Before the

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

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Case No. 115 of 2008

IN THE MATTER OF

Maharashtra State Power Generation Company Ltd.'s (MSPGCL) Petition for approval of Truing up for FY 2007-08, Annual Performance Review for FY 2008-09 and Determination of Tariff for FY 2009-10

Shri, V. P. Raja, Chairman
Shri A. Velayutham, Member
Shri S. B. Kulkarni, Member

ORDER

Dated: August 17, 2009

In accordance with the MERC Tariff Regulations and upon directions from the Maharashtra Electricity Regulatory Commission (hereinafter referred as MERC or the Commission), the Maharashtra State Power Generation Company Ltd. (MSPGCL), submitted its Petition for approval of truing up of FY 2007-08, Annual Performance Review for FY 2008-09 and Tariff for FY 2009-10, on affidavit. The Commission, in exercise of the powers vested in it under Section 61 and Section 62 of the Electricity Act, 2003 (EA 2003) and all other powers enabling it in this behalf, and after taking into consideration all the submissions made by MSPGCL, all the suggestions and objections of the stakeholders, responses of MSPGCL, issues raised during the Public Hearing, and all other relevant material, and after review of Annual Performance for FY 2008-09, determines the tariff for the Generating Stations of MSPGCL for FY 2009-10 as under:

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List of Abbreviations

ATE	Appellate Tribunal for Electricity
A&G	Administrative and General
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
APH	Air Pre Heater
AOH	Annual Overhauling
BHEL	Bharat Heavy Electriacals Ltd.
Capex	Capital Expenditure
CPI	Consumer Price Index
CEA	Central Electricity Authority
Cu.m	Cubic meter
CV	Calorific Value
COD	Commercial Operation Date
DPR	Detailed Project Report
EA 2003	Electricity Act, 2003
FAC	Fuel Adjustment Cost
FOCA	Fuel & Other Cost Adjustment
FY	Financial Year
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
GOM	Government of Maharashtra
GOMWRD	Government of Maharashtra-Water Resource Department
HPCL	Hindustan Petroleum Corporation Limited
ID	Induced draft
IWC	Interest on Working Capital
Kcal	kilo calories
kW	kilo Watt
kWh	kilowatt hour
LD	Liquidity Damages
MCM	Million Cubic Meter
MMSCMD	Million Standard Cubic Meters per Day
MERC	Maharashtra Electricity Regulatory Commission

MSEB	Maharashtra State Electricity Board
MSPGCL	Maharashtra State Power Generation Company Limited
MT	Metric Tonnes
MU	Million Units
MW	MegaWatt
MYT	Multi Year Tariff
OEM	Original Equipment Manufacturer
O&M	Operations and Maintenance
PLF	Plant Load Factor
PLR	Prime Lending Rate
R&M	Repair and Maintenance
RH	Re-heater
SH	Super Heater
SHPs	Small Hydel Plants
TVS	Technical Validation Session
WPI	Wholesale Price Index

1 BACKGROUND AND BRIEF HISTORY

The Maharashtra State Power Generation Company Limited (MSPGCL or Maha GENCO) is a Company formed under the Government of Maharashtra (GoM) General Resolution No. ELA-1003/P.K.8588/Bhag-2/Urja-5 dated January 24, 2005 with effect from June 6, 2005 according to the provisions envisaged in the Electricity Act, 2003 (EA 2003). MSPGCL has been registered with the Registrar of Companies, Mumbai under the Companies Act, 1956.

The provisional Transfer Scheme was notified under Section 131(5)(g) of the EA 2003 on June 6, 2005, which resulted in the creation of following four successor companies and MSEB Residual Company, to the erstwhile Maharashtra State Electricity Board (MSEB), namely,

- MSEB Holding Company Ltd.,
- Maharashtra State Power Generation Company Ltd.,
- Maharashtra State Electricity Transmission Company Ltd. and
- Maharashtra State Electricity Distribution Company Ltd.

MSPGCL is in the business of generation of electricity.

1.1 TARIFF REGULATIONS

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

1.2 COMMISSION'S ORDER ON ARR AND TARIFF PETITION FOR FY 2005-06 AND FY 2006-07

MSPGCL submitted its Aggregate Revenue Requirement (ARR) and Tariff Petition for FY 2005-06 and FY 2006-07 in Case No. 48 of 2005 on February 10, 2006. The Commission issued the Order on the ARR Petition of MSPGCL for FY 2005-06 and

ARR and Tariff Petition of MSPGCL for FY 2006-07 on September 7, 2006.

1.3 REVIEW PETITION ON TARIFF ORDER FOR FY 2006-07

MSPGCL filed a review Petition (numbered as Case No. 34 of 2006) against the above said Commission's Order. The Commission disposed off the Review Petition through its Order dated December 7, 2006.

1.4 COMMISSION'S ORDER ON MYT PETITION FOR MSPGCL FOR FY 2007-08 TO FY 2009-10

MSPGCL submitted its ARR and Multi Year Tariff (MYT) Petition for the first Control Period from FY 2007-08 to FY 2009-10 on January 2, 2007 (numbered as Case No. 68 of 2006). The Commission issued the MYT Order for MSPGCL for the first Control Period, i.e., FY 2007-08 to FY 2009-10, on April 25, 2007, which came into effect from April 25, 2007, and the tariffs were valid upto March 31, 2008. As the Annual Performance Review for FY 2007-08 and Tariff determination for FY 2008-09 were under process, the various Utilities filed Petitions for continuation of tariff determined for FY 2007-08 till the time of issuance of the respective Tariff Orders of each Utility. Accordingly, the Commission, in its Order on April 1, 2008, extended the applicability of the aforesaid Tariff Orders for the Utilities till the revised tariffs are determined for FY 2008-09 under the APR framework and orders issued thereunder.

1.5 MSPGCL APPEAL WITH ATE AND ATE JUDGMENT

MSPGCL filed two Appeals before the Honourable Appellate Tribunal for Electricity (ATE), viz., Appeal No.s 86 of 2007 and 87 of 2007, on the Commission's Order dated September 7, 2006 in Case No. 48 of 2005 and Case No. 68 of 2006, respectively.

MSPGCL challenged the Commission's Order for FY 2005-06 and FY 2006-07 on the following issues:

- Administrative and General expenses
- Transit loss of coal
- Station Heat Rate
- Tariff for small hydro projects.

MSPGCL challenged the Commission's MYT Order on the following issues:

- Truing up of the fuel expenses for FY 2005-06
- Disapproval of A&G expenses
- Truing up of depreciation
- Truing up of other debits
- Truing up of interest expenses and financing charges
- Truing up of revenue earned
- Transit loss of coal
- Station Heat Rate
- Auxiliary consumption of various stations
- Specific oil consumption
- O&M expenses for base year for MYT Period
- Hydel tariff
- Tariff for small hydro power station
- Reactive energy charges
- Normative O&M expenses for hydel plants
- Employee incentive schemes.

The ATE dealt with the above issues vide its Judgment dated April 10, 2008 in Appeal No.s 86 and 87 of 2007. The ATE's ruling on various aspects raised in MSPGCL's Appeals have been summarised below:

- ATE upheld MSPGCL's appeal regarding allowance of actual A&G expenses for FY 2005-06 for truing up purposes and directed the Commission to true up the said expenses based on actuals, subject to prudence check. ATE also directed the Commission not to consider the A&G expenses towards projects under construction as recoverable through tariff, since such expenses should be capitalised.
- ATE directed the Commission to consider the transit loss levels in terms of the station-wise loss reduction trajectory approved by the Commission in its Tariff Order for FY 2003-04,
- ATE directed the Commission to engage an appropriate agency/ies either on its own or through MSPGCL, to carry out a study in a time bound manner (preferably within three months) to reasonably assess the achievable heat rate of the plants owned by MSPGCL and to suggest measures to improve the heat rates

over a period of time. ATE further directed the Commission to determine the heat rate based on the outcome of the study and directed that the pre-existing tariffs may be continued, subject to truing up based on the revised heat rates, when available.

- ATE directed the Commission to take into consideration the independent study and reset the operating parameters, viz., transit loss of coal, station heat rate, auxiliary consumption, and specific oil consumption, and align its Regulations by prescribing achievable norms and not merely ideal norms. ATE also advised the Commission to ensure that deliberate inefficiencies on the part of the Utility are not passed on to the consumers.
- Regarding the tariff for small hydro power stations, the ATE stipulated that fixed charge as determined by the Commission is subject to change only on account of re-determination of the lease rents payable to Government of Maharashtra and change in the working capital on account of the change in the expenses towards lease rentals.
- ATE rejected MSPGCL's appeal for entitlement of higher tariff for small hydro projects as the Commission's Order in this regard is applicable only in the case of new projects. The ATE also did not agree with MSPGCL's contention that the Commission has disregarded the provisions of Section 61 (h) of the Electricity Act, 2003 while considering the tariff fixation of small hydro projects.
- ATE upheld MSPGCL's appeal for monthly billing of the incentives and held that any under or over recovery on account of such claims may be adjusted on monthly basis.
- ATE upheld MSPGCL's appeal as regards truing up of actual fuel expenses till such time the re-assessed improvement trajectory of parameters is available.
- ATE upheld MSPGCL's appeal as regards truing-up of depreciation, while ruling that if the Commission has allowed any extra recovery in the past under the head of depreciation, the same may be adjusted.
- ATE, while allowing the truing of other debits, held that
    - Both, MSPGCL and the consumers may bear the burden on this account, and hence, the sum to be recovered from the consumers may be spread over a period of three years, without any interest, to lessen the burden on the consumers. However, the above cannot be taken as a precedent for making similar claims in the future.

- Directed the Commission to examine the claim of MSPGCL for truing up on account of miscellaneous losses & write off, sundry expenses, intangible assets written off and intangible assets interest charges for HVDC, subject to prudence check.

- ATE directed the Commission to consider the interest on working capital on normative basis, and if any interest on short-terms loans which is in the nature of working capital has been allowed, the same should be disallowed
- As regards truing up of other income, the ATE ruled that if the other income cannot be reasonably linked to any cost item allowed by the Commission as a part of the ARR, the same should not be adjusted against the ARR of MSPGCL.
- As regards O&M expenses, ATE directed MSPGCL to take up the claim for base O&M expense for FY 2006-07 based on the audited accounts subject to prudence check as mentioned by the Commission.
- ATE directed the Commission to devise a mechanism which addresses the concern of peak and off peak generation from hydel stations, by determining the ratio of peak and off-peak generation after taking into consideration the operational capacity of MSPGCL and system pattern.
- ATE held that since MSPGCL is incurring additional expenditure without being compensated, for extending support for reactive energy generation/absorption for grid stability, the Commission should either work out a scheme specifically for State power generators for compensation for incurring the additional expenditure or extend the incentive/penalty mechanism applicable for transmission licensees, distribution licensees and open access users, to the State generators.
- ATE rejected MSPGCL's request to set aside the norm for O&M expenses set by the Commission for old hydel plants and ruled that since the existing hydro electric plants are not covered by the Policy of the Government it will be inappropriate to compare the O&M expenses of the existing plants with that of the new hydel stations covered under MERC Tariff Regulations.
- ATE directed the Commission to consider the issue of employee incentive schemes in accordance with law.

The ATE, in view of the above findings/observations, set aside the impugned Tariff Orders and allowed the appeals partially, and remitted the matter back to the Commission for re-determination of the tariff for MSPGCL. The Commission, in its

Order dated May 31, 2008 in the matter of APR for FY 2007-08 and Tariff for FY 2008-09 in Case No. 71 of 2007 stipulated as follows:

"The Commission is of the view that as the Orders of the Commission have been set aside and the ATE in its Order has directed the Commission to re-determine the tariff, and as the original Orders in both the cases, i.e., ARR and Tariff Determination for FY 2006-07 and MYT Order for the first Control Period, i.e., FY 2007-08 to FY 2009-10 were issued after following the due public process including public hearing, the re-determination of ARR and tariff for MSPGCL needs to be undertaken after following the due public process including public hearing. The Commission will initiate a separate process for re-determination of tariff for MSPGCL for FY 2005-06, 2006-07 and FY 2007-08. However, this Order has to be issued, since the tariff payable to MSPGCL is a major input cost to MSEDCL, and the Order of MSEDCL cannot be delayed till such time the complete data is submitted by MSPGCL and the due regulatory process is followed to revise the tariff of MSPGCL.

As regards norms for performance parameters, viz., transit loss of coal, station heat rate, auxiliary consumption, and specific oil consumption of MSPGCL's generating stations, ATE directed the Commission to undertake an independent study, either through MSPGCL or on its own, and reset the operating parameters and align its Regulations by prescribing achievable norms and not merely ideal norms after taking into consideration the results of such independent study. ATE, in its Order, has also mentioned that till such time the Commission re-determines the Station Heat Rate, MSPGCL may continue with the pre-existing tariff, subject to truing up when revised Station Heat Rates when available. The Commission, abiding by the directions of ATE, will engage an appropriate independent agency to carry out independent study to reasonably assess the achievable performance of MSPGCL stations and to suggest the measures to improve the performance over a period of time. Based on the outcome of the study, the Commission will re-determine the performance parameters of MSGPCL's generating stations, whether higher or lower than the norms stipulated in the Tariff Regulations and norms approved in the Tariff Orders, and will carry out the truing up of MSPGCL's expense and revenue based on re-determined performance *parameters.*

Further, the impact of directions of ATE in respect of following heads of expenses and revenue needs to be assessed based on additional information/clarifications:

- *A&G Expenses*
- *Truing up of Depreciation for FY 2005-06*
- *Truing up of Other Debits for FY 2005-06*
- *Truing up of Interest and Finance Charges for FY 2005-06*
- *Truing up of Revenue earned in FY 2005-06*
- *Truing up of non-tariff income earned in FY 2005-06 and FY 2006-07*
- *Compensation for Reactive Energy generation.*

The Commission, in its Order dated April 25, 2007 on MYT Petition for the first Control Period, has already undertaken the final truing up of expenses and revenue for FY 2005-06. However, consequent to ATE Order, the truing up of expenses and revenue for FY 2005-06 will have to be undertaken again considering the ATE's directions and based on impact and additional information/clarifications submitted by MSPGCL. The Commission is of the view that it will be preferable to carry out the truing up of all elements of expenses and revenue for FY 2005-06 once again based on impact of truing up and additional information/clarifications from MSPGCL and after following due public process. The Commission has therefore not undertaken the truing up of expenses and revenue for FY 2005-06 again in this Order. The Commission, after following the due public process, will issue an Order which will deal with the truing up of all the elements of expenses and revenue for FY 2005-06.

The truing up of expenses and revenue for FY 2005-06 will have certain implications on ARR for FY 2006-07 and for subsequent years. The O&M expenses for FY 2005-06 approved after truing up, will have a bearing on allowable O&M expenses in subsequent years'. Similarly, the truing up of depreciation for FY 2005-06 may have effect on depreciation expenses to be allowed for FY 2006-07 and subsequent years. As regards truing up of fuel expenses for FY 2006-07, the Commission is of the view that MSPGCL has already recovered variation in fuel prices through the FAC mechanism and truing *up of fuel expenses on account of variation in performance parameters has to be examined based on approved performance parameters upon completion of study by independent agency. The Commission, in this Order, has therefore undertaken the truing up of certain expenses and revenue for FY 2006-07. The Commission will undertake the final truing up of expenses and revenue for FY 2006-07 along with truing up of expenses and revenue for FY 2005-06 and re-determination of performance parameters."*

The Commission has since appointed M/s Central Power Research Institute (CPRI) to carry out a detailed study of the various performance parameters and the CPRI report for all the stations is expected by September 2009.

1.6 PETITION FOR ANNUAL PERFORMANCE REVIEW FOR FY 2007-08 AND TARIFF DETERMINATION FOR FY 2008-09

MSPGCL submitted its Petition for APR for FY 2007-08 and determination of tariff for FY 2008-09 on November 30, 2007 (numbered as Case No. 71 of 2007). The Commission issued the APR Order for MSPGCL in Case No. 71 of 2007 on May 31, 2008, which came into effect from June 1, 2008, and the tariffs were initially valid upto March 31, 2009, which was later extended till the revised tariff are determined for FY 2009-10 vide the Commission's Order dated May 11, 2009 in Case No. 2 of 2009.

1.7 PETITION FOR ANNUAL PERFORMANCE REVIEW FOR FY 2008-09 AND DETERMINATION OF TARIFF FOR FY 2009-10

In accordance with Regulation 9.1 of the MERC Tariff Regulations, the application for the determination of tariff has to be made to the Commission not less than 120 days before the date from which the tariff is intended to be made effective. Further, the first proviso to Regulation 9.1 states that the

"date of receipt of application for the purpose of this Regulation shall be the date of intimation about the receipt of a complete application in accordance with Regulation 8.4 above:"

The Commission had directed MSPGCL to submit the Petition for Annual Performance Review latest by November 30 of each year in accordance with Regulation 9.1 of the Tariff Regulations.

MSPGCL submitted its Petition for APR for FY 2008-09 and tariff determination for FY

2009-10 on December 8, 2008, based on actual audited expenditure for FY 2007-08, actual expenditure for first half of FY 2008-09, i.e., from April to September 2008 and revised estimated expenses for October 2008 to March 2009, and projections for FY 2009-10. MSPGCL, in its Petition, requested the Commission to

- Undertake truing up for FY 2007-08 based on actual audited data and normative parameters as applicable for various heads of expenditure;
- Approve the revised ARR for FY 2008-09 and FY 2009-10 in accordance with the submissions and rationale given in the Petition;
- Approve the tariff of its generating stations for FY 2009-10;
- Allow MSPGCL to apply the tariff approved by the Commission from the beginning of FY 2009-10.

The Commission, vide its letter dated December 27, 2008, forwarded the preliminary data gaps and information required from MSPGCL. MSPGCL submitted its replies to preliminary data gaps and information requirement on January 10, 2009.

The Commission held a Technical Validation Session (TVS) on MSPGCL's APR for FY 2008-09 and Tariff Petition for FY 2009-10, on January 12, 2009, in the presence of Consumer Representatives authorised on a standing basis under Section 94(3) of the EA 2003 to represent the interest of consumers in the proceedings before the Commission. The list of individuals, who participated in the TVS, is provided at **Appendix-1**. During the TVS, the Commission directed MSPGCL to provide additional information and clarifications on the issues raised during the TVS. The Commission also directed MSPGCL to submit the draft Public Notice in English and Marathi in the format prescribed by the Commission.

1.8 ADMISSION OF PETITIONS AND PUBLIC PROCESS

MSPGCL submitted its responses to the queries raised during the TVS, on February 17, 2009, and the Commission admitted the APR Petition of MSPGCL on March 25, 2009.

In accordance with Section 64 of the EA 2003, the Commission directed MSPGCL to publish its application in the prescribed abridged form and manner, to ensure adequate public participation. The Commission also directed MSPGCL to reply expeditiously to all the suggestions and comments received from stakeholders on its Petition. MSPGCL published the Public Notice in The Times of India, Indian Express, Loksatta and Maharashtra Times newspapers on March 28, 2009, inviting suggestions and objections from stakeholders on its APR Petition. The copies of MSPGCL's Petition and its summary were made available for inspection/purchase to members of the public at MSPGCL's offices and on MSPGCL's website (www.mahagenco.in). The copy of the Public Notice and the Executive Summary of the Petition was also uploaded on the web site of the Commission (www.mercindia.org.in) in downloadable format. The Public Notice specified that the suggestions and objections, either in English or Marathi, may be filed in the form of affidavit along with proof of service on MSPGCL.

The Commission received written suggestions and objections expressing concerns on O&M expenses, performance parameters, fuel expenses, etc. The Public Hearing was held on May 4, 2009 at 11:00 hours at **Vista Hall, 30th Floor, Centre 1, World Trade Centre, Cuffe Parade, Mumbai - 400 005**. The list of objectors, who participated in the Public Hearing, is provided in **Appendix- 2.**

The Commission has ensured that the due process, 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 Order is being issued well within the time period of 120 days from the date of admission of complete Petition, as stipulated under the EA 2003.

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

1.9 ORGANISATION OF THE ORDER

This Order is organised in the following six Sections:

- **Section 1** of the Order provides a brief history of the quasi-judicial regulatory process undertaken by the Commission. For the sake of convenience, a list of abbreviations with their expanded forms has been included.

- **Section 2** of the Order lists out the various suggestions and objections raised by the objectors in writing as well as during the Public Hearing before the Commission. The various suggestions and objections have been summarized, followed by the response of MSPGCL and the rulings of the Commission on each of the issues.
- **Section 3** of the Order details MSPGCL's proposal for truing up of expenses and revenue for FY 2007-08 and the Commission's analysis of the same.
- **Section 4** of the Order details the performance parameters as approved by the Commission in the MYT Order for first Control Period, APR Order for FY 2007-08, MSPGCL's proposal for performance parameters and the Commission's approach on performance parameters for FY 2008-09 and FY 2009-10.
- **Section 5** of the Order comprises the review of performance for FY 2008-09 and the Commission's analysis on various components of Energy Charges and Annual Fixed Charges of MSPGCL's Stations for FY 2009-10.
- **Section 6** of the Order details the tariff design for MSPGCL's Stations and the approved Annual Fixed Charges and Energy Charges for FY 2009-10.

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

2.1 CAPITAL EXPENDITURE

Ispat Industries Limited (Ispat) submitted that for FY 2007-08, the actual capital expenditure of Rs. 126.63 Crore incurred was lower than the approved value of Rs. 202.2 Crore, whereas, for FY 2008-09 and FY 2009-10, the capital expenditure projections of Rs. 281.22 Crore and Rs. 683.72 Crore, respectively, are substantially higher. Further, Ispat suggested that MSPGCL should provide the impact of each capital expenditure scheme on the plant's performance and emphasize the benefits accrued due to improved plant performance.

Ispat added that MSPGCL has failed to comply with Regulation 30.6 of the MERC Tariff Regulations, which stipulates that any expenditure on replacement, renovation and modernisation or extension of life of fixed assets shall be considered after writing off the gross value of such replaced assets from the original capital cost. Ispat submitted that the project-wise details of Capital Work in Progress (CWIP) of the Uran TPS for FY 2009-10 clearly specifies that the capital expenditure of Rs. 175 Crore was allocated for replacement of Hot Path components but the computation of assets and depreciation reveals that none of the retired assets have been written off.

As regards capitalisation, Ispat submitted that the actual capitalisation for Chandrapur Thermal Power Station (TPS) for FY 2007-08 was Rs. 12 Crore as against the approved capitalisation of Rs. 93 Crore. The non-capitalisation indicates that some of the projects might have been delayed, which results in non-accrual of the benefits, which in-turn has affected the performance of MSPGCL. .

MSPGCL's Response

MSPGCL submitted that a large number of schemes are being implemented in various power stations. As most of the Units of MSPGCL are significantly old, the spare parts are not easily available. Therefore, the lead time for implementation of such schemes right from invitation of tenders, reverse engineering at times and final quality assurance is high, which sometimes leads to delay in ordering and spill over of schemes to the next financial year. Regarding the increase in projected capital expenditure for FY 2009-10, MSPGCL submitted that it has identified certain capital expenditure schemes for sustaining the current performance. Further, MSPGCL submitted that it plans to undertake annual overhaul and capital overhaul for more units in FY 2009-10 as compared to previous years due to which the capital expenditure proposed is on higher side. MSPGCL added that it has submitted the Detailed Project Report (DPR) for schemes costing above Rs. 10 Crore and it is difficult to quantify the benefits arising out of schemes costing less than Rs. 10 Crore. MSPGCL further submitted that it is not possible to quantify the contribution of each capital expenditure scheme to operational efficiency.

As regards the contention raised regarding the non-compliance with Regulation 30.6 of MERC Tariff Regulations on treatment of replacement of old fixed assets, MSPGCL submitted that the Audited Accounts duly follow Regulation 30.6, which means that any expenditure on replacement and Renovation & Modernisation (R&M) are considered after writing off the gross value of any such replaced asset from the original cost. For FY 2007-08, MSPGCL submitted that the opening GFA, asset addition to GFA and asset reduction are in accordance with Audited Accounts. MSPGCL further submitted that the same will be done for FY 2008-09 and FY 2009-10 while finalising the Audited Accounts for these years. Further, MSPGCL submitted that any additional depreciation allowed on this account will get trued-up once the Audited Accounts for FY 2008-09 and FY 2009-10 are available, which stipulates write-off against the replaced assets.

As regards the capitalisation of Chandrapur TPS, MSPGCL submitted that although the capitalisation during FY 2007-08 was only Rs. 12.47 Crore, the actual expenditure during the year was Rs. 37.51 Crore. MSPGCL further submitted that certain schemes require long hours of shut-down and considering the power shortage in the State, it is not possible to take such shut-downs leading to delay in implementation of the scheme and its capitalisation. MSPGCL further submitted that Interest during Construction (IDC) for all upcoming stations where the investment could be attributed to qualifying asset, has been capitalised in respective project account heads. As per the accounting principles, the investment on small capex schemes has not been considered in the revenue expenditure.

Commission's Ruling

The Commission has taken note of the concerns raised by several stakeholders regarding the excessive capital expenditure being undertaken by MSPGCL, and the impact of the same on the tariff. The Commission has carried out a detailed analysis of the capital expenditure and capitalisation and the treatment of the same on ARR and Tariff in Section 5 of this Order. The Commission's computations in this regard, as well as the treatment of non-DPR capital expenditure schemes has been elaborated subsequently in Section 3 on truing up of expenses and revenue for FY 2007-08 and in Section 5 while approving the revised revenue requirement for FY 2008-09 and FY 2009-10.

As regards the benefit the confirmation that the projected benefits actually accrue for the benefit of the stakeholders, the Commission has directed MSPGCL to submit the detailed report with established benefits vis-à-vis the benefits projected against the schemes within one month from the issuance of this Order.

2.2 OPERATION & MODERNISATION (O&M) EXPENSES

Ispat Industries Limited (Ispat) submitted that MSPGCL has failed to comply with the MERC Tariff Regulations for computing O&M expenditure. They added that there has been significant difference between the O&M expenses approved in the MYT Order, the expenses computed as per Regulations, and the O&M expenses projected in the APR Petition for FY 2008-09. Ispat further submitted that MSPGCL has considered the period from 2005 to 2008 for arriving at an escalation rate of 6.3%. It is observed that inflation reached its peak during the year 2008 and there has been a declining trend since then. Therefore, considering the year 2008 will increase the escalation rate.

Shri Ashok Pendse representing Mumbai Grahak Panchayat, one of the Consumer Representatives authorised on a standing basis under Section 94 of the EA 2003, submitted that for FY 2009-10, the O&M expenses have increased significantly as compared to that in FY 2007-08, without any commensurate benefits.

MSPGCL's Response

MSPGCL submitted that in the MYT Order, the expenses of FY 2006-07 have been considered as the base year and escalation has been provided on base expenses. The current level of decline in inflation may be linked to the upcoming elections and there might be increase in the inflation rates in the future. In order to avoid any cash flow issues, MSPGCL requested the Commission to allow higher inflation rates as the escalation rate is only used for the purpose of projecting the expenses for the ensuing year.

MSPGCL submitted that the Audited Accounts for FY 2007-08, which provide the details of O&M and interest expenses have been duly verified by the Auditors. As regards the commensurate benefits in terms of improvement in performance, MSPGCL submitted that the technical performance cannot be linked solely to the O&M and interest expenses, and MSPGCL strives to maintain the current performance of most of its old Units by incurring prudent operational expenses.

Commission's Ruling

As deliberated in Section 3, the Commission has not undertaken the truing up of the O&M expenses for FY 2007-08 as the final truing up of FY 2005-06 and FY 2006-07 in this regard has yet to be undertaken in accordance with the ATE Judgment, which may have impact on the truing up of FY 2007-08.

For FY 2009-10, as detailed in Section 5 of the Order, the Commission has not allowed O&M expenses as projected by MSPGCL and has allowed O&M expenses in accordance with the principles specified in MYT Order by considering an escalation rate of 6.04%.

2.3 EMPLOYEE EXPENSES

Ispat Industries Limited and Graduate Engineers' Association (GEA) submitted that MSPGCL, in its APR Petition for FY 2008-09, has submitted that the impact of pay revision will be 20% over and above the normal escalation rate of 6.30% and thus this increase of 26.3% in FY 2008-09 will have an impact on the estimated figures for FY 2009-10. They submitted that the Commission should direct MSPGCL to submit the details of pay revision along with the details of different grades of employees eligible for pay revision.

GEA further submitted that the response to the recruitment of engineers in MSPGCL is poor and the attrition rate is also very high due to the poor remuneration. The provision of funds at 20% over the employee expenses of FY 2007-08 for pending pay revision is insufficient and there should be at least 60% increase in provisions over FY 2007-08.

MSPGCL's Response

MSPGCL submitted that the increase of 20% reflects the correction in base rate on which the escalation is to be provided. The increase of 6.30% in employee expenses is made to cater to the normal increment in a financial year.

MSPGCL submitted that the facts and figures submitted by GEA are subject to verification. The wage revision is under negotiation with all unions and the issue will be taken up with the Commission for necessary amendment, perusal and orders after finalisation of the negotiations.

Commission's Ruling

As regards the impact of the pay revision, as discussed in Section 5 of the Order, subsequent to the Public Hearing, the Commission asked MSPGCL to clarify whether the revised wage agreement has been signed. MSPGCL, in its reply, submitted that the proposal of pay revision is yet to be finalised and that it would submit the information to the Commission after finalising the same. Hence, as detailed in the Section 5 of the Order, the Commission at this stage could not consider the effect of pay revision as the exact impact is not known, and also, the linkage of the pay revision to the improvement in operational efficiency also needs to be ensured by MSPGCL which is yet to be done by MSPGCL. In view thereof, the Commission will undertake the final truing up of employee expenses for FY 2008-09 based on actual employee expenses for the entire year and prudence check, during the APR process for FY 2009-10.

2.4 REPAIR & MAINTENANCE (R&M) EXPENSES

Ispat Industries Limited submitted that MSPGCL should submit the reasons towards incurring frequent R&M expenses. Further, MSPGCL should clarify whether these expenses are incurred on yearly basis or are of an intermittent nature. They added that if the R&M expenses are intermittent in nature then escalating these expenses would lead to higher projected expenses.

Kolhapur Engineering Association submitted that MSPGCL should provide the details of R&M expenses incurred.

MSPGCL's Response

MSPGCL submitted that all the expenses booked under R&M expenses are subject to prudence check by the statutory auditors of the Company. MSPGCL added that it follows all the accounting practices and is open to share the details of accounts if required by the Commission for prudence check. MSPGCL further submitted that the details of R&M expenses incurred have already been provided in the Petition.

Commission's Ruling

As deliberated in Section 3, the Commission has not undertaken the truing up of the O&M expenses for FY 2007-08 as the final truing up of FY 2005-06 and FY 2006-07 in this regard has yet to be undertaken in accordance with the ATE Judgment, which may have impact on the truing up of FY 2007-08.

For FY 2009-10, as detailed in Section 5 of the Order, the Commission has not allowed O&M expenses as submitted by MSPGCL and has approved the O&M expenses in accordance with the principles specified in MYT Order.

2.5 ADMINISTRATIVE & GENERAL (A&G) EXPENSES

Ispat Industries Limited submitted that MSPGCL should submit the reasons behind considering fuel security related charges under A&G expenses. Kolhapur Engineering Association submitted that MSPGCL should provide the details of A&G expenses incurred.

MSPGCL's Response

MSPGCL submitted that it has booked the salary of the security personnel engaged in fuel security under A&G expenses. MSPGCL further submitted that the detailed information has been provided in the Petition.

Commission's Ruling

As deliberated in Section 1 and 3, the Commission has not undertaken the truing up of the O&M expenses for FY 2007-08 as the final truing up of FY 2005-06 and FY 2006-07 in this regard has yet to be carried out, which may have impact on the truing up of FY 2007-08.

For FY 2009-10, as detailed in Section 5 of the Order, the Commission has not allowed O&M expenses as submitted by MSPGCL and has approved the O&M expenses in accordance with the principles specified in MYT Order.

2.6 COST OF GENERATION

Shri N. Ponrathnam representing Vel Induction Hardenings submitted that there should be uniformity in tariff across all the generating stations with similar generation profile.

MSPGCL's Response

MSPGCL submitted that as per Electricity Act 2003 (EA 2003), generation of electricity is a regulated business and the tariff determination is within the purview of the Regulatory Commission.

Commission's Ruling

As regards the suggestion of uniform tariff for all generating stations, the Commission does not find any merit in the suggestion, as each generating station has different capital cost based on the capacity of the plant and vintage of station, the fuel mix at each generating station is different, and landed fuel cost at each generating station varies depending upon the fuel mix and source of fuel. In such circumstances, it is not possible to approve uniform tariff across all the generating stations, as the generation tariff has to reflect the cost of generation at the respective generating station.

2.7 INTEREST EXPENSES

Ispat submitted that if interest rates are derived based on the interest expenses projected in the Petition, the interest rates for some loans works out to around 23%. Ispat added that MSPGCL should provide the details of interest capitalised, interest rates for each loan,

loan drawal and loan repayment. Further, MSPGCL should take all possible measures like debt restructuring to reduce interest expenses.

MSPGCL's Response

MSPGCL submitted that there has been a levy of debt restructuring premium charged to revenue, due to which the net interest expense appears to be on higher side. However, the actual interest rate has not been higher than 13%. Further, MSPGCL has submitted copies of loan agreement for prudence check.

Commission's Ruling

The Commission has obtained the tranche-wise details of the various loans and has analysed the same. The Commission also obtained the details of the debt restructuring of the high interest rate loans by sharing the interest benefits between Power Finance Corporation (PFC) and erstwhile MSEB. MSPGCL submitted that the premium amount paid was booked to deferred revenue expenditure and was written off in the respective years in proportion of differential interest over the balance period of loan maturity. On unbundling of MSEB, the balance amount of premium (after write off) was allocated to successor companies and thereby an amount of Rs. 32.80 Crore was transferred to MSPGCL.

The detailed computation of interest expenses is elaborated in Section 3 of the Order on the truing up of expenses for FY 2007-08 and in Section 5 for FY 2008-09 and FY 2009-10.

2.8 INTEREST ON WORKING CAPITAL

Ispat submitted that MSPGCL has considered interest on working capital at 13%, and requested the Commission to re-compute the interest on working capital at 12.25%, based on the SBI PLR rate prevailing in February 2009.

MSPGCL's Response

MSPGCL submitted that it has considered the SBI PLR on the date of submission of the Petition.

Commission's Ruling

For FY 2009-10, the Commission has estimated the working capital requirement for MSPGCL in accordance with the MERC Tariff Regulations. As the short-term Prime Lending Rate of State Bank of India was 13% at the time of filing of APR Petition by MSPGCL, the Commission has considered the interest rate of 13% for estimating the interest on working capital, in accordance with the MERC Tariff Regulations.

2.9 DEPRECIATION INCLUDING ADVANCE AGAINST DEPRECIATION (AAD)

Ispat requested the Commission to disallow Advance Against Depreciation (AAD) for FY 2007-08, as the actual depreciation during the year was higher than the actual loan repayment. They further submitted that MSPGCL has computed AAD on plant-wise basis, which should not be allowed, since the Commission has been providing AAD computation on company-wide basis.

MSPGCL's Response

MSPGCL submitted that the depreciation is segregated on plant-wise basis. For allowing the AAD, the Commission considers the loan repayment for the Company as a whole, since there is no clear segregation of loans between the stations.

Commission's Ruling

The Commission has not allowed any AAD for FY 2007-08 as the actual depreciation for MSPGCL during the year was higher than the actual loan repayment for the Company as a whole. The objective of providing AAD in addition to depreciation is to support cashflow requirement towards loan repayment of the entire company as a whole. Further, MSPGCL has admitted that there is no clear segregation of loans between the Stations.

2.10 INCOME TAX

Ispat submitted that the actual income tax paid by MSPGCL during FY 2007-08 as per the Audited Accounts is Rs. 56.20 Crore as against Rs. 81.54 Crore submitted by MSPGCL in its Petition. Further, MSPGCL should submit the details of the steps taken to reduce the income tax liability. Kolhapur Engineering Association submitted that the income tax liability for FY 2007-08 was Rs. 81.54 Crore and Rs. 42.39 Crore for FY

2008-09, hence, MSPGCL should submit the rationale behind the decrease in income tax liability.

MSPGCL's Response

MSPGCL submitted that the actual tax payment made during FY 2007-08 is Rs. 81.54 Crore for which income tax Challans have been submitted to the Commission. The amount of Rs. 56.20 Crore was a provision made in the books of accounts against income tax. MSPGCL further submitted that it had paid the minimum possible tax payable by any profit generating organisation, and has projected income tax of Rs.42.39 Crore for FY 2009-10.

Commission's Ruling

The Commission has addressed in detail the issue related to the income tax for FY 2007-08 in Section 3 of the Order, while the income tax for FY 2008-09 and FY 2009-10 has been elaborated in Section 5of the Order.

2.11 TRANSIT LOSSES

Shri N. Ponrathnam submitted that the consumers should not be burdened with various losses like transit loss, loss in calorific value and deterioration of coal properties due to increase in the moisture content. Shri Ponrathnam, in his rejoinder, submitted that the efforts taken by MSPGCL to control the losses are inadequate.

MSPGCL's Response

MSPGCL submitted that it has no control over pilferage and loss during transit, and the details of the various measures taken by MSPGCL to reduce transit losses are mentioned in the Petition under Energy Charges.

Commission's Ruling

The Commission has elaborated on the treatment of the performance parameters including transit losses, in Section 4 of the Order. However, transit losses are allowable on normative basis, and the Commission does not agree with the objector's contention that transit losses should not be allowed.

2.12 OTHER EXPENSES

Ispat submitted that the amount of Rs. 53.88 Crore incurred in FY 2007-08 on account of loss on account of old stores, cannot be established from the Audited Accounts provided along with the Petition. Ispat added that holding of obsolete stock clearly signifies inability of the management to utilise the stock in an efficient manner leading to deterioration of the assets. Ispat further submitted that in the previous Orders, truing up of various expenses like coal cost variance, bad and doubtful debts, sundry expense, etc., was done through Material Cost Variation. Ispat requested the Commission to disallow Rs. 0.21 Crore on account of writing off bad-debts.

MSPGCL's Response

MSPGCL submitted that the amount of Rs. 53.88 Crore is pertaining to miscellaneous losses and write-off. They added that the truing-up of material cost variance will actually reduce the ARR by Rs. 0.56 Crore and irrespective of the effect of such variance, the same should be allowed as pass through in the tariff under truing-up. The obsolete items only amount to Rs. 0.96 Crore, and the rest of the amount of Rs. 52.64 Crore are slow moving items, which have been procured as insurance spares.

As regards the provision for bad debts, MSPGCL submitted that the Judgment of the ATE in Appeal Nos. 86 and 87 of 2007 regarding provision for bad debts pertaining to the period when the erstwhile MSEB was in existence, states that both the Distribution Licensee and the consumers should bear the burden. The sum to be recovered from the consumers may be spread over a period of 3 years without any interest, to lessen the burden on the consumers. Therefore, MSPGCL should be allowed to provide for bad and doubtful debts, which pertains to advances made to suppliers for implementing various contracts.

Commission's Ruling

The Commission has addressed these issues in detail in Section 3 of the Order while undertaking truing up of expenses and revenue for FY 2007-08. As regards the Insurance Spares, the Commission of the view that the insurance spares have to be depreciated at the same rate as the original asset against which these assets have been procured as spares. MSPGCL has not provided for written off for original assets for which the insurance spares have been procured and hence the amount for writing off the insurance spares can not be considered unless these details are submitted.

2.13 FIXED COSTS

Ispat submitted a comparison between the fixed costs of old plants like NTPC Korba and Badarpur with old stations of MSPGCL and observed that the fixed costs of all the stations of MSPGCL are higher than fixed costs of NTPC plants. The per unit O&M costs of these plants are also higher than that of NTPC plants. Dr. Ashok Pendse submitted that the O&M expenses and interest expenses are not giving commensurate with the performance and are mounting at an alarming level.

MSPGCL's Response

MSPGCL submitted that it is not correct to compare fixed cost per unit or the O&M costs of two different stations of different capacity because the fixed costs do not increase in proportion to the capacity of a station. MSPGCL further submitted that dividing the fixed cost with high generation of Korba power plant will reduce the per unit fixed costs.

Commission's Ruling

As regards the O&M expenses and other fixed cost elements, the Commission has approved the same in accordance with the MERC Tariff Regulations, as elaborated in Section 5 of this Order.

2.14 PERFORMANCE PARAMETERS AND VARIABLE COSTS

Ispat submitted that MSPGCL has considered fuel expenses of Rs. 6020.70 Crore for FY 2007-08 as against the approved Rs. 5624 Crore and the reason submitted for the increase is poor quality of coal and high moisture content. Ispat added that MSPGCL should provide the details of the measures taken for improving the quality of coal like coal washing, coal beneficiation and a cost benefit analysis should be done to overcome these difficulties in future. Further, MSPGCL should ensure that the contractual terms should have penalties for non-compliance with assured quality. They also submitted that MSPGCL should explore strategies for mitigating the above risk. Ispat further requested that as per the ATE Judgment, the Commission is expected to appoint an independent agency to study the operational parameters for variable expenses and in the absence of the above result, the Commission should follow the approved parameters like Availability, SHR and Auxiliary Consumption as specified by the Commission in the MYT Order. Ispat further submitted that MSPGCL should submit the details of gas purchased from different sources for calculation of variable input costs. MSPGCL should further submit the necessary actions taken in terms of contractual rights towards non-supply of gas by GAIL.

Shri Ashok Pendse contended that MSPGCL, in its Petition, has submitted that during rainy season they receive wet coal with mud, which affects the quantum of generation. He suggested that MSPGCL should look for other sources of coal. Shri Ashok Pendse further submitted that MSPGCL should monitor station-wise performance on monthly basis. He added that as regards the station-wise auxiliary consumption and specific oil consumption, Nashik and Koradi have not yet achieved the national average.

MSPGCL's Response

MSPGCL submitted that it uses a mix of domestic, washed and imported coal and has undertaken preliminary investigations of using blended coal. Due to shortage of indigenous coal, use of imported coal has increased, which has increased the overall cost of generation. MSPGCL has decided that for coal quality of Grade-D or below, 50% washed coal will be used. MSPGCL further submitted that it is taking all possible measures to retain the quality of coal. The stacked coal is covered with tarpaulin in rainy season to avoid deterioration. Further, MSPGCL has entered into an agreement with Mahanadi Coalfields Ltd. (MCL) and South Eastern Coalfield Ltd. (SECL) under which MSPGCL would be assured of fine quality of coal at its stations.

MSPGCL submitted that since the allocation of Administered Price Mechanism (APM) gas to beneficiaries is within the purview and authority of Ministry of Petroleum and Natural Gas (MoPNG), MSPGCL does not have any power over contractual obligation.

In the current coal shortage scenario, where only one to two days of coal stock is available with the stations, the quality of coal as received is directly fed to the boilers.

The problem aggravates during the rainy season, when wet and sticky coal is directly fed for power generation.

Commission's Ruling

For assessment of actual and achievable performance parameters, the Commission has appointed M/s Central Power Research Institute (CPRI) to carry out a detailed study of the various performance parameters and based on the findings of the study and after due regulatory process, the Commission would take an appropriate view regarding the achievable targets for the performance parameters. Pending the completion of the study, the Commission has not re-set the performance parameters as stipulated in the MYT Order in Case No. 61 of 2006. Further, the Commission does not find merit in MSPGCL's contention that the fuel cost has increased due to the receipt of wet and muddy coal during monsoon months, since if that were so, then the same problem would be experienced every monsoon, and would not be a phenomenon that occurred only during FY 2007-08. Being an annual phenomenon, the cost implication of the same would have already been factored into the variable cost computations.

2.15 FUEL PRICE

Ispat submitted that MSPGCL has projected imported coal price of around Rs. 6192 per tonne for FY 2009-10 whereas, MSPGCL has considered Rs. 6700 per tonne for calculating cost of fuel for FY 2008-09. MSPGCL should submit the details of the steps taken to arrive at a competitive contractual price for import of coal. Kolhapur Engineering Association submitted that MSPGCL should submit the reasons behind increase in fuel expenses by Rs. 396 Crore in FY 2007-08. They further submitted that MSPGCL should submit details regarding increase in the lease rent from Rs. 85 Crore to Rs. 217.56 Crore for Hydo Power Stations.

MSPGCL's Response

MSPGCL submitted that international coal prices have been experiencing wide fluctuations over the past several years. Besides the volatility in prices, there are several other factors like ocean freight, handling charges and inland transportation charges that need to be considered. The escalation rates for various sub-components as considered by Central Electricity Regulatory Commission (CERC) shows that the escalation in price of coal sub-component had been as high as 112%. In order to avoid risks involved during procuring imported coal, MSPGCL prefers to enter into short-term firm price contract for one year. MSPGCL further submitted that the procurement of imported coal even for the period less than one year is done through international competitive bidding.

MSPGCL submitted that the impact of using imported coal in overall cost of generation is Rs. 0.39/kWh and accordingly the overall cost has been projected as Rs. 2.29/kWh. This signifies that though the usage of imported coal increases the overall cost, however, it avoids the unavailability of station due to shortfall of domestic coal, thereby ensuring that consumers do not pay the cost of alternate short-term purchases.

MSPGCL submitted that it has provided details of fuel expenses in its Petition. It has submitted audited fuel expense for FY 2007-08, actual expenses for six months and estimated expenses for next six months for FY 2008-09 and projected expenses for FY 2009-10.

As regards the Lease rent charges, MSPGCL submitted that it the same has been considered in accordance with the Order of the Commission in Case No. 17 of 2007, on lease rent payable by MSPGCL to GoM.

Commission's Ruling

The Commission has addressed this issue of fuel costs in detail in Section 5 of the Order while determining the Energy Charges. As regards reduction in fuel prices in later part of FY 2008-09, the Commission has obtained and analysed the month-wise actual fuel prices for the period from October 2008 to March 2009 and has considered the same for projecting the fuel costs for FY 2009-10.

As regards the lease rent for FY 2009-10, it is clarified that the Commission vide its Order dated October 27, 2008 in Case No. 17 of 2007 has approved the year-wise lease rent for hydro generating stations being operated by MSPGCL, which have been handed over by the Government of Maharashtra.

2.16 COMPETITION AMONG GENERATORS

Shri N. Ponrathnam submitted that due to shortage of electricity, the Distribution Licensee might itself engage in generation to gain maximum price for the generated electricity. The Commission should set a minimum and maximum price ceiling for the generated electricity.

MSPGCL's Response

MSPGCL submitted that as per Section 61(d) of EA 2003, tariff is determined by the Commission to safeguard consumer's interest and at the same time ensure recovery of cost of electricity in a reasonable manner.

As regards the setting of maximum price ceiling, MSPGCL submitted that tariff is determined by the Commission as per the MERC Tariff Regulations.

Commission's Ruling

It is clarified that the tariff for the generating stations of MSPGCL has been determined in accordance with the MERC Tariff Regulations.

2.17 PLANT LOAD FACTOR (PLF) AND AVAILABILITY

Ispat submitted that the availability of Bhusawal Thermal Power Station for first half of FY 2008-09 was 69.05% as against the target availability of 86.44%. MSPGCL should submit the reasons behind poor availability in the first half, despite the fact that overhauling schedule has been allocated for second half of the year and provide the measures to be taken to achieve the target availability.

Dr. Ashok Pendse submitted that during FY 2007-08, MSPGCL was unable to achieve the approved PLF, which has resulted in shortfall of 1811 MU. He further submitted that assuming external power purchases at an average cost of Rs. 3/kWh then the cost of 1811 MU will amount to Rs.543 Crore. He further submitted that the Annual Fixed Charges should be reduced proportionally to the tune of underachievement of PLF.

MSPGCL's Response

MSPGCL submitted that the values of PLF and availability approved in the MYT Order were based on MSPGCL's computation, which was in accordance with the methodology specified by CEA. MSPGCL further submitted that the Commission has subsequently been approving Availability and PLF in accordance with MERC Tariff Regulations and added that MSPGCL has been submitting that such normative parameters are not practically achievable. MSPGCL further submitted that it has provided the details of the achievable performance parameters along with the rationale for the same in the APR Petition.

Commission's Ruling

As regards, the contention raised regarding reduction in the fixed cost on proportionate basis for the plants under achieving the target availability, the Commission agrees with the concerns of the objectors in this regard. However, as discussed earlier and in subsequent paragraphs, the Commission has undertaken truing up only of certain elements for FY 2007-08, and has therefore not reduced the Annual Fixed Charges (AFC) at this stage, for the stations under-achieving the target normative availability of 80%. The Commission would consider such reduction based on the final truing up of all the elements of the AFC for such stations, whose availability is less than the target availability of 80%.

2.18 POWER PURCHASE AGREEMENT (PPA)

Shri N. Ponrathnam submitted that the terms and conditions of the PPA should be in favour of the Distribution Licensee so that the benefits can be passed on to the consumers. Further, the Fuel Adjustment Cost (FAC) charges should be specified separately in the PPA. He added that the Distribution Licensees should be mandated to provide uninterrupted power supply to the consumers. The Distribution Licensees should have stand-by arrangement for unscheduled outages and load shedding should be done only when all the back-up for supply fails.

Shri N. Ponrathnam, in his rejoinder, submitted that with the de-licensing of generating stations, the Government has no control over the generating stations and no penal action could be taken if the generating company stops producing electricity.

MSPGCL's Response

MSPGCL submitted that the PPA between MSPGCL and MSEDCL has been approved by the Commission and the FAC computations are being done in accordance with the provisions of the MERC Tariff Regulations.

MSPGCL further added that the efforts taken by it for maximising the generation to overcome power shortage problem are mentioned in the APR Petition.

Commission's Ruling

As regards the issue of FAC computations, it is clarified that the FAC computations are being carried out by Utilities and being vetted on post-facto basis by the Commission in accordance with the MERC Tariff Regulations. It is clarified that the PPA between MSPGCL and MSEDCL has been approved by the Commission after following the due regulatory process, including Public Hearing.

As regards the observations regarding directions to distribution licensees and control over generating stations by the Government, the Commission is of the view that the same have no relevance in the context of the present regulatory process, which has been undertaken to determine the tariff for generating Stations of MSPGCL.

2.19 PRICING METHODOLOGY

Shri N. Ponrathnam submitted it has been observed that the expenses as per Audited Accounts are always higher than that approved by the Commission and suggested that expenses needs to be linked to the performance and performance should be linked with the reward.

MSPGCL's Response

MSPGCL submitted that tariff is determined by the Commission in accordance with MERC Tariff Regulations, after prudence check.

Commission's Ruling

It is clarified that the tariff for the generating stations of MSPGCL has been determined in accordance with the MERC Tariff Regulations, which is a combination of cost-plus and performance based regulation, as the tariff is determined by considering normative performance parameters.

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

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

The Commission in its MYT Order in Case No. 68 of 2006 dated April 25, 2007 stipulated that the gains and losses on account of controllable and uncontrollable factors will be shared between the Generating Company and the Licensee at the time of truing up of ARR based on actuals, in accordance with Regulation 19 of the MERC Tariff Regulations. As discussed in Section 1, the Commission will undertake the final truing-up of expenses and revenue for FY 2007-08 through separate proceedings. Hence, the Commission will undertake the sharing of gains and losses on account of controllable and uncontrollable factors along with final truing-up of expenses and revenue for FY 2007-08.

3.1 FUEL COSTS

MSPGCL, in its Petition, has submitted that the total actual fuel cost for FY 2007-08 as per Audited Accounts for the existing stations (excluding Paras Unit-3 and Parli Unit-6) was Rs. 6020 Crore as against the approved amount of Rs. 5624 Crore including other fuel related costs of Rs. 169.31 Crore. MSPGCL submitted that the increased fuel costs are largely on account of expenditure on other variable charges (including water, chemical, lubricants, etc.), variation in performance parameters, i.e, heat rate, poor quality of coal and higher transit losses.

3.1.1 <u>Performance Parameters</u>

MSPGCL submitted that the main reason for the deviation from the performance parameters specified by the Commission is due to vintage of the stations. MSPGCL submitted that around 29% of the existing capacity of generating stations has outlived its useful life of 25 years and another 32% of the capacity of existing stations has been left with a useful life of less than 5 years. MSPGCL added that the Commission, in its Order for FY 2005-06 and FY 2006-07, had approved a trajectory for improvement of the performance parameters. As a result of the deviations from the approved performance parameters, the Commission disallowed the truing-up of expenses for FY 2005-06 in its MYT Order. MSPGCL filed an Appeal before the ATE seeking relief against the optimistic targets set by the Commission and sought approval of the disallowed expenses.

The ATE, in its Judgment dated April 10, 2008 in Appeal Nos. 86 and 87 of 2007, directed the Commission to appoint an independent consultant to practically assess the performance levels of the generating stations. As discussed earlier, the Commission has appointed M/s CPRI as an independent agency to assess the achievable performance parameters for MSGPCL stations and also to suggest measures for improvement of performance parameters.

3.1.2 <u>Gross Generation</u>

The actual gross generation achieved by MSPGCL during FY 2007-08 is 50883 MU, which is around 3% lower than the gross generation of 52324 MU approved by the Commission. MSPGCL submitted that the actual thermal generation during FY 2007-08 is 46338 MU, which is significantly lower than the gross thermal generation approved by the Commission. The actual hydel generation of 4545 MU during FY 2007-08 is higher than the generation of 3966 MU approved by the Commission.

The summary of station-wise gross generation approved by the Commission in its MYT Order for FY 2007-08 and actual gross generation during FY 2007-08 is given in the Table below:

Table: Summary of Gross Generation for FY 2007-08 (MU)

Gross Generation	Tariff Order	Actuals
Khaperkheda	6059	6294
Paras	388	345
Bhusawal	3339	3182
Nasik	6195	6294
Parli	4716	4278
Koradi	7323	6353

Gross Generation	Tariff Order	Actuals
Chandrapur	16399	15862
Uran	3939	3730
Total-Thermal	**48358**	**46338**
Hydro	**3966**	**4545**
Total-Thermal +Hydro	**52324**	**50883**

3.1.3 Auxiliary Consumption

MSPGCL, in its Petition, submitted that the auxiliary consumption of all its Stations/Units is higher than the auxiliary consumption approved in the Order. The summary of Unit-wise gross auxiliary consumption approved by the Commission in its Tariff Order for FY 2007-08, and actual auxiliary consumption during FY 2007-08 is given in the Table below:

Table: Auxiliary Consumption (%)

Plant	Tariff Order	Actual
Khaperkheda	8.50%	8.90%
Paras	9.70%	11.39%
Bhusawal	9.75%	10.07%
Nasik	9.00%	9.08%
Parli	9.00%	10.06%
Koradi	9.80%	10.19%
Chandrapur	7.80%	7.40%
Uran	2.40%	2.17%
Koyna Complex	0.80%	0.72%
Small Hydro stations		0.29%
Koyna Complex		0.72%

The Commission asked MSPGCL to confirm whether gross generation for thermal and hydel generating stations is actual gross generation or gross generation after deducting construction power provided to upcoming generating stations or extension Units at same location. The Commission added that if construction power has been supplied from existing Units/stations, then MSPGCL should clarify under which provisions of the Electricity Act, 2003 and Regulations it has supplied power to upcoming stations from existing generating stations. Further, the Commission asked MSPGCL to submit monthly details of energy utilised for construction power from all thermal and hydel generating stations separately and to confirm whether cost of construction power has been considered in the Capital Cost of upcoming generating stations. MSPGCL, in its reply, submitted that the gross generation for thermal and hydel generating stations is actual gross generation. MSPGCL added that it has provided the construction power to the new generating stations based on the definition of "Generating Station" under Part I Section 2(30) of the EA 2003, which states that:

> "*generating station" or "station" means any station for generating electricity, including any building and plant with step-up transformer, switch yard, switch-gear, cables or other appurtenant equipment, if any used for that purpose and the site thereof, a site intended to be used for a generating station, and any building used for housing the operating staff of a generating station, and where electricity is generated by water-power, includes penstocks, head and tail works, main and regulating reservoirs, dams and other hydraulic works, but does not in any case include any substation"*

MSPGCL further submitted that for some of the upcoming generating stations, the supply of construction power is from MSEDCL, while for the others the power is provided from the existing Units. MSPGCL submitted that existing Units provide such construction power as per tariff rates specified by the Commission. While the existing Units treat such revenue as an income in their Books of Accounts, the upcoming Units on the other hand, capitalize such cost of power. However, MSPGCL submitted that the amount of such power and associated cost is insignificant considering the total quantum of fuel related expenses. The year-wise construction power supplied to the new generating Units/stations from the existing stations is given in the following Table:

Table: Details of energy utilised for construction ***(MU)***

Particulars	FY 2004-05	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
Bhusawal				0.02	0.47
Paras	0.01	0.37	0.77	0.24	0.14

Particulars	FY 2004-05	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
Parli			0.68	0.20	
Khaperkheda					1.46

As regards the supply of power to upcoming stations from existing Units, the Commission is of the view that supply of construction power to new units is a retail supply activity and cannot be treated as sale of power from the existing stations of MSGCL units. The Commission hereby rules that the supply of construction power to new units will be considered as sale of power from existing Units to MSEDCL at the respective generation tariff applicable for the respective period. Accordingly, the Commission has considered the additional revenue to MSPGCL considering such sale to MSEDCL. MSEDCL will be deemed to have supplied construction power to new Units of MSPGCL based on the tariff applicable for LT VII (Temporary Supply). For units, the cost of this power supplied will be considered as part of construction power and capitalised in the Project Cost.

3.1.4 <u>Plant Load Factor (PLF)</u>

The summary of Unit-wise Plant load Factor (PLF) approved by the Commission in its MYT Order for FY 2007-08 and actual PLF achieved by MSPGCL during FY 2007-08 is summarised in the Table below:

Table: Plant Load Factor (PLF) ***(%)***

Plant	Approved	Actual
Khaperkheda	82.34%	84.82%
Paras	80.00%	71.51%
Bhusawal	80.00%	75.84%
Nasik	80.00%	82.38%
Parli	80.00%	70.29%
Koradi	80.00%	69.79%
Chandrapur	80.00%	76.98%
Uran	52.77%	49.84%

MSPGCL submitted that the following key issues affected the technical performance:

- operation of a fleet of old generation assets wherein some of the 210 MW units are 25 years old and 500 MW Units are 11 to 17 years old
- Units of capacity less than 200 MW are more than 30-38 years old and most of the equipments supplied during this period experience similar problems
- Partial loading of the machines due to poor quality of coal

3.1.5 Availability

The summary of station-wise availability approved by the Commission in its MYT Order for FY 2007-08 and actual availability during FY 2007-08 is summarised in the Table below:

Table: Availability (%)

Plant	Approved	Actual
Khaperkheda	86.44%	84.80%
Paras	83.70%	71.51%
Bhusawal	86.41%	75.84%
Nasik	85.39%	82.40%
Parli	86.34%	70.29%
Koradi	85.61%	69.79%
Chandrapur	85.97%	76.98%
Uran	53.22%	49.84%

3.1.6 Station Heat Rate (SHR)

The summary of Station-wise heat rate approved in the MYT Order and actual heat rate for FY 2007-08 is given in the following Table:

Table: Heat Rate ***(kcal / kWh)***

Plant	FY 2007-08	
	Approved	Actual

Plant	FY 2007-08	
	Approved	Actual
Khaperkheda	2556	2755
Paras	3105	3291
Bhusawal	2649	2914
Nasik	2648	2659
Parli	2652	2779
Koradi	2786	3249
Chandrapur	2545	2599
Uran	1980	1973

MSPGCL submitted the reasons for the deviation in SHR as under:

1. Due to old age of the generating units, problems like furnace infiltration, Air Pre-Heater (APH) in-leakage, i.e., through seals, passing of valves, and main-steam and re-heater-steam spray have occured;
2. Vast difference between the design value of coal and coal actually received leads to deviations from design heat rate since the control system has to tune itself to the changed coal quality;
3. Degradation and ageing of machines;
4. Operational problems and constraints like partial loading of the machines due to poor quality of coal, use of fuel oil for start-up and low load support, use of make-up water to replenish blow down auxiliary steam, etc.;
5. Ambient parameter variations;
6. Coal yard losses like presence of stones in coal, loss in heating value of the coal due to spontaneous combustion and stacking, increase in moisture content of the fuel and the drop in Calorific Value of coal;
7. receipt of wet coal during rainy season
8. operational problems and constraints like partial loading of machines, delay in start up and loading of machines, etc.

3.1.7 <u>Secondary Fuel Oil Consumption</u>

MSPGCL submitted that efforts have been made to avoid oil support to the extent possible and to reduce the use of secondary fuel oil by monitoring daily oil consumption at the corporate level. Due to these efforts, the secondary oil consumption has reduced to 1.78 ml/kWh in FY 2007-08 from 1.96 ml/kWh in FY 2004-05.

Table: Secondary Fuel Oil Consumption ***(ml/ kWh)***

Plant	**FY 2007-08**		
	Type	**Approved**	**Actual**
Khaperkheda	FO	2.00	0.76
	LDO		0.11
Paras	FO	2.00	2.13
	LDO		0.22
Bhusawal	FO	2.00	3.25
	LDO		0.21
Nasik	FO	2.00	1.31
	LDO		0.35
Parli	FO	2.00	3.41
	LDO		0.37
Koradi	FO	2.00	1.43
	LDO		0.51
	LSHS		1.03
Chandrapur	FO	2.00	0.57
	LDO		0.26

MSPGCL further submitted that even with all it efforts, performance of Units during FY 2007-08 has deteriorated due to wet coal problems during rainy season and partial loading due to coal shortage.

As regards the truing up of the performance parameters like station heat rate, specific oil consumption, transit losses, and auxiliary consumption, in accordance with the directions given by the ATE in its Judgment dated April 10, 2008 in Appeal Nos. 86 and 87 of 2007 to appoint an independent consultant to practically assess the performance levels for the stations, the Commission has appointed M/s CPRI as an independent consultant to carry out the studies on behalf of the Commission. Based on the outcome of the study the Commission will carry out the truing up exercise for such performance parameters.

3.1.8 Other Variable Charges

MSPGCL submitted that the variation in fuel expenses is mainly due to other variable charges such as lubricants, chemicals, water charges, etc., MSPGCL submitted that the Commission, in its MYT Order, has considered these charges as part of variable costs while estimating the energy charges and estimated such expenses at Rs. 169.31 Crore for FY 2007-08. MSPGCL sought truing-up of other variable charges for FY 2007-08 to the tune of Rs. 217.08 Crore based on the Audited Accounts.

The summary of such expenses are provided in the Table below:

Table: Break-up of other fuel related expenses ***(Rs. Crore)***

S. No.	Particulars	Amount
1.	Other Fuel Related Costs	87.52
2.	Verification of Coal Stock	19.50
3.	Stock Shortages on Physical Verification of Oil Stock	0.0003
4.	Excess found on physical verification of fuel stock – oil	-0.001
5.	Cost of Water	82.55
6.	Lubricants & Consumable Stores	26.64
7.	Station Supplies	3.54
8.	**Total**	**219.75**
9.	Less: Other Fuel Related Expenses of New Parli	2.67
10.	**Net Other Fuel Related Expenses for existing plants**	**217.08**

The Commission asked MSPGCL to provide a reconciliation statement for actual other fuel related costs for FY 2007-08 based on the Audited Accounts for existing stations and newly commissioned and upcoming stations. MSPGCL subsequently provided the reconciliation statement wherein it confirmed that the other fuel related costs for existing stations amounted to Rs. 217.08 Crore.

The Commission asked MSPGCL to submit the details of the other fuel related costs. MSPGCL submitted that the other fuel related costs represent the charges for coal handling contract charges, demurrage on coal wagons, railway siding charges, penalties for overloading, commission to agents, payments to railway staff posted at power stations, coal stock maintenance cost, other coal related cost, oil handling contract charges and demurrage on oil tankers.

The Commission asked MSPGCL to provide the basis and rationale for the expenditure on 'verification of coal stock'. MSPGCL submitted that as per the Circular dated March 19, 1987 issued by the erstwhile MSEB, the value of coal shortages identified during physical verification will be treated as cost of fuel consumed. Accordingly, amount booked against Account Head – Stock Shortage on physical verification of coal stock is equal to shortages of coal found on physical verification carried in the month of October 2007.

As regards the other fuel related expenses for FY 2007-08, the Commission has undertaken the truing up and has considered the actual fuel cost of Rs. 217.08 Crore for truing up purposes.

3.2 OPERATION & MAINTENANCE (O&M) EXPENSES

MSPGCL submitted that in the MYT Order, the Commission approved O&M expenses for the period from FY 2007-08 to FY 2009-10 by escalating the approved O&M expenses of FY 2006-07 by a factor of 5.38% per annum. In the APR Order for FY 2007-08 dated May 31, 2008, the Commission had not considered the Audited Accounts for FY 2006-07 for revision of the O&M expenses approved in the MYT Order. However, in accordance with the Judgment of ATE in Appeal Nos. 86 and 87 of 2007, the Commission has been directed to allow the truing-up for FY 2006-07 based on the Audited Accounts for FY 2006-07 and in effect MSPGCL expects the Commission to revise the allowable O&M expenses for the base year and project the allowed expenditure for the Control Period.

MSPGCL submitted that the Commission had approved the O&M expenses of Rs. 861.55 Crore in its APR Order for FY 2007-08, for the existing stations of MSPGCL. The Commission had not provided the break-up of O&M expenses under Employee expenses, Administration & General (A&G) expenses and Repair & Maintenance (R&M) Expenses. MSPGCL submitted that as per the Audited Accounts for FY 2007-08, the actual expenditure on O&M for existing stations (excluding new Units of Paras and Parli) is Rs. 967.65 Crore and submitted the following breakup:

Table: Details of O&M expenses for FY 2007-08 (Rs. Crore)

Particulars	O&M Expenses
Employee Expenses	428.24
A&G Expenses	57.72
R&M Expenses	481.70
Total O&M Expenses	**967.65**

MSPGCL submitted that the variation in the actual expenses vis-à-vis the approved O&M expenses are mainly on account of the following:

a. Ageing of the Units leading to frequent R&M expenses;
b. Actual employee expenses considering that MSPGCL has inherited a work force from erstwhile MSEB and in the current setup, all such expenses are incidental to the generation business while MSPGCL has no control over the same;
c. Actual A&G expenses, which have increased on account of the following:
    i. Increase in rents on account of levy of service tax on the lease rents;
    ii. Increase in legal charges due to various cases which MSPGCL had to fight in courts, tribunals, etc.;
    iii. Increase in consent fees paid to Maharashtra Pollution Control Board (MPCB) wherein for FY 2007-08, the fees have been levied as a percentage of capital cost as against previous practice of charging a lump sum amount;
    iv. Correct booking of fuel security related expenses under A&G expenses in the Books of Accounts.

As regards A&G expenses, MSPGCL quoted from the ATE Judgment dated April 10, 2008 in Appeal No. 86 and 87 of 2007, wherein the ATE stated as under:

"The admissibility of A&G expenditure should be determined after carrying out prudence analysis and check instead of adopting the A&G expenses as per the Tariff Order dated 10 March 2004 and then escalating the same by applying 4.2% increase every year without considering the impact of inflation factor."

Accordingly, MSPGCL requested the Commission to allow the expenses based on the

Audited Accounts subject to prudence check.

The Commission asked MSPGCL to submit the reasons for increase in A&G expenses for FY 2007-08 along with the impact (in Rs. Crore) of increase in rents on account of levy of service tax on the lease rents. MSPGCL submitted that the impact of service tax on building rent has been Rs. 0.94 Crore for FY 2007-08. MSPGCL further submitted that the main reason for increase in A&G expenses is the legal fees booked by Head Office and Nasik Power Station towards certain court cases like cases lodged by M/s Black Diamond towards coal mill reject, cancellation of various agreements of M/s Dirk India Ltd..

The Commission, in its APR Order in Case No. 71 of 2007, while undertaking the truing up of O&M expenses for FY 2006-07, stipulated as follows:

> *"As regards the Repairs and Maintenance expenses, the Commission in its MYT order had made the following comments on such expenditure for 2006-07:*
>
> > *" …..Actual Repair and Maintenance expenditure as given by MSPGCL are given in the Table below:*

Spent upto Nov 06	***Expenditure in Dec 06***	***Total Expenditure in Q1,Q2,Q3***	***Projected expenditure in FY 2006-07***
311.89	*36.35*	*348.23*	*464.31*

> > *Based on the actual expenditure incurred by MSPGCL as per details given by MSPGCL, it is projected that MSPGCL may spend Rs. 464 crore, i.e., 90 % of the proposed expenditure up to March 31, 2007. Further, considering that on an average, at least around 20 % of the expenditure is meant for upgradation, modernization, high cost insurance spares, etc., which are of capital nature, the actual expenditure on Repairs and Maintenance in FY 2006-07 is estimated at Rs. 370 crore, which works out to approximately 73 % of MSPGCL's proposal of Rs 508.64 Crore. This also amounts to a 12% increase over the actual R&M expenditure booked by MSPGCL in FY 2005-06, which could also include expenditure of capital nature. Considering the above aspects, the Commission has not considered the truing up of R&M expenses for FY 2006-07 at this stage. In*

order to have a clear picture regarding Repairs and maintenance expenditure, MSPGCL should maintain a clear demarcation of capital expenditure and revenue expenditure heads, and submit Capital expenditure proposals for Renovation and Modernisation schemes, for the Commission's approval. The Commission considering the aspects discussed above will consider the actual R&M Expenses based on audited accounts for FY 2006-07 subject to prudence check at the time of Annual Performance Review for FY 2007-08, and based on clear segregation of capital related expenditure and revenue expenditure."

...

As discussed in Section 1, as the Commission will undertake the truing up of O&M expenses for FY 2005-06 and FY 2006-07 through a separate process, the Commission in this Order has not undertaken the truing up of O&M expense for FY 2006-07, since the final truing-up cannot be undertaken twice.

As the truing up for O&M expense for FY 2006-07 is yet to be undertaken as part of separate proceedings, it will not be appropriate to undertake the truing up of O&M expenses for FY 2007-08. Accordingly, the Commission has not carried out the truing up of O&M expenses for FY 2007-08 at this stage.

3.3 SUPERVISION CHARGES TOWARDS HYDEL ASSESTS

MSPGCL, in its Petition, has considered the supervision charges of Rs. 8.97 Crore for operating hydel assets computed as 15% of O&M expenses as a part of the truing up element. The Commission asked MSPGCL to clarify the Regulations under which it has sought approval of supervision charges. Further, the Commission also asked MSPGCL to provide the basis and justification of considering supervision charges as 15% of O&M expenses and provide back-up documentation, which permits MSPGCL to levy supervision charges.

MSPGCL submitted that it has only proposed this mechanism for allowing some incentive for efficiently managing the hydro resources in the State, the intent being that under the current model, MSPGCL is only allowed to recover the cost of operations without getting any incentive for the efforts and expertise involved in such operations. MSPGCL does not have equity stake in the projects, which is why it is not eligible to claim RoE under the MERC Tariff Regulations. Hence, MSPGCL has submitted a proposal for allowing supervision charges of 15% of O&M charges for such hydro stations, which effectively works out to Rs. 8.97 Crore in FY 2007-08. MSPGCL further submitted that since the amount is miniscule as compared to the total ARR of MSPGCL, the Commission should kindly consider the submissions of MSPGCL or devise a mechanism by amending its Regulations to allow such incentives to MSPGCL.

As regards the claim of supervision charges of Rs. 8.97 Crore computed as 15% of O&M expenses for FY 2007-08, the Commission is not inclined to grant the same as there is currently no provision in the MERC Tariff Regulations under which such expenses may be allowed. Further, the Commission is of the view for such hydel projects, which have been taken over by MSPGCL to operate from GoM on lease basis, the Commission has approved leased rent for such stations, which also includes the return on equity and the Commission approves all the relevant expenses incurred by MSPGCL towards the operation and maintenance of the hydel generating stations. In case the supervision charges are allowed to MSPGCL in addition to lease rent, which includes return as a component, it will tantamount to allowing return in excess of the rate prescribed in the MERC Tariff Regulations.

3.4 CAPITAL EXPENDITURE (CAPEX) AND CAPITALISATION

The Commission asked MSPGCL to submit a detailed note on the actual Capital Expenditure (capex) and Capitalisation for FY 2007-08 along with the reasons for deviation between actual capex and capitalisation vis-à-vis the approved capex and capitalisation. MSPGCL submitted that the Commission has classified the capex as a controllable expense under the MYT regime. MSPGCL further submitted that given the vintage of the Units and the variation in quality of coal and other technical parameters, it may not be possible to restrict to the capex schemes envisaged at the beginning of the year. In real time, there are certain critical [non-Detailed Project Report (DPR)] expenses of capital nature that need to be incurred in order to keep up the performance of the Units. MSPGCL submitted that in practical terms, it may not be possible to implement all the schemes during a time frame as envisaged at the time of submission of Petition. However, such schemes that are not undertaken in such time period are taken up on priority during the ensuing period. Such spill-over of schemes also leads to deviation between approved capex and capitalization vis-à-vis the actual capital expenditure and capitalisation.

The Commission asked MSPGCL to reconcile the differences (as shown in the Table below) between asset addition reported under Format F4 and actual capitalization as reported under Form F5.4 during FY 2007-08, with proper justification.

Rs. Crore

Stations	FY 2007-08		
	Additions during the year (Form F4) (As per Earlier Submission)	Additions during the year (Form F4)(Revised Submission)	Total Capitalisation (Form F5.4) (Revised Submission)
Bhusawal	6.32	2.60	2.60
Chandrapur	1.39	12.47	12.47
Nasik	14.98	14.77	14.77
Koradi	19.47	19.47	19.26
Paras	2.52	2.51	2.51
Parali	8.47	8.47	8.47
Uran	45.55	45.56	3.57
Khaperkheda	8.66	4.18	4.18
Hydel	42.52	42.52	42.52
Total	**149.88**	**152.55**	**110.35**

MSPGCL submitted that in case of Koradi there has been an asset addition in vehicles, which is on account of transfer of vehicles from Nasik training centre of MSEDCL. Since the plant has itself not done any expenditure on the same, therefore, the same did not get reflected in Format 5.4. The asset addition shown in the Format F4 is based on audited accounts and therefore, reflects the entry gained from such transfer from other Unit. In case of Uran, there has been an asset addition in land, which is resulting in the difference. The land has been procured for the upcoming Uran expansion and a separate accounting Unit will be made for undertaking capex for the upcoming unit. However, at the time of finalisation of accounts for FY 2007-08, no such accounting Unit was formed, therefore, such asset addition has been shown under the existing Unit only. The same would however, be duly transferred to the new accounting Unit during the next financial year. The land has been procured from internal accruals and no loan has been taken for procurement of the same. Further, such addition of land does not change the ARR of the station as no depreciation is allowed on land.

The Commission notes that as against permitted capitalisation of Rs. 295.49 Crore considered under its earlier APR Order in Case No. 71 of 2007, actual capitalisation by MSPGCL during FY 2007-08 amounted to Rs. 110.30 Crore. The Commission has verified the actual capitalisation claimed by MSPGCL as against the capex schemes already approved by the Commission. The Commission's rationale for approving the capitalisation for FY 2007-08 in this Order is discussed below:

As regards the accounting of various heads of expenses of upcoming stations, the Commission directs MSPGCL that it should ensure that the expenses pertaining to upcoming stations should not be loaded on to the existing stations.

The Commission observes that MSPGCL has incurred capitalisation only towards the Non-DPR schemes, Though the Commission has considered the actual capitalisation during FY 2007-08 as the actual capitalisation during FY 2007-08 is on lower side as against the approved figures, however, MSPGCL has to confirm that the projected benefits actually accrue for the benefit of the stakeholders. **The Commission directs MSPGCL to submit the detailed report with established benefits vis-à-vis the benefits projected against the schemes within one month from the issuance of this Order.**

3.5 DEPRECIATION AND ADVANCE AGAINST DEPRECIATION (AAD)

For the purposes of truing-up for FY 2007-08, MSPGCL submitted that the depreciation rate considered is in accordance with the rates specified in the MERC Tariff Regulations, and the depreciation works out to Rs 349.87 crore. MSPGCL claimed Rs. 391.77 Crore as depreciation and AAD for FY 2007-08. As regards the AAD, MSPGCL submitted that since the Commission determines the tariff separately for individual power stations, hence, MSPGCL should be allowed the AAD based on loan repayment vis-à-vis the depreciation for the individual stations.

The Commission observes that the actual Opening level of GFA for FY 2007-08 amounts to Rs 9996.20 Crore as against Rs 9985.31 Crore considered by the Commission in its earlier Tariff Order. The Commission has verified the same with audited financial statements of MSPGCL. Accordingly, for the purposes of true-up exercise for FY 2007-

08, the Commission has considered opening GFA for MSPGCL at Rs 9996.20 Crore as claimed by MSPGCL, as per its Audited Accounts. Further, MSPGCL in its additional submissions has confirmed that depreciation has not been claimed beyond 90% of the asset value in line with the MERC Tariff Regulations. The depreciation expenses approved by the Commission for FY 2007-08 has been summarised in the following Table:

Table: Depreciation for FY 2007-08 ***(Rs. Crore)***

Particulars	Approved (APR Order FY 2007-08)	Revised Estimate	Allowed after truing up
Depreciation (Thermal)	345.37	331.90	331.90
Depreciation (Hydel)	4.57	5.11	5.11
Depreciation	349.94	337.01	337.01

MSPGCL submitted that the repayment of generic loans is only to the extent of Rs. 17.22 Crore in FY 2007-08. MSPGCL further submitted that the loan repayment has exceeded the depreciation specified by the MERC Tariff Regulations by Rs. 54.76 Crore in the case of Koradi, Khaperkheda and Hydro plants, as shown in the Table below:

Table: Advance against Depreciation for FY 2007-08 ***(Rs. Crore)***

Depreciation and Advance Against Depreciation for FY 2007-08	Depreciation	Loan Repayment	Advance Against Depreciation
Koradi	28.54	42.58	14.04
Khaperkheda	82.40	115.40	33.01
Hydro plants	5.11	12.82	7.71
Total			**54.76**

MSPGCL submitted the overall comparative summary of revised estimates of depreciation along with AAD for individual plants vis-à-vis the amounts determined by the Commission as under:

Table: Depreciation and AAD of MSPGCL for FY 2007-08 ***(Rs. Crore)***

Particulars	Approved (APR Order FY 2007-08)	Revised Estimate
Depreciation (Thermal)	345.37	331.90
Depreciation (Hydel)	4.57	5.11
AAD	0.00	54.76
Depreciation (incl. AAD)	**349.94**	**391.77**

MSPGCL requested the Commission for truing up of Rs. 41.83 Crore for variation in Depreciation (including AAD) allowed in its Order vis-à-vis the actual depreciation (including AAD for individual plants) in accordance with the MERC Tariff Regulations.

The Commission asked MSPGCL to submit a summary-table of accumulated depreciation and total loan repayment till date in accordance with the MERC Tariff Regulations. MSPGCL submitted that it has provided the information pertaining to current loans only. Since most of the units are very old, details of historic loan repayment cannot be submitted, which should ideally be considered when comparing accumulated depreciation with accumulated loan repayment.

As regards the summary of opening loan balance and loan addition for FY 2007-08, the Commission asked MSPGCL to reconcile the differences between the opening loan balance as approved by the Commission for FY 2007-08 and the details as submitted in this APR Petition for FY 2008-09.

Particulars-FY 2007-08	Opening Loan Balance		
	MSPGCL Petition	APR Order	APR Petition for FY 2008-09
Bhusawal	20.05	20.05	22.12
Chandrapur	156.93	156.93	158.26
Nasik	48.25	48.25	51.13
Koradi	199.08	199.08	202.85
Paras	0.19	0.19	0.45
Parali	57.04	57.04	59.58
Uran	146.27	146.27	148.27
Khaperkheda	253.91	253.91	239.38

	Opening Loan Balance		
Sub-total (Thermal)	**881.72**	**881.72**	**882.03**
Hydel	71.36	71.36	72.87
Sub-total (Hydel)	**71.36**	**71.36**	**72.87**
GRAND TOTAL (Thermal+Hydel)	**953.07**	**953.07**	**954.90**

MSPGCL submitted that it has apportioned the common loans to the stations and the variation is primarily on account of rounding off of the loan details while apportioning them to individual stations.

As regards the discrepancy of the opening loan balance for FY 2007-08, the Commission does not agree with the MSPGCL's submission that it is primarily on account of the rounding off error. It may be observed that for stations like Uran and Bhusawal, the difference on opening loan balance is around Rs. 2 Crore, while for Khaperkheda, the difference is around Rs. 15 Crore. The Commission directs MSPGCL to maintain the opening loan balance properly. However, for the purpose of computing the capital expenditure related expenses, the Commission has considered the MSPGCL's submissions in the present Petition towards the opening loan balances for FY 2007-08.

Regulation 32.3 of the MERC Tariff Regulations stipulates that where the actual amount of loan repayment in any financial year exceeds the amount of depreciation allowable under Regulation 34.4.1, the generating company shall be allowed an advance against depreciation for the difference between the actual amount of such repayment and the allowable depreciation for such financial year.

The Commission observes that actual loan repayment of Rs 230.03 Crore for FY 2007-08 does not exceed actual depreciation of Rs 337.01 Crore for the year for MSPGCL as a whole. The Commission is of the view that Advance Against Depreciation is intended to meet shortfall in meeting loan repayment obligations of the Generating Company, and is not intended to provide additional cash flow to the Generation Company. While tariff is determined on a station-wise basis, AAD is a special provision, which enables the Utility to meet its loan repayment obligations as a whole rather than for each Station. Giving AAD on a station-wise basis may result in a situation, where the generation tariffs are determined higher to account for the component of AAD, even though the Company has enough funds to meet its loan repayment obligations.

3.6 INTEREST EXPENSES

The Commission, in the APR Order for FY 2007-08 dated May 31, 2008 for MSPGCL, had approved net interest expenses of Rs. 81.28 Crore for FY 2007-08 after considering the interest expenses pertaining to long-term loans only.

MSPGCL submitted that the actual gross long term interest expenses for FY 2007-08 are Rs 342.71 crore for MSPGCL as an entity and provided the project details along with the lender's name against the actual interest expenditure incurred on long-term loans. The summary of the interest expenses on long-term borrowings as identified for various projects is tabulated below:

Rs Crore

PARTICULARS	Outstanding Loan at the beginning	Loan drawal during the year	Loan repayment during the year	Balance Outstanding at the end of the year	Interest expense incurred during the year
Generic Loans	58.67	212.69	17.22	254.14	19.71
Project Specific - Thermal + Gas	823.36	31.88	199.99	655.25	57.86
Project Specific - Hydro	72.87	9.92	12.82	69.97	5.11
New Paras	1,063.64	466.35	95.58	1,434.41	137.44
New Parli	1,125.70	329.11	88.03	1,366.79	110.45
Other new projects under construction stage	-	523.70	-	523.70	12.14
Grand Total	**3,144.24**	**1,573.65**	**413.63**	**4,304.26**	**342.71**

The details of capitalization of long term interest expense are as per the Table below:

Table: Details of Interest Capitalization in FY 2007-08 (Rs. Crore)

Loan	Amount
Generic Loans	-
Project Specific - Thermal + Gas	-
Project Specific – Hydro	-
New Paras	137.44
New Parli (upto CoD IDC, after CoD charged to Revenue)	69.23
Other new projects under construction stage	12.14
Total	**218.81**

Thus, the net interest expense for existing plants of MSPGCL for FY 2007-08 as submitted by MSPGCL is shown in the Table below:

Table: Details of Net Interest Expenses claimed by MSPGCL (Rs. Crore)

Particulars	Rs Crore
Generic Loans	19.71
Project Specific - Thermal + Gas	57.86
Project Specific – Hydro	5.11
Gross Interest Expenses	**82.69**
Less: Capitalisation	-
Net Interest Expenses	**82.69**

Further, the Commission asked MSPGCL to submit the reasons for considering loan addition of Rs. 254.49 Crore during FY 2007-08 as against the actual capitalisation of Rs. 110.30 Crore. The Commission asked MSPGCL to clarify whether any capitalisation during FY 2007-08 is towards DPR schemes and if there are any such schemes, the Commission asked MSPGCL to provide the detailed computations of IDC and tranche-wise interest computation against each of the loans drawn from PFC, GoM and other sources giving the details of opening loan balance, loan repayment during the year, closing loan balance and applicable interest rate for FY 2007-08, FY 2008-09 and FY 2009-10. MSPGCL submitted that the drawal of loan and deployment of equity during the year should not be linked to capitalisation as there might be inherent lead times in implementation of the scheme. The more relevant factor for comparison of drawal of funds is the investment made in various schemes. MSPGCL further submitted that the mismatch between drawal of funds and actual investment into the schemes is primarily because of the following reason:

"On unbundling of MSEB, loans of erstwhile MSEB were allocated to successor companies. However certain loans finally allocated to MSPGCL were serviced by MSETCL in the interim period up to final allocation. Consequently MSETCL demanded amount of Rs 191.49 crs towards servicing of said loans as mentioned below:

Table: Loan Details (Rs. Crore)

Sr.No	***Particulars***	***Amount***
1	*Interest on loan from Indian Bank*	*3.92*
2	*REC Loan Repayment & Interest*	*76.70*
3	*NCD Interest*	*9.58*
4	*NCD Redemption*	*93.79*
5	*Interest on Bank of India Loan*	*7.20*
6	*Arranger Fee*	*0.30*
TOTAL		***191.49***

MSPGCL settled the aforesaid liability of MSETCL as follows:

Table: Sources of Loan Repayment (Rs. Crore)

Sr. No	***Particulars***	***Amount***
1	*Loan from Bank of India*	*78.02*
2	*Loan from Canara Bank*	*113.47*
TOTAL		***191.49***

Out of aforesaid amount paid to MSETCL, only around Rs 103.37 crs paid against NCD Redemption & Interest can be linked towards capital expenditure since NCD's were issued for funding Coal Handling plant at Chandrapur Unit VII, Bulk Evacuation system, Stage – II DPC, Total Electrification Package for Khaperkheda Units 3 & 4 and Railway Track Hopper System. The remaining loans are simply liabilities on account of the transfer scheme and cannot be linked to specific capex schemes. Therefore the total loan drawal is exceeding the investment shown against various schemes."

In order to validate the above submissions, the Commission also asked the Maharashtra State Electricity Transmission Company Limited (MSETCL) to provide the year-wise details of all the elements of the loan repaid and interest serviced by it towards various loans of MSPGCL. Further, the Commission asked MSETCL to clarify whether it is still servicing the loans of MSPGCL and if yes, to provide the complete details in this regard. MSETCL submitted the year-wise details of all the elements including the loan repaid and interest serviced by it towards MSPGCL loans. As regards the servicing of loans, MSETCL submitted that the last payment towards it was made on February 2, 2008, and no payment was made thereafter. The summary of the year-wise details as submitted by MSETCL is shown below:

Sr. No.	Particulars	Indian Bank STL	REC STL	BEST NCD	IFCI NCD	Bank of India	Arranger Fees	Total
	Loan As on 6.6.2005 Prov in							
	the book of MSETCL Loan	60,00,00,000.00	1,25,00,00,000.00	3,93,88,650.00	92,48,11,350.00			2,81,42,00,000.00
	HCL As on 6.6.2005 MSEB HCL BR Dt. 26.9.06 O/s loans on 31.3.2007			taken over by MSPGCL		78,02,25,217.00		78,02,25,317.00
	2005-06							
1	Interest							
	5.6.2005 to 31.3.2006	3,85,79,075.00	1,69,53,125.00	39,33,858.00				5,94,66,058.00
	5.6.2005 to 15.1.2006				8,14,62,435.00			8,14,62,435.00
	16.1.2006 to 31.2.2006				82,26,467.00			82,26,467.00
	14.2.2006 to 31.3 2006					81,12,207.00		81,12,207.00
2	Repayment							
	5.6.2005 to 31.3. 2006		75,00,00,000.00	87,50,000.00				75,87,50,000.00
	5.6.2005 to 31.12. 2005				15,28,12,500.00			15.28.12,500.00
3	Prepayment							
	14.2.2006				77,19,98,850.00			77,19,98,850.00
A	**Total as on 31.3.2006**	3,85,79,075.00	76,69,53,125.00	1,26,83,858.00	1,01,45,00,252.00	81,12,207.00		1,84,08,28,517.00
	2006-07							
1	Interest							
	1.4.2006 to 30.4.2006	7,13,425.00						7,13,425.00
	1.4.2006 to 31.7.2006			21,91,709.00				21,91,709.00
	1.4.2006 to 31.3.2007					6,38,86,140.00		6,38,86,140.00
	Int. refund - Apr 06	-41,554.00						-41,554.00
2	Repayment							
	1.4.2006 to 30.9.2006			43,75,000.00				43,75,000.00
3	Arranger fees for Bank of India loan						29,76,835.00	27,76,835.00
B	**Total for 2006.07**	6,71,871.00		65,66,709.00		6,38,86,140.00	29,76,835.00	7,41,01,555.00
C	**Total (A+B) as on 31.3.2007**	**3,92,50,946.00**	**76,69,53,125.00**	**1,92,50,567.00**	**1,01,45,00,252.00**	**7,19,98,347.00**	**29,76,835.00**	**1,91,49,30,072.00**

The Commission asked MSETCL to clarify that whether it has claimed such expenses (i.e., interest and loan repayment/NCD redemption) as a part of its ARR for previous years, and if claimed, to provide the complete details of such expenses, which have been shown as a part of ARR. MSETCL submitted that interest and principal paid on these loans were never a part of MSETCL's ARR and the same was clarified in the Petition dated January 4, 2007.

The Commission further asked MSETCL that since MSPGCL has settled all the above mentioned liabilities pertaining to loan and interest, MSETCL should confirm whether it has reduced such loans from its outstanding loan balance and should submit the necessary details to prove the same. MSETCL submitted that these loans have never been shown as liability in MSETCL's Books of Accounts. MSPGCL further submitted that all the payments towards principal and loan are shown as receivables from MSPGCL.

Further, MSETCL submitted as follows:

1) 12% NCD Loan of Rs. 96.46 Crore from IFCI was allocated to MSPGCL as per transfer scheme. However, the NCD loan was serviced by MSETCL from 06/06/2005 to 14/02/2006.
2) Outstanding balance of this loan on 14/02/2006 was Rs. 78.02 Crore (Principal Rs.77.20 Crore + Interest Rs 0.82 Crore).
3) MSETCL obtained a loan of Rs. 78.02 Crore (Originally sanctioned Rs. 100 Crore), @ 9.25% from Bank of India on 13/02/2006 to repay the high interest bearing IFCI-NCD Loan.
4) Interest on Bank of India's loan was serviced by MSETCL from 14/02/2006 to 02/02/2008 but never claimed in its ARR.
5) Subsequently, the liability towards Bank of India Loan of Rs. 78.02 Crore was transferred to MSPGCL. Hence, MSETCL's liability on the said loan has ceased.

As regard the interest and loan repayment towards various loans serviced by MSETCL on behalf of MSPGCL, the Commission observed that MSPGCL has shown an amount of Rs. 113.47 Crore towards loan availed from Canara Bank to service such liabilities. The Commission is of the view that such a treatment would amount to servicing a loan (i.e., loan repayment and interest of previous years being serviced by MSETCL) by taking another loan whose repayment has also been considered in previous years ARR, as shown below. It is to be noted that for ARR purposes, any repayment towards the loan is to be funded through Depreciation and AAD (in case repayment is higher than depreciation). Further, the Commission referred to MSPGCL's earlier Petition filed in Case No. 68 of 2006 and Case No. 71 of 2007 related to interest expenses, which states as under:

MSPGCL Submission in Case No. 68 of 2006

> *"In the Review Order dated December 7, 2006, Commission has mentioned that "….the Commission may consider the legitimate interest expenses and other finance charges while truing up in the next year's ARR based on complete Audited loan portfolio details that are made available"*

MSPGCL accordingly is submitting the Project details along with the lender's name to substantiate the actual expenditure incurred as interest expenses on long term loans.

Table 2.2 : Long Term Interest Expenses for the year 2005-06

All figures in Rs. lakh

Project	Source of Loan	Loan No. / Project No.	Outstanding Loan at the beginning of the year	Loan drawal during the year	Loan repayment during the year	Balance outstanding at the end of the year	Interest Expense incurred during the year
All TPS	NCD*	-	393.75		87.50	306.25	940.97
All TPS	NCD	-	9248.11		9248.11	0.00	41.74
NCD Total		-	*9641.86*	*0*	*9335.61*	*306.25*	*982.71*
All TPS	HDFC Bank	Common Loan	177.17	0.00	54.05	123.12	15.95

MSPGCL's Submission in Case No. 71 of 2007

"The actual net long term interest expenses for the year 2006-07 are Rs 47.99 crore. The Petitioner is accordingly submitting the project details along with the lender's name to substantiate the actual expenditure incurred as interest expenses on long term loans.

Table 2.2: Long Term Interest Expenses for the year 2006-07

All figures in Rs. Crore

Source of Loan	Project	Loan No. / Project No.	Out-standing Loan at beginning of year	Loan drawal during the year	Loan re-payment during the year	Bal. out-standing at the end of the year	Interest Expense incurred during the year
Existing Loans							
...	...	...	...	...	...	...	...
NCD	**ALL TPS**	**-NA-**	**3.06**	**0.00**	**0.88**	**2.18**	**0.41**
NCD Total			**3.06**	**0.00**	**0.88**	**2.18**	**0.41**

As some of the loan repayment and interest towards the servicing of these loans may have been claimed by MSPGCL in its previous Petitions and therefore, it would require a detailed analysis of all the previous submissions of MSPGCL, and previous years' audited accounts before allowing the interest and repayment for these loans. Therefore, the Commission has not considered any interest payable towards the loan from Canara Bank. However, the Commission has considered the interest payable towards the loan from Bank of India as it has been established clearly that the MSETCL obtained a loan of Rs. 78.02 Crore @ 9.25% from Bank of India to repay outstanding loan balance and interest against the high interest bearing IFCI-NCD Loan.

The Commission directs MSPGCL to submit all the necessary documents and a detailed working based on its previous submission towards such loans within one month from the date of this Order.

In the context of debt restructuring, MSPGCL submitted that the Debt Restructuring Premium (DRP) is on account of the erstwhile MSEB's request to Power Finance Corporation (PFC) to restructure the high interest rate loans by sharing the interest reduction benefits between PFC and MSEB on these loans and thereafter continuing with PFC at current applicable rate of interest in the same category of projects. PFC's share, i.e., 50% of restructuring benefit was paid in the form of DRP, which was computed as the present discounted value of cash flow of the differential interest between interest to be paid and the interest amount computed at the current interest rate applicable to the corresponding loans over the balance period of loan maturity. The discount/rebate of 50% was allowed on the amount so computed. MSEB restructured various loans drawn during different years carrying interest rate ranging from 13.5% to 17% depending on the rate prevailing at the time of drawal and paid premium to PFC as follows:

Table: DRP (Rs. Crore)

Financial Year	Amount
2002-03	24.19
2003-04	20.73
2004-05	40.97
2005-06	7.12
TOTAL	**93.02**

MSPGCL submitted that in the books of erstwhile MSEB, the said premium amount was booked under deferred revenue expenditure and was written off in respective years in the proportion of differential interest over the balance period of loan maturity. MSPGCL provided the amount considered for amortisation of such year-wise amount as follows:

Particulars	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2009-10	FY 2010-11
DRP Premium	32.80						
Amortisation of DRP Premium	5.48	5.11	5.11	4.38	4.38	4.38	3.97

The Commission has accepted MSPGCL's submissions in this regard and considered the amortisation as submitted by MSPGCL, since this premium was paid to restructure the high cost loans.

MSPGCL submitted that the total interest expenses payable as per the audited accounts are higher than that computed for the purpose of truing up by the Commission, because the interest paid on short-term loans, cash credit limits, and working capital demand loans have been excluded from the computation.

Hence, against the net interest expenses of Rs. 81.28 Crore approved by the Commission for FY 2007-08, the actual net interest expenses incurred on long-term loans on existing power stations of MSPGCL is Rs. 82.69 Crore.

Accordingly, MSPGCL requested the Commission for truing-up the variation of Rs. 1.41 Crore of long-term interest expense for existing stations based on audited accounts vis-à-vis expenses approved in the APR Order for FY 2007-08.

The summary of the interest as approved in the APR Order in Case No. 71 of 2007, actual interest claimed by MSPGCL and as approved after truing up is shown in the Table below:

Particulars	**APR Order**	**Actuals**	**Allowed after truing-up**
Opening balance of loan	953.07	954.90	954.90
Additions	236.39	254.49	110.52
Repayment	-236.77	-230.03	-230.03
Closing Balance of Loan	952.7	979.36	835.40
Gross Interest Expense	**81.28**	**82.69**	**80.66**

Less: Interest Capitalised			
Net Interest Capitalised	**81.28**		**80.66**

Other Financing Charges for FY 2007-08

MSPGCL, in its Petition, submitted that other finance charges mainly comprise Guarantee Fees, SBI Lease Rentals, Bank Commissions and other finance charges. The summary of finance charges for existing stations for FY 2007-08 based on audited accounts are provided in the Table below:

Table: Other Financing Charges for FY 2007-08 (Rs. Crore)

Particulars	APR Order	Actuals
Guarantee fees		8.53
Financing Charges		2.52
Other charges	37.51	6.84
Total	**37.51**	**17.90**

As seen from the above Table, MSPGCL submitted that against the other finance charges of Rs. 37.51 Crore approved by the Commission for FY 2007-08, the actual expenses incurred are Rs. 17.90 Crore.

The Commission asked MSPGCL to submit the documentary evidence for Guarantee Fees payable against specific loans and basis for projecting finance charges and the documentary evidence for the same. The Commission further asked MSPGCL to submit the details of lease rentals payable to SBI. MSPGCL submitted the Guarantee Fee statement for FY 2007-08 containing loan-wise guarantee fee and copies of challans as proof for payment of Guarantee Fee.

Accordingly, the Commission has considered the actual other financing charges of Rs. 17.9 Crore for truing up purposes, as shown in the Table below:

Particulars	APR Order	Actuals	Allowed after truing-up
Guarantee fees		8.53	8.53
Financing Charges		2.52	2.52
Other charges	37.51	6.84	6.844
Total	**37.51**	**17.90**	**17.90**

3.7 RETURN ON EQUITY

MSPGCL submitted that it has computed return on equity in accordance with the principles specified under the MERC Tariff Regulations. MSPGCL claimed return on equity of Rs. 370.48 Crore for FY 2007-08 as compared to Rs. 366.98 Crore approved by Commission in its earlier APR Order dated May 31, 2008 in Case No. 71 of 2007.

MSPGCL submitted that the Commission, in the MYT Tariff Order for the FY 2007-08 stated:

> "*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. Thus, amount shown as equity and return thereon would be trued up based on the actual capital expenditure incurred, asset capitalization and additional equity used to fund the capital expenditure*"

MSPGCL submitted that the increased claim for RoE is on account of the deferred tax liability, which MSPGCL has recognized in its Audited Accounts for FY 2007-08 in pursuance of compliance with AS-22 on 'Accounting for Taxes on Income' issued by Accounting Standards Board of Institute of Chartered Accountants of India (ICAI). MSPGCL further submitted that the amount reflected in the Books of Accounts as deferred tax liability is eligible for addition during the computation of base of equity as per Explanation 1 to Regulation 31.1.1 (b) of MERC Tariff Regulations, 2005, which states:

> "*Explanation – for the purpose of this Regulation, equity capital shall be the sum total of paid-up equity capital, preference share capital, fully/compulsorily convertible debentures (or other financial instruments with equivalent characteristics), foreign currency convertible bonds, share premium account and any reserves, available for distribution as dividend or for capitalization by way of issue of bonus shares, which have been invested in the Generation Business. The amount of any grant, revaluation reserve, development reserve, contingency reserve and contributions from customers shall not be included in the*

*equity capital. **The amount reflected in the books of account as deferred tax liability or deferred tax asset of the Generation Business shall be added or deducted, as the case may be, from the amount of equity capital**."**(Emphasis Added)***

The Commission has computed the return on equity on the opening level of equity of Rs. 2563.41 Crore at the rate of 14%. However, the Commission does not agree with the claim of MSPGCL to consider the deferred tax liability to be treated as equity. The Commission observes that MSPGCL has relied only on the explanation to the Regulation 31.1.1 (b), however, the Regulation 31.1.1 (b) stipulates as follows:

"(b) The amount of equity capital shall be equal to-

(i) equity capital as at April 1, 2004 as determined by the Commission in accordance with the Explanation below; plus

(ii) equity component of approved capital expenditure for the financial year ending March 31, 2005:

Provided that in case of a Generating Company formed as a result of a transfer scheme under Section 131 of the Act, the date of the said transfer scheme shall be the effective date instead of April 1, 2004 for determination of equity capital under clause (b) above.

Explanation – for the purpose of this Regulation, equity capital shall be the sum total of paid-up equity capital, preference share capital, fully/compulsorily convertible debentures (or other financial instruments with equivalent characteristics), foreign currency convertible bonds, share premium account and any reserves, available for distribution as dividend or for capitalization by way of issue of bonus shares, which have been invested in the Generation Business. The amount of any grant, revaluation reserve, development reserve, contingency reserve and contributions from customers shall not be included in the equity capital. The amount reflected in the books of account as deferred tax liability or deferred tax asset of the Generation Business shall be added or deducted, as the case may be, from the amount of *equity capital."*

The Commission is of the view that the objective of this Explanation in the MERC Tariff Regulations is to cover the various elements that can be considered as opening equity and this Explanation is not applicable for the deferred tax liability created in the accounts subsequently.

Considering the above provisions of the Regulation 31.1.1 (b), it is obvious that MSPGCL is a Generation Company formed as a result of transfer scheme under Section 131 of the EA 2003, therefore, for MSPGCL, the effective date would be the date of the Transfer Scheme. Since, the provisional Transfer Scheme was notified under Section 131(5)(g) of the EA 2003 on June 6, 2005, which resulted in the creation of following four successor companies and MSEB Residual Company, to the erstwhile Maharashtra State Electricity Board (MSEB), namely,

- MSEB Holding Company Ltd.,
- Maharashtra State Power Generation Company Ltd.,
- Maharashtra State Electricity Transmission Company Ltd. And
- Maharashtra State Electricity Distribution Company Ltd

Therefore, any deferred tax liability reflected in FY 2007-08 would not be entitled for inclusion in the equity, unless the same was also reflected in the opening Balance Sheet under the provisional Transfer Scheme. Hence, the Commission has not considered MSPGCL's request in this regard and has not computed any return on such deferred tax liability.

The summary of the RoE as approved in the APR Order, as submitted by MSPGCL and as approved by the Commission in this Order after truing up is shown in the Table below:

Table: Return on Equity for FY 2007-08 ***(Rs. Crore)***

Particulars	**APR Order**	**Revised Estimate by MSPGCL**	**Allowed after truing-up**
Opening Equity as on April 1, 2007 (A)	2621.26	2563.41	2563.41
Equity Addition during the year	51.27	-	-
Deferred Tax Liability (B)	-	165.77	-
Closing Equity	**2672.53**	**2729.18**	**2563.41**
RoE Computation			
RoE at the beginning of the year (A*14%)	366.98	358.88	358.88
RoE on Deferred Tax Liability (B/2*14%)	-	11.6	-
Total RoE	**366.98**	**370.48**	**358.88**

3.8 INCOME TAX

In the APR Order for FY 2007-08 in Case No. 71 of 2008, the Commission estimated the income tax for FY 2007-08 considering the approved return on equity for each station in the APR Order and estimated the income tax as Rs 41.58 Crore on account of change in MAT rate from 11.22% to 11.33%.

MSPGCL submitted that the Commission, in its MYT Order for the FY 2007-08 stated:

> *"The Commission will however, true up the income tax liability, based on actual income tax paid by MSPGCL"*

MSPGCL submitted that total provision of Rs. 80.20 Crore has been made towards income tax and Rs. 1.33 Crore towards fringe benefit tax for FY 2007-08, as against the Commission's approval of income tax of Rs. 41.58 Crore for the year. MSGCL submitted the copies of the income tax challans and Income Tax Return Verification (ITRV) form as part of the part of additional information requirement.

Hence, MSPGCL requested the Commission for truing up of Income tax for Rs. 39.96 Crore on account of Income tax and fringe benefit tax, based on audited accounts and allow the same, as per Audited accounts.

The Commission asked MSPGCL to submit the reasons for not considering the refund of income tax for FY 2007-08. MSPGCL submitted that it has actually paid the income tax of Rs. 80.28 Crore during FY 2007-08 and on the basis of self-assessment; and has applied for a refund of Rs. 25.55 Crore as per ITRV filed.

The Commission also asked MSPGCL to submit the reasons for interest payable of Rs. 52.33 Lakh towards income tax. MSPGCL submitted that the Income Tax liability is to be discharged on advance basis in four quarters. As such, a lot of estimation goes into projecting the future incomes and tax thereon. As per provisions of Income Tax Act, advance tax is payable in the following instalments in the case of companies:

Due Date of Instalment	Amount Payable
On or before 15th June	Not less than 15% of advance tax liability
On or before 15th September	Not less than 45% of advance tax liability as reduced by the amount if any paid in earlier instalments
On or before 15th December	Not less than 75% of advance tax liability, as reduced by the amount if any paid in earlier instalments
On or before 15th March	The whole amount of the advance tax liability as reduced by the amount if any, paid in earlier instalments

As such, in cases where income tax deposited deviates from above scheme, then interest under Sections 234 C of Income Tax Act is payable.

As per the computation of total income and tax thereon based on Audited Accounts of FY 2007-08, there was shortfall of Rs. 1,26,84,880 and Rs. 17,44,52,439 in first and second instalment respectively. Hence, interest of Rs. 52,33,572 was charged on the shortfall.

As regards the Income Tax refund for previous years, the Commission asked MSPGCL to submit the Indian Income Tax Return Verification (ITRV) Form for the Assessment Year AY 2007-08, i.e., FY 2006-07 and confirm whether any income tax refund has been received in FY 2007-08 on account of previous years or not and if received then provide the details of the income tax refund of previous years along with corresponding interest. MSPGCL submitted the copy of the Income Tax Return Verification form for the assessment year 2006-07. MSPGCL further submitted that the Income tax refund has been received pertaining to AY 2006-07 (FY 2005-06). The Details of the Income tax refund for AY 2006-07 (FY 2005-06) are as follows:

Table: Income Tax (Rs. Crore)

Particulars	Amount
Income Tax Refund	29.69
Interest accrued on Refund	1.01
Total	**30.69**

In this context, the Commission observes that interest paid by MSPGCL on account of delayed payment of income tax, is not an expense properly incurred. The Utility is supposed to pay income tax on time as good governance. Any fallout of poor governance and consequential financial implication/burden should not be passed on to consumers. For example, any penalty paid by the Utility will not be passed on to the consumers. Accordingly, under the truing exercise, the Commission has considered the actual income tax, but has disallowed the interest paid by MSPGCL on account of delayed payment of income tax. The summary of the income tax as allowed for FY 2007-08 is shown below:

Particulars	APR Order	Actual	Allowed after truing up
Income Tax	41.58	81.54	80.98

Though the Commission has considered the actual income tax paid during FY 2007-08, the Commission directs that as per ITRV, MSPGCL is entitled for a refund of Rs. 25.55 Crore and it should ensure that such refunds are availed at the earliest and the exact amount of such refund should be incorporated during the truing up for FY 2008-09.

3.9 PRIOR PERIOD ITEMS

MSPGCL submitted that the financial statements for FY 2007-08 have been prepared in accordance with the format as prescribed under Schedule VI of the Companies Act, 1956, as against earlier practice of preparing the 'Annual Statement of Accounts' as prescribed under Rule 5(1) of the Electricity Supply (Annual Account) Rules, 1985. Accordingly, previous year's figures have been reworked/ regrouped/ reclassified wherever necessary to conform to current year classification.

Further, MSPGCL has prepared its Annual Financial Statements in compliance with Generally Accepted Accounting Principles (GAAP) and Accounting Standards issued by Accounting Standards Board of Institute of Chartered Accountants of India (ICAI). To fall in line with the applicable Accounting Standards, MSPGCL has revised its accounting policy in some cases. Wherever such entries have been passed, retrospective effect has been considered and suitable adjustments have been made. The effect of all such items is tabulated below:

(Rs. Crore)

Particulars	**Amount**	**Impact on ARR (Increase/Decrease)**	**Remarks**
Khaperkheda Ash Handling Plant	2.91	Increase	Compliance with AS-26
Transco write-off	9.27	Increase	Audit Observance
Establishment costs charged to capital	21.40	Increase	Compliance with AS-9 and GAAP
A&G expense charged to capital	2.37	Increase	Compliance with AS-9 and GAAP
HOS charges absorbed account	51.05	Increase	Compliance with AS-9 and GAAP
Provision for Shortfall in PF Plan Assets	1.60	Increase	Compliance with AS-15
Provision for Earned leave encashment	192.61	Increase	Actuarial Valuation Report
Prior Period Income	(54.37)	Decrease	Compliance with AS-5
Prior Period Expenses	45.65	Decrease	Compliance with AS-5
Total	**181.18**		

During FY 2007-08, MSPGCL in compliance with Accounting Standard-15 'Accounting for Retirement Benefits in the financial statements of Employers' has changed its accounting policy for accounting for leave benefits and has accounted for compensated absences on accrual basis as against accounting for same on cash basis in earlier years. MSPGCL has made a provision for leave encashment of Rs. 192.61 Crore in FY 2007-08 as per audited accounts. MSPGCL has made such provision in accordance with the recommendations of actuarial valuation report/study conducted by M/s K.A.Pandit.

As regards the provisioning of Rs. 192.61 Crore for leave encashment in FY 2007-08 as per audited accounts, the Commission asked MSPGCL to submit the break up for the amount shown towards leave encashment for existing generating stations and recently commissioned Units of Paras and Parli as well as other upcoming stations. MSPGCL submitted that the amount of provision for leave encashment has been made based on the actuarial report, which has been prepared at the Company level. MSPGCL clarified that it does not have segregation of such amount between existing stations and recently commissioned Units. However, MSPGCL submitted that it will have to submit truing up Petition for Parli Unit-6 for FY 2007-08 based on the audited accounts. In case the Commission segregates the amount of leave encashment between existing stations and Paras and Parli (recently commissioned) Units, the same amount would be used in their truing up Petition. MSPGCL further submitted that in case of Paras Unit-3, all expenses up to March 31, 2008 are capitalized. Therefore, the amount of leave encashment apportioned for Paras will have to be added in its capital cost. The other way could be to allow such expenses in the current ARR.

Further, MSPGCL submitted that there are certain prior period items, which have been identified and incorporated in the audited financial statements for FY 2007-08. As per Accounting Standards (AS 5) (Revised) on 'Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies' states:

> *"Prior period items are income or expenses which arise in the current period as a result of errors or omissions in the preparation of the financial statements of one or more prior periods"*

MSPGCL requested the Commission to consider such expenses as these are income or expenses incurred by MSPGCL while remaining in its core business of power generation and therefore, allow such expenses amounting to Rs. 181.18 Crore for true-up incidental to such business.

As regards the claim of leave encashment of Rs. 192.61 Crore, the Commission has considered the same for existing stations and new stations in proportion of the O&M expenses provided in the Reconciliation Statement for FY 2007-08. The summary of the allocation of leave encashment to existing stations and new stations is shown in the Table below:

Rs. Crore

Particular	MSPGCL	Commission
Provision for Earned leave encashment	192.61	192.61
Provision for Earned leave encashment apportioned to existing stations		**177.37**

The increase of around Rs. 177.37 Crore in the gross employee expenses as estimated by the Commission in the above Table is entirely attributable to the impact of provisioning for leave encashment liability on the basis of actuarial valuation. The Commission is of the view that this expenditure of Rs. 177.37 Crore in one year is an extra-ordinary expenditure, on account of change in accounting policy, due to the change in Accounting Standards. Given this background, the Commission is of the view that such a huge impact on account of a change in accounting policy, should not be passed on to the consumers in one financial year, and should be spread over five years. Moreover, this expense is only provisioning, and is not actually incurred by the Utility. Hence, the Commission has spread this expense over five years, starting from FY 2007-08, and the expense allowed in FY 2007-08 on this account is Rs. 35.47 Crore. The Commission has allowed other prior period charges as submitted by MSPGCL.

The summary of the actual prior-period charges as submitted by MSPGCL and as approved by the Commission in this Order after truing up is shown in the Table below:

Particulars	**MSPGCL**	**Allowed after Truing up**
Khaperkheda Ash Handling Plant	2.91	2.91

Particulars	MSPGCL	Allowed after Truing up
Transco write-off	9.27	9.27
Establishment costs charged to capital	21.40	21.40
A&G expense charged to capital	2.37	2.37
HOS charges absorbed account	51.05	51.05
Provision for Shortfall in PF Plan Assets	1.60	1.60
Provision for Earned leave encashment	192.61	35.47
Prior Period Incomes	(54.37)	(54.37)
Prior Period Expenses	45.65	45.65
Total	**181.18**	**24.05**

3.10 OTHER EXPENSES

MSPGCL submitted that the Commission had allowed coal cost variance at the time of truing up for FY 2006-07 in the APR Order in Case No. 71 of 2007. Regarding 'Other Debits' MSPGCL submitted that the ATE, in its Judgment in Appeal Nos. 86 and 87 of 2007 stipulated:

> *"Appellant had also submitted for truing on account of Miscellaneous losses & write off, Sundry expenses, intangible assets written off and Intangible assets interest charges for HVDC. We do not find any reason in the order of the Commission while disallowing such expenses. The Commission is directed to examine the claim of the Appellant and decide the admissibility after a prudence check"*

In this regard, MSPGCL submitted that the audited expenses for FY 2007-08 under the head other debits are Rs. 49.07 Crore as detailed in the Table below:

Table: Other debits ***(Rs. Crore)***

Particulars	Actuals
Material Cost Variance (O&M)	-0.56
Coal Cost Variance Accounts	-4.88
Bad and Doubtful Debts written off/ Provided for	0.21
Miscellaneous Losses and write-off	53.88

Particulars	Actuals
Sundry Expenses	0.01
Intangible Assets written off	0.41
Total	**49.07**

The Commission asked MSPGCL to specify the Regulation under which MSPGCL has sought truing-up of 'Bad and Doubtful debts' written-off. In response to the query, MSPGCL submitted that the other expenses have been sought in true-up calculations as per the Books of Accounts for FY 2007-08 duly audited by statutory Auditor. MSPGCL further submitted that such expenses are incidental to the core generation business of the company and hence, are liable to be claimed as part of the ARR, in accordance with the philosophy of the Commission regarding truing up of other income wherein such income is also considered as a part of the revenue of the Company and is considered in the truing-up process. MSPGCL referred to Regulation 17.6 of the MERC Tariff Regulations, for claiming such expenses as these are beyond the control of MSPGCL and needs to be trued-up.

The Commission asked MSPGCL to submit the basis of considering 100% value of obsolete stock, 60% of non-moving stock and 30% value of slow-moving stock as shown under sub-head 'Miscellaneous losses and write-off'. The Commission further asked MSPGCL to submit the complete details of the obsolete stock, and the detailed plan and strategy to dispose off the obsolete stocks. MSPGCL submitted that the provisions for considering the "Miscellaneous losses and write-off" as 100% of the obsolete stock, 60% of the slow moving stock and 40% of the non moving stock, are based on MSPGCL's qualitative assessment of its resources for its efficient and effective utilisation. As regards the details of station wise obsolete stock, MSPGCL submitted that the data is available with them, however, the same is in the form of voluminous records, and merely making copies of such voluminous submissions will be a time consuming process. As regards the detailed plan and strategy to dispose off the obsolete stocks, MSPGCL submitted that it is diligently following the prescribed procedures of the Company to dispose off such assets in the near future.

The Commission asked MSPGCL to submit the details of the sundry expenses and the details of the intangible assets written off and confirm whether this is a provision or an actual expense. MSPGCL submitted the details of the intangible assets written off as follows:

(Rs. Crore)

Remarks	**Amount**
Capital Expenditure has been done for the construction of Pench Dam to acquire Water right for Khaperkheda TPS. Expenses were incurred on the construction of the dam for priority of water usage and assurance of optimal water supply to the plant. The same had been planned to be amortised over a period of 25 years starting from FY 2004-05.	0.41
PPMS Software has been planned to be written off over a period of 10 years starting from FY 2007-08 as per the Company's policy.	0. 33
Total	**0.74**

MSPGCL further submitted that all the aforementioned expenses are actual expenditures. As regards the other expenses, as discussed in Section 1, the Commission will undertake the truing up of various elements of expenses for FY 2007-08 such as O&M expenses, fuel expenses based on re-determined performance parameters through a separate process. Similarly, since the ATE Judgment covers the issues related to other expenses as well, the Commission will carry out the truing up of interest on working capital as part of final truing up for FY 2007-08.

3.11 INTEREST ON WORKING CAPITAL

The Commission, in its APR Order for FY 2007-08 dated May 31, 2008, computed interest on working capital in accordance with the MERC Tariff Regulations, which depends on various elements of ARR like O&M expenses, maintenance spares, receivables, fuel expenses and had approved Rs. 211.13 Crore as interest on working capital for FY 2007-08.

MSPGCL, in its Petition, submitted that the interest on working capital has been computed in accordance with the MERC Tariff Regulations, and submitted that the normative interest rate of 12.75% based on the revised Prime Lending Rate (PLR) of the State Bank of India (SBI) has been considered for estimating interest on working capital. The Commission asked MSPGCL to submit the details of the actual interest paid towards the working capital. MSPGCL submitted that the actual interest paid towards the working capital for existing stations amounted to Rs. 28.87 Crore and also provided the allocation of the same to existing stations. The summary of the station-wise interest on working capital as approved in the APR Order, estimate by MSPGCL and actual interest on working capital is shown in the Table below:

Table: Interest on Working Capital **(Rs. Crore)**

Particulars	**APR Order**	**Estimated by MSPGCL**	**Allocation of actual IoWC**
Khaperkheda	26.54	36.21	2.41
Paras	1.82	2.62	8.08
Bhusawal	16.99	21.84	4.79
Nasik	31.23	43.29	3.72
Parli	24.94	29.12	0.29
Koradi	26.57	33.59	3.25
Chandrapur	65.29	73.10	1.82
Uran	14.36	16.42	4.00
Hydel	3.38	4.57	0.51
Total	**211.23**	**260.78**	**28.87**

Accordingly, MSPGCL requested the Commission for truing up of Rs. 49.90 Crore towards variation in interest on working capital allowed in its MYT order vis-à-vis the normative interest on working capital based on actual audited ARR elements.

In accordance with the MERC Tariff Regulations, interest on working capital has to be computed based on the norms which depends on various elements of ARR like O&M expenses, maintenance spares, receivables, fuel expenses. As discussed in Section 1, the Commission will undertake the truing up of various elements of expenses for FY 2007-08 such as O&M expenses and fuel expenses based on re-determined performance parameters through a separate process. As the truing up of all these elements will impact interest on working capital, the Commission will undertake the truing up of interest on working capital as part of final truing up for FY 2007-08.

3.12 REVENUE

For FY 2007-08, the revenue earned by MSPGCL as per the Books of Accounts is tabulated below:

Table: Total Revenue **(Rs. Crore)**

Particular	Amount
Revenue from sale of power (excluding FAC)	7415.00
Revenue from FAC	624.85
Provision of Incentive in Accounts	25.97
Revenue from sale of power to colonies	16.17
Total Revenue as per Accounts	**8082.00**

MSPGCL submitted that against the provision of Rs. 25.97 Crore, the actual incentive billed for FY 2007-08 has been Rs. 25.11 Crore. Besides, MSPGCL has earned a non-tariff income of Rs. 167.93 Crore.

In its reply to data gaps, MSPGCL submitted a revised comparison of approved revenue vis-à-vis the actual revenue earned during FY 2007-08 in the Table below:

Table: Truing-up of Revenue Side **(Rs. Crore)**

Particulars	Approved	Actual	MSPGCL's claim for True-up
Revenue	7546.03	8081.97	-535.94
Non-Tariff Income	112.93	167.93	-55.00
Less: Revenue From Parli Unit-6	0	-142.71	142.71
Less: Provision for Incentives	0	-25.97	25.97
Total	**7658.96**	**8082.08**	**-422.26**

MSPGCL further submitted that it has not considered a migration entry against borrowing costs which were short capitalised earlier and are now being capitalised for the upcoming stations. MSPGCL requested the Commission to consider this expense as a part of the revenue expenditure for FY 2007-08. The revised truing-up amount as submitted by MSPGCL is given in Table below:

Table: Net Truing-up **(Rs. Crore)**

True-up submission						
Particulars	**Petition**			**Revised Submissions**		
	Approved	**Actual**	**True-up Amount**	**Approved**	**Actual**	**True-up Amount**
Expenses	7658.97	8517.1	858.13	7658.97	8520.38	861.41

True-up submission						
Particulars	**Petition**			**Revised Submissions**		
	Approved	**Actual**	**True-up Amount**	**Approved**	**Actual**	**True-up Amount**
Revenue	7658.97	8082.08	-422.26	7658.97	8070.69	-411.73
Net True-up			**435.87**			**449.69**

As regards the revenue from sale of energy to the colonies, the Commission asked MSPGCL to clarify whether power supply to the residential colonies of the stations is included in the auxiliary consumption of the station and if not included, then MSPGCL should clarify the source of power supply to the colonies and energy accounting mechanism for the same. Further, MSPGCL should submit the details of the power consumption of the colonies by various categories of consumers including the shops in the colonies of all power generating stations and the tariff charged for the sale of power to colonies. In response, MSPGCL submitted that the supply to residential colonies is not included in the auxiliary consumption. Further, MSPGCL submitted that at certain places, the supply to colonies is from MSEDCL, whereas for the rest of the colonies, the supply is from a separate feeder from the station. In the latter cases, the supply is billed at the tariff rates in accordance with the Tariff Order for MSEDCL. Such revenue is shown as sale of power to colonies in the Books of Accounts of MSPGCL. The total revenue generated from the sale of power to colonies is Rs. 16.17 Crore and the tariff is charged as per prevailing rates for a particular consumer category mentioned in the Tariff Order for MSEDCL.

As discussed in Section 1, the Commission for truing up of non tariff income has asked MSPGCL to submit certain additional information in accordance with the ATE Order, and the Commission has not undertaken the truing up of revenue for FY 2007-08 in this Order. The Commission will undertake the truing up of revenue of MSPGCL for FY 2007-08 as part of final truing up for FY 2007-08 through due Regulatory process.

3.13 TRUING UP FOR FY 2007-08

As discussed in this Section, the Commission has undertaken truing-up of expenses related to other variable charges, depreciation, interest on long term loan and other financing charges, return on equity and income tax for FY 2007-08. The summary of the truing up on account of the treatment of the elements of the ARR as approved in this Order is shown in the Table below:

Table: Truing-up **(Rs. Crore)**

Particulars	**For FY 2007-08**		
	APR Order	**Actuals**	**Allowed after truing-up**
Other Variable Charges	169.31	217.08	217.08
Depreciation & AAD	349.94	391.77	337.01
Interest Expenses	81.28	82.69	80.66
Finance Charges	37.51	17.9	17.90
Return on equity	366.98	370.48	358.88
Income Tax	41.58	81.54	80.98
Total	**1046.6**	**1161.46**	**1093.25**

4 PERFORMANCE PARAMETERS

Regulation 16.1 of the MERC Tariff Regulations, 2005, stipulates,

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

The Commission, in its MYT Order dated January 2, 2007 in Case No. 68 of 2006 for MSPGCL, had approved the trajectory of following performance parameters:

- Availability
- Heat Rate
- Auxiliary Consumption
- Transit Loss
- Secondary Fuel Oil Consumption.

4.1 GENERATING STATIONS OF MSPGCL

The Commission, in its above-said MYT Order, considered the total installed capacity of MSPGCL as 9510 MW. The Commission had not considered the derated capacity as projected by MSPGCL in its MYT Petition for some of its stations, as the application for deration of the installed capacity was pending with Central Electricity Authority (CEA) for approval. Subsequently in the APR Order for FY 2007-08 dated June 1, 2008 in Case No. 71 of 2007, the Commission accepted the derated capacity for Nasik, Koradi, Bhusawal, Paras and Parli TPS in accordance with the approval granted for the same by the CEA dated April 20, 2007.

The derated capacity of MSPGCL's existing generating stations is 9472 MW, comprising 2320 MW of hydel generation capacity, 6330 MW of coal based thermal generation capacity and 852 MW of gas based thermal generation capacity.

The station-wise and Unit-wise break up of total capacity of MSPGCL’s existing stations is given in the following Table:

Table: Summary of Existing Generation Capacity of MSPGCL

Station / Unit	**No of Units**	**Approved in MYT Order**		**Considering Derated Capacity**	
		Capacity of each unit in MW	**Total Capacity in MW**	**Derated Capacity of each unit in MW**	**Total Capacity in MW**
Thermal					
Uran			**852**		**852**
Unit 2,3,4	3	60	180	60	180
Unit 5,6,7,8	4	108	432	108	432
WHR_AO, WHR_BO	2	120	240	120	240
Khaparkheda			**840**		**840**
Unit 1,2,3,4	4	210	840	210	840
Paras	1	58	**58**	**55**	**55**
Bhusawal			**478**		**475**
Unit 1	1	58	58	55	55
Unit 2,3	2	210	420	210	420
Nasik			**910**		**880**
Unit 1,2	2	140	280	125	250
Unit 3,4,5	3	210	630	210	630
Parli			**690**		**670**
Unit 1,2	2	30	60	20	40
Unit 3,4,5	3	210	630	210	630
Koradi			**1080**		**1040**
Unit 1,2,3,4	4	115	460	105	420
Unit 5	1	200	200	200	200
Unit 6,7	2	210	420	210	420
Chandrapur			**2340**		**2340**
Unit 1,2,3,4	4	210	840	210	840
Unit 5,6,7	3	500	1500	500	1500
Sub-Total			**7190**		**7152**
Hydel					
Koyna			1956		1956
Vaitarna	1	60	60	60	60
Bhira	2	40	80	40	80
Tillari	1	66	66	66	66

Station / Unit	No of Units	Approved in MYT Order		Considering Derated Capacity	
		Capacity of each unit in MW	Total Capacity in MW	Derated Capacity of each unit in MW	Total Capacity in MW
Others			158		158
Sub-Total			**2320**		**2320**
Total			**9510**		**9472**

Further, in accordance with the provisions of MERC Tariff Regulations, the Commission will separately approve the Performance Parameters, Capital Cost and Tariff for Parli Expansion Unit-1 of 250 MW and Paras Expansion Unit-1 of 250 MW on the Petitions filed by MSPGCL for approval of the tariff, and hence, the Commission has not approved the Performance Parameters and Tariff for the above Units in this Order.

4.2 STATION-WISE PERFORMANCE PARAMETERS AND TARIFF

The Commission, in its MYT Order for MSPGCL, had approved the performance of individual generating stations, as under.

4.2.1 <u>Availability and PLF of MSPGCL's Generating Stations</u>

The Commission, in its MYT Order, had approved the availability of generating stations over the Control Period considering the availability projections of MSPGCL and approved the availability of 80% for such stations where MSPGCL had projected availability lower than 80%. As the approved availability of all the generating station was either more than normative availability of 80% or equal to the normative availability of 80%, the Commission allowed the full recovery of annual fixed charges approved by the Commission. However, for Uran Gas based station, the Commission approved the availability as projected by MSPGCL for recovery of Annual Fixed Charges considering the shortage in supply of gas.

MSPGCL submitted that the fixed charges are contracted capacity charges payable to the Generating Company based on normative availability, irrespective of actual generation from the plants. MSPGCL highlighted that the availability projections submitted by MSPGCL in the MYT Petition were based on the methodology adopted by CEA and involved the concept of loadability. The availability had thus been projected at a higher level for all the stations. However, in this APR Petition, MSPGCL had provided the availability in accordance with the methodology stipulated in the MERC Tariff Regulations. Under this methodology, the availability of most of the stations is lower than the normative levels approved by the Commission.

MSPGCL requested the Commission that the norm of availability in accordance with the MERC Tariff Regulations should be made applicable for the new stations and that the same criteria should not be applied to the vintage stations owned by it. MSPGCL submitted that there are serious constraints in increasing the loadability of the stations to prevent breakdowns and to avoid shutdowns.

MSPGCL submitted that the reasons for lower availability are beyond its control and are primarily attributable to the deteriorated performance of the vintage Units, which are due for replacement. MSPGCL has undertaken only bare minimum Repair & Maintenance expenditure on such Units just to keep them under running condition. MSPGCL highlighted that considering the acute shortage of power in the State of Maharashtra, it is still in the interest of the consumers of the State to operate these vintage stations even at their deteriorated performance. Accordingly, MSPGCL requested the Commission to consider its submission with regard to lower availability and allow MSPGCL to fully recover the fixed charges of these Stations, even though they may not have achieved the normative availability levels required for full recovery of fixed charges.

MSPGCL, in its Petition, submitted the revised estimates for availability and PLF for FY 2008-09, based on the actual availability and PLF for the first six months and projected for the remaining six months of FY 2008-09. MSPGCL submitted that the planned Repair & Maintenance of the stations has a direct bearing on the availability of thermal power stations. MSPGCL submitted that considering the age of the plants and increased pressure on the stations owing to the burgeoning demand-supply gap in the State, it understands the importance of maintaining at least the current performance level of its plants, if not improving on the same.

MSPGCL has made the following submissions with respect to the revised projections of Station-wise availability and PLF during FY 2008-09 and FY 2009-10.

Uran Plant

MSPGCL submitted that it has signed a Gas Supply Agreement with GAIL on July 01, 2006 for gas linkage of 3.5 Million Standard Cubic Meters per day (MMSCMD) up to March 31, 2011 for its Uran gas plant. However, the average availability of gas has been varying between 2-3 MMSCMD. MSPGCL submitted that due to poor gas receipt, the availability of the station is on the lower side and considering the current availability of gas, the overall availability of the plant has been projected by MSPGCL to be around 58% in FY 2008-09.

MSPGCL submitted that considering the aspect of overall power shortage scenario in the State of Maharashtra, it has envisaged operating the otherwise stranded assets and subsequently entered into contracts for procurement of spot Re-Liquefied Natural gas (RLNG) (from April to June 2008) and Marginal Field gas from Oil and Natural Gas Corporation (ONGC) for limited period of time to support additional peaking capacity of around 100 MW. MSPGCL submitted that the availability of gas from ONGC is however, not firm and is dependent on the yield from the gas field. The gas from ONGC and RLNG are currently purchased at $11/MMBTU and $16/MMBTU respectively.

MSPGCL further submitted that it has also considered procurement of 1 MMSCMD gas from Reliance Industries Limited starting from mid February 2009, which would be able to support around 170 MW of capacity leading to an increase in PLF to around 79% in FY 2009-10.

In the first half of FY 2008-09, the actual PLF was 59.20% and MSPGCL projected the PLF as 58.19% in the second half of FY 2008-09. For FY 2009-10, MSGPCL projected the availability and PLF at 78.87%, as against the approved availability and PLF of 53.22% and 52.77% in the MYT Order.

MSPGCL submitted that the availability and corresponding PLF of the Units are subject to availability of gas. MSPGCL further submitted that it is pursuing the issue with GAIL and efforts are being taken to improve the availability in subsequent months.

Bhusawal Thermal Plant

For FY 2008-09, the Commission in its MYT Order, approved the availability of 86.44%.

MSPGCL highlighted that in its MYT Petition, MSPGCL projected an availability of around 86.44% based on methodology adopted by CEA; however, the Commission has approved the same availability in accordance with methodology specified in the MERC Tariff Regulations. MSPGCL submitted that the methodology of CEA takes into consideration the loadability of the stations, which is not the case in availability determined in accordance with the MERC Tariff Regulations. MSPGCL requested the Commission to consider this aspect and submitted that the availability in accordance with the MERC Tariff Regulations would correspond to a lower availability as compared to availability in accordance with CEA methodology.

MSPGCL submitted that in accordance with the methodology stipulated in the MERC Tariff Regulations, the corresponding availability is around 69.05% during the period from April 2008 to September 2008. MSPGCL has planned to undertake Annual Overhaul (AOH) of boilers of all its Units in the station during the second half of FY 2008-09, the details of which have been shown in the Table below:

Table: Details of Planned Outages in (Oct-Mar) FY 2009-10

Unit-1	23 days each (AOH of both boilers)
Unit-2	-
Unit-3	25 days (AOH)

Accordingly, MSPGCL projected availability of around 81.60% for the remaining part of the year, i.e., October 2008 to March 2009. Accordingly, the overall availability for FY 2008-09 has been estimated to be around 75%. MSPGCL estimated the PLF for FY 2008-09 at the same level, i.e., 75%

For FY 2009-10, MSPGCL has projected a PLF of around 74.69% on account of the planned outages during the year as shown in the table below:

Table: Details of Planned Outages in FY 2009-10

Unit-1	11 days AOH of boilers
Unit-2	62 days COH (DCS work)
Unit-3	22 days (AOH)

Chandrapur Thermal Plant

For FY 2008-09, the Commission in its MYT Order, had approved an availability of 86.16%. MSPGCL highlighted that in its MYT Petition, MSPGCL projected an availability of around 85.97% based on CEA methodology; however, the Commission has approved the same availability in accordance with the methodology specified in MERC Tariff Regulations. MSPGCL submitted that the availability in accordance with MERC Tariff Regulations for the first half of FY 2008-09 has been 66.34%, due to overhauling of some of the Units during this period. For second half of FY 2008-09, MSPGCL estimated an availability of 82.22% and hence, estimated overall availability of 74.16% for FY 2008-09. MSPGCL estimated the PLF for FY 2008-09 at the same level, i.e., 74.16%. For FY 2009-10, MSPGCL has projected availability and PLF of around 75.89%.

Nasik Thermal Power Station

For FY 2008-09, the Commission in its MYT Order, has approved an availability of 80%. MSPGCL highlighted that in its MYT Petition, MSPGCL projected an availability of 79.13% based on CEA methodology; however, the Commission has approved at 80%. MSPGCL submitted that the availability in accordance with MERC Tariff Regulations for the first half of FY 2008-09 has been 72.58%, due to overhauling of some of the Units during this period. For second half of FY 2008-09, MSPGCL estimated an availability of 81.62%, and hence, estimated overall availability of 75.91% for FY 2008-09. MSPGCL estimated the PLF for FY 2008-09 at the same level, i.e., 75.91%.

For FY 2009-10, MSPGCL has projected availability and PLF of around 76.80% on account of annual overhauling of Units in accordance with the schedule and considering a margin for forced outage for reasons not attributable to it.

Khaperkheda Thermal Power Station

As against the approved availability of 85.73%, the actual availability achieved during first half of FY 2008-09, i.e., April 2008 to September 2008, is 89.64%. Considering the planned outage towards overhauling of some of the Units, for second half of FY 2008-09, MSPGCL has estimated availability of 76.54%. Accordingly, the overall availability has been estimated to be around 83.78% for FY 2008-09. MSPGCL estimated the PLF for FY 2008-09 at the same level, 83.78%.

For FY 2009-10, MSPGCL has projected availability and PLF of around 82.78% on account of annual overhauling of Units in accordance with schedule and considering a margin for forced outage for reasons not attributable to it.

Paras Thermal Power Station

For FY 2008-09, the Commission in its MYT Order, approved an availability of 86.41%. MSPGCL highlighted that in its MYT Petition, MSPGCL projected an availability of around 86.41% based on CEA methodology; however, the Commission has approved the same availability in accordance with the methodology specified in MERC Tariff Regulations. MSPGCL submitted that the availability in accordance with MERC Tariff Regulations for the first half of FY 2008-09 has been 75.27%. For second half of FY 2008-09, MSPGCL estimated an availability of 78.68%, and hence, estimated overall availability of 77.34% for FY 2008-09. MSPGCL estimated the PLF for FY 2008-09 at the same level, i.e., 77.34%.

For FY 2009-10, MSPGCL has projected availability and PLF of around 76.34%, on account of annual overhauling of Units in accordance with schedule and considering a margin for forced outage for reasons not attributable to it.

Parli Thermal Power Station

For FY 2008-09, the Commission in its MYT Order, had approved availability of 86.41%. MSPGCL highlighted that in its MYT Petition, MSPGCL projected an availability of around 86.41% based on CEA methodology; however, the Commission has approved the same availability in accordance with methodology specified in MERC Tariff Regulations. MSPGCL submitted that the availability in accordance with MERC Tariff Regulations for the first half of FY 2008-09 has been 69.04%. For second half of FY 2008-09, MSPGCL considering the planned outages towards COH/AOH for some of the Units, estimated availability of 70.55%, and hence, estimated overall availability of 69.59% for FY 2008-09. MSPGCL estimated the PLF for FY 2008-09 at the same level, i.e., 69.59%. For FY 2009-10, MSPGCL has projected availability and PLF of around 68.89% on account of annual overhauling of Units in accordance with schedule and considering a margin for forced outage for reasons not attributable to it.

Koradi Thermal Power Station

For FY 2008-09, the Commission in its MYT Order, approved availability of 85.87%. MSPGCL highlighted that in its MYT Petition, MSPGCL projected availability of around 85.87% based on CEA methodology; however, the Commission has approved the same availability in accordance with methodology specified in MERC Tariff Regulations. MSPGCL submitted that the availability in accordance with MERC Tariff Regulations for the first half of FY 2008-09 has been 62.39%. For second half of FY 2008-09, MSPGCL estimated availability of 78.60%, and hence, estimated overall availability of 70.23% for FY 2008-09. MSPGCL estimated the PLF for FY 2008-09 at the same level, i.e.,70.23%.

For FY 2009-10, MSPGCL has projected availability and PLF of around 73.52% on account of annual overhauling of Units in accordance with schedule and considering a margin for forced outage for reasons not attributable to it.

Commission's Ruling on Availability and PLF

The Commission approved the Station-wise Availability in its MYT Order considering the availability projections of MSPGCL for each year of the Control Period. The Stations for which, MSPGCL projected the availability lower than 80% (i.e., Bhusawal and Parli), the Commission approved the availability of 80%. However, for Uran Gas based station, considering the short supply of gas, in its MYT Order the Commission approved the availability as projected by MSPGCL for recovery of full fixed charges.

For the Control Period, the Commission approved the Station-wise PLF considering the PLF projections of MSPGCL, and for stations for which MSPGCL projected PLF lower than 80%, the Commission considered the PLF of 80%, since in times of severe supply shortage, the PLF will be equal to Availability, and full recovery of fixed costs is possible only when the normative availability of 80% is achieved. The Commission hence, allowed the full recovery of Annual Fixed Charges for the Control Period in its MYT Order on account of approval of the Availability and PLF at the normative levels.

The Commission, at this stage, has not revised the availability for FY 2008-09 and will consider the actual availability for the entire year during the truing up exercise. Further, at this stage, the Commission has not revised the approved availability for FY 2009-10 except for Uran power plant, however, the Commission would consider the deviations in actual availability during truing up exercise along with the reasons for deviations. For Uran plant, considering the submissions of MSPGCL with respect to availability of gas from Reliance Industries Limited and other short-term sources, the Commission has accepted MSPGCL's projection of availability and PLF projections as 79% for FY 2009-10.

The Commission directs MSPGCL to continue to submit the Station-wise actual Availability and PLF figures to the Commission on a monthly basis, strictly in accordance with the provisions of MERC Tariff Regulations along with reasons for variation in Availability and PLF duly certified by Maharashtra State Load Despatch Centre (MSLDC).

The station-wise availability and PLF as approved by the Commission in the MYT Order, projected by MSPGCL in the APR Petition, and approved by the Commission for FY 2008-09 and FY 2009-10 is given in the following Table:

Table: Availability for FY 2008-09 & FY 2009-10

Particulars	FY 2008-09			FY 2009-10		
	MYT Order	Revised Estimate	Approved	MYT Order	Revised Estimate	Approved
Khaparkheda	85.73%	83.78%	85.73%	85.04%	82.78%	85.04%
Paras	86.41%	77.34%	86.41%	86.41%	76.34%	86.41%
Bhusawal	86.44%	75.00%	86.44%	80.00%	74.69%	80.00%
Nasik	80.00%	75.91%	80.00%	86.41%	76.80%	86.41%
Parli	86.41%	69.59%	86.41%	80.00%	68.89%	80.00%
Koradi	85.87%	70.23%	85.87%	81.31%	73.52%	81.31%
Chandrapur	86.16%	74.16%	86.16%	85.81%	75.89%	85.81%
Uran Gas	53.22%	58.48%	53.22%	53.22%	78.87%	78.87%

Table: PLF for FY 2008-09 & FY 2009-10

Particulars	FY 2008-09			FY 2009-10		
	MYT Order	Revised Estimate	Approved	MYT Order	Revised Estimate	Approved
Khaparkheda	81.44%	83.80%	81.44%	80.79%	82.78%	80.79%
Paras	80.00%	77.34%	80.00%	80.00%	76.34%	80.00%
Bhusawal	80.00%	75.00%	80.00%	80.00%	74.69%	80.00%
Nasik	80.00%	75.91%	80.00%	80.00%	76.80%	80.00%

Particulars	FY 2008-09			FY 2009-10		
	MYT Order	Revised Estimate	Approved	MYT Order	Revised Estimate	Approved
Parli	80.00%	69.59%	80.00%	80.00%	68.89%	80.00%
Koradi	80.00%	70.23%	80.00%	80.00%	73.52%	80.00%
Chandrapur	80.00%	74.16%	80.00%	80.00%	75.89%	80.00%
Uran Gas	52.77%	58.48%	52.77%	52.77%	78.87%	78.87%

The Commission will review the actual availability and PLF for each station at the end of the year, and in case the availability achieved for thermal stations is lower than 80% as computed in accordance with the MERC Tariff Regulations, the Commission will examine the reasons for such deviation and may proportionately deduct the recovery of Annual Fixed Charges during the truing up exercise based on actual performance.

4.2.2 Auxiliary Consumption

MSPGCL, in its Petition, submitted that the auxiliary consumption for hydro and thermal generation units for FY 2008-09 is based on the actual auxiliary consumption for the first six months and projected performance for the remaining six months of FY 2008-09. MSPGCL made the following submissions with respect to the revised projections of auxiliary consumption during FY 2008-09 and FY 2009-10.

Uran Plant

The Auxiliary Consumption for the first six months of FY 2008-09 for Uran Plant is 2.11% which is better than the target of 2.4% approved by Commission in its MYT Order. MSPGCL projected a consumption of 2.4% for the remaining six months of the FY 2008-09. Accordingly, an auxiliary consumption of 2.25% has been projected by MSPGCL for FY 2008-09.

MSPGCL submitted that although MERC Tariff Regulations allows an auxiliary consumption of 3% for such plants, however, MSPGCL has been maintaining auxiliary consumption at about 2.40% and envisaged the auxiliary consumption at a level of 2.40% for FY 2009-10.

Bhusawal TPS

MSPGCL, in its Petition, submitted that the actual Auxiliary Consumption for the first six months of FY 2008-09 for Bhusawal TPS (BTPS) was 10.79%, which is slightly higher than the target approved by the Commission (9.75%) for FY 2008-09. MSPGCL has envisaged an improvement in the same in the remaining half of the year and estimated the overall auxiliary consumption of around 10.57% for the entire FY 2008-09.

MSPGCL submitted that due to poor quality of coal, one additional coal mill as compared to designed number of operating mills is being operated in all the three Units, which causes not only additional consumption of auxiliary energy by the mills but also enhanced loads on the fans contributing to further consumption of auxiliary energy. Due to ageing of the Stage-1 Units, the leakages in these boilers are higher, resulting in further overloading of Induced Draft (ID) fans, which leads to a higher auxiliary consumption as compared to the normative levels approved by the Commission. Due to these reasons, MPSGCL has projected the auxiliary consumption of BTPS to be around 10.70% for FY 2009-10.

Chandrapur TPS

MSPGCL submitted that the Auxiliary Consumption for the first six months of FY 2008-09 for Chandrapur Plant was 8.18%, which is higher than the approved auxiliary consumption of 7.80%, and submitted the reason for deviation as major overhauls undertaken in the plant during the year. MSPGCL also submitted that increase in the auxiliary consumption is also on account of the poor quality of coal, which leads to more coal mill operations, increased air flow, and flue gas losses, which increase the auxiliary consumption. MSPGCL projected an improvement in the same in the remaining half of the year, and estimated the auxiliary consumption for FY 2008-09 to be around 7.51% and also projected the auxiliary consumption for FY 2009-10 at 7.81%.

Nasik TPS

MSPGCL submitted that the Auxiliary Consumption for first six months of FY 2008-09 for Nasik Plant was 9.93%, which is slightly higher than the approved auxiliary consumption of 9.00% and submitted the reasons for deviation as inferior quality of coal in terms of Gross Calorific Value (GCV), ash content, volatile matter and moisture as received from mines as compared with designed quality of coal. MSPGCL further explained that in order to meet the rated load of the units, one additional coal mill is always taken into service leading to increased loading on draft fans. MSPGCL further submitted that the capacity of Units 1 and 2 have been derated w.e.f. April 2007 and therefore, the auxiliary consumption for the Units has further increased. On account of the above reasons, MSPGCL projected auxiliary consumption of 9.54% for FY 2008-09 and 9.59% for FY 2009-10.

Khaperkheda TPS

MSPGCL submitted that the Auxiliary Consumption for the first six months of FY 2008-09 for Khaperkheda Plant was 9.09%, which is higher than the approved auxiliary consumption of 8.5%, and submitted the reasons for deviation as increase in plant auxiliary load due to commissioning of Ammonia Plant (30 kW) in 2005 and commissioning of Ozone Dosing plant (500 kW) in 2006. Further, MSPGCL explained that the Units are supposed to run with 4 coal cycles with designed GCV coal, but due to poor quality of coal, Khaperkheda TPS has to practically run with 5 coal cycles for full load operation. These two factors primarily contribute to increase in auxiliary consumption.

MSPGCL projected the auxiliary consumption as 9.46% in the remaining half of the year and projected Auxiliary consumption of around 9.26% for FY 2008-09 and 9.45% for FY 2009-10.

Paras TPS

MSPCGL submitted that the Auxiliary Consumption for the first six months of FY 2008-09 for Paras was 11.53%, which is higher than the approved auxiliary consumption of 9.70% in FY 2008-09, on account of the vintage of the stations and poor quality of coal. MSPGCL further submitted that the capacity of Unit-2 has been derated w.e.f. April 2007 and therefore, the auxiliary consumption for the Unit has increased. MSPGCL projected the auxiliary consumption of 11.53% for FY 2008-09 and 12.10% for FY 2009-10.

Parli TPS

MSPGCL submitted that the Auxiliary Consumption for the first six months of FY 2008-09 for Parli Plant was 10.69%, which is higher than the approved auxiliary consumption of 9%. MSPGCL further submitted that the capacity of Units 1 and 2 have been derated w.e.f. April 2007 and therefore, the auxiliary consumption for the Units has further increased. MSPGCL projected an improvement in the same in the remaining half of the year and estimated auxiliary consumption of 10.43% during the period October 2008 to March 2009. Accordingly, MSPGCL projected overall auxiliary consumption of 10.56% for FY 2008-09 and 11.09% for FY 2009-10.

Koradi TPS

MSPGCL, in its Petition, submitted that the Auxiliary Consumption for the first six months of FY 2008-09 was 10.65%, which is higher than the target of 9.80% approved by the Commission in its MYT Order. MSPGCL submitted though it is taking all requisite measures to reduce the auxiliary consumption, however, it does not envisage much improvement in the same in the remaining half of the year and has therefore, projected an overall auxiliary consumption of around 10.75% for the entire FY 2008-09.

MSPGCL submitted the following reasons for deviation in the auxiliary consumption:

- Due to poor coal quality of coal, one additional coal mill as compared to designed number of operating mills is being operated in all the seven Units.
- Unit No. 5 is designed with open cycle condenser cooling system and the water circulation system as designed calls for two stage pumping of water, which adds to the working drives to the extent of about 1240 kW.
- Units 5 and 6 are fitted with bag filters, which have added compressors for bag filters, spray, etc., into the circuit. Over and above these, the ID fans are of higher design to take care of higher DP across the bag filters adding about 1800 kW of auxiliary power consumption of these Units. This adds to about 0.9% increase in auxiliary power consumption of these two Units.
- In case of Stage-1 Units, it has been noticed that even if the power plant receives coal of desired size, the feeding to boilers is always through crushers only. This causes unnecessary loading on the crushers and adds to the auxiliary power consumption. If the above additional loads are added, there is around 10% to 15% increase in aux. power consumption as compared to the normative value of 9%.
- Capacity of the plant has been derated from 1100 MW to 1040 MW (w.e.f. Apr 2007).
- For remote auxiliaries, supply is given through MSEDCL, which accounts for increase in the consumption.

- ➢ Partial loading and shut downs are due to inferior quality coal and wet coal are other factors leading to increased auxiliary consumption.

MSPGCL requested the Commission to approve the Auxiliary Consumption for FY 2009-10 as 11.29%.

MSPGCL appealed to the ATE against the MYT Order on the issue of the approved auxiliary consumption as against the MSPGCL's Petition. The ATE, in its Judgment dated April 10, 2008 on MSPGCL's Appeal regarding the approved auxiliary consumption directed the Commission to undertake an independent study. Para 80 of the ATE Judgment dated April 10, 2008 in Appeal Nos. 86 and 87 of 2007 is reproduced below:

> *"However, we find that there is a substantial difference between the norms prescribed by the Commission through the Tariff Regulations and those achieved by the Appellant. We find that the Tariff Regulations give powers to the Commission to amend any provisions of the Tariff Regulations (Regulation 84) and to remove difficulties in implementation of the Tariff Regulations (Regulation 85), which we feel can be used by the Commission to take corrective measures so that the norms set are achievable under the operating environment. Hence, we direct the Commission to take into consideration the independent study which we have directed to be undertaken, and re-set the above operating parameters. This will also help the Commission to align its Regulations with the Tariff Policy issued by the Government of India advising for prescribing achievable norms and not merely ideal norms. At the same time, the Commission has to be cautious to ensure that deliberate inefficiency on the part of the utility is not passed on to the consumers."*

In accordance with direction from the ATE, the Commission has initiated a separate study by an independent agency, i.e., M/s CPRI to assess the reasonably achievable performance of MSPGCL Stations and to suggest measures to improve the performance over a period of time. Based on the outcome of the study, the Commission will re-determine the performance parameters of MSGPCL generating Stations, whether higher or lower than the norms stipulated under the MERC Tariff Regulations and will undertake the truing up of MSPGCL's expenses and revenue based on re-determined performance parameters. The Commission at this stage is not revising the Auxiliary Consumption for FY 2008-09 based on six months' actual performance. The Commission, at the time of truing up for FY 2008-09, will also consider the actual auxiliary consumption achieved during the year and reasons submitted by MSPGCL for deviations in actual auxiliary consumption as compared to auxiliary consumption approved in the Order.

The summary of auxiliary consumption as approved in MYT Order, proposed by MSPGCL in the APR Petition, and approved by the Commission for FY 2008-09 and FY 2009-10 is given in the following Table:

Table: Auxiliary Consumption for FY 2008-09 & FY 2009-10

Particulars	FY 2008-09			FY 2009-10		
	MYT Order	Revised Estimate	Approved	MYT Order	Revised Estimate	Approved
Khaparkheda	8.50%	9.26%	8.50%	8.50%	9.45%	8.50%
Paras	9.70%	11.53%	9.70%	9.70%	12.10%	9.70%
Bhusawal	9.75%	10.57%	9.75%	9.75%	10.70%	9.75%
Nasik	9.00%	9.54%	9.00%	9.00%	9.59%	9.00%
Parli	9.00%	10.56%	9.00%	9.00%	11.09%	9.00%
Koradi	9.80%	10.75%	9.80%	9.80%	11.29%	9.80%
Chandrapur	7.80%	7.81%	7.80%	7.80%	7.81%	7.80%
Uran Gas	2.40%	2.25%	2.40%	2.40%	2.40%	2.40%

4.2.3 Heat Rate

MSPGCL submitted that as stated in the APR Petition for FY 2007-08 in Case No. 71 of 2007, it solicited the technical consultancy services of a third party, M/s Mecon Limited, to assess the current state of affairs of the plant and provide its assessment of the expected performance level. MSPGCL explained that the Report has reference to various degradation standards considered for power plants, which are listed below:

- DIN 1943 : increase in heat rate of 0.7% every year with age
- IEC – 60953 -2 : increase in heat rate of 0.6% every year with age
- BHEL PG test procedure : increase in heat rate of 0.6% every year with age
- ASME PTC – 6 R (1985) : increase in heat rate of 0.4% every year with age
- Report of the Expert Group constituted by CERC to review the operational norms for

thermal power stations: 0.4% per year as per ASME PTC-6R which has been considered in this Report.

MSPGCL further submitted the key reasons as mentioned by M/s Mecon in its Report towards higher heat rate for thermal power stations as follows:

- *"Ageing of the plant*
- *Conditions of Boiler including conditions of pressure parts*
- *Axial Shift Problem*
- *Operating Load of the Plant*
- *Constraints in loading of Units*
- *Design Constraints*
- *Reheater metal temperature restriction*
- *ID Fan overloading*
- *Combustion Problem*
- *Coal Quality*
- *Condenser vacuum and CW inlet temperature*
- *Increase in Flue gas temp. at APH outlet*
- *Increase in coal mill rejects*
- *Feed Water inlet temperature*
- *Flue gas outlet temperature, Unburnt coal in ash, Leakages in boiler area and moisture content in coal, etc."*

MSPGCL submitted that it understands that the Commission has appointed M/s CPRI to undertake a study to assess the technical performance of the stations operated by it. MSPGCL further requested the Commission to consider the variation in performance of the station in light of the technical report by M/s CPRI and approve such revised norms that adequately represent the state of affairs of the plants.

As discussed in Section 1 of the Order, MSPGCL appealed to the ATE against the MYT Order on the issue of the approved station heat rate for each generating station. The ATE, in its Judgment dated April 10, 2008 on MSPGCL's appeal regarding the approved heat rate, directed the Commission to undertake an independent study, as reproduced above.

The Commission would like to highlight that for FY 2008-09, the revised heat rate figures submitted by MSPGCL are estimated figures based on actual performance during the first six months and estimated performance during the next six months of the year. The trajectory of performance parameters during the first Control Period was approved in MYT Order considering the past performance and based on submissions made by the Petitioner.

In accordance with the ATE's direction, the Commission has engaged an independent agency, i.e., M/s CPRI to carry out independent study to reasonably assess the achievable performance of MSPGCL stations and to suggest the measures to improve the performance over a period of time. Based on the outcome of the study, the Commission will re-determine the performance parameters of MSGPCL's generating stations, whether higher or lower than the norms stipulated in the MERC Tariff Regulations and approved in the Tariff Orders and will undertake the truing up of MSPGCL's expense and revenue based on re-determined performance parameters.

Thus, at this stage, the Commission has not considered any revision in heat rate and has retained the heat rate approved by the Commission in its MYT Order. The Commission will undertake final truing of FY 2008-09 based on the actual heat rate achieved by each station and reasons for any deviations and also based on outcome of the report to be submitted by the independent agency on the study of the operating parameters. The summary of heat rate approved in MYT Order, heat rate proposed by MSPGCL in the APR Petition, and as approved by the Commission for FY 2008-09 and FY 2009-10 is given in the following Table:

Table: Heat Rate (kcal/kWh) for FY 2008-09 & FY 2009-10

Plant	**2008-09**			**2009-10**		
	MYT Order	**Revised Estimate**	**Approved**	**MYT Order**	**Revised Estimate**	**Approved**
Khaparkheda	2561	2783	2561	2566	2810	2566
Paras	3105	3243	3105	3105	3278	3105
Bhusawal	2654	2933	2654	2652	2966	2652
Nasik	2653	2807	2653	2642	2839	2642
Parli	2657	2871	2657	2660	2908	2660
Koradi	2792	3280	2792	2797	3280	2797
Chandrapur	2551	2713	2551	2556	2801	2556
Uran Gas	1980	2000	1980	1980	2000	1980

4.2.4 Transit Loss

MSPGCL, in its Petition, submitted that the Commission had approved a transit loss of 0.8% for all its power stations for the Control Period. MSPGCL submitted that it has no control over the loss during transit of coal and therefore, has a limited role to control the same. MSPGCL submitted that with the same level of effort made by it, the reported transit losses in first half of FY 2008-have been even lower in some of the stations, as compared to the norm set by the Commission. MSPGCL submitted that the transit losses have been showing a varied trend for the stations and may increase or decrease in the future.

Upon querying MSPGCL on the various steps undertaken by it to reduce transit loss, MSPGCL submitted that the following steps had been initiated for reduction of transit losses:

- Visiting and carrying out the inspection of the weigh bridges where transit loss is found increased.
- Calibration and sealing of weigh bridges at regular intervals at the loading and unloading end.
- Insisting Railway Police Force to have constant vigilant watch during movement of coal.
- Requesting Railway authorities to reduce or eliminate number of stoppages of rakes in transit.

The ATE dealt with MSPGCL's contentions on transit losses in its Judgment dated April 10, 2008 in Appeal No. 86 & 87 of 2007. The ATE directed the Commission to undertake an independent study, as reproduced earlier.

In accordance with the ATE's direction, the Commission has engaged an independent agency i.e., M/s CPRI to carry out independent study to reasonably assess the achievable performance of MSPGCL stations and to suggest the measures to improve the performance over a period of time. Based on the outcome of the study, the Commission will re-determine the performance parameters of MSGPCL generating stations, whether higher or lower than the norms stipulated in the MERC Tariff Regulations and approved in the Tariff Orders and will undertake the truing up of MSPGCL's expense and revenue based on re-determined performance parameters.

The Commission at this stage has therefore, considered the transit loss of 0.8% for all the coal based stations for FY 2008-09 and FY 2009-10 in accordance with the MERC Tariff Regulations. The Commission will undertake final truing up of FY 2008-09 based on the actual transit loss achieved by each station and reasons for any deviations and also based on outcome of the report to be submitted by the independent agency on the study for the operating parameters during the APR of FY 2009-10.

4.2.5 Specific Oil Consumption

MSPGCL, in its Petition, submitted that considering the age of plants and reasons mentioned for higher station heat rate, the projected station-wise specific oil consumption for FY 2008-09 and FY 2009-10 is as follows:

Table: MSPGCL projection of Specific Oil Consumption (ml/kWh) for FY 2008-09 & FY 2009-10

Plant	FY 2008-09	FY 2009-10
Khaparkheda	1.44	2.00
Paras	2.59	2.94
Bhusawal	5.40	3.80
Nasik	3.92	3.62
Parli	5.96	3.94
Koradi	3.73	3.22
Chandrapur	1.85	2.00

MSPGCL appealed to the ATE against the MYT Order on the issue of the approved specific oil consumption as against the specific oil consumption projected in MSPGCL's Petition. The ATE, in its Judgment dated April 10, 2008 on MSPGCL's appeal regarding the approved auxiliary consumption directed the Commission to undertake an independent study as reproduced above.

In accordance with the ATE's direction, the Commission has engaged an independent agency, i.e., M/s CPRI to carry out independent study to reasonably assess the achievable performance of MSPGCL stations and to suggest the measures to improve the performance over a period of time. Based on the outcome of the study, the Commission will re-determine the performance parameters of MSGPCL generating stations whether higher or lower than the norms approved in the MERC Tariff Regulations and will undertake the truing up of MSPGCL's expense and revenue based on re-determined performance parameters.

The Commission at this stage has therefore, considered the normative secondary fuel oil consumption of 2 ml/kWh for all the coal based stations for FY 2008-09 and FY 2009-10 in accordance with the MERC Tariff Regulations. The Commission will undertake final truing of FY 2008-09 based on the actual secondary fuel oil consumption achieved by each station and reasons for any deviations and also based on outcome of the report to be submitted by the independent agency on the study for the operating parameters during the APR of FY 2009-10.

The summary of secondary fuel oil consumption as approved in MYT Order, proposed by MSPGCL in the APR Petition, and as approved by the Commission for FY 2008-09 and FY 2009-10 is given in the following Table:

Table: Specific Oil Consumption (ml/kWh) for FY 2008-09 & FY 2009-10

Plant	FY 2008-09			FY 2009-10		
	MYT Order	Revised Estimate	Approved	MYT Order	Revised Estimate	Approved
Khaparkheda	2.00	1.44	2.00	2.00	2.00	2.00
Paras		2.59			2.94	
Bhusawal		5.40			3.80	
Nasik		3.92			3.62	
Parli		5.96			3.94	
Koradi		3.73			3.22	
Chandrapur		1.85			2.00	

5 ANALYSIS OF ENERGY AVAILABILITY, ENERGY CHARGE AND ANNUAL FIXED CHARGES FOR FY 2008-09 AND FY 2009-10

MSPGCL, in its APR Petition for FY 2008-09 and Tariff Petition for FY 2009-10, submitted the performance for FY 2008-09 based on actual performance for the first half of the year, i.e., April to September 2008, and revised estimate of performance for the second half of the year, i.e., October 2008 to March 2009. MSPGCL submitted the comparison of each element of cost for FY 2008-09 with that approved by the Commission in its Order dated May 31, 2007 on MSPGCL's APR Petition for FY 2007-08 and tariff determination for FY 2008-09 in Case No. 71 of 2007.

The Commission will undertake the truing up of expenses and revenue for FY 2008-09 only after the audited accounts of MSPGCL for FY 2008-09 are available, i.e., during Annual Review of Performance for the third year of the Control Period, i.e., FY 2009-10. However, in this Order on APR for FY 2008-09 and tariff determination for FY 2009-10, the Commission has considered provisional truing up of certain elements of ARR due to revision in capital expenditure/capitalisation figures. Before proceeding towards determination of tariff for FY 2009-10, it is essential to assess the performance during FY 2008-09. Accordingly, the revised estimate of performance of MSPGCL during FY 2008-09 as compared to Commission's APR Order for MSPGCL is analysed in this Section, followed by the approval of the expenditure for FY 2009-10.

5.1 ENERGY AVAILABILITY AND GROSS GENERATION DURING FY 2008-09

The summary of actual gross generation during FY 2007-08, gross generation approved by the Commission in its APR Order for FY 2008-09, and revised estimates of gross generation for FY 2008-09 are given in the following Table:

Table: Gross Generation (MU)

Particulars	FY 2007-08	FY 2008-09	FY 2008-09
	Actual	APR Order	Rev. Est.
Khaparkheda	6294	5993	6166

Particulars	FY 2007-08	FY 2008-09	FY 2008-09
	Actual	APR Order	Rev. Est.
Paras	345	385	373
Bhusawal	3182	3329	3121
Nasik	6294	6167	5852
Parli	4278	4695	4084
Koradi	6353	7288	6398
Chandrapur	15862	16399	15202
Uran Gas	3730	3938	4365
Total	**46238**	**48194**	**45561**

The Commission, in its APR Order in Case No. 71 of 2007, has accepted the de-rated capacity as submitted by MSPGCL for its generating stations at Nasik, Koradi, Bhusawal, Paras and Parli TPS as approved by CEA and accordingly, considered the de-rated capacity of these stations for working out the revised gross generation based on the approved PLF in its MYT Order for FY 2008-09. As discussed in the previous paragraph, the Commission has only undertaken the provisional truing up of certain elements of ARR. The Commission has not undertaken any provisional truing up of gross generation for FY 2008-09 and the Commission will undertake the final truing up of gross generation for FY 2008-09 based on actual performance for the entire year along with the reasons for variation in actual generation, during Performance Review for the third year of the Control Period, i.e., FY 2009-10.

5.2 ENERGY AVAILABILITY AND GROSS GENERATION DURING FY 2009-10

5.2.1 Generation from Hydel Stations

As regards the generation from hydel generating stations for FY 2009-10, in its Petition, MSPGCL submitted a revised projection of net generation of 3828 MU during FY 2009-10. The Commission, in its MYT Order, approved the generation from hydel stations considering the actual generation during last ten years, excluding FY 2005-06 and FY 2006-07, as in these two years the rainfall was much higher than the average rainfall. Accordingly, the Commission approved net generation of 3934 MU for FY 2009-10.

The Commission enquired of MSPGCL regarding the reasons for projecting lower generation from hydel plants during FY 2009-10. In reply, MSPGCL submitted that generation from Koyna Stage I, II, III & IV Stations is based on the utilization of 67.5 TMC water allocated for westward diversion from Shivaji Sagar Reservoir and the estimated generation has been worked out by considering normal water discharge rate by utilizing 67.5 TMC of water. MSPGCL added that additional generation of 20-25 MU may be possible on account of water inflow in the catchment area of Stage-III Kokewadi dam.

As justification for estimation of lower generation from Small Hydro Power Stations, MSPGCL submitted that all these hydro power Stations are based on irrigation/drinking water needs and the generation from Small Hydro Stations depends on the actual water release from reservoirs by Water Resource Department (WRD) for the purpose of irrigation in the State. MSPGCL submitted that the generation from Small Hydro Power Stations for FY 2009-10 has been estimated based on the estimated average rainfall over the monsoon season.

The actual generation from hydel stations will depend upon the monsoon during FY 2009-10. Further, the Commission in its MYT Order observed that the average hydel generation for the last ten years excluding FY 2005-06 and FY 2006-07 works out to 3934 MU. The Commission has therefore, considered the approved generation of 3934 MU (net generation) from hydel stations as approved in the MYT Order for FY 2009-10. The Commission will consider the variation in actual generation due to monsoon while truing up the expenses and revenue for FY 2009-10.

5.2.2 Generation from Thermal Stations

MSPGCL projected the net generation from its existing stations for FY 2009-10 based on the projected PLF and Auxiliary Consumption for each generating station.

The Commission has considered net generation from existing thermal generating stations of MSPGCL for FY 2009-10, based on Station-wise PLF and Auxiliary Consumption approved by the Commission as elaborated in Section 4 of the Order. However, for projecting the net generation, the Commission has considered the de-rated capacities for some of the stations as discussed in above paragraphs. Further, as discussed in Section 4 of this Order, the Commission has accepted MSPGCL’s projections of PLF for Uran

Plant on account of additional gas availability during FY 2009-10. The summary of net energy availability from existing thermal stations as projected by MSPGCL and as considered by the Commission for FY 2009-10 is given in the following Table:

Table: Net Generation from existing Thermal Stations for FY 2009-10

Sl.	Station	Net Generation (MU)	
		MSPGCL	Approved
1	Khaparkheda	5515.66	5439.54
2	Paras	323.30	348.05
3	Bhusawal	2775.31	3004.24
4	Nasik	5352.60	5612.01
5	Parli	3594.89	4272.78
6	Koradi	5941.77	6574.06
7	Chandrapur	14341.29	15119.62
8	Uran	5745.20	5745.20
	sub-total	**43590.02**	**46115.50**

5.2.3 Total Net Generation

The summary of total net energy available from MSPGCL generating stations during FY 2009-10 as projected by MSPGCL and as approved by the Commission is given in the following table:

Table: Total Net Generation for FY 2009-10 (MU)

Particulars	MSPGCL	Approved
Existing Thermal	43590	46116
Hydel	3828	3934
Total	**47418**	**50050**

5.3 VARIABLE COSTS OF THERMAL GENERATING STATIONS

5.3.1 Fuel Costs for FY 2008-09

MSPGCL, in its Petition, submitted that the total fuel cost for FY 2008-09 is estimated to be Rs. 7151 Crore (excluding other variable charges). MSPGCL submitted that the increase in fuel costs is largely on account of the increase in prices of coal and oil during FY 2008-09 and also variation in calorific value. MSPGCL estimated the fuel prices for second half of FY 2008-09, considering the actual fuel prices during H1 of FY 2008-09.

As the impact of variation in fuel prices is allowed as pass through under the FAC mechanism, in this Order, the Commission has not considered any revision in fuel prices for FY 2008-09. Accordingly, the Commission has not undertaken the provisional truing up of fuel prices for FY 2008-09. The Commission will undertake the final truing up of fuel costs based on actual fuel costs during the entire year, subject to prudence check, during Performance Review for the third year of the Control Period, i.e., FY 2009-10.

5.3.2 Fuel Price and Fuel Calorific Value for FY 2009-10

MSPGCL, in its Petition, has projected the cost of domestic coal, imported coal and secondary oil by assuming the actual price of fuel prevailing during the period from April to September 2008.

For FY 2009-10, in accordance with the practice adopted in previous Tariff Orders, the Commission has considered the actual price of fuel equivalent to average actual fuel price for the latest period, i.e., from January 2009 to March 2009. The Commission has considered the average calorific value of fuel for the period from January to March 2009 as estimated by MSPGCL. The Commission has not considered any escalation in fuel prices as the adjustments for variation in fuel prices is allowed as part of FAC mechanism. Further, the Commission has considered the utilisation of washed coal and imported coal at various stations of MSPGCL as proposed by MSPGCL in its Petition. The summary of fuel prices and calorific value as projected by MSPGCL and as considered by the Commission for FY 2009-10 is given in the Tables below:

Table: Summary of Fuel Price and Calorific Value for Indian Coal

Station	MSPGCL		Approved	
	Price	Calorific Value	Price	Calorific Value
	Rs/MT	kcal/kg	Rs/MT	kcal/kg
Khaparkheda	1417	3194	1377	3263
Paras	1750	3730	1814	3513
Bhusawal	1891	3065	1729	3172
Nasik	2188	3131	2240	3365

Station	MSPGCL		Approved	
	Price	Calorific Value	Price	Calorific Value
	Rs/MT	kcal/kg	Rs/MT	kcal/kg
Parli	1768	3227	1971	3190
Koradi	1485	3559	1518	3688
Chandrapur	1385	2923	1295	3328

Table: Summary of Fuel Price and Calorific Value for Imported Coal

Station	MSPGCL		Approved	
	Price	Calorific Value	Price	Calorific Value
	Rs/MT	kcal/kg	Rs/MT	kcal/kg
Khaparkheda	6192	6600	6831	5853
Bhusawal	6172	6600	6783	6613
Nasik	5927	6600	6569	6170
Parli	6381	6323	6965	6339
Koradi	6192	6600	6831	6647
Chandrapur	6192	6600	6192	6600

Table: Summary of Fuel Price and Calorific Value for Washed Coal

Station	MSPGCL		Approved	
	Price	Calorific Value	Price	Calorific Value
	Rs/MT	kcal/kg	Rs/MT	kcal/kg
Nasik	2155	4136	2186	4697
Koradi	1540	4949	1512	4823
Chandrapur	1753	3894	1651	4208

Table: Summary of Fuel Price and Calorific Value for Secondary Fuels as approved by the Commission

Station	FO			LDO		
	Sp. Cons.	Price	Cal. Value	Sp. Cons.	Price	Cal. Value
	ml/kWh	Rs/KL	kCal/kg	ml/kWh	Rs/KL	kCal/kg
Khaparkheda	1.60	16557	10189	0.40	31063	10676
Paras	1.69	16915	10173	0.31	36529	10385
Bhusawal	1.84	16701	10373	0.16	34249	10580
Nasik	1.66	16992	10106	0.34	30592	10579
Parli	1.70	17775	10113	0.30	31091	10517
Koradi	1.67	18124	10106	0.33	32164	10579

Station	FO			LDO		
	Sp. Cons.	Price	Cal. Value	Sp. Cons.	Price	Cal. Value
	ml/kWh	Rs/KL	kCal/kg	ml/kWh	Rs/KL	kCal/kg
Chandrapur	1.50	17342	10126	0.50	40382	10642

5.3.3 Cost of Lubricants, Other Consumables and Water Charges, etc.

MSPGCL, in its Petition, submitted that it has considered the cost of lubricants, chemicals and water charges, etc., as part of energy charge. The Commission has included the cost of these other items, viz., lubricants, chemicals and water charges, etc., as part of variable costs while estimating the energy charges. The Commission has considered these costs for each station based on actual costs incurred during FY 2007-08. The summary of station-wise cost of these other charges considered by the Commission is given in the following Table:

Table: Summary of Other Variable Costs and Adjustments for FY 2009-10 (Rs Crore)

Station	Amount
Khaparkheda	14.43
Paras	1.86
Bhusawal	29.42
Nasik	53.91
Parli	36.55
Koradi	36.41
Chandrapur	42.87
Uran	1.11
Total	**216.57**

The variation in other variable costs and adjustments shall not be considered as part of FAC computations and the FAC computations should only include the variations in fuel prices. Any variations in other charges and adjustments shall be considered at the time of truing up.

5.3.4 Rate of Energy Charge

Based on performance parameters, i.e., heat rate and auxiliary consumption approved for FY 2009-10 and considering the fuel prices and fuel calorific value as discussed in above paragraphs, the rate of energy charge for each thermal generating station for FY 2009-10 as approved by the Commission is given in the Table below. The summary of the variable cost and rate of energy charge as projected by MSPGCL and as approved by the Commission for FY 2009-10 is shown in the Table below:

Table: Rate of Energy Charge for FY 2009-10

S.No	Station	fuel Cost excluding other fuel charges (Rs Crore)		Other Variable Cost (Rs Crore)		Rate of Energy Charge to be considered for FAC (Rs/kWh)		Rate of Energy Charge (Rs/kWh)	
		MSPGCL	Approved	MSPGCL	Approved	MSPGCL	Approved	MSPGCL	Approved
1	Khaparkheda	996.15	938.08	20.93	14.43	1.81	1.72	1.84	1.75
2	Paras	59.22	62.95	3.47	1.86	1.83	1.81	1.94	1.86
3	Bhusawal	713.82	654.59	24.49	29.42	2.57	2.18	2.66	2.28
4	Nasik	1326.30	1293.24	54.75	53.91	2.48	2.30	2.58	2.40
5	Parli	790.18	875.42	40.55	36.55	2.20	2.05	2.31	2.13
6	Koradi	1049.66	954.31	23.34	36.41	1.77	1.45	1.81	1.51
7	Chandrapur	2244.33	1822.86	60.79	42.87	1.56	1.21	1.61	1.23
8	Uran	740.81	702.32	1.54	1.11	1.29	1.22	1.29	1.22
	Total	**7920.48**	**7303.77**	**229.86**	**216.57**				

5.4 LEASE RENT FOR HYDEL STATIONS

MSPGCL submitted that the Commission, in its Order dated October 27, 2008 in Case No. 17 of 2007, has approved the revised lease rentals of Rs 230.80 Crore for the hydro stations operated by the MSPGCL for FY 2009-10, since, as per the Order, the revised lease rentals are effective from FY 2009-10 onwards. However, MSPGCL highlighted that it has not considered the lease rentals against Paithan and Ujjani pump storage schemes and a separate Petition has been filed before the Commission for determination of charges from these stations.

The Commission has approved the lease rents for the hydro generating stations handed over to MSPGCL for operation and maintenance, starting from FY 2010 in its Order dated October 27, 2008 in Case No. 17 of 2 008. The lease rent approved by the Commission for FY 2009-10 includes the lease rent for Paithan and Ujjani pump storage schemes amounts to Rs. 230.80 Crore. Accordingly, for FY 2009-10, the Commission has approved the lease rent payable to GoM for FY 2009-10 as Rs. 230.80 Crore. As regards the Petition filed by MSPGCL for separate approval of lease rent, the Commission in its Order in Case No. 94 of 2007 stipulated as under:

"The Commission clarifies that the lease rent for Ujjani and Paithan Pumped Storage has been approved vide Order dated October 27, 2008 in Case No. 17 of 2007 in the matter of MSPGCL's Petition for Approval of Lease Rent of Hydel Stations owned by GoM leased to MSPGCL. Accordingly, the lease rent as approved by the Commission in the above-said Order should be considered by MSPGCL for these stations."

5.5 OPERATION & MAINTENANCE (O&M) EXPENSES

MSPGCL, in its Petition, submitted that for projecting the revised O&M expenses for FY 2008-09 and FY 2009-10, it has considered the actual O&M expenses for FY 2007-08 based on audited accounts as base and has escalated the same by applying an inflation rate of 6.30%. As regards the inflation index, MSPGL submitted that it has not considered the inflation rate in accordance with the Commission's estimation in the MYT Order but has re-computed the inflation rate in order to factor in the economic scenario prevalent in the country. MSPGCL further submitted that it has computed the inflation index based on the mean of the year-on-year increase in Wholesale Price Index (WPI) and Consumer Price Index (CPI) after considering a weight of 60% to WPI and 40% to CPI. MSPGCL has considered the WPI numbers as per Office of Economic Advisor of Govt. of India and CPI numbers for Industrial Workers based on indices notified for Mumbai as per Labour Bureau, GoI. The CPI indices for Mumbai have been considered rather than for India as a whole because according to MSPGCL, the CPI indices for Mumbai are more relevant than national indices as it is a State Utility and its operations are restricted to Maharashtra State only.

Accordingly, MSPGCL has projected total O&M expenses of Rs 1115 Crore for FY 2008-09 as against Rs 908 Crore as approved in the APR Order and Rs 1186 Crore for FY 2009-10 as against Rs 957 Crore as approved in MYT Order.

MSPGCL further submitted that it is in the process of finalizing a proposal for pay revision for its employees during the last quarter of FY 2008-09, which would be applicable retrospectively from April 1, 2008. MSPGCL submitted that it expects the effect of such pay revision to be around 20% increase in establishment cost in FY 2008-

09 over and above the normal escalation rate of 6.30%. The Commission asked MSPGCL in May 2009 as a part of the additional information requirement to confirm whether it has finalised the pay revision proposal to which, MSPGCL submitted that the pay revision proposal is yet to be finalised and it would submit the complete details after finalising the same.

As elaborated in Section 1, the Commission would undertake the truing up of certain expenses and revenue for FY 2007-08 through separate proceedings. Further, as stipulated in the APR Order for FY 2007-08 in Case No. 71 of 2007, the truing up of O&M expenses for FY 2005-06 and FY 2006-07 will have bearing on base O&M expenses for projecting O&M expenses for the Control Period. Accordingly, the Commission at this stage has not revised the approved O&M expenses for FY 2008-09.

As regards the submission of MSPGCL to consider WPI and CPI of Mumbai as against the country-wise as a whole, the Commission clarifies that the Commission in its MYT Orders at the beginning of the first Control Period for all the Utilities has consistently considered the WPI and CPI for estimating the O&M expenses and hence the Commission does not find merit to revise any philosophy at this stage. Moreover, it should be noted that only MSPGCL's corporate office is located at Mumbai and its main operation is being spread across the Maharashtra and not limited to Mumbai.

For FY 2009-10, the Commission has considered an increase of around 6.04% on account of inflation over the approved level of O&M expenses for FY 2008-09, based on the increase in Wholesale Price Index (WPI) and CPI. The Commission has considered the point to point inflation over WPI numbers (as per Office of Economic Advisor of Govt. of India) and CPI numbers for Industrial Workers (as per Labour Bureau, Government of India) for a period of 3 years, i.e., FY 2005-06 to FY 2007-08, to smoothen the inflation curve. The Commission has considered a weight of 60% to WPI and 40% to CPI, based on the expected relationship with the cost drivers. Further, the Commission has also considered the impact of leave encashment for FY 2009-10 at Rs. 35.47 Crore.

The summary of O&M expenditure as approved by the Commission in the MYT Order, projected by MSPGCL and that allowed by the Commission for FY 2008-09 and FY 2009-10 are as given below:

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

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Projections	Approved after provisional truing up	MYT Order	Revised Projections	Approved
Bhusawal	59.72	92.65	59.72	62.94	98.49	66.26
Chandrapur	273.53	264.61	273.53	288.24	281.27	298.50
Paras	7.24	29.01	7.24	7.63	30.83	8.56
Parli	86.22	121.85	86.22	90.86	129.52	95.31
Koradi	134.96	171.52	134.96	142.22	182.33	148.48
Uran	79.80	87.70	79.80	84.09	93.22	87.56
Khaperkheda	104.96	109.05	104.96	124.44	115.92	114.82
Nasik	113.71	166.74	113.71	119.83	177.25	125.89
Hydro	47.75	72.14	47.75	50.32	76.68	52.83
Total	**907.89**	**1115.26**	**907.89**	**956.74**	**1185.52**	**998.21**

5.6 CAPITAL EXPENDITURE AND CAPITALISATION

Capital expenditure and capitalisation are two important variables that influence computation of various critical parameters such as depreciation, advance against depreciation, interest on long term debt and return on equity. Accordingly, variation in approved values of these variables over the Control Period needs to be evaluated carefully during Annual Performance Review along with scrutiny of reasons necessitating such review. The summary of the approved capital expenditure in the APR Order in Case No. 71 of 2007 for FY 2008-09 and the MYT Order in Case No. 68 of 2006 for FY 2009-10 and revised estimates as submitted by MSPGCL is shown in the Table below:

(Rs Cr)

Particulars	FY 2008-09		FY 2009-10	
	APR Order	Revised Estimate by MSPGCL	MYT Order	Revised Estimate by MSPGCL
Bhusawal	4.23	18.57	0.40	2.10
Chandrapur	5.02	56.82	40.71	314.29
Nasik	13.66	55.65	45.69	30.30
Koradi	43.32	45.79	13.23	107.00
Paras	0.04	1.71	0.04	0.00

Particulars	FY 2008-09		FY 2009-10	
	APR Order	Revised Estimate by MSPGCL	MYT Order	Revised Estimate by MSPGCL
Parali	30.44	25.61	0.79	13.02
Uran	4.94	4.96	1.80	188.64
Khaparkheda	51.38	51.49	2.78	4.40
Sub-total (Thermal)	**153.03**	**260.60**	**105.44**	**659.75**
Sub-total (Hydel)	**6.21**	**20.62**	**3.31**	**23.97**
GRAND TOTAL (Thermal+Hydel)	**159.24**	**281.22**	**108.75**	**683.72**

The Commission, in its APR Order, has approved capital expenditure of Rs 159.24 Crore for FY 2008-09 and in the MYT Order has approved Rs 108.75 Crore for FY 2009-10. Against this, MSPGCL has projected revised estimate of capital expenditure of Rs 281.22 Crore for FY 2008-09 and Rs 683.72 Crore for FY 2009-10. Significant variation in capital expenditure has been proposed for Chandrapur station, where, against capital expenditure of Rs 40.71 Crore considered under MYT Order, MSPGCL has submitted revised estimate of capital expenditure Rs 314.29 Crore for FY 2009-10.

In reply to the query of the Commission seeking justification for deviation between revised estimated capital expenditure and capitalisation as against the approved capital expenditure and capitalization for FY 2008-09 and FY 2009-10, MSPGCL submitted that while preparing the MYT Petition, MSPGCL had projected capital expenditure of Rs 745.53 Crore and Rs 694.08 for the FY 2008-09 and FY 2009-10 respectively. However, the Commission, in its MYT Order, has approved capital expenditure of Rs 159.26 Crore for FY 2008-09 and Rs 108.75 Crore for FY 2009-10.

MSPGCL submitted that the Commission has classified capital expenditure as a controllable expense under the MYT regime. Accordingly, while projecting the capital expenditure for FY 2008-09 in the APR Petition for FY 2007-08, MSPGCL has prioritized some of the schemes and accordingly submitted a revised capex of Rs 159.24 crore and the same was in accordance with the capital expenditure approved by the Commission in the MYT Order for 2008-09 i.e., Rs. 159.26 crore.

MSPGCL further submitted that given the vintage of the Units and the variation in quality of coal and other technical parameters, it may not be possible to restrict to the capex schemes envisaged at the beginning of the year. In real time, there are certain critical [non-Detailed Project Report (DPR)] expenses of capital nature that need to be incurred in order to keep up the performance of the Units. MSPGCL submitted that in practical terms, it may not be possible to implement all the schemes during a time frame as envisaged at the time of submission of Petition. However, such schemes that are not undertaken in such time period are taken up on priority during the ensuing period. Such spill-over of schemes also leads to deviation between approved capex and capitalization vis-à-vis the actual capital expenditure and capitalisation.

In this regard, MSPGCL further submitted that while it is submitting a set of schemes for various stations, however, the overall capital expenditure would need to be prioritized based on the outcome of M/s CPRI study and subsequent approval of technical performance of the stations by the Commission.

As regards justification for the capital expenditure for hydel generating stations, MSPGCL submitted that the terms of the Lease Agreement between GoM and MSEB signed on December 19, 1970, stipulates that MSEB has to keep and maintain the premises in a good and substantial state of repair and to keep the plant, machinery and equipments in working condition throughout the term except as and when any damage is caused by fire, tempest, flood, violence by any army or mob, earthquake, earth tremors or other irresistible force. Thus, MSPGCL is incurring capital expenditure on renovation and modernization of plants and also to maintain them in good working condition. The capital expenditure incurred by hydro generating station is shown separately as “Capital Expenditure resulting in Assets not belonging to the Company” as these assets on which capital expenditure is incurred are not owned by the Company. MSPGCL submitted that however, as per provisions of Accounting Standards - 10 (AS-10), “Fixed asset” denotes an asset held with the intention of being used for the purpose of producing or providing goods and services and is not held for sale in normal course of business. Further, as per AS-6, depreciable assets are the assets which-

(i) Are expected to be used during more than one accounting period
(ii) Have a limited useful life and
(iii) Are held by an enterprise for use in the production or supply of goods and services, for rentals to others, or for administrative purposes and not for the purpose of sale in the ordinary course of business.

MSPGCL submitted that the above mentioned Accounting Standards can be applied even if legal ownership does not vest with the enterprise. On the contrary, if such expenses are booked under repairs and maintenance, the same would substantially inflate the Aggregate Revenue Requirement (ARR) of hydro stations. Since, even in its books of accounts, MSPGCL is treating such capex as "Capital Expenditure resulting in Assets not belonging to the Company", rather than as revenue expenditure item, MSPGCL submitted that it would be desirable from the consumers' perspective to allow depreciation on such assets.

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

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

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

(Rs Crore)

Particulars	FY 2004-05 Actuals	FY 2005-06 Actuals	FY 2006-07 Actuals	FY 2007-08 Actuals-Petitioner submission	FY 2008-09 Revised Estimate	FY 2009-10 Projected
Opening GFA						
MSPGCL	9319.00	9437.00	9641.99	9996.20	10120.59	10382.33
MSETCL	8060.28	8322.37	8632.69	8965.25	9831.27	11016.16
MSEDCL	8384.00	8894.00	9428.00	10530.80	11806.83	14444.80
Total	**25763.28**	**26653.37**	**27702.68**	**29492.25**	**31758.69**	**35843.29**
Asset addition during the year						
MSPGCL	118.00	204.99	343.39	152.55	261.74	836.62
MSETCL	262.34	310.41	332.59	867.14	1184.92	2879.34
MSEDCL	510.00	534.00	942.78	1278.54	2649.97	5479.47
Total	**890.34**	**1049.40**	**1618.76**	**2298.23**	**4096.63**	**9195.44**
Asset write off/retirement during the year						
MSPGCL	0.00	0.00	-0.07	-28.33	0.00	0.00
MSETCL	-0.25	-0.09	-0.68	-1.12	-0.03	0.00
MSEDCL	0.00	0.00	-0.27	-2.51	-12.00	-13.00
Total	**-0.25**	**-0.09**	**-1.02**	**-31.96**	**-12.03**	**-13.00**
Closing GFA						
MSPGCL	9437.00	9641.99	9985.31	10120.59	10382.33	11218.95
MSETCL	8322.37	8632.69	8964.60	9831.27	11016.16	13895.51
MSEDCL	8894.00	9428.00	10370.51	11806.83	14444.80	19911.27
Total	**26653.37**	**27702.68**	**29320.42**	**31758.69**	**35843.29**	**45025.73**

Note: Figures taken from Audited A/c or respective Tariff Orders or ARR Petition of Utilities as available

The above compilation has been done for MSEB as a whole, to give a better picture of the overall increase in asset addition over the last five years, since MSEB was earlier being regulated as an integrated Utility.

It is clear from the above Table that the Gross Fixed Assets have increased by around 19%, 67%, and 124% for the Generation (excluding new units), Transmission, and Distribution Business, respectively, over the last five years. The pace of asset addition has increased by leaps and bounds over the last five years. MSEDCL has projected to more than double its asset base (as in FY 2004-05) by the end of FY 2009-10, while MSPGCL and MSETCL have also proposed to increase their asset base (as in FY 2004-05) to around 1.2 to 1.7 times. Further, when these Utilities were operating in an integrated manner during the period from FY 2004-05 and FY 2005-06, the total asset addition every year was only around Rs. 900 to 1000 Crore, whereas in FY 2008-09 and FY 2009-10, each of the Businesses are individually adding assets of the same amount or higher every year on an average. The addition to the asset base is clearly not commensurate either with the increase in sales or increase in demand in MW served. Since the Utilities were able to serve the existing consumer base well enough with the existing assets, the rationale for this steep increase in the asset base needs to be examined further. The favourite argument of the Utilities that in the past, there was a backlog on this account and that they want to rake it up is also unconvincing to justify the 100% increase in the asset base in such a short period.

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

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

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

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

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

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

In this context, the recent Report by Forum of Regulators on Multi-Year Framework has also emphasized that the capital expenditure plans of Utilities should clearly bring out cost benefit analysis and targeted reduction in technical losses.

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

Further, in the absence of documentary evidence that the stated purpose and objective of the capex schemes have been achieved, the Commission is restricting the capitalisation considered for the purposes of determination of ARR and tariff. Once MSPGCL submits the necessary justification to prove that the scope and objective of the capex scheme has been achieved as projected in the DPR, the same may be considered in future Orders.

MSPGCL is directed to prioritise the capex schemes based on importance and the schemes may be implemented in a phased manner to minimise the impact on the generation tariff.

As regards capitalisation, the Commission under its previous APR Order has approved capitalisation of Rs 172.19 Crore for FY 2008-09 and in its MYT Order has approved Rs 195.73 Crore for FY 2009-10. Against this, MSPGCL has projected revised estimate of capitalisation of Rs 248.76 Crore for FY 2008-09 and Rs 780.32 Crore for FY 2009-10, as shown in the Table below:

Table: Summary of Capitalisation submitted by MSPGCL (Rs Cr)

Particulars	FY 2008-09		FY 2009-10	
	APR Order	Revised Estimate by MSPGCL	MYT Order	Revised Estimate by MSPGCL
Bhusawal	4.58	20.39	0.43	2.10

Particulars	FY 2008-09		FY 2009-10	
	APR Order	Revised Estimate by MSPGCL	MYT Order	Revised Estimate by MSPGCL
Chandrapur	5.02	85.21	44.13	314.29
Nasik	14.81	19.44	49.53	74.01
Koradi	46.96	54.85	52.28	108.45
Paras	0.04	1.71	0.05	0.00
Parali	33.00	29.08	40.70	15.49
Uran	5.35	7.55	1.95	196.02
Khaparkheda	55.70	9.91	3.01	45.99
Sub-total (Thermal)	**165.46**	**228.14**	**192.07**	**756.35**
Sub-total (Hydel)	**6.73**	**20.62**	**3.66**	**23.97**
GRAND TOTAL (Thermal+Hydel)	**172.19**	**248.76**	**195.73**	**780.32**

As per Regulation 30.1 of the MERC Tariff Regulations, subject to prudence check by the Commission, actual capital expenditure incurred on completion of the project shall form the basis for determination of original cost of the project. For the purpose of APR exercise for FY 2008-09 and revised projection for FY 2009-10, the Commission has considered capitalisation as projected by MSPGCL for DPR schemes already approved by the Commission. However, the Commission has not considered any capitalisation of such DPR schemes where in-principle approval of the Commission is yet to be accorded. Accordingly, the Commission has not considered the capitalisation against 'Renovation of Railway Siding' for which MSPGCL had considered a capitalisation of Rs. 21.36 Crore in FY 2009-10.

MSPGCL further submitted that as M/s CPRI is carrying out a detailed study initiated by the Commission, there may be changes in such schemes and hence, the DPR for such schemes is yet to be submitted for the Commission's approval. Accordingly, for the purpose of APR exercise, the Commission has not considered any capitalisation towards such schemes as the DPR for the same are yet to be submitted for approval. Further, the Commission also observed that there were certain schemes under Non-DPR schemes whose cost was more than Rs. 10 Crore, however the Commission has not considered any capitalisation towards such schmes. The list of schemes not considered by the Commission is shown in the Table below:

Table: Non DPR schemes above Rs.10 Crore submitted by MSPGCL

Particulars	Station
Spares	Chandrapur
LTSH coils for U-4	Chandrapur
Platen Reheater coils in Unit-5	Chandrapur
Re-heater coils for U-5	Chandrapur
Pendent R/H coils for U-2.	Chandrapur
Economizer coils for U-4	Chandrapur
Re-heater coils for U-6	Chandrapur
Locomotive of capacity 2400 HP WDM-II- 1 No.	Chandrapur

MSPGCL has further categorised certain schemes under the head 'Non DPR schemes whose project cost has been estimated more than Rs. 10 Crore' and has projected capitalisation for the same in FY 2009-10. The various schemes are as listed below.

- LE works of U-6, Koradi TPS
- Repairing / Renovation work in coal Handling Plant of 1 X 200 MW & 2 X 210 MW sets at Koradi TPS
- Replacement of Hot path components, Uran
- Procurement of HPT module for Unit no. 1 & 2 (TM), Khaperkheda

The MERC Tariff Regulations clearly stipulates that any scheme exceeding value of Rs. 10 Crore must be treated as a DPR scheme and a DPR for the same should be submitted to the Commission for its approval. MSPGCL has not submitted DPR for any of the above schemes for approval from the Commission. Accordingly the Commission for the purpose of APR exercise has not considered capitalisation of such schemes as projected by MSPGCL.

For Non-DPR schemes, the Commission has considered 50% of the proposed capitalisation by MSPGCL on adhoc basis, as the Commission is of the view that until it is ascertained that the projected benefits have actually accrued for the benefit of the consumers, it would not be appropriate to allow the entire expenses.

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

Table: Summary of Capitalisation (Rs Cr)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by MSPGCL	Approved	MYT Order	Revised Estimate by MSPGCL	Approved
Bhusawal	4.58	20.39	9.84	0.43	2.10	1.05
Chandrapur	5.02	85.21	42.61	44.13	314.29	34.07
Nasik	14.81	19.44	10.29	49.53	74.01	26.94
Koradi	46.96	54.85	27.43	52.28	108.45	21.73
Paras	0.04	1.71	0.85	0.05	0.00	0.00
Parali	33.00	29.08	14.54	40.70	15.49	7.70
Uran	5.35	7.55	3.78	1.95	196.02	10.51
Khaparkheda	55.70	9.91	4.96	3.01	45.99	12.62
Sub-total (Thermal)	**165.46**	**228.14**	**114.28**	**192.07**	**756.35**	**114.62**
Sub-total (Hydel)	**6.73**	**20.62**	**10.31**	**3.66**	**23.97**	**11.99**
GRAND TOTAL (Thermal+Hydel)	**172.19**	**248.76**	**124.60**	**195.73**	**780.32**	**126.60**

5.7 DEPRECIATION

The Commission, in its APR Order, had permitted depreciation to the extent of Rs 357.71 Crore for FY 2008-09 and in its MYT Order had permitted Rs 321.55 Crore for FY 2009-10, which amounts to 3.48% and 3.05% of Opening level of Gross Fixed Assets (GFA) of MSPGCL for FY 2008-09 and FY 2009-10, respectively. The opening GFA was stated at Rs 10280.80 Crore for FY 2008-09 and Rs 10549.74 Crore for FY 2009-10. The depreciation rates were considered as prescribed under the MERC Tariff Regulations, 2005.

MSPGCL, under its APR Petition, submitted the revised estimate of depreciation for FY 2008-09 and FY 2009-10 as Rs 361.38 Crore and Rs 374.84 Crore including Advance Against Depreciation (AAD), respectively, at a depreciation rate of 3.36% and 3.47% corresponding to opening GFA of Rs 10120.59 Crore and Rs 10382.33 Crore, respectively.

Table: Summary of Depreciation (Rs Cr)

Particulars	FY 2008-09		FY 2009-10	
	APR Order	Revised Estimate by MSPGCL	MYT Order	Revised Estimate by MSPGCL
Depreciation	357.71	361.38	321.55	374.84
Opening GFA	10280.80	10120.59	10549.74	10382.33
Depn as % of Op. GFA	**3.48%**	**3.36%**	**3.05%**	**3.47%**

The station-wise depreciation expenditure claimed by MSPGCL for FY 2008-09 and FY 2009-10 and that considered under APR and MYT Orders is summarised under the following Table:

Table: Summary of Depreciation (Rs Cr)

Particulars	FY 2008-09		FY 2009-10	
	APR Order	Revised Estimate by MSPGCL	MYT Order	Revised Estimate by MSPGCL
Bhusawal	14.16	13.39	13.42	14.15
Chandrapur	120.98	116.88	124.56	119.98
Nasik	20.48	20.67	22.42	21.36
Koradi	29.88	46.45	30.48	46.22
Paras	1.37	1.33	1.47	1.40
Parali	24.89	12.13	27.32	24.02
Uran	60.42	57.02	12.14	56.66
Khaparkheda	82.16	82.42	85.06	82.71
Sub-total (Thermal)	**354.34**	**350.29**	**316.88**	**366.49**
Sub-total (Hydel)	**3.37**	**11.09**	**4.67**	**8.35**
GRAND TOTAL (Thermal+Hydel)	**357.71**	**361.38**	**321.55**	**374.84**

The Commission has examined the capitalisation and depreciation claimed by MSPGCL in detail as against the various capex schemes approved by the Commission. Further, MSPGCL in its additional submissions confirmed that depreciation has not been claimed beyond 90% of the asset value in accordance with the MERC Tariff Regulations.

The Station-wise approved depreciation expenditure for FY 2008-09 and FY 2009-10 have been summarised in the following table:

Table: Summary of Depreciation (Rs Cr)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by MSPGCL	Approved after provisional truing up	MYT Order	Revised Estimate by MSPGCL	Approved
Bhusawal	14.16	13.39	13.39	13.42	14.15	13.75
Chandrapur	120.98	116.88	116.88	124.56	119.98	118.38
Nasik	20.48	20.67	20.67	22.42	21.36	21.01
Koradi	29.88	29.24	29.23	30.48	32.06	30.99
Paras	1.37	1.33	1.33	1.47	1.40	1.37
Parali	24.89	12.13	12.13	27.32	24.02	23.48
Uran	60.42	57.02	56.91	12.14	56.66	56.42
Khaparkheda	82.16	82.42	82.42	85.06	82.71	82.51
Sub-total (Hydel)	**3.37**	**6.64**	**6.64**	**4.67**	**8.35**	**7.01**
GRAND TOTAL (Thermal+Hydel)	**357.71**	**339.72**	**339.60**	**321.55**	**359.81**	**354.92**

In view of the above, the depreciation expenditure approved by the Commission for FY 2008-09 and FY 2009-10 is summarised in the following Table:

Table: Summary of Depreciation (Rs Cr)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by MSPGCL	Approved after provisional truing up	MYT Order	Revised Estimate by MSPGCL	Approved
Depreciation	357.71	339.72	339.60	321.55	359.81	354.92
Opening GFA	10280.80	10120.59	10078.37	10549.74	10382.33	10203.0
Depn as % of Op. GFA	**3.48%**	**3.36%**	**3.37%**	**3.05%**	**3.47%**	**3.48%**

The Commission will undertake the truing up of Depreciation based on actual depreciation expenditure during the entire year, subject to prudence check, during Performance Review for the third year of Control Period, i.e., FY 2009-10, and subject to the impact of the separate regulatory process on account of the ATE Judgment.

5.8 ADVANCE AGAINST DEPRECIATION

MSPGCL submitted that in the APR and MYT Orders, the Commission had not allowed AAD for individual plants. The Commission at that time had considered the loan repayment schedule for MSPGCL as a whole and hence, considered AAD for MSPGCL as a whole.

The views of the Commission in the MYT Order and APR Order, submitted as part of the Petition by MSPGCL are reproduced below:

> *"the Commission observes that it would be futile to undertake such exercise on station-wise basis unless MSPGCL undertakes apportionment of loan and equity across all the stations on rational basis. Further, the Commission observes that MSPGCL is yet to tie-up its funding source for the capex plans to be undertaken over the Control Period. In view of above, the Commission has considered requirement of AAD at generating company level instead computing the same at generating station level."*

The Commission in the APR Order in Case No. 71 of 2007 had stated as follows:

> *"The Commission opines that Advance against depreciation is intended to meet shortfall in meeting loan repayment obligations of the Generating Company. In the absence of proper accounting of outstanding loans, apportionment of existing loans to various stations on certain basis (say, NFA) is desirable. However, it needs to be ensured that it does not result in unjust enrichment of the Generating Company at the cost of consumers on account of its claim on AAD."*

With reference to the Commission's observations regarding allowance of AAD on individual station basis, MSPGCL submitted the segregation of generic loan and total loan repayment along with the fraction of generic loans to that of the total loan repayment as 22.37% and 25.77% for FY 2008-09 and FY 2009-10 respectively.

Table: Generic Loan Repayment vis-à-vis Total Loan Repayment

Rs Crore

Particulars	FY 2008-09	FY 2009-10
Total Loan Repayment	199.70	171.59
Generic Loan Repayment	44.67	44.22

Particulars	FY 2008-09	FY 2009-10
Generic Loan Repayment as a percentage of Total Loan Repayment	22.37%	25.77%

MSPGCL further requested the Commission to devise a mechanism for allocation of such loans and thereby provide for AAD on individual plant basis.

MSPGCL further submitted that allowance of AAD does not lead to unjust enrichment of the Generating Company. In support to the same, MSPGCL submitted that it has been claiming the depreciation at the rates specified in the MERC Tariff Regulations subject to a maximum of 90% of the cost of the asset. Therefore, by allowing AAD, the only factor that effectively changes is the rate of depreciation and not the total amount of depreciation, which is based on the maximum limit set by the Commission. Therefore, any AAD provided by the Commission simply leads to front loading of depreciation in the tariff, which is bound to happen in case the tariff is determined for individual stations in case loan repayment exceeds the depreciation during the year. However, as an outcome of allowing AAD, MSPGCL would charge less depreciation during the later life of the plant when the entire loan amount is repaid.

MSPGCL submitted that it has identified plant-wise loans in its portfolio of loans inherited from MSEB, and has proportionally allocated the common loans to each of the stations based on the NFA as at the end of FY 2005-06.

Regulation 32.3 of MERC Tariff Regulations stipulates that where the actual amount of loan repayment in any financial year exceeds the amount of depreciation allowable under Regulation 34.4.1, the Generating Company shall be allowed an advance against depreciation for the difference between the actual amount of such repayment and the allowable depreciation for such financial year.

The Commission observes that revised estimate of loan repayment of Rs 199.70 Crore for FY 2008-09 is far lower than estimated depreciation of Rs 339.72 Crore for MSPGCL as a whole. Also, during FY 2009-10, the projected loan repayment of Rs 171.59 Crore is far lower than projected depreciation of Rs 359.81 Crore for MSPGCL as a whole. The Commission is of the view that Advance Against Depreciation is intended to meet shortfall in meeting loan repayment obligations of the Generating Company, and is not intended to provide additional cash flow to the Generation Company. While tariff is determined on a station-wise basis, AAD is a special provision, which enables the Utility to meet its loan repayment obligations as a whole rather than for each Station. Giving AAD on a station-wise basis may result in a situation, where the generation tariffs are determined higher to account for the component of AAD, even though the Company has enough funds to meet its loan repayment obligations.

In this context, the Commission notes that as per outstanding loan allocated to various generating stations by MSPGCL, while loan repayment in respect of Khaparkheda, Koradi and Hydel exceed depreciation claim in respect of these stations during FY 2008-09 and FY 2009-10 resulting in AAD claim in respect of these stations, the depreciation claim in respect of other stations such as Chandrapur, Uran, Parali, Nasik and Bhusawal exceed loan repayment during FY 2008-09 and FY 2009-10.

Accordingly, Advance against Depreciation (AAD) projected by MSPGCL and approved by Commission for FY 2008-09 and FY 2009-10 is as under:

Table: Summary of Depreciation including AAD (Rs Cr)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by MSPGCL	Approved after provisional truing up	MYT Order	Revised Estimate by MSPGCL	Approved
Depreciation	357.71	339.72	339.60	321.55	359.81	354.92
Loan Repayment	(182.49)	(199.70)	(199.70)	(141.53)	(171.59)	(171.59)
Advance against depreciation (AAD)	0.00	21.26	0.00	0.00	15.04	0.00
Depreciation incl. AAD	**357.71**	**360.98**	**339.60**	**321.55**	**374.85**	**354.92**

5.9 INTEREST EXPENSES

The Commission, in its APR Order, had permitted net interest expense to the extent of Rs 86.50 Crore for FY 2008-09 and in its MYT Order had permitted net interest expense of Rs 113.24 Crore for FY 2009-10.

MSPGCL submitted that it has inherited a portfolio of loans from the erstwhile MSEB and station/project-wise allocation of loans was not provided in the provisional Transfer Scheme. Considering the same, the loans have been allocated to various projects based on the following principles:

- The loans that are clearly identifiable with the project have been assigned to the project only
- The loans (Generic Loans) that are not identifiable directly with the project have been allocated plant-wise on the base of Net Fixed Assets as at the end of FY 2005-06.

MSPGCL in its present APR petition has continued the above approach for allocation of interest expenses for such common loans for FY 2008-09 and FY2009-10.

MSPGCL submitted that for computation of interest charges, the Commission in the APR and MYT Orders had considered an interest rate of around 10.50% for debt to be raised during the Control Period. However, considering the recent economic conditions, MSPGCL submitted that it has considered the interest rate as applicable to existing loans and has considered an interest rate of 12.50% during FY 2008-09 and FY 2009-10 for the loan capital to be borrowed during these years.

Accordingly, MSPGCL in its APR Petition submitted the revised estimate for net interest expense for FY 2008-09 and FY 2009-10 as Rs 108.74 Crore and Rs 137.45 Crore respectively, as summarised in the following Table.

Table: Summary of Interest Expenses (Rs Crore)

Particulars	**FY 2008-09**		**FY 2009-10**	
	APR Order	**Revised Estimate by MSPGCL**	**MYT Order**	**Revised Estimate by MSPGCL**
Op. balance of loan	952.70	979.37	1139.80	1060.89
Loan Addition	137.76	281.22	157.31	964.94
Loan Repayment	(182.49)	(199.70)	(141.53)	(171.59)
Cl. Balance of loan	907.96	1060.89	1155.59	1854.24
Gross Interest Expenses	**86.50**	108.74	**113.24**	137.45
Less Interest Expenses capitalised	-	-	-	

Particulars	FY 2008-09		FY 2009-10	
	APR Order	Revised Estimate by MSPGCL	MYT Order	Revised Estimate by MSPGCL
Net Interest Expense	**86.50**	**108.74**	**113.24**	**137.45**

The station-wise interest expenditure claimed by MSPGCL for FY 2008-09 and FY 2009-10 and that considered in the APR and MYT Order is summarised in the following Table:

Table: Summary of Interest Expenses (Rs Crore)

Particulars	FY 2008-09		FY 2009-10	
	APR Order	Revised Estimate by MSPGCL	MYT Order	Revised Estimate by MSPGCL
Bhusawal	2.16	4.21	7.14	5.12
Chandrapur	24.05	28.68	34.91	49.04
Nasik	4.65	12.42	9.30	8.78
Koradi	12.80	17.72	13.07	23.30
Paras	0.40	0.34	0.41	0.42
Parali	7.89	7.86	14.10	9.02
Uran	15.49	13.96	13.89	23.16
Khaperkheda	11.14	16.85	13.01	8.55
Sub-total (Thermal)	**78.57**	**102.04**	**105.82**	**127.40**
Sub-total (Hydel)	**7.93**	6.69	**7.42**	10.06
GRAND TOTAL (Thermal+Hydel)	**86.50**	**108.74**	**113.24**	**137.45**

As regards the means of finance for funding capex scheme for FY 2008-09, the Commission has accepted MSPGCL's proposal of funding through 100% debt. Based on the prevalent market conditions, the Commission has considered the interest rate at 11% and the MSPGCL has also obtained some of these loans at interest rate of 11%. However, the Commission clarifies that any revision on this account shall be considered based on actuals, subject to prudence check, for the purpose of truing up during subsequent annual performance review.

As regards funding for new capex proposed during FY 2009-10, MSPGCL proposed funding through 100% debt and submitted that the debt for funding capex during FY 2009-10 is yet to be tied up. As the funding for the new schemes is yet to be tied up, the Commission has considered the means of finance for funding new capex scheme at

Debt:Equity ratio of 80:20 in accordance with MYT Order. Accordingly, the Commission has considered interest rate of 10.5% p.a. as considered under MYT order. However, the Commission clarifies that any revision on this account shall be considered based on actuals, subject to prudence check, for the purpose of truing up during subsequent annual performance review.

Based on the above, the approved interest expense for FY 2008-09 and FY 2009-10 is summarised in the following Table:

Table: Summary of Interest Expenses (Rs Cr)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by MSPGCL	Approved after provisional truing up	MYT Order	Revised Estimate by MSPGCL	Approved
Op. balance of loan	952.70	979.37	835.40	1139.80	1060.89	760.30
Loan Addition	137.76	281.22	124.60	157.31	964.94	103.68
Loan Repayment	(182.49)	(199.70)	(199.70)	(141.53)	(171.59)	(171.59)
Cl. Balance of loan	907.96	1060.89	760.30	1155.59	1854.24	692.39
Gross Interest Expense	**86.50**	**108.74**	**83.06**	**113.24**	**137.45**	**77.51**

The station-wise approved interest expenditure for FY 2008-09 and FY 2009-10 have been summarised in the following Table:

Table: Summary of Station-Wise Interest Expenses (Rs Cr)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by MSPGCL	Approved after provisional truing up	MYT Order	Revised Estimate by MSPGCL	Approved
Bhusawal	2.16	4.21	3.33	7.14	5.12	2.95
Chandrapur	24.05	28.68	22.05	34.91	49.04	21.59
Nasik	4.65	12.42	5.86	9.30	8.78	7.15
Koradi	12.80	17.72	16.02	13.07	23.30	13.97
Paras	0.40	0.34	0.24	0.41	0.42	0.20
Parli	7.89	7.86	6.57	14.10	9.02	6.31

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by MSPGCL	Approved after provisional truing up	MYT Order	Revised Estimate by MSPGCL	Approved
Uran	15.49	13.96	12.31	13.89	23.16	11.39
Khaparkheda	11.14	16.85	10.15	13.01	8.55	7.08
Sub-total (Thermal)	**78.57**	**102.04**	**76.52**	**105.82**	**127.40**	**70.63**
Sub-total (Hydel)	7.93	6.69	6.54	7.42	10.06	6.88
GRAND TOTAL (Thermal+Hydel)	**86.50**	**108.74**	**83.06**	**113.24**	**137.45**	**77.51**

Other Financing Charges for FY 2008-09 and FY 2009-10

MSPGCL, in its Petition, projected other financing charges of Rs 19.69 Crore as against the approved expenses of Rs 35.95 Crore for FY 2008-09. The Commission has estimated the other financing charges for FY 2008-09 based on the actual other financing charges for FY 2007-08..

Similarly, in its Petition, MSPGCL has projected other financing charges of Rs 21.66 Crore as against the approved expenses of Rs 14.00 Crore for FY 2009-10. MSPGCL submitted that it has assumed an escalation of 10% over the previous year's expenses for projecting the other finance charges for FY 2009-10. The Commission has approved the other financing charges of Rs 17.90 Crore for FY 2009-10 based on the actual other financing charges for FY 2007-08.

5.10 RETURN ON EQUITY (ROE)

The Commission, in its APR Order, had permitted return on equity to the extent of Rs 374.15 Crore for FY 2008-09 and in its MYT Order had permitted return on equity of Rs 377.42 Crore for FY 2009-10, at the rate of 14% in accordance with Regulation 34.1 of the MERC Tariff Regulations.

MSPGCL, in its Petition, submitted that it envisaged funding its capital expenditure schemes using 100% debt for FY 2008-09 and FY 2009-10 and has accordingly not projected any equity addition in respect of its capital expenditure plan. For the purpose of computing the return on equity for FY 2008-09, MSPGCL has increased the equity base corresponding to the amount of deferred tax liability of Rs 165.77 Crore based on the Audited Financial Statements of MSPGCL for FY 2007-08. Accordingly, MSPGCL considered a return of Rs 382.08 Crore for both FY 2008-09 and FY 2009-10 at 14% on the Opening Balance of Equity at the commencement of FY 2008-09 and FY 2009-10, respectively.

The revised estimate of Regulated Equity and RoE for FY 2008-09 and FY 2009-10 as projected by MSPGCL is presented in the following Table.

Table: Summary of Return on Equity (Rs Crore)

Particulars	FY 2008-09		FY 2009-10	
	APR Order	Revised Estimate by MSPGCL	MYT Order	Revised Estimate by MSPGCL
Regulatory Equity at the beginning of the year	2672.53	2729.18	2695.88	2729.18
Equity portion of assets capitalised	33.03	0.00	38.72	0.00
Regulatory Equity at the end of the year	2705.56	2729.18	2734.61	2729.18
Return on Regulatory Equity	**374.15**	**382.08**	**377.42**	**382.08**

As regards the request for considering the deferred tax liability for computing return on equity, the Commission has not considered the deferred tax liability in accordance with the ruling on this matter given in Section 3 of this Order.

The Commission notes that MSPGCL is yet to tie up any debt for proposed capital expenditure for FY 2009-10, hence, the Commission has considered debt:equity of 80:20 in accordance with earlier assumptions under MYT Order for FY 20091-0 and computed return on equity accordingly. The station-wise opening level of Regulated Equity for FY 2008-09 and FY 2009-10 have been summarised in the following Table:

(Rs Cr)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by MSPGCL	Approved after provisional truing up	MYT Order	Revised Estimate by MSPGCL	Approved
Bhusawal	103.88	104.42	98.08	104.14	104.42	98.08

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by MSPGCL	Approved after provisional truing up	MYT Order	Revised Estimate by MSPGCL	Approved
Chandrapur	807.84	818.14	768.45	822.13	818.14	768.45
Nasik	200.73	210.87	198.06	206.40	210.87	198.06
Koradi	173.77	177.42	166.64	174.37	177.42	166.64
Paras	9.46	9.12	8.57	9.48	9.12	8.57
Parali	152.54	148.02	139.03	155.08	148.02	139.03
Uran	320.63	302.12	283.77	315.39	302.12	283.77
Khaparkheda	903.69	959.06	900.81	908.90	959.06	900.81
Sub-total (Thermal)	**2672.53**	**2729.18**	**2563.41**	**2695.88**	**2729.18**	**2563.41**
Sub-total (Hydel)	**0.00**	0.00	0.00	0.00	0.00	0.00
GRAND TOTAL (Thermal+Hydel)	**2672.53**	**2729.18**	**2563.41**	**2695.88**	**2729.18**	**2563.41**

Station-wise Return on Regulated Equity for FY 2008-09 and FY 2009-10 has been summarised in the following Table:

Table: Summary of Return on Equity (Rs Cr)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by MSPGCL	Approved after provisional truing up	MYT Order	Revised Estimate by MSPGCL	Approved
Bhusawal	14.54	14.62	13.73	14.58	14.62	13.73
Chandrapur	113.10	114.54	107.583	115.10	114.54	107.583
Nasik	28.10	29.52	27.728	28.90	29.52	27.728
Koradi	24.33	24.84	23.330	24.41	24.84	23.330
Paras	1.32	1.28	1.20	1.33	1.28	1.20
Parali	21.36	20.72	19.46	21.71	20.72	19.46
Uran	44.89	42.30	39.73	44.15	42.30	39.73
Khaparkheda	126.52	134.27	126.11	127.25	134.27	126.11
Sub-total (Thermal)	**374.15**	**382.08**	**358.88**	**377.42**	**382.08**	**358.88**
Sub-total (Hydel)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
GRAND TOTAL (Thermal+Hydel)	**374.15**	**382.08**	**358.88**	**377.42**	**382.08**	**358.88**

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

(Rs Cr)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by MSPGCL	Approved after provisional truing up	MYT Order	Revised Estimate by MSPGCL	Approved
Regulatory Equity at the beginning of the year	2672.53	2729.18	2563.41	2695.88	2729.18	2563.41
Equity portion of assets capitalised	33.03	0.00	0.00	38.72	0.00	34.91
Regulatory Equity at the end of the year	2705.56	2729.18	358.88	2734.61	2729.18	358.88
Return on Regulatory Equity	**374.15**	**382.08**	**358.88**	**377.42**	**382.08**	**358.88**

5.11 SUPERVISION CHARGES TOWARDS HYDEL ASSETS

MSPGCL, in its Petition, submitted that it has been operating the hydro power stations owned by the Government of Maharashtra and the expenses incidental to such operations and maintenance are allowed by the Commission to be recovered from the tariff chargeable to MSEDCL. Further, though MSPGCL has been putting its efforts and expertise to optimize the performance of scarce hydro resources, MSPGCL is not earning any commensurate returns/incentives over and above the actual cost incurred for such operations. MSPGCL, in its Petition, therefore, proposed a recovery of supervision charges to the extent of 15% of the Operations and Maintenance expenses incurred during the year for such hydro power plants and requested the Commission to include such charges to be recovered from tariff charged to MSEDCL. The computation of such charges as submitted by MSPGCL is provided in the following table.

(Rs Cr)

Particulars	FY 2008-09	FY 2009-10
O&M Expense (A)	72.14	76.68
Supervision Charges (15% of A)	**10.82**	**11.50**

As regards the claim of supervision charges computed as 15% of O&M expenses for FY

2008-09, the Commission is not inclined to grant the same as there is currently no provision in the MERC Tariff Regulations under which such expenses may be allowed. Further, the Commission is of the view for such hydel projects, which have been taken over by MSPGCL to operate from GoM on lease basis, the Commission has approved leased rent for such stations, which also includes the return on equity and the Commission approves all the relevant expenses incurred by MSPGCL towards the operation and maintenance of the hydel generating stations. In case the supervision charges are allowed to MSPGCL in addition to lease rent, which includes return as a component, it will tantamount to allowing return in excess of the rate prescribed in the MERC Tariff Regulations.

5.12 INTEREST ON WORKING CAPITAL FOR FY 2008-09

MSPGCL, in its Petition, submitted that the Working Capital has been computed in accordance with MERC Tariff Regulations, which stipulate the components of working capital of a generating station. MSPGCL further submitted that for FY 2008-09, the normative interest rate of 13.75% has been considered for estimating interest on working capital based on the revised Prime Lending Rate (PLR) of the State Bank of India, with effect from August 16, 2008. This rate of interest on working capital has been considered by MSPGCL against the PLR of 12.75% considered by MSPGCL in APR filing of 2007-08.

As regards the interest rate to be considered for computing the interest on working capital for FY 2008-09, the Commission does not agree with MSPGCL as the MERC Tariff Regulations stipulate that rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on the date on which the application for determination of tariff is made. As the short-term Prime Lending Rate of State Bank of India of 12.75% prevalent at that time application for determination of tariff for FY 2008-09, the Commission hereby clarifies that for estimating the interest on working capital during the truing up, interest rate of 12.75% would be considered.

As discussed earlier, the Commission has not carried out the provisional truing up for FY 2008-09 at this stage and accordingly; the Commission has not estimated the change in interest on working capital for FY 2008-09.

5.13 INTEREST ON WORKING CAPITAL FOR FY 2009-10

MSPGCL, in its Petition, submitted that the Working Capital has been calculated in accordance with the MERC Tariff Regulations, which stipulate the components of working capital of a generating station. MSPGCL further submitted that the normative interest rate of 13% has been considered for estimating interest on working capital.

The Commission has estimated the Station-wise working capital requirement for the thermal and gas based generating stations of MSPGCL and aggregate working capital requirement for hydel stations of MSPGCL in accordance with the provisions of MERC Tariff Regulations. For Uran gas project, the Commission has estimated the Working Capital requirement at estimated PLF rather than normative availability as projected PLF for Uran gas is lower than the normative availability of 80%.

As the prevailing short-term Prime Lending Rate of State Bank of India at the time of filing APR Petition was around 13%, the Commission has considered the interest rate of 13 % for estimating the interest on working capital.

The interest on working capital for each generating station and aggregate for hydel stations for FY 2009-10 is given in the following Table:

Table: Interest on Working Capital for FY 2009-10 (Rs Crore)

Station	MYT Order	APR	
		MSPGCL	Approved
Khaparkheda	26.67	45.91	42.96
Paras	1.96	3.20	2.53
Bhusawal	16.99	28.90	25.36
Nasik	31.99	53.43	50.18
Parli	26.06	33.68	34.72
Koradi	27.30	44.87	39.89
Chandrapur	66.92	96.57	81.10
Uran	15.30	32.85	30.96
Hydel	3.58	8.30	7.45
Total	**216.78**	**347.70**	**315.55**

5.14 NON TARIFF INCOME FOR FY 2008-09

MSPGCL submitted the revised estimate of Non Tariff Income for FY 2008-09 as Rs 41.02 Crore against Rs 112.93 Crore as approved in APR Order.

The Commission at this stage has not undertaken the provisional truing up and will undertake the truing up of Non Tariff Income based on audited accounts during Performance Review for the third year of Control Period, i.e., FY 2009-10.

5.15 NON TARIFF INCOME FOR FY 2009-10

For FY 2009-10, MSPGCL submitted the revised estimate of Rs 41.80 Crore against Rs 37.08 crore as approved in the MYT Order.

The Commission has considered the Non-tariff Income at the same level as approved in the MYT Order for each generating station and aggregate for hydel stations for FY 2009-10.

5.16 INCOME TAX FOR FY 2008-09 AND FY 2009-10

MSPGCL submitted that as per the MERC Tariff Regulations, income tax actually paid by MSPGCL is a component of fixed costs. MSPGCL has projected income tax in FY 2008-09 and FY 2009-10 on the basis of income-tax rate applicable on eligible return on equity and has also included the supervision charges for the purpose of tax calculation.

On seeking justification for considering supervision charges for computing income tax liability, MSPGCL submitted that Supervision Charges on hydel assets are comparable to RoE as the same has been proposed as part of ARR and would be over and above the operating expenditure of hydel plants. As there is no matching cost towards it, MSPGCL stated that it would be taxable under Income Tax Act and hence, an income tax liability on the same has been considered.

Accordingly, MSPGCL has projected income tax of Rs 44.52 Crore as against Rs 42.39 Core approved in the APR Order for FY 2008-09 and Income Tax of Rs 44.59 Crore against Rs 40.26 crore approved in the MYT Order for FY 2009-10.

As discussed in the earlier Section, the Commission has not undertaken the provisional truing up for FY 2008-09. The Commission has estimated the income tax for FY 2009-10 considering the approved return on equity for each station in this Order and estimated the income tax on account of change in MAT rate from 11.33% to 17% (15% + 10% surcharge + 3% cess).

Table: Income Tax for FY 2008-09 & FY 2009-10 (Rs Crore)

Particulars	**FY 2008-09**			**FY 2009-10**		
	APR Order	**Revised Estimate**	**Approved After Provisional Truing up**	**MYT Order**	**Revised Estimate**	**Approved**
Return on Equity	374.15	382.08	358.88	**358.88**	**382.08**	358.88
Supervision Charges on Hydel Plants	-	10.82	-		11.50	-
MAT Rate	11.33%	11.33%	11.33%	11.22%	11.33%	17%
Income Tax	**42.39**	**44.52**	**40.66**	**40.26**	**44.59**	**61.01**

5.17 FIXED COST OF GENERATION

The summary of Annual Fixed Charges for existing Stations of MSPGCL as approved by the Commission for FY 2008-09 is given in the following Table:

Table: Station-wise Annual Fixed Charges for FY 2008-09 (Rs Crore)

Particulars	Bhusawal	Chandrapur	Nasik	Koradi	Paras	Parli	Uran	Kapekheda	Hydel	Total
Operation & Maintenance Expenses	59.72	273.53	113.71	134.96	7.24	86.22	79.80	104.96	47.75	907.89
Hydel Lease Rent									85.00	85.00
Depreciation, including advance against depreciation	13.39	116.88	20.67	29.23	1.33	12.13	56.91	82.42	6.64	339.60
Interest on Long-term Loan Capital	4.52	27.90	8.06	18.63	0.37	8.25	14.44	12.25	6.54	100.96
Interest on Working Capital	21.52	76.86	44.12	32.84	2.08	31.80	15.54	33.82	3.88	262.46
Income Tax	1.56	12.19	3.14	2.64	0.14	2.21	4.50	14.29	0.00	40.66
Total Revenue Expenditure	100.70	507.36	189.69	218.30	11.16	140.61	171.19	247.74	149.81	1736.56
Return on Equity Capital	13.73	107.58	27.73	23.33	1.20	19.46	39.73	126.11	0.00	358.88
Aggregate Revenue Requirement	114.43	614.94	217.42	241.63	12.35	160.07	210.92	373.86	149.81	2095.44
Non Tariff Income	5.76	33.69	15.44	15.44	0.37	19.65	0.34	22.24	0.00	112.93
Net Aggregate Revenue Requirement	108.67	581.25	201.98	226.19	11.98	140.42	210.58	351.62	149.81	1982.51
Approved AFC in APR Order	108.10	588.17	199.63	228.13	12.19	172.65	223.60	357.93	148.70	2039.10
provisional truing up	0.57	(6.92)	2.35	(1.94)	(0.21)	(32.23)	(13.02)	(6.31)	1.11	(56.59)

*Note: Interest on long-term loan includes other financing charges also

Based on provisional truing up of certain elements for FY 2008-09 as discussed in above paragraphs, the Annual Fixed Charge for FY 2008-09 works out to Rs 1982.51 Crore as against the amount of Rs 2039.10 Crore approved in the APR Order. As discussed earlier in this Section, the Commission has not undertaken provisional truing up of fuel costs and revenue for FY 2008-09 in this Order as the increase in fuel costs is allowed to be recovered under FAC mechanism. Thus, the net impact of provisional truing up for FY 2008-09 works out to decrease in AFC for FY 2008-09 by Rs 56.59 Crore. The Commission has considered this reduction of Rs 56.59 Crore in Annual Fixed Charge for FY 2009-10. The Commission has also considered the impact of truing up of certain elements of ARR as described in Section 3, to the extent of Rs 46.66 Crore for FY 2007-08 for determining the AFC for FY 2009-10.

The summary of Annual Fixed Charges for existing Stations of MSPGCL as approved by the Commission for FY 2009-10 is given in the following Table:

Table: Station-wise Annual Fixed Charges for FY 2009-10 (Rs Crore)

Particulars	Bhusawal	Chandrapur	Nasik	Koradi	Paras	Parli	Uran	Kapekheda	Hydel	Total
Operation & Maintenance Expenses	66.26	298.50	125.89	148.48	8.56	95.31	87.56	114.82	52.83	998.21
Depreciation, including advance against depreciation	13.75	118.38	21.01	30.99	1.37	23.48	56.42	82.51	7.01	354.92
Interest on Long-term Loan Capital	4.14	27.44	9.35	16.57	0.34	7.99	13.52	9.18	6.88	95.40
Interest on Working Capital	25.36	81.23	50.18	39.92	2.53	34.74	31.01	43.12	7.45	315.55
Income Tax	2.33	18.29	4.71	3.97	0.20	3.31	6.75	21.44	0.00	61.01
Hydro Lease Rent									230.80	230.80
Total Revenue Expenditure	111.85	543.84	211.16	239.93	13.00	164.83	195.26	271.06	304.96	2055.89
Return on Equity Capital	13.73	107.58	27.73	23.33	1.20	19.46	39.73	126.11	0.00	358.88
Aggregate Revenue Requirement	125.58	651.43	238.89	263.26	14.20	184.29	234.99	397.17	304.96	2414.77
Non Tariff Income	5.76	33.69	15.44	15.44	0.37	19.65	0.34	22.24	0.00	112.93
Net Aggregate Revenue Requirement	**119.82**	**617.74**	**223.45**	**247.82**	**13.83**	**164.64**	**234.65**	**374.93**	**304.96**	**2301.84**
Provisional Truing up for FY 2008-09	0.57	(6.92)	2.35	(1.94)	(0.21)	(32.23)	(13.02)	(6.31)	1.11	(56.59)
Truing up for FY 2007-08	15.35	(6.89)	29.39	35.26	(0.09)	(17.34)	(10.30)	2.74	(1.47)	46.66
Net AFC	**135.75**	**603.93**	**255.19**	**281.14**	**13.54**	**115.07**	**211.33**	**371.36**	**304.61**	**2,291.91**

6 TARIFF OF MSPGCL'S GENERATING STATIONS

Regulation 20.1 of the MERC Tariff Regulations stipulates that the tariff will be determined on an annual basis, as reproduced below:

> *"The Commission shall determine the tariff of a Generating Company or Licensee covered under a multi-year tariff framework for each financial year during the control period, at the commencement of such financial year, having regard to the following:*
>
> > *(a) The approved forecast of aggregate revenue requirement and expected revenue from tariff and charges for such financial year, including approved modifications to such forecast; and*
> >
> > *(b) Approved gains and losses to be passed through in tariffs, following the annual performance review."*

The Commission, in its MYT Order, has approved the Annual Fixed Charge and parameters of variable cost for each thermal generating station and hydel generating station for the Control Period. The Commission further stipulated in the MYT Order that it will determine the Tariff of MSPGCL's generating stations for each financial year during the Control Period in accordance with Regulation 20.1 above and considering the fuel prices prevalent during the current year. In accordance with the principles of the MERC Tariff Regulations, the Commission has determined the tariff, i.e., Annual Fixed Charge as well as variable charge for MSPGCL generating stations for FY 2009-10 in this Order.

6.1 TARIFF FOR THERMAL POWER GENERATING STATIONS

Regulation 28 of the MERC Tariff Regulations specifies that *"Tariff for sale of electricity from a thermal power generating station shall comprise of two parts, namely, the recovery of annual fixed charges and energy charges"*.

i) Approved Annual Fixed Charges

As regards the recovery of Annual Fixed Charges, Regulation 33.1.1 of the MERC Tariff Regulations stipulates that the target availability for full recovery of annual fixed charges shall be 80 percent. As elaborated in Section 4, for FY 2009-10, the Commission has projected the availability of 80% or higher for thermal stations. The Commission hence, approves the full recovery of fixed charges during FY 2009-10 for all thermal stations. However, in the event of actual availability for the year, computed in accordance with the MERC Tariff Regulations (after accounting for the unavailability of fuel), being less than 80%, the fixed charges shall be proportionately reduced in accordance with the MERC Tariff Regulations, while truing up the revenue requirement in the next year. However, for Uran Gas based station, considering the short supply of gas, the Commission approves the recovery of full fixed charges based on the approved availability for FY 2009-10.

The approved Station-wise Fixed Charges for Thermal Stations for FY 2009-10 is given in the following Table:

Table: Approved Fixed Charge of MSPGCL Thermal Stations for FY 2009-10 (Rs. Crore)

Station	AFC	Monthly Fixed Charge
Khaparkheda	371.36	30.95
Paras	13.54	1.13
Bhusawal	135.75	11.31
Nasik	255.19	21.27
Parli	115.07	9.59
Koradi	281.14	23.43
Chandrapur	603.93	50.33
Uran	211.33	17.61

ii) Energy Charge

The rate of energy charge (ex-bus) for FY 2009-10 has been approved for each station, based on approved operational parameters and assumed fuel price for FY 2009-10. Any variations in the fuel price shall be dealt with under the FAC mechanism. The following Table details the station-wise energy charge to be charged by MSPGCL for sale of power from its thermal generating stations:

Table: Approved Energy Charge for MSPGCL Thermal Stations

S.No	Station	Approved Energy Charge (Rs/kWh)
1	Khaparkheda	1.75
2	Paras	1.86

S.No	Station	Approved Energy Charge (Rs/kWh)
3	Bhusawal	2.28
4	Nasik	2.40
5	Parli	2.13
6	Koradi	1.51
7	Chandrapur	1.23
8	Uran	1.22

The approved energy charges during FY 2009-10 have increased primarily because of increase in usage of imported coal, usage of washed coal and increase in fuel prices.

iii) Incentive

In accordance with Regulation 37 of MERC Tariff Regulations, MSPGCL shall be eligible for an incentive of 25.0 paise/kWh for ex-bus scheduled energy corresponding to generation in excess of ex-bus energy corresponding to a target Plant Load Factor of 80 percent.

As regards the incentive, the Commission, in its APR Order in Case No. 71 of 2007 stipulated:

> *"MSPGCL appealed on this issue with the ATE and the ATE in its judgment in Appeal No. 86 & 87 of 2007 upheld the MSPGCL's appeal for monthly billing of incentives and held that any under or over recovery on account of such claims may be adjusted on monthly basis.*
>
> *The Commission approves the monthly billing of incentives and directs MSPGCL to determine the incentives at the end of each month on the basis of actual performance and raise the bill for incentive amount to MSEDCL on monthly basis considering the cumulative generation till that particular month. Any under or over recovery on account of incentive computations at the end of every month may be adjusted on monthly basis. However, the Commission rejects MSPGCL's request for providing incentive for Uran gas thermal station on the basis of reduced availability and PLF, due to shortage of gas. The Commission is of the view that though full fixed cost recovery has been permitted to Uran gas station, despite non achievement of normative availability of 80%, it would not be fair to*

the consumers to provide incentive to MSPGCL at such low levels of generation."

Accordingly, the Commission approves monthly billing of incentives and directs MSPGCL to determine the incentives at the end of each month on the basis of actual performance and raise the bill for incentive amount to MSEDCL on monthly basis considering the cumulative generation till that particular month. Any under or over recovery on account of incentive computations at the end of every month may be adjusted on monthly basis and at the end of the year on annual basis.

6.2 TARIFF FOR HYDEL POWER GENERATING STATIONS

i) Energy Charges for Generation during Peak and Non Peak Period

The Electricity Act, 2003 requires the Commission to encourage economical use of the resources while determining the terms and conditions of tariff. Accordingly, the MERC Tariff Regulations propose an energy rate for hydro stations, which is equal to the variable cost of the least-cost, available alternative source of power if such hydropower generating station was not to be dispatched in accordance with the final dispatch schedule of the State Load Despatch Centre.

The MERC Tariff Regulations in this regard specify that,

> *"Tariff for sale of electricity from a hydro power generating station shall comprise of two-parts, namely, recovery of annual capacity charge and energy charges.*
>
> *Provided that the annual capacity charges for a hydro power generating station shall be computed in accordance with the following formula:*
>
> *Annual Capacity Charges = (Annual Fixed Charge- Energy Charge)*
>
> ***Provided further that the Energy Charge shall not exceed the Annual Fixed Charge under these Regulations"*** **(emphasis added)**

The Commission in its Order dated September 7, 2006 on ARR and Tariff Petition of MSPGCL for FY 2006-07 approved a differential hydro peaking tariff to optimise the hydel generation during peak hours as follows:

Differential Energy Charges for peak and non-peak hours	Rs/kWh
Peak Hours (0900 to 1200 hrs & 1800 to 2200 hrs)	2.00
Non Peak Hours (Other than peak hours)	1.65

MSPGCL in its Petition submitted that the generation during peak hours in the past one year was merely 45% of the total generation.

MSPGCL further quoted the following paragraph of the APR Order in Case No. 71 of 2007:

> *"The Commission is of the view that as this matter involves concerns of more than one party, the modification to peak and non-peak differential tariff shall only be carried out after giving the opportunity to other parties, i.e., MSEDCL and SLDC. The Commission will take up this issue of modifying the hydel tariff mechanism during peak and non peak tariff alongwith truing up for FY 2005-06 and FY 2006-07. Further, the Commission at this stage has not penalised MSPGCL for reduction in generation during peak hours as against the target approved in the Order. The Commission will address the issue of variations in the recovery of charges on account of differential peaking tariff from the Commission's approved values in the revised mechanism."*

The Commission obtained the break up of hydel generation during peak and non-peak hours from Koyna Hydel Station for the period April 2007 to November 2008 and compared the same with generation during the peak and non-peak hours for the similar period of FY 2006-07. The month-wise comparison of hydel generation during peak and off peak hours is given in the following Table:

Table: Hydel Generation during peak and non-peak hours

Month	Total Gen (MU)	Peak Hour Gen (MU)	Peak Hr. Gen (%)	Non Peak Hour Gen (MU)	Non Peak Hr. Gen.(%)
Apr-07	334.06	110.49	33.08%	223.56	66.92%
May-07	313.44	115.53	36.86%	197.91	63.14%
Jun-07	152.15	73.77	48.49%	78.38	51.51%
Jul-07	475.63	204.22	42.94%	271.41	57.06%
Aug-07	455.14	199.73	43.88%	255.41	56.12%
Sep-07	280.13	152.40	54.40%	127.73	45.60%

Month	Total Gen (MU)	Peak Hour Gen (MU)	Peak Hr. Gen (%)	Non Peak Hour Gen (MU)	Non Peak Hr. Gen.(%)
Oct-07	372.25	173.82	46.69%	198.43	53.31%
Nov-07	186.10	105.62	56.76%	80.47	43.24%
Dec-07	246.00	121.49	49.39%	124.51	50.61%
Jan-08	360.78	173.74	48.16%	187.04	51.84%
Feb-08	194.94	99.42	51.00%	95.52	49.00%
Mar-08	217.25	91.42	42.08%	125.82	57.92%
Total	**3587.85**	**1621.67**	**45.20%**	**1966.18**	**54.80%**

As observed from the above Table, the generation during peak hours during April 2007 to March 2008 is 45% of the total hydel generation.

The Commission is of the view that it may be more appropriate to take a holistic review of the hydel tariff mechanism for the next Control Period, rather than modifying it in the last year of the first Control Period. Therefore, for FY 2009-10, the Commission approves the hydel tariff during peak and non-peak hours as approved in earlier Orders as follows:

Differential Energy Charges for peak and non-peak hours	Rs/kWh
Peak Hours (0900 to 1200 hrs & 1800 to 2200 hrs)	2.00
Non Peak Hours (Other than peak hours)	1.65

Table: Hydro Generation during peak and non-peak hours for FY 2009-10 (MU)

Source	Total Generation	Generation during peak hours	Generation during non-peak hours
Koyna	3224	2874	350
Other Hydro	710		710
Total	**3934**	**2874**	**1060**

iii) Treatment of excess amount recovered on account of hydro peaking tariff

Based on the above assumption of generation in the peak and non-peak hours and the corresponding energy tariffs during those hours, the total revenue recovery is estimated to exceed the annual fixed charge of hydro generating stations by Rs. 445.09 Crore.

MSPGCL, in its Petition, submitted that the return of fixed monthly excess recovery should be discontinued as the actual peak and off-peak generation is not in accordance with the peak generation considered by the Commission, i.e., 89% of the total generation. MSPGCL further submitted that the return on the excess recovery should be based on the actual energy generated during the peak and off-peak period and not the normative generation considered by the Commission. MSPGCL further submitted that the return of excess recovery should be provided only after deducting its fixed monthly charges as determined by the Commission and the same should also include the supervision charges.

Since the Commission has decided to take a holistic review of the hydel tariff mechanism for the next Control Period, MSPGCL's suggestions for modification to the hydel tariff mechanism are not being considered at this stage, and the existing mechanism is being continued. Hence, the Commission allows 5% of excess recovery of revenue from hydel stations on account of higher generation during peak hours to be shared between Generating Company and Distribution Licensees in the proportion of 50:50.

Considering the target generation during peak and off peak hours specified in the Order, the Commission directs 95% of adjustment of excess recovery of Rs. 445.09 Crore from hydro generating stations in the bills for sale of power to be raised by MSPGCL to MSEDCL. The reduction towards excess recovery should be provided every month on pro-rata basis.

iv) Incentive

MSPGCL shall be eligible for an incentive payable in accordance with Regulations 37.2 of MERC Tariff Regulations. MSPGCL shall compute the incentive on the basis of the actual performance and bill the same as an additional charge on monthly basis. There shall be pro rata recovery of annual fixed charges in case the generating station achieves capacity index below the prescribed normative levels. Any under or over recovery on account of such claims should be adjusted on monthly basis.

v) Tariff for Pumped Storage

MSPGCL submitted that it has already filed a separate petition for approval of norms for pumped storage plants namely Paithan, Ujjani, and Ghatghar power stations. MSPGCL further requested the Commission to consider the impact of revised lease rentals as applicable for such stations while issuing the Order for such stations separately. The Commission, in its Order in Case No. 94 of 2007 stipulated as under:

> *"The Commission clarifies that the lease rent for Ujjani and Paithan Pumped Storage has been approved vide Order dated October 27, 2008 in Case No. 17 of 2007 in the matter of MSPGCL's Petition for Approval of Lease Rent of Hydel Stations owned by GoM leased to MSPGCL. Accordingly, the lease rent as approved by the Commission in the above-said Order should be considered by MSPGCL for these stations."*

Accordingly, the Commission has considered the lease rent as approved in Case No. 17 of 2007 for the above stations.

6.3 APPLICABILITY OF ORDER AND TARIFF

This Order for the third year of the first Control Period, i.e., for FY 2009-10, shall come into force with effect from August 1, 2009, and the Tariff approved in the Order shall be applicable from August 1, 2009.

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

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

(P.B. Patil)
Secretary, MERC

APPENDIX 1

List of Persons who attended the Technical Validation Session held on January 12, 2009

S.No	Name
MSPGCL Officials	
1	Shri Ajoy Mehta
2	Shri C.S Thoture
3	Shri G.J. Girase
4	Shri L.N. Ambekar
5	Shri S.A. Nikaye
6	Shri V.T. Bapat
7	Shri S.M. Madan
8	Shri N.J. Padalkar
9	ShriA.A. Kachare
10	Shri P.V.Jumnake
11	Shri S.N. Bhadange
12	Shri S.S. Sonpethkar
13	Shri J.K. Srinivasan
14	Shri S.C. Dwivedi
15	Shri N.P. Gatne
16	Shri S.J. Jhadav
17	Shri S.P.Patil
18	Shri V.T. Phirke
19	Shri R.D. Adhyam
20	Shri JayaPrakash K.S.
21	Shri P.V. Salunkhe
22	Shri A.D. Pimple
23	Shri R.R. Kulkarni
24	Shri M.V. Deskmukh
25	Shri N.S. Paule
26	Shri Girish C. Magare
27	Shri Dhiraj M. Vispute
28	Shri M.R. Deshmukh
29	Shri P.K. Atram
Consultants to MSPGCL	
30	Shri Ramandeep Singh
Consultants to Commission	
31	Shri Suresh Gehani
32	Shri M. Palaniappan
33	Shri Santosh Kumar Singh

34	Shri M.N. Bapat
35	Shri Saurabh Gupta
36	Shri Anand Kulkarni

APPENDIX 2

List of Objectors

S.No	Name of Person /Official	Designation	Institution
Consumer Representative Organisations			
1	Dr. Ashok Pendse		Mumbai Grahak Panchayat
Objectors			

1	Shri Balachandran	General Manager (Power & Energy)	Ispat Industries Ltd.
2	Shri Shrikant G. Dudhane and B.T. Tendulkar	Chairman & Vice-Chairman	Kolhapur Engineering Association,
3	Shri N. Ponrathnam		Vel Induction Hardenings
4	Shri Bhasker U. Mete	Working President	Graduate Engineers' Association

List of Objectors who attended the Public Hearing on May 4, 2009

S.No.	Name of Person /Official	Institution
1	Dr. Ashok Pendse	Mumbai Grahak Panchayat
2	Shri Balachandran	General Manager (Power & Energy)
3	Shri Bhasker U. Mete	Graduate Engineers' Association