phased manner and associated study will have to be conducted.

7.4.3 Commission's Ruling

The Commission has noted the issue of static meters raised by BEST. The Commission has introduced a two-part tariff for all consumer categories, as detailed in Part III of the Order.

In case of Residential LF-1, Non-residential cum Commercial LF-2 and LTP-1 category, the connected load data is not easily verifiable; hence the Commission has determined the fixed charges for these categories in terms of Rs./connection/month.

7.5 Categorization of Consumers in present tariff structure

7.5.1 Objection

MGP has objected to the consumer categorization in the present tariff structure of BEST. MGP has stated that broadly there are 3 categories of consumers, viz. residential, industrial and commercial for other Utilities. Industrial consumers pay approximately 1.22 times average cost and commercial consumers pay approximately 1.26 times average cost.

MGP suggested that as the grouping done for residential, commercial and industrial categories has been enforced in Maharashtra for MSEB for approximately 5 years and for REL for about 1 ½ years, and the same has been well accepted, hence, the same structure should be used in case of BEST. MGP has suggested that the number of categories that BEST is showing should be reduced, and should be in line with the tariff structure applicable for MSEB and REL.

MGP has also said that even the factor whereby utility charges more than average cost of power should be limited to say 1.25. But, under no circumstances it can be two in some consumer category as it is appearing in the case of BEST.

7.5.2 BEST's Response

BEST has mentioned that the implementation of suggestions of MGP mentioned above, depend on the tariff that would be approved by the Commission.

7.5.3 Commission's Ruling

The Commission has taken into consideration the aspect of uniformity in tariffs in the State, in the tariff design for BEST. The tariff philosophy adopted by the Commission is detailed subsequently in Part III of this Order.

7.6 Power Factor Penalty

7.6.1 Objection

MGP has suggested that there should be power factor penalty for sanctioned load beyond 20 KW, to be measured by meter.

7.6.2 BEST's Response

BEST has clarified that power factor surcharge is being levied in case of consumers covered by the present tariff categories RC(LV), IND(LV), RC(HV), IND(HV) and consumers under C2, GP2 tariff categories. The surcharge will be on the total amount of maximum demand charges and energy (kWh) charges billed to the consumer. The surcharge being charged by BEST is as under:

Sr. No.	Power Factor	Surcharge
1	Between 92% and 85%	1% for every complete 1% fall in power factor
2	Between 85% and 75%	7% + 1.5% for every complete 1% fall in power factor below 85%
3	Between 75% and 50%	22% + 2.5% for every complete 1% fall in power factor below 75%
4	Below 50%	84.5%

BEST has further stated that the implementation of suggestions of MGP mentioned above would depend upon the tariff that would be approved by the Commission.

7.6.3 Commission's Ruling

The Commission has rationalized the charges for power factor maintenance, by eliminating the Power Factor Surcharge in the revised Tariff and retaining only the RkVAh charges. RkVAh charges will be applicable to consumers of category LF-2, LTP-1, LTP-2, LTC-1 and all HT categories. In case of LF-2 and LTP-1 categories the RkVAh charges will be applicable to consumers whose monthly energy consumption is above 3000 kWh (units) per month.

7.7 Meter Rent

7.7.1 Objection

MGP has suggested that the meter rent should be abolished, and that BEST should be allowed to collect meter cost (as approved by the Commission) only once during the life time of the consumer. This is in line with the practice of other utilities.

7.7.2 BEST's Response

BEST has responded that the implementation of suggestions of MGP mentioned above, depend on the tariff that would be approved by the Commission.

7.7.3 Commission's Ruling

The Commission has abolished meter rent in conformity of the policy already implemented for other licensees, viz. MSEDCL, REL and TPC.

7.8 Minimum Consumption

7.8.1 Objection

MGP has objected that there cannot be a consumer category, which is being compelled to consume minimum number of units. There can be a utilization factor incentive but not minimum consumption tariff.

7.8.2 BEST's Response

BEST has said that the minimum consumption is like the fixed charges which are levied only when the consumer does not consume any electricity with a view to recover the portion of the fixed costs involved in creating the required infrastructure and maintaining the same.

7.8.3 Commission's Ruling

The Commission has removed the Minimum Consumption related charges in the Tariff Design and instead has adopted the two-part tariff structure, comprising fixed/demand charges and energy charges.

7.9 ToD Meters

7.9.1 Objection

MGP has suggested that all the consumers beyond 20 kW should have TOD meters. This will help in the long run in flattening the load curve.

7.9.2 BEST's Response

BEST has submitted that the criteria of all the consumers beyond 20 KW load to have TOD meters is not understood, as TOD meters are necessarily static meters to be installed for consumers with high consumption and high maximum demand in order to achieve flattening of demand. BEST recognizes the role of TOD meters in flattening of load curve and energy conservation and would undertake a study of suitability of its existing meters, applicability of TOD tariffs and additional requirement of such meters for high consumption consumers. It is submitted that a suitable time frame may be given to BEST by Commission to conduct its study and submit its outcome.

7.9.3 Commission's Ruling

The Commission has decided to introduce the Time of the Day (ToD) Tariffs for the Commercial and Industrial consumers with consumption above a certain level. However, it is seen that appropriate meters are not installed for all such consumers. The Commission has therefore directed BEST to install electronic meters capable of recording ToD consumption and Maximum Demand, for its consumers in categories LF-2, LTP-1, LTP-2, LTC-1 with consumption above 3,000 kWh/month or sanctioned load above 20 kW and to all consumers in HT category consumers in a time bound manner so that the ToD tariffs and Demand Charges in Rs/kVA/month can be introduced for these consumer categories in the next Tariff Determination exercise for FY 2006-07. To begin with, three Time of the Day Slots are envisaged as '0800-1600 Hours', '1600-2400 Hours' and '2400-0800 Hours'. However, in future these shall be scalable for up-gradation to 4 time slots. BEST should keep this in mind, metering being an important area for focused attention and up-gradation, while installing new meters for existing/ new connections in the HT and LT Industrial and Commercial categories mentioned here.

7.10 Security Deposit

7.10.1 Objection

MGP has objected that in spite of supply code being notified in January 2005, BEST has not recalculated the security deposit based on last financial year's average consumption and depending upon this average, demanded extra or refunded the excess security deposit based on one month billing cycle.

7.10.2 BEST's Response

BEST has mentioned that it would abide by the directives of the MERC based on MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005 notified in January 2005.

7.10.3 Commission's Ruling

The Commission notes that BEST Undertaking has not refunded the excess Security Deposit as per the MERC (Electric Supply Code and other Conditions of Supply) Regulations 2005. Although, as per the Regulations, the excess Security Deposit has to be refunded in a single payment, given the quantum of refund involved the Commission directs BEST to refund the Excess Security Deposit over a period of 6 months from the date of the enforcement of the Operative Order with an interest rate of 6% up to the date of 20th January 2005 [the Date of enforcement of MERC (Electric Supply Code and other Conditions of Supply) Regulations, 2005] and from thereon at a rate of 12% p.a. till the date of refund on a reducing balance basis.

7.11 Differences in Tariff among the Distribution Licensees in Mumbai

7.11.1 Objection

The Bombay Small Scale Industries Association (BSSIA) has made a reference to the tariff structure of BEST, and has mentioned that approximately 46% of electricity consumers are residential consumers who are paying maximum tariff of up to Rs 3.25/ kWh. Further it has mentioned that the BEST is not levying fixed monthly charges to residential, commercial or others except – Industrial (LV), Industrial (HV), RC (LV) and RC (HV) above 100 kW.

Further, BSSIA has mentioned that the BEST is charging meter rent and they do not want to revise meter rent or tariff for the year as they are earning reasonable profit.

BSSIA has submitted that there should not be discrimination in the tariffs of the distribution licensees in the Mumbai region. It has suggested that the differentiation in tariff among the Distribution Licensees in Mumbai must be removed after the approval of the Annual Revenue Requirement of BEST for the year 2005-06.

EMM and Adv. S.S. Pawar suggested that since BEST is purchasing power from TPC and the same company is also selling electricity at other places apart from Mumbai, there is a need for collective /common tariffs (including losses) to become applicable or at least the tariff slabs should be made common.

7.11.2 BEST's Response

BEST has said that the tariff levied to the consumers by the respective distribution licensees, are decided by the Commission.

In respect of comments by EMM, the Undertaking has replied that since BEST Undertaking is a Local Authority, other distribution companies cannot supply electricity to consumers in its license area. It has stated that, keeping the tariff slabs common will depend upon the approval of the tariff by the Commission.

7.11.3 Commission's Ruling

The Commission has undertaken significant tariff rationalization in order to bring in similarity in the Tariff Structure of the Distribution Licensees in the Mumbai region. This aspect is detailed at length in Part III of this Order.

7.12 Outstandings of the Consumers

7.12.1 Objection

MGP has objected to the billing errors and levels of outstanding with some of the consumers including the MMC and the State Government Departments. It has given examples of the following outstandings.

- Residential consumers outstandings, e.g.
  - Amin Abdali: Rs. 3.21 crore
  - S L Laga Boena: Rs. 1 crore
  - Mr. Gordhan: Rs. 18.58 Lakh
  - Sarkar Towers: Rs. 68 lakh

Outstandings of Residential and Commercial consumers (Rs. Lakh)

	July 2003	July 2004	July 2005
MUTP	168	97	56
JJ Hospital	155	182	213
Commissioner of Police	18	16	15
Phulora Printer	40	49	49
Oriental Container	14	15	15

- Outstanding of the Offices of Municipality
  - Ward Officer – D Ward: Rs. 63 lakh and Rs. 94 lakh
  - Exe. Engineers: Rs. 67 lakh
  - Ward G North: Rs. 99 lakh

MGP has mentioned that it is impossible that an individual residential consumer like Amin Abdali can consume electricity worth Rs. 3.21 crore. Since the bill has been sent and then rectified later, it simply shows lack of supervision on billing. The system of sending the correct bill is necessary and BEST should submit to Commission the steps it would take to do so.

MGP has suggested that there has to be an effort of book entry closure between the BEST and MMC and also between the MMC and the State Government. Due to social pressure, it will never be possible for BEST to cut off power supply to consumers like JJ Hospital and Commissioner of Police.

MGP has said that there cannot be a default of payment between MMC's own department and BEST. A mechanism has to be developed to close the entry on a monthly basis.

7.12.2 BEST's Response

BEST has accepted that there was an error in the billing of the consumers mentioned in the petition by MGP. BEST has mentioned that it has rectified the same during the current financial year and the above mentioned consumers do not appear in the outstanding list for the current financial year.

BEST has replied that it has taken the following steps in its metering and billing system to avoid recurrence of such errors in future:

§ Readings of the meters are taken by the meter reading staff of BEST. If the reading appears exceptionally high, the meter reader once again checks and confirms the correct reading. In such cases, necessary action is being taken to test the meter subsequently to ensure that bills should be correct.

§ Similarly, while punching data readings, exceptions arising out of punching vis-à-vis the average during the previous financial year are highlighted.

§ Before preparing the final bill, the numbers are again checked with the meter reading folios.

Besides the above measures, BEST has stated that it has taken steps for implementation of project for Consumer Information and Billing System (CIBS), which would have inherent monitoring systems to avoid recurrence of such mistakes and accumulation of outstanding bills.

Thus, it may be clear from the above that BEST has built adequate checks and balances in the metering and billing system to ensure that such mistakes do not recur in future.

In response to MGP's suggestion, that there should be a mechanism for book entry closure between MCGM and BEST, BEST has provided clarification that presently most of the Government Departments and Corporation Departments are paying their monthly electricity bills promptly. Most of the arrears which are shown in the electricity bills of Government Departments and Municipal Corporation are arising out of the delayed payment charges which are levied and which have not been paid by them. Discussions are in progress at the Government level to sort out these issues which are pending for very long time. BEST has drawn attention to the point that apart from the delayed payment charges, actual unit charges not paid will only be a small portion of the total arrears shown. BEST has said that it will explore the feasibility of implementation of these suggestions with competent authorities.

7.12.3 Commission's Ruling

The Commission has noted the steps taken by the BEST Undertaking in ensuring that the billing mistakes are avoided, steps taken by BEST to improve metering and billing system as well as the efforts being made at collecting the outstandings from the Government departments and MMC. As regards delays in collections, measures to collect the same in a time bound manner are required.

The Commission has found the current level of Consumer Outstandings of BEST to be unacceptable. A brief analysis of the top ten defaulters as per the data submitted by BEST that the outstanding in the commercial and industrial categories is showing an increasing trend, which is detrimental, and measures should be taken to check and reduce the same. Therefore, it directs BEST to make focused efforts in a time bound manner for reducing the outstandings to a reasonable level. The Commission directs BEST to publish a list of defaulters in newspapers and also on its website on a regular basis.

8. OTHER OBJECTIONS/ ISSUES

8.1 Expansion of the Distribution Business of the BEST Undertaking for Optimum Utilization of the assets of the Undertaking in the Suburbs of Mumbai

8.1.1 Objection

EMM suggested that BEST should expand its electricity distribution area by making use of its assets in the suburbs and build 'state of the art' infrastructure in order to serve more and more electricity consumers. EMM has suggested that BEST should work as a franchisee of the TPC and distribute electricity in the suburbs in order to optimally utilize the assets of the Undertaking in the suburbs and all possibilities should be explored for the integrated development of the BEST Undertaking.

8.1.2 BEST's Response

BEST Undertaking has replied that there is a need to study the possibility of the Undertaking distributing electricity through optimum utilization of its assets in the suburbs.

8.1.3 Commission's Ruling

The current distribution area of BEST is governed by its Distribution License. It is up to BEST to decide as to how best to utilize its assets in the suburbs.

8.2 Usage of the Non-conventional Solar Energy

8.2.1 Objection

EMM has suggested that for the integrated development, BEST Undertaking should harness Solar Energy by generating the same through demonstrative turnkey projects under government assistance in its suburban depots like the Oshiwara and Goregaon Depots.

8.2.2 BEST's Response

The Undertaking has welcomed the suggestions of the EMM on harnessing the Solar Energy and has said that the same can be studied.

8.2.3 Commission's Ruling

BEST is advised to study the suggestion and feasibility of implementing the same.

8.3 Substation-wise Energy Audit

8.3.1 Objection

Mr. A.R. Bapat enquired whether sub-station wise energy audit is being undertaken by BEST.

8.3.2 BEST's Response

BEST clarified that the exercise for substation-wise energy audit is being undertaken.

8.3.3 Commission's Ruling

In this respect, the Commission directs BEST to put in place regular substation-wise energy accounting and audit and to submit the break-up of technical and commercial losses.

BEST should prepare a long-term plan for customer indexing and distribution transformer-wise energy accounting for consideration of the Commission.

8.4 Checking of Meters as per I.E. Rules

8.4.1 Objection

Mr. A.R. Bapat enquired if meters are checked as per I.E. rules by BEST. He further enquired whether the faulty meters are being replaced quickly.

8.4.2 BEST's Response

BEST has replied that when defective meters are noticed, endeavour is made to replace the defective meters promptly. BEST understands that as per the EA 2003 the Regulations for testing and maintenance of meters is to be notified. It is learnt that the same is under preparation. Endeavour will be made by the Undertaking to test and maintain the meters as per the Regulations as and when it is notified.

8.4.3 Commission's Ruling

As per Section 55 of the EA 2003, "*no licensee shall supply electricity, after the expiry of two years from the appointed date, except through installation of a correct meter in accordance with the regulations to be made in this behalf by the Authority*".

BEST should undertake measures to check the meters at regular intervals and ensure that meters function effectively and have in place a system to immediately replace defective meters as per the Regulations for testing and maintenance of meters. BEST should also comply with the Regulations in this respect once they are notified.

8.5 Deficit in running the Transport Service of BEST Undertaking

8.5.1 Objection

Mr. A.R. Bapat has commented that undoubtedly BEST's transport service is best in India as is its Electric Supply Service. The area served by transport covers also 380 sq. km. of suburban area and extends beyond MCGM areas to Navi Mumbai and Bhayander. Mr. Bapat enquired as to the deficit in running the service in the city, in suburbs and in extended areas.

8.5.2 BEST's Response

BEST has clarified that the Accounts of BEST are maintained in the manner and in the form as prescribed by the BEST Committee from time to time as provided in the Section 460 MM (1) of MMC Act 1888. Further, Regulation 2.1(a) of the MERC (Terms and Conditions of Tariff) Regulations 2005, states:

"provided that incase of any local authorities engaged in the business of the distribution of electricity, the accounting statement shall mean the item, as mentioned above (i.e. at 2.1(a) (i) to (v)) prepared and maintained in the accordance with the relevant acts or statues as applicable to such local authorities"

BEST has stated that taking into account this provision, the BEST Undertaking is maintaining Accounting Statement in accordance with the relevant provisions of the MMC Act, 1888.

BEST has replied that it is difficult to work out the deficit of services running in the city and suburban areas. As in case of city and suburbs most of the services are over-lapping from city to suburbs and also from Western region to Eastern region vis-à-vis from all 25 Depots with 331 routes. Further, the Books of Account are maintained in a centralized manner. As such, number of electricity consumers in city area burdened on account of the deficit cannot be ascertained exactly.

8.5.3 Commission's Ruling

The Commission is of the opinion that this issue as not relevant to the exercise undertaken by it, since the losses of the Transport Division have not been considered in determination of the Annual Revenue Requirement of BEST.

8.6 Issue of suburban commuters saving on transport cost and paying electricity bills to a different electricity supplier

8.6.1 Objection

Mr. A. R. Bapat has objected that the electricity consumer in the city area is burdened for the full deficit to the tune of Rs. 90 crore. Mr. Bapat has raised a question as to why should suburban commuter save money on transport and pay (subsidies) for electric supply from a different supplier?

8.6.2 BEST's Response

BEST has clarified that the bus fares for the BEST's transport services are uniform in the city and suburban areas. Besides this, commuters obtain electric supply from the distribution licensee where their residence is located, whereas the area of distribution of electric supply is restricted to city as defined in the license.

8.6.3 Commission's Ruling

The transport division losses have not been taken into account in computation of the ARR and tariff of the electricity supply division of BEST. Therefore, this issue is irrelevant.

8.7 APDRP Assistance

8.7.1 Objection

Mr. A.R. Bapat has raised a query as to how does the BEST Undertaking ensure that APDRP funds are not diverted for normal system development work? The ARR claims BEST to have been innovative in adopting latest technology, even before APDRP came into being. Approximately Rs. 60 Crore APDRP assistance (grant and loan) is obtained and sanction for much more is in the pipeline. By what mechanism is it ensured that the assistance is not used for normal system development and budgeted funds do not get diverted?

8.7.2 BEST's Response

BEST has clarified that APDRP assistance (grant and loan) is obtained and claimed only after incurring the expenditure on various projects. It has further mentioned that up to FY 2004-05, BEST has incurred an expenditure of Rs. 172.63 Crore against the project approved by Government of India amounting to Rs. 318.67 Crore up to FY 2003-04. BEST has received Rs.54.20 Crore (i.e. Rs. 27.10 Crore as a loan and Rs. 27.10 Crore as a grant) till 31.03.2005 under APDRP. As such the assistance received from APDRP is a reimbursement towards the expenditure of projects that were already incurred by BEST under APDRP.

8.7.3 Commission's Ruling

The Commission has noted the points made and response of BEST Undertaking.

8.8 Investment in the Electricity Division by MMC/ BEST

8.8.1 Objection

Adv. S.S. Pawar has given the example of Tata Power Company/ Group which has invested in telecom services and stated that the general public feels that taking the principle of equitable justice, just as the way BEST co-operates with the transport division, the BMC should invest in the Electricity division of BEST, in order to make available electricity to the general public at competitive rates. This will provide the public with services with the use of high technology and help in substantial integrated development of the general public.

EMM has suggested that BEST should invest in reduction of distribution losses and saving in the requirement of power and also bring about reduction in the expenditure. The BEST Management should take up special programmes for the integrated development such as consumer education programmes, training of the employees through expert trainers, efforts to increase the renewal capacity of the items purchased, etc.

8.8.2 BEST's Response

BEST has replied that since the suggestion given by Adv. S.S. Pawar is related to the BMC, it is being sent to the BMC for consideration of the same.

BEST has replied that the suggestions by EMM are welcome. BEST will endeavour to make its employee training programmes and consumer education programmes more consumer oriented.

8.8.3 Commission's Ruling

Any investments/capital expenditure being planned by the BEST needs prior approval of the Commission, along similar lines as applicable for other licensees in the State, as per the provisions of the EA 2003.

PART III: COMMISSION'S ANALYSIS AND DECISION ON BEST'S PETITION

9. SALES PROJECTIONS (MU)

In its ARR and Tariff Petition for FY 2004-05 and FY 2005-06, BEST has submitted the data on actual sales in FY 2004-05, as 3535.04 MU, and the same has been considered by the Commission.

For FY 2005-06, BEST has projected the sales on the basis of CAGR for the period FY 2000-01 to FY 2004-05. However, there are a few categories, where sales for FY 2005-06 have been projected based on year on year growth, as those categories have shown an increase in recent years. Thus, BEST has projected sales for FY 2005-06 at 3614.5 MU.

BEST provided revised sales projections for FY 2005-06 after the Public Hearing, vide their letter dated 25th January 2006. BEST estimated the sales for FY 2005-06 as 3647.9 MU based on actual data for 8 months and estimates for 4 months of FY 2005-06.

BEST further provided month-wise and category-wise sales data for 9 months of FY 2005-06 vide their letter dated 6th February 2006. The Commission has estimated the month-wise category-wise sales data for the entire FY 2005-06 (at 3645.9 MU), based on the month-wise category-wise actual sales data for 9 months of FY 2005-06.

The category-wise actual sales in FY 2004-05, BEST's projections and Commissions estimates for FY 2005-06 have been summarized in the following Table. As can be seen, residential and commercial categories contribute prominently (46% and 44%, respectively) to the consumption mix of BEST.

Table: Sales in FY 2004-05 and FY 2005-06 (MU) as per existing categories

Existing Categories as per BEST Tariff Structure	FY 2004-05	FY 2005-06	
	Actuals	BEST Proposal[#]	MERC Approval[@]
Residential Category			
R	1426.38	1471.44	1462.73
S	67.54	69.70	71.91
H	34.79	36.71	35.97
SN	36.44	34.61	37.33
R(HV)	31.70	37.15	32.86
S(HV)	8.99	9.17	9.73
H(HV)	14.74	15.15	19.17
SN(HV)	-	-	-
Sub-total Residential	**1620.58**	**1673.93**	**1669.70**
Commercial Category			
C1	630.63	634.87	629.74
C2	593.23	613.92	639.35

Existing Categories as per BEST Tariff Structure	FY 2004-05	FY 2005-06	
	Actuals	BEST Proposal#	MERC Approval@
CD	4.16	2.19	1.58
RC(LV)	67.42	68.74	67.38
RC(HV)	238.56	240.66	261.97
Sub-total Commercial	**1534.00**	**1560.38**	**1600.01**
Industrial Category			
GP1	57.45	55.33	52.93
GP2	106.55	110.47	108.06
GP2(HV)	-	-	-
Ind(LV)	6.59	5.08	6.57
Ind(HV)	158.00	156.29	154.51
Sub-total Industrial	**328.59**	**327.17**	**322.08**
Others Category			
SL	36.63	36.98	39.00
TS	8.23	8.37	8.46
TSR	0.53	0.50	0.66
E	1.14	1.09	1.06
SB	5.35	6.08	4.97
Sub-total Others	**51.88**	**53.02**	**54.15**
TOTAL	**3535.04**	**3614.50**	**3645.9**

 # BEST ARR and Tariff Proposal dated 27th September 2005

@ MERC Approval is based on BEST's revised sales data (vide letters dated 25th January 2006 and 6th February 2006)

10. DISTRIBUTION LOSSES (MU)

In its ARR and Tariff Petition, BEST has indicated the distribution losses for FY 2004-05 at 10.78%, which is based on actual data for the year. For FY 2005-06, BEST has projected Distribution losses of 12.5%.

The distribution losses of BEST include technical losses and commercial losses. All the consumers other than street lights are metered. BEST has not provided a break up of commercial and technical losses for each year, as they have expressed difficulty in estimating the losses due to theft or meter tampering. Thus, BEST has said that the entire losses should be considered as technical losses. BEST is in the process of implementing schemes under APDRP which will enable separate identification of technical and commercial losses.

The distribution loss for the year FY 2004-05 is 10.78%, while the estimated distribution loss for FY 2005-06 is higher at 12.5%. The Commission has noted with reservation, the explanation given by BEST that in the earlier years, unit sales used to be computed after deducting the units given as credit to consumers for past wrong billing from units billed. In FY 2004-05, however, deduction of 59 MU was not done. This resulted in reduction of calculated distribution loss as 10.78%. If 59 MU had been reduced in line with past practice prior to November 2003, the distribution loss would have been12.27%.

BEST has submitted that it has discontinued billing on assumed/average basis from April 2005 in line with the Commission's Regulations. Due to discontinuation of assumed billing, there is a one time shortfall of 37 MU in FY 2005-06 as part consumption pertaining to this year has been already accounted for in the previous year in March 2005 on assumed basis.

BEST has stated that in view of the change in the accounting practice and billing procedure in line with the Commission's Regulations, the distribution losses in FY 2005-06 have been estimated as 12.5%.

The Commission also directed BEST to provide data on actual distribution losses for first 9 months of FY 2005-06. BEST submitted month-wise category-wise actual sales data for first 9 months of FY 2005-06,and corresponding energy input. Based on the data submitted, the distribution losses have been estimated as follows:

Table: Distribution losses for FY 2005-06 based on Actuals and Estimates

Particulars	**Purchase (MU)**	**Sales (MU)**	**Distribution losses (MU)**	**Distribution losses %**
Total for FY 2005-06	4164.27	3645.9	518.37	12.4%

Source: Additional data submission by BEST vide letters dated 25th January 2006 and 6th February 2006

The Commission has considered the distribution losses as given by BEST for FY 2004-05 based on actuals (10.78%) and estimated the distribution losses for FY 2005- 06 based on actuals for 9 months and estimates for next 3 months viz. January, February and March 2006, at 12.4%. The Commission has noted with reservation the explanation given by BEST that the increase in the figure of distribution losses for FY 2005-06 is due to the change in accounting practice and billing procedure in line with the Commission's Regulations.

The Commission directs BEST to conduct a study for segregation of Technical and Commercial Losses and the Report on the same should be submitted to the Commission by 31st May 2006.

Based on the above referred study report, the Commission intends to stipulate a road map with specific target for reduction of technical loss and elimination of commercial loss while considering BEST's ARR Petition for FY 2006-07. The Commission directs BEST to reduce the Distribution Losses in a progressive manner. In this respect the Commission also directs BEST to put in place regular substation-wise energy accounting and audit and to submit the break-up of technical and commercial losses. BEST should prepare a long-term plan for customer indexing and distribution transformer-wise energy accounting for consideration of the Commission.

The following Table provides the distribution losses allowed by the Commission for FY 2004-05 and FY 2005-06.

Table: Distribution losses for FY 2004-05 and FY 2005-06 (in %)

Particulars	FY 2004-05	FY 2005-06		
	Actuals	**ARR Petition**	**Revised data of BEST#**	**MERC Approval**
Distribution losses	10.78%	12.5%	12.4%	12.4%

 # Additional data submission of BEST vide letter dated 25th January 2006

** Based on additional data submission of BEST vide letters dated 25th January 2006 and 6th February 2006*

11. ENERGY INPUT REQUIREMENT/ POWER PURCHASE UNITS (MU)

The total energy input requirement as projected by BEST and approved by the Commission for FY 2004-05 (actuals) and FY 2005-06 is as follows:

Table: Energy Input Requirement for FY 2004-05 and FY 2005-06 (in MU)

Particulars	FY 2004-05	FY 2005-06		
	Actuals	**ARR Petition**	**Revised data of BEST#**	**MERC Approval**
Total Sales of BEST	3,535.04	3,614.50	3,647.90	3,645.90
Distribution Losses	427.08	516.36	516.37	518.37
Energy Input Requirement	**3,962.12**	**4,130.85**	**4,164.27**	**4,164.27**

Additional data submission of BEST vide letter dated 25th January 2006

12. EXPENDITURE PROJECTIONS

The major head of expenditure is power purchase expenses, which accounted for around 80% of the total expenditure of BEST in FY 2004-05. The other heads of expenditure are employee expenses, repair and maintenance expenses, administration and general expenses, depreciation, interest, and other miscellaneous expenses. The Commission has discussed the allowed expenditure on each of these heads and the total expenditure of BEST approved by the Commission for FY 2004-05 and FY 2005-06, in the subsequent Sections.

13. POWER PURCHASE EXPENSE

BEST procures power from The Tata Power Company (TPC) at 110 kV and 22/33 kV to meet its demand. . The charges applicable at these voltage levels are different for the first 25% of the units procured and the remaining 75% of the units, in accordance with the Commission's

Tariff Order for TPC issued on June 1, 2004. BEST had a power purchase agreement (PPA) with TPC, which has subsequently lapsed. The revised PPA under various provisions of the EA 2003 between TPC and BEST is currently awaiting the Commission's approval, and the Commission will issue a separate Order on the same.

The power purchase cost in FY 2004-05 was lower than the power purchase expense in FY 2003-04 on account of the reduction in TPC tariff as determined earlier by the Commission. The power purchase expenditure of BEST is based on the following:

- Demand charges – which are payable against the actual maximum demand supplied by TPC to BEST
- Energy charges – for actual energy units purchased by BEST
- Fuel Adjustment Cost – charged by TPC on month to month basis

The existing power supply tariff of TPC to BEST is as follows:

Table: TPC Rate Schedule for BEST effective from June 1, 2004

For Supply at 22kV/ 33kV	
Demand Charge	Rs. 340 per kVA of demand during the month
Energy Charge	
25% of monthly offtake	145 Paise/ kWh
75% of monthly offtake	200 Paise/ kWh
For Supply at 100kV	
Demand Charge	Rs. 340 per kVA of demand during the month
Energy Charge	
25% of monthly offtake	141 paise/ kWh
75% of monthly offtake	195 paise/ kWh

As per the directives of the Commission, BEST has to purchase power from Renewable Energy sources also. The Commission's Order (Case 1 of 2004) in the matter of Determination of Renewable Purchase Obligation (RPO) for Distribution Licensees in Maharashtra has laid down the RPO of distribution licensees in the State.

However, as per the additional data submitted by BEST in their letter No. DO/GM/AGM(ES)/7141/2006 dated 25th January 2006, BEST has stated that the cost of the RPO has not been considered in the power purchase for FY 2004-05 and FY 2005-06 and it shall be provided for in the ARR for FY 2006-07.

For FY 2004-05, the actual power purchase expenses have been allowed by the Commission. For FY 2005-06, the expenses have been projected on the basis of the projected quantum of power purchase, which is the sum of the sales and distribution losses. BEST has submitted revised data relating to power purchase units and power purchase cost based on actuals for first 9 months of FY 2005-06 and estimates for the balance 3 months of FY 2005-06 (vide their letter dated 25th January 2006 and 6th February 2006). The Commission has allowed the Power Purchase expenses projected by BEST for FY 2005-06, as this is based on actuals for 9 months and estimate for 3 months.

The power purchase cost projected by BEST Undertaking and approved by the Commission is as follows:

Table: Power Purchase Cost for FY 2004-05 and FY 2005-06 (Rs. Crore)

Particulars	FY 2004-05	FY 2005-06		
	Actuals	ARR Petition	Revised data of BEST	MERC Approval
Energy charges at 33/22 kV	565.84	547.35	559.29	559.29
Energy charges at 110 kV	161.26	216.36	210.78	210.78
Demand Charges	259.16	293.30	296.60	296.60
FAC	93.54	111.12	53.26	53.26
Incentive	-1.32	-	-	-
ToSE	10.02	-	-	-
Total Power Purchase Cost	**1088.50**	**1168.13**	**1119.93**	**1119.93**

14. EMPLOYEE EXPENSES

BEST has submitted data on actual employee expenditure in FY 2004-05 as Rs. 88.26 Cr, which has been accepted by the Commission. BEST has projected employee expenses of Rs. 85.62 Cr in FY 2005-06.

The Commission is of the view that the employee expenditure projected by BEST is in line with past trends. However, the Commission notes that there is scope for reduction in manpower expenditure. Hence, in the ARR Petition for FY 2006-07 and onwards, BEST must formulate a manpower plan and reduce manpower expenditure progressively.

For computation of the ARR, the Commission has analyzed the expenditure projected by BEST in its ARR and Tariff Petition for FY 2005-06 and projected the expenses based on past trends and the Commission's assessment of the prudence of the same.

BEST has projected employee expenses under the following heads (based on the assumptions detailed below):

§ Salaries, wages and allowances – Based on number of employees on the rolls of the Undertaking on 1st April of the year.

§ Dearness allowance (DA) – Calculated on the last three years trend in the fixed average DA Index, i.e., Mumbai Consumer Price Index.

§ Contribution to PF – Calculated on 12% of Basic Pay plus DA

§ Gratuity – Calculated on number of staff expected to retire during the year.

§ Cost of bus token and passes – Calculated at Rs. 189/- per person per month.

§ Ex-gratia payment in lieu of bonus

§ LTA – Calculated on the basis of the Basic Pay.

§ Interim Relief – Rs 9.17 crore has been considered for FY 2004-05 only. BEST has stated in its ARR Proposal (dated 27th September 2005) that the actual expenditure booked is Rs 19.83 crore which includes earlier years' interim relief payment, and the balance should be considered under Regulatory Assets.

§ Voluntary Retirement Scheme (VRS)

BEST has implemented a VRS in FY 2004-05 and the VRS cost is Rs. 0.88 crore. The Commission has accepted this expense for FY 2004-05.

Impact of Pay Revision Committee Recommendations

In their ARR Petition (dated 27th September 2005), BEST has proposed the creation of a Regulatory Asset, to offset the impact of the Pay Revision Committee (PRC) Recommendations. The recommendation of the PRC for FY 2001-02 to FY 2005-06 and the details of arrears of Supply and Transport Division year wise based on PRC's recommendation with regard to employees other than officers cadre as given by BEST in their ARR petition (dated 27th September 2005) is given in the Table below:

Table: Pay Revision Committee Recommendations (*Rs. Cr*)

Particulars	2002	2003	2004	2005	2006	Total
Electric Supply	12.98	10.66	8.87	7.48	5.63	45.62
Transport	78.83	65.46	54.53	45.04	35.04	278.90
Total	**91.81**	**76.12**	**63.40**	**52.52**	**40.67**	**324.52**

Source: BEST's ARR and Tariff Proposal for FY 2004-05 and FY 2005-06 dated 27th September 2005

BEST has stated in their ARR petition that the recommendation of the Pay Commission is under arbitration/negotiation within the organization. The Management and Unions have agreed to a maximum settlement of Rs. 350 crore for non-officer cadre. The similar compensation, in line with the recommendation of PRC for officer cadre, is about Rs. 25 crore. Thus, the expected settlement for the entire wage revision is Rs. 375 crore.

Out of the above, as a part of the settlement, interim relief was granted to employees. The interim relief paid till FY 2004-05 is Rs.195.15 crore. The entire amount has been booked in the revenue accounts in FY 2004-05. In addition, the interim relief in FY 2005-06 is expected to be Rs. 43.11 crore (budgetary estimate).

However, for the purpose of the ARR, the BEST Undertaking has stated that it proposes to pass on the impact of PRC to the consumers over a period of time by creating a regulatory asset. The calculation of regulatory asset assumes that the interim relief for FY 2004-05 amounting to Rs. 49.30 crore and the estimated interim relief for FY 2005-06 would be claimed in the ARR Petitions for the respective years. The balance, which includes the interim relief paid prior to FY 2004-05 and the balance of payment to be made to the employees, would be treated as a regulatory asset, which is proposed to be recovered in a 5-year period from FY 2006-07 to FY 2011-12. The following table provides the calculation:

Table: Regulatory Asset proposed by BEST Undertaking (Rs. Cr)

Years	Rs. Crore	Remarks
(A) Interim Relief paid in 2000-01 to 2003-04 (Actuals)		
(A1) Interim Relief paid (Actuals)	88.35	Booked in the year 2004-05 as expenses
(A2) Advance paid to employees against interim relief (Actuals)	57.50	Booked as Prior period expenditure
(A) Sub Total	**145.85**	
(B) Interim Relief paid in 2004-05 (Actuals)	49.30	Booked as expenses in the Year 2004-05
(C) Interim Relief to be paid in 2005-06 (BE)	43.11	
(D) Total Interim relief to be booked as expense in FY 2005 and FY 2006 (A+B+C)	**238.26**	
(E) Amount proposed to be booked as expense in ARR in FY 2005 and FY 2006 (B+C)	**92.41**	
(F) Total Impact of PRC	**375.00**	
(G) Balance (proposed by BEST to be treated as a **regulatory asset** over the next five years starting from 2006-07) (F-E)	**282.59**	
(H) Amount proposed to be recovered per year from 2006-07 to 2011-12 (G/5)	56.52	

Source: BEST's ARR and Tariff Proposal for FY 2004-05 and FY 2005-06 dated 27th September 2005

The allocation of the above between the electricity supply and transport division as given in the ARR Petition (dated 27th September 2005) is given in the Table below:

Table: Break up of Interim Relief (Rs. Cr)

Particulars	Total Interim Relief	Electricity Supply	Bus/ Transport
Advance paid to employees against interim relief (Actuals)	**57.50**	10.24	47.26
Interim Relief paid (Actuals prior to 2004-05)	**88.35**	16.85	71.50
Interim Relief paid (Actuals 2004-05)	**49.30**	9.17	40.13
Interim Relief to be paid (BE 2005-06)	**43.11**	6.49	36.62
Total	**238.26**	**42.75**	**195.51**

Source: BEST's ARR and Tariff Proposal for FY 2004-05 and FY 2005-06 dated 27th September 2005

BEST has proposed that the impact of the PRC recommendations for the period from FY 2001-02 till FY 2005-06, net of interim relief paid/ to be paid for FY 2004-05 and FY 2005-

06, which amounts to Rs. 282.59 Crore, be treated distinctly as a "Regulatory Asset" for recovering from consumers in future years in a phased manner. BEST is of the view that this will prevent a tariff shock to the consumers, which would otherwise happen in case of recovery of the whole amount in one single year.

BEST submitted additional data vide their letter dated 25th January 2006, pertaining to the PRC impact. The break-up of the total PRC impact between the Electricity supply division and Transport division as given by BEST, is as follows:

Table: Break-up of Total PRC Impact (Rs Cr)

PRC Impact	
Electric Supply division	67.28
Bus division	307.72
Total	**375.00**

Source: Additional data submission of BEST vide letter dated 25th January 2006

The Commission is of the view that for computation of ARR, only expenses pertaining to licensed business, i.e., Electricity Supply division should be included. Thus, the PRC impact attributable only to the Electric Supply division is to be taken into account in the computation of ARR for FY 2004-05 and FY 2005-06.

Thus, the Interim Relief pertaining to the electric supply division for FY 2004-05 (at actuals i.e. Rs.9.17 Cr) and for FY 2005-06 (estimates i.e. Rs. 6.49 Cr) proposed by BEST have been accepted by the Commission for the respective years. The Commission has allowed the balance PRC impact pertaining to the Electricity Supply division, which amounts to Rs. 51.62 Cr., (i.e. 67.28 – 9.17 – 6.49) as an expense in FY 2005-06, and has disallowed the creation of a Regulatory asset. This is in accordance with the National Tariff Policy, which stipulates that a regulatory asset is to be created only as an exception, and subject to certain preconditions. Also, the amount under consideration is small.

The actual employee expenditure in FY 2004-05 and the projected employee expenditure for FY 2005-06 as given by BEST and the employee expenditure approved by the Commission in FY 2005-06 is presented in the following Table:

Table: Employee Expenses (Rs Cr)

Particulars	**FY 2004-05**	**FY 2005-06**	
	Actuals	**ARR Petition**	**MERC Approval**
Salaries, wages and allowances	46.18	45.66	45.66
Dearness allowance	21.17	21.78	21.78
Contribution to PF	8.11	8.92	8.09
Special contribution to PF (Gratuity)	-	-	-
Cost of bus token/passes	1.52	1.47	1.47
Ex-gratia payment in lieu of bonus	0.15	-	-

Particulars	**FY 2004-05**	**FY 2005-06**	
	Actuals	**ARR Petition**	**MERC Approval**
LTA	1.08	1.30	1.30
Sub-total for Electric Supply	**78.21**	**79.13**	**78.30**
Interim Relief (with share of GA) for year	9.17	6.49	6.49
Interim Relief & balance PRC Impact of Electric Supply Division	-	-	51.62
VRS Payment	0.88	-	-
Total	**88.26**	**85.62**	**136.41**

15. REPAIRS & MAINTENANCE (R&M) EXPENDITURE

The actual R&M expenses in FY 2004-05 have been indicated as Rs. 10.19 Cr, while the R&M expenditure in FY 2005-06 has been projected as Rs. 11.83 Cr, , which is about 1.07 % and 1.16 % of the Gross Fixed Assets (GFA) at the beginning of the year, respectively. The Commission has allowed the R&M expenditure for FY 2004-05 as they are at actuals and the projected R&M expenses for FY 2005-06, as R&M expenditure is required to be incurred to ensure that the system functions efficiently.

The total R&M expense allowed by the Commission for FY 2004-05 and expenditure projected for FY 2005-06 is presented in the following Table.

Table: Repairs & Maintenance Expenses

Particulars	**FY 2004-05**	**FY 2005-06**	
	Actuals	**ARR Petition**	**MERC Approval**
R&M Expenses (Rs. Cr)	10.19	11.83	11.83
Opening GFA (Rs. Cr)	955	1,023	1,023
R&M as % of Opening GFA	1.07%	1.16%	1.16%

16. SHARE OF GENERAL ADMINISTRATION EXPENSES

The BEST Undertaking allocates the general administration expenses between the supply and transport businesses based on allocation percentages. These percentages are arrived at by considering the number of staff members deployed in the two divisions, e.g., security guards allotted to Transport division/ supply division, number of vehicles allotted to the two divisions, etc. The cost of security and vigilance department is allocated on the basis of average number of security guards on duty in the operating division as on 1st April every year. The cost of time keeping, personnel, welfare, medical, etc. is allocated on the basis of total number of employees as on 1st April every year.

Hence, general administration expenses comprise of the expenses of the administration department, which are identified with the supply business. On this account, the estimated expenses allocated to Supply Division are Rs. 37.74 Crore and Rs 36.03 Crore for FY 2004-05 and FY 2005-06, respectively.

The Commission has allowed the general administration expenses shown for FY 2004-05 as they are at actuals. The Commission has applied the CAGR for past 5 years (2000-01 to 2004-05) to the general administration expenses of FY 2004-05 to project the share of general administration expenses for FY 2005-06.

The Table below gives the details of the general administration expenses incurred (and allocated to Supply Division) for FY 2004-05 (actuals) and projections for FY 2005-06 and expenses allowed by Commission for FY 2005-06.

Table: Share of General Administration Expenses (Rs. Cr)

Particulars	**FY 2004-05**	**FY 2005-06**	
	Actuals	**ARR Petition**	**MERC Approval**
Honorarium payable to BEST committee members, internal audit, Legal, MM Estb.	5.18	5.50	5.31
Security and Vigilance Estb.	3.92	5.78	4.14
Civil Engg. and Drawing office Estb.	1.09	1.20	1.35
Time keeping, Personnel, Welfare medical, Special PF contribution to staff, Ex-gratia payment in lieu of bonus contingencies, VRS impact	12.69	7.50	15.88
EDP Estb.	2.61	2.80	2.63
Internal Transport Estb.	0.23	0.21	0.22
R&M, Insurance, Miscellaneous, External Audit Charges, Provision for Depreciation., Additional Depreciation, Interest Charges, Telecom and Electronics, Provision for property insurance fund, Miscellaneous loan charges	12.02	13.04	12.27
Total	**37.74**	**36.03**	**41.80**

17. OTHER EXPENSES

The other expenses include various heads such as insurance, transport expense, contingency reserve fund, lease rent of meters, service charges, etc.

The amount shown under contribution to contingency reserve fund for FY 2004-05 and FY 2005-06 by BEST has been allowed by the Commission.

The 'Others component' includes stationery, printing, postage, advertisements, etc. The Commission has allowed the other expenses for FY 2004-05 as they are at actuals. For projecting the 'Others component' expenses for FY 2005-06, the Commission has applied the CAGR for past 5 years (2000-01 to 2004-05) to the 'Others component' expenses in FY 2004-05.

For the remaining items under Other Expenses, viz. insurance, transport expenses, property insurance fund, lease rent of meters, service charge on gas insulated switchgears, the Commission has accepted the expenses for FY 2004-05 as they are at actuals and has projected the expenses for FY 2005-06 based on the CAGR for the past 5 years (2000-01 to 2004-05).

The Other Expenses have been shown in the Table below:

Table: Other Expenses (Rs. Cr)

Particulars	FY 2004-05	FY 2005-06	
	Actuals	ARR Petition	MERC Approval
Insurance	0.07	0.08	0.08
Transport Expenses	0.19	0.25	0.19
Property Insurance Fund	4.59	5.28	4.98
Contingency Reserve Fund	4.81	5.51	5.51
Lease Rent of Meters	0.80	0.80	0.75
Service Charge on gas insulated switchgears	0.88	0.88	0.88
Others Components (printing, stationery, postage, etc.)	33.33	42.12	37.38
	44.67	**54.92**	**49.76**

18. DEPRECIATION EXPENDITURE

In its ARR computation, BEST has projected depreciation and additional depreciation in FY 2004-05 and FY 2005-06.

BEST has projected depreciation (including additional depreciation) expenses of Rs. 55.44 Cr for FY 2004-05 and Rs. 59.01 Cr for FY 2005-06. The average depreciation rate has been steady at around 3.8 % in the past years. The average depreciation rate projected by BEST for FY 2004-05 and FY 2005-06 is 3.98% of Opening GFA and 4% of Opening GFA, respectively.

BEST has been providing for depreciation on straight-line basis, on the fixed assets in use at the beginning of the year. The depreciation is based on the original cost, estimated life and residual life. 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 MERC (Terms and Conditions of Tariff) Regulations, 2005.

BEST has been providing for actual depreciation, which is worked out based on the original purchase price of the assets, which in BEST's opinion is inadequate to meet the replacement cost of the assets in the later years due to continuous rise in prices of the assets. Thus, BEST has been making a provision for additional depreciation in the revenue account in order to meet the shortfall to some extent in replacement cost of assets. The amount in respect of additional depreciation is credited to a 'Special Depreciation Fund'. BEST provides for additional depreciation at a rate of 50% of the depreciation for the year.

In principle, an asset can be depreciated only up to the cost of the asset. Further, as per Section 76.4.1 of the MERC (Terms and Conditions of Tariff) Regulations 2005, the residual value of the asset shall be considered at 10% of the allowable capital cost and depreciation shall be allowed up to a maximum of 90 % of the allowable capital cost of the asset. Additional depreciation, has therefore, not been taken into account in the ARR computation, as it is not a component of ARR as per the MERC (Terms and Conditions of Tariff) Regulations, 2005.

Further, as depreciation has been charged on the Gross Fixed Assets (which includes grants received), depreciation is higher. Hence, the Commission has made an adjustment for depreciation, by computing depreciation on the GFA less grants received.

The Commission has analysed the capital investments made by BEST in FY 2003-04 and FY 2004-05, and as they are at actuals, has allowed the depreciation for the year as worked out by BEST, after making adjustment for depreciation, assuming depreciation would be computed on GFA less grants received. The analysis of the capital investments has been discussed in the next Section.

The Table below summarizes the Depreciation allowed by the Commission for FY 2004-05 and FY 2005-06.

Table: Depreciation for FY 2004-05 and FY 2005-06 (Rs. Cr)

Particulars	FY 2004-05		FY 2005-06	
	ARR Petition	MERC Approval	ARR Petition	MERC Approval
Depreciation	55.44	34.51	59.01	37.57

19. CAPITAL EXPENDITURE

The capital expenditure for FY 2004-05 (Rs. 69.6 Cr) has been allowed by the Commission as it is at actuals.

BEST in its ARR and Tariff Petition (dated 27th September 2005) has proposed capital expenditure of Rs. 122.75 Cr in FY 2005-06, which is high in comparison to past years (average of around Rs. 66 Cr per year).

The Commission asked BEST to provide the actual data on expenses incurred towards capital expenditure in the year and has recomputed the capital expenditure for FY 2005-06.

BEST has provided data on actual capital expenditure incurred for the first 8 months of FY 2005-06 (i.e. up to November 2005); vide their letter dated 25th January 2006. Further, BEST provided clarification on certain items under capital expenditure vide their letter dated 6th

February 2006. Details of Capital Expenditure proposed based on revised grant and Capital expenditure incurred up to November 2005 are given in the Table below:

Table: Capital Expenditure based on revised data of BEST (Rs. Cr)

Particulars	**FY 2005-06 Revised grant**	**Up to Nov '05**
Extension to existing 22 kV substations and New 22 kv/33kv up-gradations	17.45	2.00
110kv substations at Senapati Bapat Marg	10.53	0.55
6.6kv/11kv substations, extensions and alterations to existing substations and sites for new substations	27.38	21.63
Laying of High Voltage and Low Voltage cables, service cables and street lighting cables	29.59	4.31
Meters	6.09	1.87
Purchase of Street Lighting Lamps	1.56	0.16
Electronic meters and Test Benches	17.62	3.41
Remote control of receiving substations communication network, additions and extensions, installation and commissioning of ripple control	0.21	0.003
Computerization	6.67	0.21
Generating Station	0.15	0
Furniture and office equipment, Tools & Equipments, etc.	3.52	2.99
TOTAL	**120.77**	**37.13**
Share of General Administration	1.17	0.31
GRAND TOTAL: Capital Expenditure	**121.94**	**37.44**

Source: Additional data submission of BEST vide letters dated 25th January 2006 and 6th February 2006

BEST has further stated that it undertakes a significant part of its capital expenditure in the concluding part of its financial year, specifically in the month of March. The first nine months of the financial year comprise only 3 months of fair season whereas in the balance 3 months, the maximum work of excavation for cable laying and allied works of substation transformer installation is undertaken and as such the second portion of capital expenditure is incurred in this time period. Therefore, a complete picture of capital expenditure for the year 2005-06 shall be clear after the end of the FY 2005-06.

In view of the actual capital expenditure undertaken by BEST in the first 8 months of FY 2005-06 and BEST's submission that a major part of capital expenditure is undertaken in the last 3 months of the year, particularly in March, for the purpose of computation of ARR, the Commission has allowed the capital expenditure for FY 2005-06 at the same level as for FY 2004-05 (i.e. Rs. 69.64 Cr)

The capital expenditure of BEST for FY 2004-05 (actuals) and projections for FY 2005-06 and the allowed capital expenditure by the Commission for FY 2005-06 are as follows:

Table: Capital Expenditure (Rs. Cr.)

Particulars	FY 2004-05	FY 2005-06			
	Actuals	ARR Petition	Revised data of BEST	Upto Nov '05 (8 months)	MERC Approval
Extension to existing 22 kV substations and New 22 kv/33kv upgradations	17.39	17.44	17.45	2.00	
110kv substations at Senapati Bapat Marg	2.52	10.53	10.53	0.55	
6.6kv/11kv substations, extensions and alterations to existing substations and sites for new substations	15.16	27.38	27.38	21.63	
Laying of High Voltage and Low Voltage cables, service cables and street-lighting cables	16.25	29.59	29.59	4.31	
Meters	2.68	6.09	6.09	1.87	
Purchase of Street Lighting Lamps	2.91	1.56	1.56	0.16	
Electronic meters and Test Benches	8.41	17.62	17.62	3.41	
Remote control of receiving substations communication network, additions and extensions, installation and commissioning of ripple control	0.11	0.21	0.21	0.003	
Computerization	0.12	7.67	6.67	0.21	
Generating Station	-	0.15	0.15	0	
Furniture and office equipment, Tools & Equipments etc.	2.14	1.65	3.52	2.99	
Civil Engineering Works	0.29	0.38	-	-	
Motor Vehicles	1.26	1.49	-	-	
TOTAL	**69.24**	**121.76**	**120.77**	**37.13**	
Share of General Administration	0.40	0.99	1.17	0.31	
GRAND TOTAL	**69.64**	**122.75**	**121.94**	**37.44**	**69.64**

20. INTEREST AND FINANCE CHARGES

BEST has projected interest expenditure of Rs. 11.36 Cr in FY 2004-05 and Rs. 15.29 Cr in FY 2005-06. The elements comprising interest and finance charges and the Commission's analysis of each sub-head of interest expenditure is detailed below.

Interest Paid on Loans

BEST has shown interest on loans in FY 2004-05 at actuals and this has been allowed by the Commission.

BEST has projected interest on loans in FY 2005-06 as Rs 6.29 Cr. However, this has been computed on the average loan balance outstanding during the FY 2005-06, without taking into account normative debt (as per Section 73 of the MERC Terms and Conditions of Tariff Regulations, 2005).

Interest due to Normative Debt: Equity Ratio

BEST has proposed funding of the entire additional Capital Expenditure through internal accruals and APDRP funds on the basis of past practice in this regard. The Commission is of the view that it is unfair to the consumers to consider the entire funding of the capital investment through own funds, as the Utility will earn a return on this investment, which is much higher than the corresponding interest expenditure in case of debt funding.

The Commission is of the opinion that it would be unfair to BEST if the funding pattern is modified retrospectively on a normative basis for capital expenditure incurred in the past years. However, for FY 2005-06, the Commission has considered a normative Debt: Equity ratio of 70:30 to fund the fresh capital investments and has accordingly computed interest expenditure on the normative loan amount.

As discussed in the earlier part of this Section on Capital Expenditure, the Commission has allowed an investment of Rs. 69.64 Cr. in FY 2004-05 and Rs. 69.64 Cr. in FY 2005-06 towards capital expenditure. The Commission has applied a normative Debt: Equity Ratio of 70:30 on the new investments (allowable capital cost after adjusting for consumer contributions and grants received) in FY 2005-06 and allowed interest on the normative Debt component at 10.5% per annum (average of last 5 years), with a normative repayment schedule as per Section 74 of the MERC (Terms and Conditions of Tariff) Regulations, 2005. The Commission has considered a moratorium of 1 year for the normative debt.

In addition to interest on loans, BEST also incurs expenditure on account of bank commission and miscellaneous loan charges. This has been allowed by the Commission. The interest on loans, bank commission and miscellaneous loan charges projected by BEST and allowed by the Commission have been summarized in the following Table:

Table: Interest on loans and related charges (Rs. Cr.)

Particulars	FY 2004-05	FY 2005-06	
	Actuals	ARR Petition	MERC Approval
Interest on loans	3.81	6.29	6.97
Bank Commission	0.0016	0.0014	0.0014
Misc. Loan Charges	0.0025	0.00	0.00
Total	**3.81**	**6.29**	**6.97**

Interest on Security Deposit

The Commission notes that BEST has not computed the Security Deposit as per MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005; and BEST has not refunded the excess Security Deposit as per the MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005.

As per Section 11 of the MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005, the Security Deposit payable by consumers shall be equivalent of the average of 3 months' of billing or of the billing cycle period, whichever is lesser. For determining the average billing for this purpose, the average of the billing to the consumer for the last 12 months or, in cases where supply has been provided for a shorter period, the average of the billing for such shorter period, shall be considered.

For the purpose of ARR computation, the Commission has computed the security deposit for LT consumers as the average of 3 months' of billing and for HT consumers as equivalent to one month's average billing, and computed interest on the security deposit amount estimated at the rate of 6% (i.e., bank rate).

With respect to the excess Security Deposit, the Commission notes that as per the MERC (Electric Supply Code and other Conditions of Supply) Regulations 2005, the excess Security Deposit has to be refunded in a single payment. However, given the quantum of refund involved, the Commission directs BEST to refund the Excess Security Deposit over a period of 6 months from the date of the enforcement of the Operative Order with an interest rate of 6% up to the date of 20th January 2005 (the Date of enforcement of MERC Electric Supply Code and other Conditions of Supply Regulations 2005) and from thereon at a rate of 12% p.a. till the date of refund on a reducing balance basis.

The interest on security deposit as provided by BEST and allowed by the Commission are summarized in the Table below:

Table: Interest on Security deposits (Rs. Cr.)

Particulars	FY 2004-05			FY 2005-06	
	ARR Petition	Revised data of BEST	MERC Approval	ARR Petition	MERC Approval
Interest on Security Deposit	7.55	15.68	5.80	9.00	6.36

Interest on Working Capital

BEST in its ARR petition (dated 27th September 2005) has specified that the working capital needs of the Undertaking are met through internal resources and not by utilizing traditional means like cash credit/overdraft limits with Banks. Therefore, interest on working capital was not provided in the ARR Petition (dated 27th September 2005).

However, BEST has submitted additional data vide its letter dated 25th January 2006, wherein it has computed interest on 'notional' working capital.

The Commission has recomputed the Interest on 'notional' working capital as per Section 76.8 of the MERC (Terms and Conditions of Tariff) Regulations, 2005. The Interest on working capital as provided by BEST and allowed by the Commission is shown in the Table below:

Table: Interest on Working Capital (Rs. Cr)

Particulars	FY 2004-05			FY 2005-06	
	ARR Petition	**Revised data of BEST**	**MERC Approval**	**ARR Petition**	**MERC Approval**
1/12th of the amount of Operations and Maintenance Expenses (For one month) **plus** ……. (a)	-	15.70	13.45	-	14.27
1/12th of the sum of the book value of stores, materials and supplies (For one month) **plus** ……. (b)	-	1.53	1.53	-	1.53
1/6th of the expected revenue from sale of electricity at the prevailing tariffs (For two months) **minus...** (c)	-	239.91	247.01	-	253.27
Amount held as security deposits from Consumers and Distribution System Users **minus** ……. (d)	-	261.30	96.72	-	106.00
1/12th of the amount of Annual Electricity purchases (For one month) ……. (e)	-	90.71	90.71	-	93.33
Working Capital (f)=(a)+(b)+(c)-(d)-(e)	-	**-94.87**	**74.56**	-	**69.74**
Interest on working capital @ 10.25%	-	-	7.64	-	7.15

Note: The figure for Consumer security deposits for FY 2004-05 and FY 2005-06 has been re-computed as per the MERC Regulations, based on the month-wise sales data submitted by BEST vide letter dated 6th February 2006.

The figure for book value of stores, materials and supplies for FY 2005-06 is assumed to be the same as that for FY 2004-05 (in absence of data for 2005-06).

For computation of the interest on working capital, the O&M expenses include employee expenses, R&M, insurance, transport expenses, lease rent of meters, service charge on gas insulated switches, others, and common expenses allocated to the electric supply division.

21. INCOME TAX

The BEST has shown income tax as 'Nil' in FY 2004-05 and FY 2005-06. BEST has specified that as per the Income Tax Act under Section 10(20), the income of Local Authority is exempted. The said provision is reproduced as below:

Section 10(20): *'the income of a local authority which is chargeable under the head "Income from house property", "Capital gains" or "Income from other sources" or from a trade or business carried on by it which accrues or arises from the supply of a commodity or services [(not being water or electricity) within its own jurisdictional area or from the supply of water or electricity within or outside its own jurisdictional area].'*

Explanation – For the purpose of this clause, the expression "local authority" means –

- *i) Panchayat as referred to in clause (d) of article 243 of the Constitution; or*
- *ii) Municipality as referred to in clause (e) of article 243 P of the Constitution, or*
- *iii) Municipal Committee and District Board,*

  Legally entitled to, or entrusted by the Government with, the control or management of a Municipal or local fund, or
- iv) *Cantonment Board as defined in Section 3 of the Cantonments Act, 1924 (2 of 1924)*

The Commission has taken the Income Tax as 'Nil' in FY 2004-05 and FY 2005-06, as proposed by BEST.

22. NON-TARIFF INCOME

The BEST has projected the Non-Tariff Income based on the estimation from meter hire, electricity duty collection charges, contract charges, hire and repair of electrical appliances, sales services (other receipts), miscellaneous income and share of general administration receipts. The Commission has analysed the various submissions made by BEST and considered the actual Non-Tariff Income earned by BEST in FY 2004-05. For FY 2005-06, the Commission has projected the Non-Tariff Income by applying the CAGR for the past 5 years (FY 2000-01 to FY 2004-05). The Non-Tariff Income for FY 2004-05 and FY 2005-06 have been summarized in the Table below:

Table: Non-Tariff Income (Rs. Cr)

Particulars	FY 2004-05	FY 2005-06	
	Actuals	**ARR Petition**	**MERC approval**
Contract Charges	16.26	15.00	17.89
Sales Service - Meter Hire	1.37	1.40	1.39
Sales Service - Electricity Duty Collection Charges	0.03	0.05	0.03
Sales Service - Other Receipts less incentive amount on power purchase	32.69	43.00	34.20
Hire and Repair of Electrical App.	0.02	0.02	0.02
Miscellaneous (Rent of Buildings, Advertisement Receipts)	18.20	17.14	20.88
Share of G.A. receipt	4.22	6.81	3.85
Total	**72.79**	**83.42**	**78.26**

23. RETURN ON EQUITY

In its ARR Petition, BEST has specified that as BEST Undertaking is not governed by the Companies Act, 1956, the BEST does not have equity in the traditional sense. Funding is mainly done through internal resources with the approval of BEST Committee and Bombay Municipal Corporation, as per Section 460 II of the Mumbai Municipal Corporation Act, 1888. Therefore, interest on internal funding should be allowed as an eligible expense for calculating tariff. BEST has presumed that the interest on internal funds would mirror the Return on Equity to other licensees.

In its ARR Petition, BEST has provided three alternative methods for computing Return on Equity viz. Interest on Internal Funds, Return on Equity Capital as per MERC Regulations and Return on Capital Base as per Schedule VI of Electricity (Supply) Act, 1948.

However, the Commission has computed Return on 'Notional' Equity for the purpose of computation of ARR as per Section 76.1 of the MERC (Terms and Conditions of Tariff) Regulations, 2005. The underlying objective is to apply a common methodology for all the licensees in the State as per MERC Regulations in order to bring in uniformity in determination of Return on Equity. The Commission has computed Opening Equity for FY 2004-05 (as of 1st April 2004) for computation of ARR. For FY 2005-06, the Commission has considered a normative Debt: Equity ratio of 70:30 to fund the fresh capital investments (as per the MERC Regulations).

Computation of Return on 'Notional' Equity is as follows:

Table: Return on 'Notional' Equity for FY 2004-05 (Rs. Cr)

Particulars	FY 2004-05 BEST Revised data *	FY 2004-05 MERC Approval
Gross Fixed Assets	1022.93	1022.93
Plus: Work in Progress	9.61	9.61
Less: Contribution made by consumers for service lines (cumulative)	45.94	45.94
Less: Government assistance (cumulative)	45.63	45.63
Fixed Assets	**940.97**	**940.97**
Less: Accumulated depreciation		328.89
Adjustment for Depreciation		29.60
Capital Base		**641.68**
Debt/Actual loans	658.68	50.07
Equity (Balance) - end of year	**282.29**	**591.61**
Annual allowable capital cost for year		69.64
Normative equity (30%)		20.89
Opening Equity for the year		**570.72**

Particulars	FY 2004-05 BEST Revised data*	FY 2004-05 MERC Approval
Computation of Return		
Return @ 16% on equity capital	45.17	
Return @ 16% on equity capital at commencement of year		91.31
Return @ 16% on 50% of equity portion of annual allowable cost for the year		1.67
Return for the year	**45.17**	**92.99**

** Additional data submission of BEST vide letter dated 25th January 2006*

Note: Depreciation appears to be calculated on GFA including consumer contribution and government assistance in the calculation of BEST Undertaking. Thus, depreciation appears to be on the higher side and an adjustment has been made for depreciation.

Computation of Opening 'Notional' Equity

The Capital Base of BEST has been computed taking into account the Gross Fixed Assets, work in progress, less contribution by consumers towards service lines and government assistance. This has been adjusted for depreciation to arrive at the capital base. As depreciation has been computed on GFA (including consumer contribution and government assistance), the depreciation computed is on the higher side. Thus, while computing the capital base, an adjustment has been made to depreciation.

To compute 'notional' equity, the actual loans for FY 2004-05 have been considered, and equity capital has been computed as the Capital base less actual loans at FY 2004-05 (as of 31st March 2005). However, this would represent 'notional' equity capital at the end of the year. Thus, considering the allowable capital cost for the year, and the equity component thereon, 'notional' equity capital at commencement of the year has been computed.

For FY 2005-06, the MERC (Terms and Conditions of Tariff) Regulations, 2005 (Section 76.1) have been followed for computing the 'additional equity' and 'Return on notional equity'.

Table: Return on 'Notional' Equity for FY 2005-06 (Rs. Cr)

Particulars	FY 2005-06 MERC Approval
'Notional' Equity Capital at commencement of year	
'Notional' Equity Capital at commencement of previous financial year (FY 2004-05)	570.72
Plus, Equity capital portion of allowable capital cost for previous	20.89

Particulars	**FY 2005-06**
	MERC Approval
financial year (FY 2004-05)	
	591.61
Annual allowable capital cost for year	69.64
Less: Contribution made by consumers	3.07
Less: Government Assistance	18.00
Net annual allowable capital cost	**48.57**
Normative equity (30%)	14.57
Normative debt (70%)	34.00
Computation of Return	
Return @ 16% on equity capital at commencement of year	94.66
Return @ 16% on 50% of equity portion of annual allowable cost for the year	1.17
Return for the year	**95.82**

Note: Contribution by consumers for first 9 months of 2005-06 was given as Rs 2.3 Cr., and this has been annualized (Rs. 3.07 Cr) for use in computing Return on Equity.

24. ANNUAL REVENUE REQUIREMENT

The Annual Revenue Requirement of BEST is the summation of all the expenses and the Return on Equity as computed above, less non-tariff income, and has been summarized below:

Table: Annual Revenue Requirement (Rs. Cr.)

Particulars	**FY 2004-05**		**FY 2005-06**	
	BEST Proposal*	**MERC Approval**	**BEST Proposal***	**MERC Approval**
Power Purchase Cost	1088.50	1088.50	1168.13	1119.93
Employee Expenses	88.26	88.26	85.62	136.41
Repairs & Maintenance	10.19	10.19	11.83	11.83
Share of General Administration Expenses	37.74	37.74	36.03	41.80
Other Expenses (Insurance, Transport, etc.)	44.67	44.67	54.92	49.76
Depreciation	55.44	34.51	59.01	37.57
Interest on Loans	3.81	3.80	6.29	6.97

Particulars	FY 2004-05		FY 2005-06	
	BEST Proposal*	**MERC Approval**	**BEST Proposal***	**MERC Approval**
Interest on Working Capital & Consumer Security Deposits	7.55	13.45	9.00	13.51
Tax on Sale of Electricity (paid to State Government)	-	42.64	-	61.13
Return on Equity	-	92.99	-	95.82
Interest on Internal Funds	59.46	-	51.10	-
Transport division losses	231.08	-	140.30	-
Total Revenue Requirement	**1626.70**	**1456.74**	**1622.23**	**1574.74**
Less Non-Tariff Income	72.79	72.79	83.42	78.26
Annual Revenue Requirement	**1553.91**	**1383.94**	**1538.81**	**1496.48**
Revenue from Existing Tariff	**1439.4**	**1482.1**	**1514.7**	**1519.6**
Revenue Surplus/ (Gap)	**(114.47)**	**98.13**	**(24.14)**	**23.15**

* *As per BEST ARR and Tariff Proposal for 2004-05 and 2005-06 dated 27th September 2005.*

25. TRUING UP MECHANISM

The Commission has instituted a truing up mechanism where in the actual expenses and the actual revenue will be trued up at the end of the year based on audited financial results and subject to a prudence check. This will enable BEST to recover/refund any shortfall/excess Revenue from/to the consumers at the end of the year, as per the directions of the Commission.

26. 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 have been determined in such a manner that there is a movement of category-wise tariffs towards the average cost of supply, and the cross-subsidy is reduced gradually without subjecting any consumer category to a tariff shock, and also to initiate a movement towards uniform tariffs throughout Mumbai and its suburbs.

BEST's existing tariff structure is quite complicated with too many consumer categories following no rationale. The Commission has undertaken significant rationalization of categories and subcategories/ slabs as a result of which the billing rate for some categories may have increased, while that of some others have been reduced. This is inevitable in any tariff rationalization exercise. The rationalization has been undertaken in such a way that the categories and slabs are similar to those of the Reliance Energy Limited (REL) and the erstwhile Maharashtra State Electricity Board (MSEB) to the extent possible.

Gradual reduction in cross-subsidy has been initiated, while at the same time ensuring that no consumer category is faced with a large tariff shock.

The Commission has undertaken the following rationalization of categories and slabs:

Revised LT Consumer Tariff Categories

BPL Category

The Commission has introduced a new category 'BPL' for consumers below poverty line, viz., BPL, with consumption slab of 0-30 units. This is in accordance with the National Electricity Policy, which stipulates that "*consumers below poverty line who consume below a specified level, say 30 units per month, may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply.*" However, as the existing tariff for these consumers is at a much lower level than the average cost of supply (19% of average cost of supply), the Commission has specified a lower tariff for this category in order to avoid tariff shock to the BPL consumer category.

The Commission directs BEST to gather data regarding the consumption of consumers and identify consumers who consume lower than 30 units per month, who are the real life-line category of consumers; so that the Commission can target the real life-line consumers by specifying lower tariffs (i.e., BPL category tariffs).

Residential LF-1

The consumer categories comprising R, S and SN as per the existing Tariff Schedule of BEST have been merged into one consumer category, viz. Residential LF-1. For this revised category LF-1, three consumption slabs have been introduced, viz., 0-100 units, 101-300 units and consumption above 300 units.

Existing		Revised	
Category	**Consumption Slab (kWh)**	**Category**	**Consumption Slab (kWh)**
Residential **(R)**	0-150	**Residential LF-1**	
	151-300		
	>300		0-100
School/ Hospital **(S)**	0-150		101-300
	>150		>300
Charitable Trust/ Public Trust **(SN)**	0-150		
	151-300		
	>300		

Non-Residential cum Commercial LF-2

The consumer categories comprising C1, C2 and H as per the existing Tariff Schedule of BEST have been merged into one consumer category, viz. Non-residential cum Commercial

LF-2. For this revised category LF-2, three consumption slabs have been introduced, viz., 0-300 units, 301-1000 units and consumption above 1000 units.

Existing		**Revised**	
Category	**Consumption Slab (kWh)**	**Category**	**Consumption Slab (kWh)**
Commercial **(C1)**	0-300	**Non-Residential cum Commercial LF-2**	
	301-500		0-300
	>500		301-1000
Other Hospitals **(H)**	0-150		>1000
	151-500		
	>500		
Commercial **(C2)**	All units		

LTC-1 (Low Tension Power Commercial – 1)

The consumer category of RC (LV) as per the existing Tariff Schedule of BEST has been retained as a separate category in the revised tariff schedule viz. LTC-1 (Low Tension Power Commercial – 1) with the entire consumption being charged at the same rate.

Existing		**Revised**	
Category	**Consumption Slab (kWh)**	**Category**	**Consumption Slab (kWh)**
Industrial large **RC (LV)**	All units	**Low Tension Power Commercial -1 (LTC-1)**	All units

C (D) (Advertisements and Hoardings)

The consumer category of C (D) (Advertisements and Hoardings) as per the existing Tariff Schedule of BEST has been retained as a separate category in the revised tariff schedule, with the entire consumption being charged at the same rate.

Existing		**Revised**	
Category	**Consumption Slab (kWh)**	**Category**	**Consumption Slab (kWh)**
Advertisements & Hoardings **(CD)**	All units	Advertisements & Hoardings **(CD)**	All units

LTP-1 (Low Tension Power Industrial – 1)

The consumer categories comprising GP1 and GP2 as per the existing Tariff Schedule of BEST have been merged into one consumer category, viz. LTP-1 (Low Tension Power Industrial – 1). For this revised category LTP-1, three consumption slabs have been introduced, viz., 0-300 units, 301-1000 units and consumption above 1000 units.

Existing		Revised	
Category	**Consumption Slab (kWh)**	**Category**	**Consumption Slab (kWh)**
Industrial low voltage **(GP1)**	0-150	**Low Tension Power Industrial - 1 (LTP-1)**	
	151-500		0-300
	>500		301-1000
Industrial General Purpose **(GP2)**	All units		>1000

LTP-2 (Low Tension Power Industrial – 2)

The consumer category of Ind (LV) as per the existing Tariff Schedule of BEST has been retained as a separate category in the revised tariff schedule, viz., LTP-2 (Low Tension Power Industrial – 2) with the entire consumption being charged at the same rate

Existing		Revised	
Category	**Consumption Slab (kWh)**	**Category**	**Consumption Slab (kWh)**
Industrial large **Ind (LV)**	All units	**Low Tension Power Industrial (LTP-2)**	All units

SL (Street Lights)

The various consumer categories comprising GRD SL and PUB SL as per the Existing Tariff Schedule of BEST have been merged into one consumer category, viz., SL (Street Lights). For this revised category SL, there is a single consumption slab for all units.

Existing		Revised	
Category	**Consumption Slab (kWh)**	**Category**	**Consumption Slab (kWh)**
Street Lighting **(GRD SL)**	All units	**Street Lighting (SL)**	All units
Public Street Lighting **(PUB SL)**	All units		

E (Electric Crematoriums)

The consumer category of E (Electric Crematoriums) as per the existing Tariff Schedule of BEST has been retained as a separate category in the revised tariff schedule, with the entire consumption being charged at the same rate.

Existing		Revised	
Category	**Consumption Slab (kWh)**	**Category**	**Consumption Slab (kWh)**
Electric Crematorium **(E)**	All units	Electric Crematorium **(E)**	All units

T (Temporary)

The consumer categories comprising TS and SB as per the existing Tariff Schedule of BEST have been merged into one consumer category, viz., T (Temporary). For this revised category T, there is a single consumption slab for all units.

Existing		Revised	
Category	**Consumption Slab (kWh)**	**Category**	**Consumption Slab (kWh)**
Temporary Supply **(TS)**	All units	**Temporary (T)**	All Units
Stand-by **(SB)**	All units		

TS (R) (Temporary Supply for Public Religious Functions)

The consumer category of TS (R) (Temporary Supply for Public Religious Functions) as per the existing Tariff Schedule of BEST has been retained as a separate category in the revised tariff schedule, with the entire consumption being charged at the same rate.

Existing		Revised	
Category	**Consumption Slab (kWh)**	**Category**	**Consumption Slab (kWh)**
Temporary Supply Religious **(TSR)**	All units	Temporary Supply Religious **(TSR)**	All units

<u>Revised HT Consumer Tariff Categories</u>

HTP-1 (High Tension Power – 1)

The consumer categories of S (HV) and SN (HV) as per the existing Tariff Schedule of BEST have been merged into one consumer category, viz. HTP-1 (High Tension Power – 1). For this revised category HTP-1, there is a single consumption slab for all units.

Existing		Revised	
Category	**Consumption Slab (kWh)**	**Category**	**Consumption Slab (kWh)**
Schools/ Hospitals High Voltage **S(HV)**	All units	**High Tension Power -1 (HTP-1)**	All units
Charitable Trust/ Public Trust High Voltage **SN(HV)**	All units		

HTP-2 (High Tension Power Commercial – 2)

The consumer category of H (HV) as per the existing Tariff Schedule of BEST has been retained as a separate category in the revised tariff schedule viz. HTP-2 (High Tension Power Commercial – 2) with the entire consumption being charged at the same rate.

Existing		Revised	
Category	**Consumption Slab (kWh)**	**Category**	**Consumption Slab (kWh)**
Other Hospitals High Voltage **H(HV)**	All units	**High Tension Power Commercial -2 (HTP-2)**	All units

HTP-3 (High Tension Power Commercial – 3)

The consumer category of RC (HV) as per the existing Tariff Schedule of BEST has been retained as a separate category in the revised tariff schedule, viz., HTP-3 (High Tension Power Commercial – 3) with the entire consumption being charged at the same rate.

Existing		Revised	
Category	**Consumption Slab (kWh)**	**Category**	**Consumption Slab (kWh)**
Industrial High Voltage **RC(HV)**	All units	**High Tension Power Commercial -3 (HTP-3)**	All units

HTP-4 (High Tension Power Industrial – 4)

The consumer categories of Ind (HV) and GP2 (HV) as per the existing Tariff Schedule of BEST have been merged into one consumer category in the revised tariff schedule, viz., HTP-4 (High Tension Power Industrial – 4) with a single consumption slab for all units.

Existing		Revised	
Category	**Consumption Slab (kWh)**	**Category**	**Consumption Slab (kWh)**
Industrial High Voltage **Ind(HV)**	All units	**High Tension Power Industrial -4 (HTP-4)**	All units
GP2 (HV)	All units		

HTP-5 (High Tension Power - 5)

The existing categories of R (HV) and Defence bulk consumption for commercial have been merged into a new category, viz., HT Defence Bulk Consumption HTP-5 (High Tension Power **-** 5). For this revised category HTP-5, there is a single consumption slab for all units.

Existing		Revised	
Category	**Consumption Slab (kWh)**	**Category**	**Consumption Slab (kWh)**
Defence bulk supply for Residential High Voltage **R(HV)**	All units	**HT Defence Bulk Consumption (HTP-5)**	All units
Defence bulk supply for downstream commercial consumption	All units		

The Commission has abolished the minimum charges and the concept of Two Part Tariff, namely Fixed Charge and Variable Charge has been introduced for all consumers, in line with the policy already implemented for other licensees. This will send the correct economic signal to the consumers, that all consumers have to contribute towards the fixed cost of the licensee, and will also simplify the bill and make it easier to understand. The Demand charges have been specified in terms of Rs./kVA/month (for LTC-1, LTP-2, SL, HTP-1, HTP-2, HTP-3, HTP-4 and HTP-5 categories) and fixed charges have been specified in terms of Rs./connection/month (for BPL, LF-1, LF-2, E, LTP-1 and C(D) categories). The Fixed Charges for the categories T and TS(R) will be applicable in terms of Rs./ connection per occasion of supply.

In case of Residential LF-1, Non-residential cum Commercial LF-2 and LTP-1 category, the connected load data is not easily verifiable, hence the Commission has determined the fixed charges for these categories in terms of Rs./connection/month.

The Commission directs BEST to install electronic meters capable of measuring maximum demand and ToD consumption for its consumers in categories LF-2, LTP-1, LTP-2, LTC-1 with sanctioned load equal to or above 20 kW or using more than 3,000 kWh/month and to all consumers in HT category in a time bound manner so that the ToD tariffs and demand charges on kVA basis can be introduced for these consumer categories in the next Tariff Determination exercise for FY 2006-07. To begin with, three Time of the Day Slots are envisaged as ‘0800-1600 Hours’, ‘1600-2400 Hours’ and ‘2400-0800 Hours’. However, in future these shall be scalable for up-gradation to 4 time slots. BEST should keep this in mind, metering being an important area for focused attention and up-gradation, while installing new meters for existing/ new connections in the HT and LT Industrial and Commercial categories mentioned here.

BEST is also directed to maintain separate data on consumption and demand of consumers having sanctioned load of up to 20 kW and those having load above 20 kW.

RkVAh charges will be applicable to consumers of category LF-2, LTP-1, LTP-2, LTC-1 and all HT categories. In case of LF-2 and LTP-1 categories, the RkVAh charges will be applicable to consumers whose monthly energy consumption is above 3000 kWh (units) per month.

The existing Fuel Adjustment Cost (FAC) has been merged with the basic tariff since the Commission has considered the prevailing power purchase prices. Thus, FAC has been equated to zero. The FAC charge will be applicable on the entire sales of BEST, without any exemption to any consumer categories. The earlier method followed by BEST of FAC exemption for the first 200 units of consumption by its existing consumer categories R, S, SN and H and for Temporary Supply Religious (TSR) connections has been done away with. The Commission has approved the following FAC formula to account for any change in the cost of power purchase due to variations in the fuel cost:

FAC = C + I + B where,

FAC = Fuel Adjustment Cost

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

I = Interest on Working Capital

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

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

However, after the issuance of this Order, whenever the FAC charge is being levied by BEST for the first time on the basis of the formula and principles approved in this Order, BEST would obtain the prior approval of the Commission before levying FAC charge. The levy of FAC charge will be subject to a ceiling as stipulated in the MERC (Terms and Conditions of Tariff) Regulations, 2005. In case, the FAC chargeable during any month exceeds the ceiling, then the Licensee will carry forward the variation in costs and recover through FAC charge in the future period.

The Commission has abolished meter rent in conformity of the policy already implemented for other licensees, viz. MSEDCL, REL and TPC.

BEST should ensure strict observation of metering, billing and collection provisions as stipulated in the MERC (Electric Supply Code and other Conditions of Supply) Regulations 2005.

The tariffs are telescopic for LF-1, LF-2 and LTP-1 categories, i.e., consumers falling in the higher slabs will have to pay higher tariffs only for the consumption in that slab and not on the total consumption.

Henceforth, Tax on Sale of Electricity (ToSE) shall not be charged on the consumers separately.

The revenue from fixed charges as a percentage of the fixed costs is projected to increase from 8% to 21.5% on account of the increase in fixed/ demand charges determined by the Commission. The Commission intends to gradually increase the recovery of fixed costs through fixed charges in future in order to avoid tariff shock.

The Monthly Billing Demand for LT/ HT consumers will be the higher of the following:

a. Actual established demand recorded in the month during the period of 0800 hours to 2400 hours;

b. 75% of the highest billing demand or Contract Demand, whichever is lower, during the preceding eleven months;

c. 50% of the Contract Demand as defined in the Supply Code.

(“Contract Demand” means demand in kilowatt (kW) / kilovolt ampere (kVA), mutually agreed between BEST and the consumer as entered into in the agreement or agreed through other written communication).

The Commission notes that BEST Undertaking has not refunded the excess Security Deposit as per the MERC (Electric Supply Code and other Conditions of Supply) Regulations 2005. Although, as per the Regulations, the excess Security Deposit has to be refunded in a single payment, given the quantum of refund involved the Commission directs BEST to refund the Excess Security Deposit over a period of 6 months from the date of the enforcement of the Operative Order with an interest rate of 6% up to the date of 20th January 2005 (the Date of enforcement of MERC Electric Supply Code and other Conditions of Supply Regulations 2005) and from thereon at a rate of 12% p.a. till the date of refund on a reducing balance basis.

The Commission finds the current level of Consumer Outstandings of BEST to be unacceptable. Therefore, it directs BEST to make focused efforts in a time bound manner for reducing the outstandings to a reasonable level. The Commission directs BEST to publish a list of defaulters in newspapers and also on its website on a regular basis.

The Commission has rationalized the charges for power factor maintenance, by eliminating the Power Factor Surcharge in the revised Tariff and retaining only the RkVAh charges.

The exiting cross subsidy and reduction in cross-subsidy considered by the Commission is given in the table below:

Table: Ratio of Average Billing Rate to Average Cost of Supply (2005-06)

Revised Consumer Category	Average Cost of Supply (Rs./unit)	Average Realization (Rs./unit)		Ratio of Average Realization to Average Cost of Supply (%)		Percentage Point increase/ decrease in tariff w.r.t. Average CoS
		Existing Tariff	Revised Tariff	Existing Tariff	Revised Tariff	
	(a)	(b)	(c)	(d)=(b)/(a)	(e)=(c)/(a)	(f)=(e)-(d)
LT Category						
BPL	4.10	-	0.87	-	21%	n.a.
LF-1	4.10	2.22	2.43	54%	59%	5%
LF-2	4.10	6.14	6.02	150%	147%	-3%
E	4.10	1.80	1.96	44%	48%	4%
LTP-1	4.10	5.42	5.89	132%	144%	12%
LTC-1	4.10	5.61	5.30	137%	129%	-8%
LTP-2	4.10	5.16	4.85	126%	118%	-8%
SL	4.10	3.98	4.19	97%	102%	5%
T	4.10	10.22	8.67	249%	212%	-38%
TS(R)	4.10	3.04	2.51	74%	61%	-13%
C(D)	4.10	9.12	12.46	222%	304%	81%
Sub-total LT	**4.10**	**4.14**	**4.20**	101%	102%	1%
HT Category						
HTP-1	4.10	2.67	3.50	65%	85%	20%
HTP-2	4.10	4.83	4.90	118%	119%	2%
HTP-3	4.10	5.09	4.85	124%	118%	-6%
HTP-4	4.10	3.58	4.22	87%	103%	16%
HTP-5	4.10	3.16	3.66	77%	89%	12%
Sub-total HT	**4.10**	**4.41**	**4.54**	108%	111%	3%

BEST is directed to explore methods such as prepaid meters, advance payment, discount schemes, and other innovative collection approaches such as payment through electronic media, provision for drop boxes for payment through cheque, Electronic Clearing Scheme, etc., if not done so already, to reduce the transaction costs for metering, billing and collection. BEST should endeavour to improve the layout of the bill, to make it easier to comprehend, and also make available information about complaint handling and grievance redressal, incuding fuse calls, prominently on the bill. BEST should also introduce bi-lingual bills, which should contain information about past consumption pattern, amount of security deposit, and information/messages to consumers.

The revised tariff applicable for all categories of consumers from March 1, 2006 has been shown below. The comparison between the existing tariff and the tariff determined by the Commission has been presented in Appendix 3.

27. INCENTIVES AND DISINCENTIVES

Prompt Payment Discount

Prompt Payment Discount has been revised to the rate of 1% of the energy bill (excluding fixed/demand charges, FAC, and Electricity Duty) for the HT and LT Industrial and Commercial categories, provided the payment of the bill is received by BEST within 7 (seven) days from the date of issue of the energy bill or within 5 (five) days from date of receipt of the energy bill, whichever is later.

Penal Tariff & Rebates

The State of Maharashtra is passing through a phase of acute power shortage, and even Mumbai city, which so far has been spared of load shedding, is likely to face power shortages in the coming summer months. In the absence of additional capacity in the region, there is an urgent need for energy conservation and load management by all power intensive consumers. In order to achieve this, the Commission has adopted the principle of economic signals for high consumption consumers, i.e., residential (households, which would typically have energy intensive equipment such as air conditioners) and commercial consumers having consumption > 300 units per month and all LT/ HT industrial and HT commercial consumers.

Subsequent to the issue of the Operative Order (dated February 25, 2006), the Commission held a Public Hearing in respect of Case No. 46 of 2005 in the matter of Strategy to bridge the demand-supply gap in the city of Mumbai, on February 27, 2006 at Mumbai in Centrum Hall, First Floor, World Trade Centre at 11:00 hours. During the Public Hearing, several suggestions were received that the reduction in monthly consumption should be in comparison to the corresponding month in the previous year instead of the average consumption in the last year. There were also suggestions that certain category of consumers should be exempted from the levy of penal tariff. Taking into account these suggestions of the public during the course of the Public Hearing, the Commission has decided to introduce load management charges and load management rebate as follows:

(i) All the residential and commercial consumers consuming more than 300 units per month henceforth and all industrial consumers (irrespective of their level of consumption) in the BEST License area will have to reduce their monthly consumption to a level of 80% of their consumption in the corresponding month in the past year (January 2005 to December 2005). Penal tariff termed as “Load Management Charge” shall be applicable for the consumption exceeding the 80% limit at the rate of additional 100% of the highest tariff chargeable to the respective category, and will be charged in the energy bill of the consumer in that month.

(ii) The money collected through the levy of this penal tariff termed as “Load Management Charge” has to be maintained in a separate fund to be used for energy conservation and Demand Side Management (DSM) measures.

(iii) Any reduction in the monthly consumption below the 80% limit prescribed on a consumption in the corresponding month in the past year (January 2005 to

December 2005) will be incentivised with a rebate termed as “Load Management Rebate” at the rate of 50% of the normal chargeable rate to the kWh units in the tariff slab applicable to the reduction in the number of units, vis-à-vis the benchmark consumption of 80% of the consumption in the corresponding month of the previous years, by adjusting the bill accordingly. This would be funded by the fund mentioned in paragraph ‘ii’ above, calculated in the energy bill of the consumer for that month. The computation of Load Management Charge and Load Management Rebate, has been illustrated for LF-1 and LF-2 categories in **Appendix 6**, for ease of reference.

(iv) In case of residential and commercial consumers having consumption greater than 300 units per month henceforth, and all LT/ HT industrial and HT commercial consumers who have already reduced their consumption in the corresponding months in the last year due to the introduction of the Load Management Charge/Rebate, i.e., for consumers who have been given Load Management Rebate last year, the load management target will be at the same level as that of the corresponding month last year, and further reduction to 80% of the consumption in the previous year is not mandatory in such cases.

(v) This monthly consumption reduction target will not be applicable for new consumers and in case of change in occupancy during the last one year for the existing consumers.

(vi) As regards the essential services, it is desirable that they should also try to reduce their monthly consumption, however, in case of failure to reduce the consumption to a level of 80% of their consumption in the corresponding month in the past year (January 2005 to December 2005), penal tariff in the form of levy of “Load Management Charge” as well as incentive of “Load Management Rebate” will not be applicable for the operational installations of following essential services:

a. Railways
b. Water Supply and Sewerage systems operated by Government/local authorities
c. Telephone exchanges
d. Defence Establishments
e. Ports and Harbours
f. Meteorological observatories
g. Hospitals
h. News Agencies
i. TV and Radio Stations
j. Posts & Telegraphs
k. Airports
l. Atomic energy establishments

(vii) In case of the above essential services, the restriction of reducing the monthly consumption to 80% of their consumption in the corresponding month of the past year will however, be applicable for the attached residential colonies and the “Load

Management Charge/ Rebate shall be applicable as mentioned in paragraphs '(i)' to '(v)' above.

28. REVENUE FROM REVISED TARIFFS

In FY 2005-06, BEST will earn revenue for 11 months with existing tariff, while the revised tariffs will be applicable for 1 month, i.e., March 2006. The total revenue from sale of electricity based on revised tariffs applicable for the entire year has been projected as Rs. 1547.61 crore.

The revised electricity tariffs to be charged by BEST to its consumers will be applicable with effect from March 1, 2006, and will continue to remain in force till further revision in tariffs. 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 consumption 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 detailed revenue computation with revised tariff has been given in Appendix 4. The impact of the tariff revision on the monthly electricity bills of the different consumer categories is presented in Appendix 5.

The Commission acknowledges the efforts taken by the Consumer Representatives, viz., (i) Mumbai Grahak Panchayat, (ii) Ekta Mitra Mandal (iii) Bombay Small Scale Industries Association and (iv) EIH Hotels (v) Mr. A.R.Bapat (vii) Adv. S.S. Pawar and the various individuals, corporates and associations for their valuable contribution to the tariff process.

The Commission would also like to put on record, the efforts of its advisors, M/s A. F. Ferguson & Co.

This Tariff Order shall come into force with effect from March 1, 2006.

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

(Malini Shankar)
Secretary, MERC

APPENDIX 1

List of persons who attended the Technical Validation Session held on 11th August 2005

Sr. No.	Name of Person/ Official	Designation and Institution
1	Shri Puranik	CE, BEST
2	Shri A.V. Tendulkar	CE, BEST
3	Shri A.V. Kane	CE, BEST
4	Shri G.M. Bhagat	Suptd., BEST
5	Shri E.S. Choudhary	Asst. Engineer, BEST
6	Shri S.R. Surve	BEST
7	Shri Seshan B	Head Power, CRISIL
8	Shri R. Suresh Kumar	Manager, CRISIL
9	Shri K.N. Rajagopal	SCS, BEST
10	Shri P. Haridasan	AGM (ES), BEST
11	Shri G.P. Pradhan	AGMA, BEST
12	Mrs. V.S. Salvi	AGM (Legal), BEST
13	Shri S.S. Jadhav	Suptd., BEST
14	Mrs. R.S. Mujumdar	SOES, BEST
15	Shri M.R. Dharaskar	SPROL, BEST
16	Dr. Ashok Pendse	Mumbai Grahak Panchayat
17	Mr. V.K. Phadke	BEST
18	Shri R. Divekar	Director, A. F. Ferguson & Co.
19	Shri S.S. Kshatriya	GM- BEST
20	Shri P.P. Kulkarni	SSGM, BEST
21	Shri J.D. Kulkarni	AGM, TPC
22	Mrs. Rupa Singh	Director, CRISIL
23	Shri Shrikant Thorat	Sr. Manager, A. F. Ferguson & Co.
24	Ms. Shaheen Chinoy	Sr. Consultant, A. F. Ferguson & Co.

APPENDIX 2

List of Objectors

S. No.	Name of the Objector	Organization & Address	Attended Public Hearing	Spoke at Public Hearing
1.	Shri Ashok Pendse Dr. Phadke	Mumbai Grahak Panchayat, Grahak Bhavan, Sant Dynyaneshwar Marg, Behind Cooper Hospital, Vile Parle (W), Mumbai-400 056	Attended	Yes
2.	Shri Prabhakar Anerao, Secretary	Ekta Mitra Mandal (Trust) 349/5, Kanya Sagar Society, Ekta Vachanalaya Marg, R.S.C. 36, Sector No.3, Charkop, Kandivali (W) Mumbai-400 067	Not Attended	No
3.	Adv. Sonu Shankar Pawar	Nominated Member – BMC Ankur, 230/1, Sector-2, Charkop, Kandivali (W) Mumbai-400 067	Not Attended	No
4.	Shri L. Vishwanathan, Partner	Amarchand & Mangaldas & Suresh A. Shroff & Co. Peninsula Chambers Peninsula Corporate Park Ganpatrao Kadam Marg, Lower Parel, Mumbai-400013	Attended	Yes
5.	Shri A.R. Bapat	73, Lokmanya C.H.S. Veer Savarkar Path, Thane (W) – 400 602	Not Attended	No
6.	Shri Rakshpal Abrol, President,	Bombay Small Scale Ind. Association, Madhu Compound, 2nd Floor, Sonawala Cross Road No.2, Goregaon (E), Mumbai-400063	Not Attended	No
7.	Consumers of Mumbai		Not Attended	No

List of persons who attended the Public Hearing on 21st December 2005

S. No.	Name of the Person	Designation	Institution/ Firm
1.	L. Vishwanathan	Partner	Amarchand & Mangaldas
2.	Deepto Roy	Associate	Amarchand & Mangaldas
3.	Murali Nair	Ag. Legal Advisor	Brihan-Mumbai Electric Supply & Transport Undertaking (BEST)
4.	P. Haridasan	Asst. GM (Electric Supply)	BEST
5.	A. V. Tendulkar	CBDS	BEST
6.	A. V. Kane	CEES	BEST
7.	A. G. Patil	DCEMERC	BEST
8.	G. M. Bhagat	Supt. MERC	BEST
9.	E.S. Chaudhary	Supt. MERC	BEST
10.	S.M. Sakpal	SSGM	BEST
11.	M.H. Vohwa	Ch. Engineer	BEST
12.	Anil Kale	Manager	CRISIL
13.	Avinash Shanbhogle	Analyst	CRISIL
14.	K.N. Rajagopal	SCS	BEST
15.	S.A. Puranik	CE	BEST
16.	S.S. Jadhav	Supdt.	BEST
17.	R.S. Mujumdar	SOES	BEST
18.	S.S. Kshatriya	General Manager	BEST
19.	Seshan B	Head	CRISIL
20.	V.K. Phadke	CAO & FA	BEST
21.	S. B. Dhole	Dy. CA & FA	BEST
22.	G. M. Phadke		Mumbai Grahak Panchayat
23.	S.B. Thorat	Sr. Manager	A. F. Ferguson & Co.
24.	S. Chinoy	Sr. Consultant	A. F. Ferguson & Co.
25.	R. Divekar	Director	A. F. Ferguson & Co.
26.	Mrs. V.S. Salvi		BEST
27.	Shri G.P. Pradhan		BEST
28.	Shri R.A. Shetty		BEST
29.	Shri R.D. Pawar		BEST
30.	R. Singh	Director	CRISIL
31.	V. H. Wagle	Manager	The Tata Power Company Ltd.
32.	J.D. Kulkarni	Dy. GM	The Tata Power Company Ltd.
33.	P.K. Anvekar	Asst. Manager	The Tata Power Company Ltd.
34.	S. Venkatraman	Consultant	The Tata Power Company Ltd.
35.	Pasarkar S.W.	MGP	The Tata Power Company Ltd.
36.	R. J. Singh	SES	BEST
37.	Mukesh B.	B.S.C	Bombay Small Scale Industries Association (BSSIA)
38.	Sujoy B.	Director Finance	Oberoi Hotels
39.	N. Shelar		BSSIA

APPENDIX 3: Comparison of BEST Existing and Revised Tariff Schedule

Existing Tariff of BEST Undertaking

Existing Categories	Slabs	Demand Charges	Energy Rate (excl FAC) Paise /kWh	RkVAh Charges Paise/ RkVAh
Residential (R)	0-150	-	75	
Residential (R)	0-150	-	75	
	151-300	-	225	
	>300	-	325	
Schools/ Hospitals (S)	0-150	-	140	
	>150	-	225	
Charitable Trust/ Public Trust (SN)	0-150	-	140	
	151-300	-	225	
	>300	-	350	

Revised Tariff of BEST Undertaking

Revised Tariff Categories	Slabs	Demand Charges per month		Energy Rate Paise per kWh	RkVAh Rate (Paise/ RkVAh)
		Single phase	**Three phase**		
(Below Poverty Line Residential) BPL	0-30	Rs. 3 / Conn./ month	-	50	-
Residential (LF-1)	0-100	Rs.10/ Conn./ month	-	75	-
	101-300	Rs.10/ Conn./ month	Rs.100/ Conn./ month	215	-
	>300	Rs.50/ Conn./ month	Rs.100/ Conn./ month	465	-

Existing Tariff of BEST Undertaking

Existing Categories	Slabs	Demand Charges	Energy Rate (excl FAC) Paise /kWh	RkVAh Charges Paise/ RkVAh
Commercial (C1)	0-300	-	400	
	301-500	-	500	
	>500	-	600	
Other Hospitals (H)	0-150	-	300	
	151-500	-	400	
	>500	-	500	
Commercial (C2)	all units	-	475	
C2 RkVAh Charges	for All RkVAh Units			240

Revised Tariff of BEST Undertaking

Revised Tariff Categories	Slabs	Demand Charges per month		Energy Rate Paise per kWh	RkVAh Rate (Paise/ RkVAh)
		Single phase	**Three phase**		
Non-residential cum Commercial (LF-2)	0-300	Rs. 150/ Conn./ month		415	
	301-1000	Rs. 150/ Conn./ month		515	
	>1000	Rs. 150/ Conn./ month		630	
RkVAh Charges applicable for consumers with greater than 3000 units per month consumption					
Applicable RkVAh Slabs					
PF<0.92					270
0.92<PF<0.95					180
0.95<PF<0.97					120
PF>0.97					0

Existing Tariff of BEST Undertaking | **Revised Tariff of BEST Undertaking**

Existing Categories	Slabs	Demand Charges	Energy Rate (excl FAC) Paise /kWh	RkVAh Charges Paise/ RkVAh	Revised Tariff Categories	Slabs	Demand Charges per month		Energy Rate Paise per kWh	RkVAh Rate (Paise/ RkVAh)
							Single phase	Three phase		
Industrial large RC(LV) with <75% Con Load for Mfg	all units	Rs. 350/kVA/month	350		**LT Power Commercial -1 (LTC-1)**	all units	Rs/ 300/ kVA/ month		410	
	Applicable RkVAh Slabs				Applicable RkVAh Slabs					
					PF<0.92					270
	RkVAh Charge if PF<0.95			170	*0.92<PF<0.95*					180
	RkVAh Charge if 0.95<PF<0.97			85	*0.95<PF<0.97*					120
	No RkVAh Charge if PF>0.97			0	*PF>0.97*					0
Comm. Advertisements (CD)	all units	-	800		**Advertisements and Hoardings (CD)**	all units	Rs. 200/ conn./ month		1215	-
Industrial Low voltage (GP1)	0-150	-	325		**LT Power Industrial -1 (LTP -1)**	0-300	Rs. 300/ Conn./ month		340	
	151-500	-	400			301-1000	Rs. 300/ Conn./ month		465	

Existing Tariff of BEST Undertaking | **Revised Tariff of BEST Undertaking**

Existing Categories	Slabs	Demand Charges	Energy Rate (excl FAC) Paise /kWh	RkVAh Charges Paise/ RkVAh	Revised Tariff Categories	Slabs	Demand Charges per month		Energy Rate Paise per kWh	RkVAh Rate (Paise/ RkVAh)
							Single phase	Three phase		
	>500	-	525			>1000	Rs. 300/ Conn./ month		615	
					RkVAh Charges applicable for consumers with greater than 3000 units per month consumption					
					PF<0.92					270
					0.92<PF<0.95					180
					0.95<PF<0.97					120
Industrial General Purpose (GP2)	all units	-	400		*PF>0.97*					0
GP2 RkVAh Charges	for All RkVAh Units			200						
Industrial large Ind(LV)	all units	Rs. 310/kVA/month	310		**LT Power Industrial - 2 (LTP-2)**	all units	Rs. 300/ kVA/ month		345	
IND(LV) RkVAh Charges	RkVAh Charge if PF<0.95			150	Applicable RkVAh Slabs					
	RkVAh Charge if 0.95<PF<0.97			75	*PF<0.92*					270
	No RkVAh			0	*0.92<PF<0.95*					180

Existing Tariff of BEST Undertaking

Existing Categories	Slabs	Demand Charges	Energy Rate (excl FAC) Paise /kWh	RkVAh Charges Paise/ RkVAh
	Charge if PF>0.97			
Street Lighting (SL) - GRD SL	all units	-	270	
PUB.ST.LTG.		-	270	
Electric Crematorium (E)	all units	-	80	
Temporary Supply (TS)	all units	Rs. 300/conn	700	
Stand by (SB)	all units	Rs. 75/kW/month	700	
Temp. Religious (TSR)	all units	Rs. 200/conn	140	

Revised Tariff of BEST Undertaking

Revised Tariff Categories	Slabs	Demand Charges per month		Energy Rate Paise per kWh	RkVAh Rate (Paise/ RkVAh)
		Single phase	Three phase		
0.95<PF<0.97					120
PF>0.97					0
Street Lights (SL)	all units	Rs. 300/ kVA/ month		360	-
Electric Crematoriums (E)	all units	Rs. 100/ Conn./ month		195	-
Temporary Supply (T)	all units	Rs. 250/ Conn./ Occasion of Supply		865	-
Temporary Supply for Public religious Functions -TS(R)	all units	Rs. 200/ Conn./ Occasion of Supply		215	-

Existing Tariff of BEST Undertaking

Existing Categories	Slabs	Demand Charges	Energy Rate (excl FAC) Paise /kWh	RkVAh Charges Paise/ RkVAh
Schools/ Hospitals High Voltage S(HV)	all units	-	160	
	for All RkVAh Units			80
Charitable Trust/ Public Trust High Voltage SN (HV)	all units	-	245	
	for All RkVAh Units			122
Other Hospitals High Voltage H (HV)	all units	-	350	
	for All RkVAh Units			175

Revised Tariff of BEST Undertaking

Revised Tariff Categories	Slabs	Demand Charges per month: Single phase	Demand Charges per month: Three phase	Energy Rate Paise per kWh	RkVAh Rate (Paise/ RkVAh)
HT Power -1 (HTP-1 for supply to Schools/ Charitable/ Public Trusts)	all units	Rs. 300/ kVA/ month		270	
Applicable RkVAh Slabs					
PF<0.92					270
0.92<PF<0.95					180
0.95<PF<0.97					120
PF>0.97					0
HT Power-2 (HTP-2 Commercial)		Rs. 300/ kVA /month		435	
Applicable RkVAh Slabs					
PF<0.92					270
0.92<PF<0.95					180
0.95<PF<0.97					120

Existing Tariff of BEST Undertaking					Revised Tariff of BEST Undertaking					
Existing Categories	**Slabs**	**Demand Charges**	**Energy Rate (excl FAC) Paise /kWh**	**RkVAh Charges Paise/ RkVAh**	**Revised Tariff Categories**	**Slabs**	**Demand Charges per month**		**Energy Rate Paise per kWh**	**RkVAh Rate (Paise/ RkVAh)**
							Single phase	**Three phase**		
					PF>0.97					0
Industrial High Voltage RC(HV) with <75% Con Load for Mfg.	All units	Rs.310.kVA/month	310		**HT Power-3 (HTP-3 Commercial)**	all units	Rs. 300/ kVA/ month		360	
	RkVAh Charge if PF<0.95			150	Applicable RkVAh Slabs					
	RkVAh Charge if 0.95<PF<0.97			75	*PF<0.92*					270
	No RkVAh Charge if PF>0.97			0	*0.92<PF<0.95*					180
					0.95<PF<0.97					120
					PF>0.97					0
Industrial High Voltage Ind(HV)	all units	Rs. 170/kVA/month	197		**HT Power – 4 (HTP-4 Industrial)**	all units	Rs. 300/ kVA/ month		270	
	RkVAh Charge if PF<0.95			100	Applicable RkVAh Slabs					

Existing Tariff of BEST Undertaking | **Revised Tariff of BEST Undertaking**

Existing Categories	Slabs	Demand Charges	Energy Rate (excl FAC) Paise /kWh	RkVAh Charges Paise/ RkVAh	Revised Tariff Categories	Slabs	Demand Charges per month		Energy Rate Paise per kWh	RkVAh Rate (Paise/ RkVAh)
							Single phase	Three phase		
	RkVAh Charge if 0.95<PF<0.97			50	*PF<0.92*					270
	No RkVAh Charge if PF>0.97			0	*0.92<PF<0.95*					180
					0.95<PF<0.97					120
					PF>0.97					0
Bulk Supply Residential High Voltage R (HV)	all units		195		**HT Power Bulk Supply HTP-5**	all units	Rs. 100 /kVA/ month		270	
	for All RkVAh Units	-		97	Applicable RkVAh Slabs					
					PF<0.92					270
					0.92<PF<0.95					180
					0.95<PF<0.97					120
					PF>0.97					0

Notes:

1) Meter Rent Applicable Additionally

Notes:

Existing Tariff of BEST Undertaking

Existing Categories	Slabs	Demand Charges	Energy Rate (excl FAC) Paise /kWh	RkVAh Charges Paise/ RkVAh

2) No FAC is charged for the first 200 units in R, S, Sn, H and TS(R). FAC will be charged in these categories above 200 units and to all other categories for all the units sold

3) ToSE Charged as a separate item in the bill

4) PF Surcharge applicable in case of consumers covered by RC(LV), IND(LV), RC(HV), IND (HV), C2, GP2 and Optional High Voltage Tariff

5) Electricity Duty is charged separately as applicable

6) Delayed Payment Charges, Prompt Payment Discount, Contract Demand, Billing Demand and clauses related to the scope of R and Sn Tariffs are as per the Foot Notes to the existing Tariff Schedule

Revised Tariff of BEST Undertaking

Revised Tariff Categories	Slabs	Demand Charges per month		Energy Rate Paise per kWh	RkVAh Rate (Paise/ RkVAh)
		Single phase	**Three phase**		

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. Additional fixed charges of Rs. 100 per 10 kW or part thereof above 10kW load shall be payable by consumers in LF-1 category.
3. In case of LF-2 (Non-residential cum Commercial) consumers and Temporary (T) connection consumers, additional fixed charge of Rs. 150 per 10 kW load or part thereof above 10 kW load shall be payable.
4. Billing Demand: The Monthly Billing Demand, where applicable, for LT/ HT consumers will be the higher of the following:

a. Actual established demand recorded in the month during the period of 0800 hours to 2400 hours;

b. 75% of the highest billing demand or Contract Demand, whichever is lower, during the preceding eleven months;

c. 50% of the Contract Demand as defined in the Supply Code.

("Contract Demand" means demand in kilowatt (kW) / kilovolt ampere (kVA), mutually agreed between BEST and the consumer as entered into in the agreement or agreed through other written communication).

5. Security Deposit: The Security Deposit payable by consumers shall be equal to the average of 3 months' of billing or of the billing cycle period, whichever is lesser. For determining the average billing for this purpose, the average of the billing to the consumer for the last 12 months or, in cases where supply has been provided for a shorter period, the average of the billing for such shorter period, shall be considered.

Existing Tariff of BEST Undertaking

Existing Categories	Slabs	Demand Charges	Energy Rate (excl FAC) Paise /kWh	RkVAh Charges Paise/ RkVAh

Revised Tariff of BEST Undertaking

Revised Tariff Categories	Slabs	Demand Charges per month		Energy Rate Paise per kWh	RkVAh Rate (Paise/ RkVAh)
		Single phase	Three phase		

6. The electricity duty will be charged as per the Government notification from time to time. However, the rate and the reference number of the Government Resolution/ Order vide which it is made effective, shall be stated in the bill. A copy of the said Resolution/ Order shall be made available on the BEST website.
7. Residential LF-1 Tariff shall be applicable for Residential premises used by professionals like Lawyers, Doctors, Professional Engineers, Chartered Accountants, etc. in furtherance of their professional activity in their residences (but shall not include Nursing Homes and any Surgical Wards)
8. Clauses related to Payment of Bills, Prompt Payment Discount, Delayed Payment Charges, Rate of Interest chargeable on arrears and Security Deposit will be applicable as specified in this Order

9. Tax on Sale of Electricity shall not be charged separately in the bill to the consumer

APPENDIX 4: Revenue Computations with Revised Tariffs for FY 2005-06

		Consumer data				Tariffs			Revenue								
Sr. No.	Consumer Category & Consumption Slab	No. of Cons.	Consmptn. in MU	Monthly Demand kVA	Mn RkVAh	Demand Charges (Rs./conn/month OR Rs./ kVA/ month) Single phase/ Three phase	Energy Charge (p/kWh)	RkVAh Charge (p/unit)	Demand Charge (Rs. Crore)	Energy Charge (Rs. Crore)	RkVAh Charge (Rs. Crore)	Total Revenue (Rs. Crore)	Avg. Revised Billing Rate (Rs/ kWh)	Avg. Existing Billing Rate (Rs/ kWh)	Tariff Inc/ Dec (%)	Ratio of Avg. revised rate to Avg. CoS	Ratio of Avg. existing rate to CoS
	Low Tension Categories																
1	BPL	79,352	7.63	-	0.00	3	50	0	0.29	0.38	0.00	**0.67**	0.87	n.a.	n.a.	21.3%	n.a.
2	LF-1																
	0-100 units	165,417	622.79	-	0.00	10	75	0	2.50	46.71	0.00	**49.21**					
	101-300 units	318,853	481.91	-	0.00	10/100 (Three phase)	215	0	5.43	103.61	0.00	**109.04**					
	>300 units	87,171	460.95	-	0.00	50/100 (Three phase)	465	0	7.46	214.34	0.00	**221.80**					
	Sub-total	**571,441**	**1565.65**	-	**0.00**				**15.39**	**364.66**	**0.00**	**380.05**	2.43	2.22	9.3%	59.2%	54.1%
3	LF-2																
	0-300 units	178,290	382.30	-	0.00	150	415		32.09	158.66		**190.75**					
	301-1000 units	37,456	255.90	-	0.00	150	515		6.74	131.79		**138.53**					
	>1000 units	19,169	672.81	-		150	630		3.45	423.87		**427.32**					
	PF <0.92				120.05			270			32.41	**32.41**					
	0.92<PF<0.95							180				-					
	0.95<PF<0.97							120				-					

		Consumer data				Tariffs			Revenue								
Sr. No.	Consumer Category & Consumption Slab	No. of Cons.	Consmptn. in MU	Monthly Demand kVA	Mn RkVAh	Demand Charges (Rs./conn/month OR Rs./ kVA/ month) Single phase/ Three phase	Energy Charge (p/kWh)	RkVAh Charge (p/unit)	Demand Charge (Rs. Crore)	Energy Charge (Rs. Crore)	RkVAh Charge (Rs. Crore)	Total Revenue (Rs. Crore)	Avg. Revised Billing Rate (Rs/ kWh)	Avg. Existing Billing Rate (Rs/ kWh)	Tariff Inc/ Dec (%)	Ratio of Avg. revised rate to Avg. CoS	Ratio of Avg. existing rate to CoS
	PF >0.97							0				-					
	Sub-total	**234,915**	**1311.02**	-	**120.05**				**42.28**	**714.32**	**32.41**	**789.02**	6.02	6.14	-2.0%	146.8%	149.8%
4	LTC-1	70	67	21,429		300	410		7.71	27.28		**34.99**					
	PF <0.92							270				-					
	0.92<PF<0.95				0.85			180			0.15	**0.15**					
	0.95<PF<0.97				0.82			120			0.10	**0.10**					
	PF >0.97				7.75			0				-					
	Sub-total	**70**	**66.54**	**21,429**	**9.42**				**7.71**	**27.28**	**0.25**	**35.25**	5.30	5.61	-5.6%	129.2%	136.8%
5	C(D)	205	1.61	-	0.00	200	1215	0	0.05	1.95	0.00	**2.00**	12.46	9.12	36.6%	303.8%	222.4%
6	LTP-1																
	0-300 units	9,624	31.23	-	0.00	300	340	0	3.46	10.62		**14.08**					
	301-1000 units	3,114	34.73	-	0.00	300	465	0	1.12	16.15		**17.27**					
	>1000 units	3,041	95.43	-		300	615		1.09	58.69		**59.78**					
	PF <0.92				14.69			270			3.97	**3.97**					

		Consumer data				Tariffs			Revenue								
Sr. No.	**Consumer Category & Consumption Slab**	**No. of Cons.**	**Consmptn. in MU**	**Monthly Demand kVA**	**Mn RkVAh**	**Demand Charges (Rs./conn/month OR Rs./ kVA/ month) Single phase/ Three phase**	**Energy Charge (p/kWh)**	**RkVAh Charge (p/unit)**	**Demand Charge (Rs. Crore)**	**Energy Charge (Rs. Crore)**	**RkVAh Charge (Rs. Crore)**	**Total Revenue (Rs. Crore)**	**Avg. Revised Billing Rate (Rs/ kWh)**	**Avg. Existing Billing Rate (Rs/ kWh)**	**Tariff Inc/ Dec (%)**	**Ratio of Avg. revised rate to Avg. CoS**	**Ratio of Avg. existing rate to CoS**
	0.92<PF<0.95							180				-					
	0.95<PF<0.97							120				-					
	PF >0.97							0				-					
	Sub-total	**15,779**	**161.39**	**-**	**14.69**				**5.68**	**85.46**	**3.97**	**95.11**	5.89	5.42	8.7%	143.7%	132.2%
7	LTP-2	12	6.48	2,489		300	345		0.90	2.24		**3.13**					
	PF <0.92							270				-					
	0.92<PF<0.95				0.02			180			0.00	**0.00**					
	0.95<PF<0.97				0.04			120			0.01	**0.01**					
	PF >0.97				0.43			0			0.00	-					
	Sub-total	**12**	**6.48**	**2,489**	**0.50**				**0.90**	**2.24**	**0.01**	3.14	4.85	5.16	-6.1%	118.2%	125.9%
8	SL	333	38.15	75,160	0.00	300	360	0	2.25	13.74	0.00	**15.99**	4.19	3.98	5.3%	102.2%	0.0%
9	E	10	1.04	-	0.00	100	195	0	0.00	0.20	0.00	**0.20**	1.96	1.80	9.0%	47.8%	43.9%
10	T	333	13.26	-	0.00	250	865	0	0.03	11.47	0.00	**11.50**	8.67	10.22	-15.1%	211.6%	249.3%

		Consumer data				Tariffs			Revenue								
Sr. No.	**Consumer Category & Consumption Slab**	**No. of Cons.**	**Consmptn. in MU**	**Monthly Demand kVA**	**Mn RkVAh**	**Demand Charges (Rs./conn/month OR Rs./ kVA/ month) Single phase/ Three phase**	**Energy Charge (p/kWh)**	**RkVAh Charge (p/unit)**	**Demand Charge (Rs. Crore)**	**Energy Charge (Rs. Crore)**	**RkVAh Charge (Rs. Crore)**	**Total Revenue (Rs. Crore)**	**Avg. Revised Billing Rate (Rs/ kWh)**	**Avg. Existing Billing Rate (Rs/ kWh)**	**Tariff Inc/ Dec (%)**	**Ratio of Avg. revised rate to Avg. CoS**	**Ratio of Avg. existing rate to CoS**
11	TS (R)		0.66	-	0.00	200	215	0	0.02	0.14	0.00	**0.17**	2.51	3.04	-17.5%	61.2%	74.1%
	High Tension Categories																
12	HTP-1	2	9.62	169		300	270		0.06	2.60		**2.66**					
	PF <0.92				2.62			270			0.71	**0.71**					
	0.92<PF<0.95							180				-					
	0.95<PF<0.97							120				-					
	PF >0.97							0				-					
	Sub-total	**2**	**9.62**	**169**	**2.62**				**0.06**	**2.60**	**0.71**	**3.36**	3.50	2.67	31.0%	85.3%	65.1%
13	HTP-2	5	19	335		300	435		0.12	8.26		**8.38**					
	PF <0.92				3			270			0.92	**0.92**					
	0.92<PF<0.95							180				-					
	0.95<PF<0.97							120				-					
	PF >0.97							0				-					
	Sub-total	**5**	**18.99**		**3.40**				**0.12**		**0.92**		4.90	4.83	1.4%	119.4%	117.8%

		Consumer data				**Tariffs**			**Revenue**								
Sr. No.	**Consumer Category & Consumption Slab**	**No. of Cons.**	**Consmptn. in MU**	**Monthly Demand kVA**	**Mn RkVAh**	**Demand Charges (Rs./conn/month OR Rs./ kVA/ month) Single phase/ Three phase**	**Energy Charge (p/kWh)**	**RkVAh Charge (p/unit)**	**Demand Charge (Rs. Crore)**	**Energy Charge (Rs. Crore)**	**RkVAh Charge (Rs. Crore)**	**Total Revenue (Rs. Crore)**	**Avg. Revised Billing Rate (Rs/ kWh)**	**Avg. Existing Billing Rate (Rs/ kWh)**	**Tariff Inc/ Dec (%)**	**Ratio of Avg. revised rate to Avg. CoS**	**Ratio of Avg. existing rate to CoS**
				335						**8.26**		**9.30**					
14	HTP-3	68	259	80,433		300	360		28.96	93.19		**122.14**					
	PF <0.92							270				-					
	0.92<PF<0.95				10.96			180			1.97	**1.97**					
	0.95<PF<0.97				11.99			120			1.44	**1.44**					
	PF >0.97				24.37			0			0.00	-					
	Sub-total	**68**	**258.85**	**80,433**	**47.31**				**28.96**	**93.19**	**3.41**	**125.55**	4.85	5.09	-4.7%	118.3%	124.1%
15	HTP-4	38	152.59	59,219		300	270		21.32	41.20		**62.52**					
	PF <0.92							270				-					
	0.92<PF<0.95				6.56			180			1.18	**1.18**					
	0.95<PF<0.97				6.12			120			0.73	**0.73**					
	PF >0.97				16.41			0				-					
	Sub-total	**38**	**152.59**	**59,219**	**29.09**				**21.32**	**41.20**	**1.92**	**64.43**	4.22	3.58	17.9%	103.0%	87.3%
16	HTP-5	5	32.45	572		100	270		0.07	8.76		**8.83**					

		Consumer data				Tariffs			Revenue								
Sr. No.	**Consumer Category & Consumption Slab**	**No. of Cons.**	**Consmptn. in MU**	**Monthly Demand kVA**	**Mn RkVAh**	**Demand Charges (Rs./conn/month OR Rs./ kVA/ month) Single phase/ Three phase**	**Energy Charge (p/kWh)**	**RkVAh Charge (p/unit)**	**Demand Charge (Rs. Crore)**	**Energy Charge (Rs. Crore)**	**RkVAh Charge (Rs. Crore)**	**Total Revenue (Rs. Crore)**	**Avg. Revised Billing Rate (Rs/ kWh)**	**Avg. Existing Billing Rate (Rs/ kWh)**	**Tariff Inc/ Dec (%)**	**Ratio of Avg. revised rate to Avg. CoS**	**Ratio of Avg. existing rate to CoS**
	PF <0.92				11.23			270			3.03	**3.03**					
	0.92<PF<0.95							180				-					
	0.95<PF<0.97							120				-					
	PF >0.97							0				-					
	Sub-total	**5**	**32.45**	**572**	**11.23**				**0.07**	**8.76**	**3.03**	**11.86**	3.66	3.16	15.7%	89.2%	77.1%
	TOTAL	**902,568**	**3,645.94**	**239,806**	**238.32**				**125.14**	**1,375.85**	**46.62**	**1,547.61**	**4.24**	**4.17**	**1.8%**	**103.5%**	**101.7%**

APPENDIX 5

Monthly Bill with Existing and Revised Tariffs

Sr. No.	Revised Tariff Consumer Category (Units in kWh Slabs)	Existing Tariff Consumer Category	Monthly Consumption (Units) (Assumed)	Monthly Bill Existing (Rs.)	Monthly Bill Revised (Rs.)	Increase/ (Reduction)	
						Rs./ month	%
1	Below the Poverty Line Consumers (BPL) (0-30 units slab)	R	25	23	16	-7	-31%
2	Residential LF-1	R	250	427	408	-19	-4%
			500	1484	1485	1	0%
		S	275	610	461	-149	-24%
			1000	3097	3810	714	23%
		Sn	275	610	461	-149	-24%
			1000	3972	3810	-162	-4%
3	Non-Residential cum Commercial LF-2	C1	275	1436	1291	-144	-10%
			480	2686	2322	-364	-14%
			2000	13640	11300	-2340	-17%
		H	700	3498	3455	-43	-1%
			2000	11584	11300	-284	-2%
		C2	12000	71640	74300	2660	4%
4	LT Commercial LTC-1	RC(LV)	80000	484300	419800	-64500	-13.3%
5	Commercial Advertisements C(D)	C(D)	7000	64334	85250	20916	32.5%
6	LT Industrial LTP-1	GP1	275	1312	1235	-77	-5.9%
			700	3764	3180	-584	-15.5%
			2000	12123	10725	-1398	-11.5%
		GP2	5000	27500	31065	3565	13.0%
7	LT Industrial LTP-2	IND(LV)	45000	261650	221550	-40100	-15.3%
8	Electric Crematoriums (E)	E	9000	17820	17650	-170	-1.0%
9	Temporary Supply (T)	TS	700	6054	6305	251	4.1%
10	Temporary Supply: Religious (TSR)	TSR	500	1304	1275	-29	-2.2%
11	HT Power HTP-1	S(HV),SN (HV)	400000	1132000	1374000	242000	21.4%
12	HT Power HTP-2	H(HV)	300000	1512250	1477500	-34750	-2.3%
13	HT Power HTP-3	RC(HV)	300000	1672000	1448400	-223600	-13.4%
14	HT Power HTP-4	IND (HV), GP2(HV)	330000	1262200	1261200	-1000	-0.1%
15	HT Power HTP-5	R(HV)	500000	1669450	1859500	190050	11%

*The monthly bill as per existing tariff does not include meter rent, and hence the impact on consumers' bills will be lesser to that extent.

APPENDIX 6

Illustrative example for implementation of Load Management Charge and Load Management Rebate

a) LF-1: Residential Category

Particulars	Revised Energy Charges	Amount	
Month		March 05	April 05
Consumption in kWh (units)		370	400
Month		March 06	April 06
Actual Consumption in 2006 (kWh)		380	310
Threshold Limit of 80% of the consumption of the respective month in past year (kWh)		296	320
Excess/(reduction) in Consumption compared to the threshold level (kWh)		84	-10
Energy Charges Slab-wise (Rs./kWh)			
0-100 units	0.75	75	75
101-300 units	2.15	430	430
>300 units	4.65	372	46.5
Load Management Charge/(Rebate)		Charge equivalent to highest slab tariff = Rs. 4.65/kWh	Rebate equivalent to 50% of corresponding slab tariff = 50% of Rs. 4.65/kWh
Load Management Charge/(Rebate) (Rs./kWh)		4.65	2.325
Load Management Charge/(Rebate) Rs.		390.6	-23.25
Total Energy Charges (incl. Load Management Charge/ Rebate charges) Rs.		1267.6	528.25
Total Fixed Charges Rs. Per month per connection		50	50
Total Energy Bill for the Month Rs.		1317.6	578.25

b) LF-2: Non-residential cum Commercial Category

Particulars	Revised Energy Charges	Amount	
Month		March 05	April 05
Consumption in kWh (units)		900	850
Month		March 06	April 06
Actual Consumption in 2006 (kWh)		900	600
Threshold Limit of 80% of the consumption of the respective month in past year (kWh)		720	680
Excess/(reduction) in Consumption compared to the threshold level (kWh)		180	-80
Energy Charges Slab-wise (Rs./kWh)			
0-300 units	4.15	1245	1245
301-1000 units	5.15	3090	1545
>1000 units	6.30		
Load Management Charge/(Rebate)		Charge equivalent to highest slab tariff = Rs. 6.30/kWh	Rebate equivalent to 50% of corresponding slab tariff = 50% of Rs. 5.15/kWh
Load Management Charge/(Rebate) (Rs./kWh)		6.3	2.575
Load Management Charge/(Rebate) Rs.		1134	-206
Total Energy Charges (incl. Load Management Charge/ Rebate charges) Rs.		5469	2584
Total Fixed Charges Rs. Per month per connection		150	150
Total Energy Bill for the Month Rs.		5619	2734