Before the

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

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Case No. 73 of 2006

In the matter of
Approval of Reliance Energy Limited (REL)'s Transmission Business
Annual Revenue Requirements
for
Control Period FY 2007-08 to FY 2009-10

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

Dated April 2, 2007

ORDER

The Maharashtra Electricity Regulatory Commission (hereinafter referred to as Commission),in exercise of the powers vested in it under Section 61 and Section 62 of the Electricity Act, 2003 (hereinafter referred to as EA 2003) and all other powers enabling it in this behalf, and upon detailed scrutiny of various responses, objections, suggestions, comments made by consumers, Reliance Energy Ltd (REL) and other key stakeholders as part of their written submissions as well as during the public hearing, hereby issues this Order on the determination of the Annual Revenue Requirement (hereinafter referred to as ARR) for REL Transmission Business.

Organisation of the Order

This Order is broadly divided into five Sections.

The **first Chapter** consists of a background and brief history of the ARR and Tariff determination process for the control period and the subsequent quasi-judicial process that it underwent. For the sake of convenience, a list of abbreviations with their expanded forms is also given.

The **second Chapter** of the Order lists the Salient Features of the Order.

The **third Chapter** of the Order details the various objections raised by the objectors in writing as well as during the Public Hearing before the Commission. The objections have been broadly categorized into Transmission Loss, Capital Expenditure and Capitalization and Income from other business, issues. The various objections have been summarized, followed by the response of REL-T and the ruling of the Commission on each of the issues.

The **fourth Chapter** of the Order comprises the Commission's analysis and its decisions on REL-T's MYT ARR for control period FY 2007-08 to FY 2009-10 for its Transmission Business. This Section comprises the various cost estimates for control period FY 2007-08 to FY 2009-10 of REL-Transmission, and the Commission's reasoning for arriving at acceptable figures with reference to the figures given by REL-T.

The **fifth Chapter** of the Order specify the applicability of the Order.

Abbreviations

A&G	Administrative and General
ARR	Annual Revenue Requirement
BSES	BSES Limited now known as Reliance Energy Limited
CAGR	Compounded Annual Growth Rate
CEA	Central Electricity Authority
Commission/ MERC	Maharashtra Electricity Regulatory Commission
CPI	Consumer Price Index
CPP	Captive Power Plant
Cr	Crore
Capex	Capital Expenditure
CWIP	Capital Work In Progress
DISCOMs	Distribution Companies
DPR	Detailed Project Report
EA 2003	Electricity Act, 2003
GFA	Gross Fixed Assets
IDC	Interest During Construction
kV	Kilo Volt
kVA	Kilo-Volt Amperes
IT	Income Tax
kW	Kilo Watt

MW	Mega Watt
MYT	Multi Year Tariff
NFA	Net Fixed Assets
O&M	Operation & Maintenance
PLR	Prime Lending Rate
R&M	Repair & Maintenance
REL	Reliance Energy Limited
SBI	State Bank of India
RoE	Return on Equity

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CHAPTER 1: BACKGROUND & BRIEF HISTORY

A. Background

This order relates to case 73 of 2006 filed by Reliance Energy Limited (REL) for ARR approval of the transmission function for the first control period from FY 2007 -08 to FY 2009 -10 and tariff determination for FY 2007 – 08.

REL (formerly known as Bombay Suburban Electricity Supply Company (BSES)) is a vertically integrated utility carrying out the functions of Generation, Transmission, Wheeling and Retail Supply of electricity in the suburbs of Mumbai. BSES was established in 1929 wherein the Government of Maharashtra (GoM) has provided them with a licence to supply electricity in the suburbs of Mumbai vide Bombay Suburban Electricity License, 1926 under section 3 of the erstwhile Indian Electricity Act, 1910. The license was renewed from time to time and currently the same license is in force till August 15, 2011.

REL has a generating plant at Dahanu, Maharashtra (Dahanu Thermal power Station – DTPS) of installed capacity of 2X250 MW for supply of power to the city of Mumbai. The power generated from DTPS is transmitted to Mumbai License area through a network of four 220 kV lines which is further stepped down to 33kV at three 220/33kV at Aarey, Ghodbunder and Versova.

B. Multi Year Tariff Frameworks

Regulation 12.1 under Part C of Maharashtra Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulation, 2005, notified on August 26, 2005, directs the licensees in the State of Maharashtra to implement Multi Year Tariff (MYT) effective from April 1, 2006.

Further, Regulation 14.1 under Part C of the above mentioned regulation states that

“The applicant shall submit a forecast of his aggregate revenue requirement and expected revenue from tariff and charges for the approval of the Commission for each financial year within a control period of five (5) financial years. Provided that for the first application made to the Commission under this Part, the control period shall be three (3) financial years i.e.April 1, 2006 to March 31, 2009.”

In line with the above, the Commission vide its letter November 14, 2005 had directed all the licensees in the State of Maharashtra to file the first MYT petition for the control period from FY 2007 – 08 to FY 2009 -10 by November 30, 2005. The Commission had also forwarded the "Draft MYT Data Formats" to all the licensees, vide its letter dated 21st November 2005, and advised the Utilities citing their un-preparedness to submit their first Multi Year Tariff Petition. In response to the Commission's letters, all the Utilities requested the Commission to extend the time for submission of the first MYT application.

The Commission, considering the requests made by the Utilities, vide its Order dated December 20, 2005 in the matter of Applicability of Multi Year Tariff Framework under Regulation 12 of Part C of the Maharashtra Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2005 granted exemption to all the Utilities in Maharashtra from implementation of MYT framework starting from FY 2006-07.

The Commission, in its Order, stated that the Commission would determine the tariff under a multi year tariff framework with effect from April 1, 2007 instead of April 1, 2006 as stipulated in MERC (Terms and Conditions of Tariff) Regulations, 2005 and accordingly, the first Control Period for MYT framework shall be the three financial years from April 1, 2007 to March 31, 2010

C. Admission of MYT Petition for the Period FY 2007-08 to FY 2009 – 10

As per the direction of the Commission, REL has filed the MYT Petition for transmission business for the first control period FY 2007 – 08 and FY 2009 – 10 under affidavit on January 16, 2007.

As per the MERC Tariff Regulations, the application for the determination of Tariff shall be made to Commission not less than 120 days before the date from when the tariff is intended to be made effective.

The Commission had directed REL to submit the MYT Petition for the first Control Period by November 30, 2006, so that the Commission could issue the Order before the commencement of the next financial year, such that the revised tariffs are applicable for the entire financial year.

REL submitted its ARR and Multi Year Tariff Petitions for the first Control period FY 2007-08, FY 2008-09 and FY 2009-10 for its Transmission Business on January 16, 2007, and requested the Commission to condone the delay in filing the MYT Petitions.

REL is a vertically integrated utility and for the first time has filed separate ARR petition for its three businesses i.e. Generation, Transmission and Distribution (wheeling and retail supply). REL has filed the MYT petition for transmission business based on the provisions in the MERC (Terms and Conditions of Tariff) Regulation, 2005 and MERC's Transmission Pricing Order dated June 27, 2006 (Case No. 58 of 2005).

The Commission held a Technical Validation session in presence of authorised Consumer Representatives on February 13, 2007 where various discrepancies in the data were identified by the Commission and the Consumer Representatives. The Commission directed REL-T to submit the additional data and clarifications. The list of the participants is attached in Annexure 1.

The Commission raised various queries during February 7, 2007 and February 13, 2007 through letters and emails to ensure the completeness of the petition. REL-T has responded to most of the queries through its letter dated February 9,2007, February 10, 2007 and February 12, 2007. After the submission of the information gaps as desired by the Commission, the Petition was accepted on February 21, 2007 vide letter No. MERC/ Case Nos. 73, 74 & 75of 2006/364.

D. Public Hearing Process

In accordance with Section 64 of the EA 2003, the Commission directed REL-T to publish its application in the prescribed abridged form and manner to ensure public participation. As directed, REL-T had published the public notice in the following newspapers:

a) Gujarat Samachar (Gujarathi) dated February 24, 2007

b) Mumbai Samachar (Gujarathi) dated February 24, 2007

c) Saamna (Marathi) dated February 24, 2007

d) Maharashtra Times (Marathi) dated February 25, 2007

e) Loksatta (Marathi) dated February 25, 2007

f) Times of India (English) dated February 25, 2007

g) Indian Express (English) dated February 25, 2007

The hard copies of REL-T's MYT petitions, executive summary and the responses to the queries raised by the Commission before acceptance of the petition were made available for inspection/purchase to members of the public at REL's offices and consumer centers and the soft copies of the same were also made available in the REL's (www.rel.co.in) and Commission's (www.mercindia.org.in) website in downloadable format.

The last date for filing written objections was March 19, 2007. The suggestions/objections, in English / Marathi, were filed in the form of affidavits.

The Public Hearing covering all three functions of REL was conducted at Dinanath Mangeskar Hall at Nehru Road, Ville Parle (E) Near Railway Station, Mumbai-400057 on March 21, 2007 at 11:00 hours.

In the public hearing there were around 9 objections out of which 2 objections belonged to consumer representatives groups and other were the consumers of REL-T addressing the issues concerning REL-Transmission business. The main issues of objection were Transmission loss level, Capital Expenditure and Capitalization and Income from other businesses, the details of which is presented in the subsequent sections.

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.

CHAPTER 2: SALIENT FEATURES OF THE ORDER

1. The ARR determined by the Commission in this Order will be applicable with effect from April 1, 2007 and will remain in force until March 31, 2008. However, the MYT framework and the principles that are enunciated in this Order would be applicable for a 3 year control period i.e. from April 1, 2007 to March 31, 2010.

2. In this Order, the Commission has detailed out the principles for the determination of the various cost components of the Annual Revenue Requirement and Tariff, which would be followed during the Control Period. This being the first control period, and keeping in view the reservations in this regard by the (authorised) consumer representatives, the Commission has taken a cautious approach that should reflect the ground realities in terms of data quality, availability etc..

3. The Commission has projected the cost components of the ARR for all the three years of the Control Period. However, the figures of capital cost are indicative given the current situation that the DPRs for all the capital expenditure schemes have not been submitted and also the investments cannot be approved for the entire control period owing to the present mechanism of DPR approvals, timing and data issues.

4. The key underlying assumption for projection of the various cost components of the ARR are as follows:

    a. The Commission approved figures for FY 2006 – 07 as per the last Tariff Order in Case No. 25 of 2005 and 53 of 2005 dated October 20, 2006 has been used as the base year figures.

    b. The Commission has considered only non-DPR schemes for approval towards capital expenditure for the control period in the ARR, as no DPR schemes have been approved in principle for the control period due to lack of submission of DPRs by the licensee and lack of data. Any further capital expenditure will be considered during the annual process after submission of DPRs’ for the proposed schemes and only after the approval by the Commission.

    c. The Employee cost has been projected based on average inflation based on consumer price index for industrial workers for the past 3 years i.e. from 2004 to 2006.

d. The Administrative and General expenses have been projected based on the composite index of WPI and CPI in the ratio of 60:40 respectively, in line with CERC regulations.

e. The Repairs and Maintenance expenses have been projected based on the average WPI for past three years from 2004 to 2006.

f. The normative interest rate for long term loans is assumed at 8% for the control period.

g. The working capital is computed as per the norms laid down in MERC (Terms and Conditions of Tariff) Regulation, 2005. The normative interest on the working capital is assumed at 11.50% i.e. the short term SBI PLR.

h. The Commission has projected an income tax expense of Rs 4.53 Cr throughout the Control period in line with approved income tax for FY 2006 -07. The same will be trued up based on the proportion of the actual tax paid by REL-T as a whole.

5. The ARR for the 2nd and 3rd year of the Control Period will be computed based on the formulae discussed in detail in the subsequent chapters.

6. The Tariff for each year of the Control Period will be determined at the beginning of the each financial year, only if necessary and not as a matter of regulatory process.

7. The summary of the various cost component of the ARR is tabulated below:

Table 1 - Summary of ARR for the Control Period FY 2007 – 08 to FY 2009 -10

(Rs Crore)

	FY 2006-07 (Tariff Order)	**FY 2007-08**	**FY 2008-09**	**FY 2009-10**
O&M Expenses				
Employee Expenses	5.72	6.03	6.35	6.69
A&G Expenses	2.15	2.27	2.39	2.52
R& M Expenses	2.36	2.49	2.62	2.76
Depreciation and Advance against depreciation	7.20	7.77	8.00	8.13
Interest on Long-term Loan Capital	0.80	1.05	1.49	1.68
Interest on Working Capital	0.08	0.70	0.73	0.75
Income Tax	1.36	4.53	4.53	4.53
Contribution to contingency reserves	1.45	1.49	1.53	1.58
Total Revenue Expenditure	**21.12**	**26.32**	**27.65**	**28.64**
Return on Equity Capital	18.37	18.68	19.06	19.27
Less: Non Tariff Income	3.11	3.28	3.44	3.61
Aggregate Revenue Requirement	**36.38**	**41.73**	**43.27**	**44.30**

CHAPTER 3: OBJECTIONS RECEIVED, REL-T'S RESPONSE AND THE COMMISSION'S RULING

1 Notice for Public Hearing

1.1 Objection Received

Industrial Associations and Consumers submitted that REL need to submit their Petitions as per the time limit prescribed by the Commission. Further, they also submitted that the time limit of three weeks given by the Commission for submitting comments and suggestions from the public is inadequate.

1.2 REL-T's Response

REL replied that the MYT Petition of the transmission business for the control period FY 2007-08 to FY 2009 - 10 was filed on January 16, 2006 as against the prescribed date of November 30, 2005 as per Regulations. Further, they requested the Commission to condone the delay.

1.3 Commission's Ruling

As per the EA 2003, the Commission is required to issue the Tariff Order within 120 days of receipt of the Petition. Hence, the Commission has stipulated November 30 of the previous year as the last date for submission of the ARR and Tariff Petitions. The Commission has been insisting on timely submission of the ARR and MYT Petitions by the licensees, so that the Orders can be issued before the commencement of the next financial year, and can be operative for the complete financial year. However, the Utilities have been delaying the submission of the Petitions on some grounds or the other, which is being viewed seriously by the Commission.

As regards the time of three weeks given to the public for submitting their comments and suggestions, the same is in accordance with the MERC (Conduct of Business) Regulations, 2004. Wherever possible, the Commission does give additional time to the public for submission of their comments and suggestions. However, given the urgency of this matter, and the need for issuing this Order before the commencement of the financial year, the Commission could not give additional time for submission of comments and suggestions.

2 Transmission Loss

2.1 Objection Received

Mumbai Grahak Panchyat and several other objectors stated that the normative transmission loss of 4.85% is very high as compared to the REL-T's actual transmission losses of 1.5 – 2%. Further they also stated that by paying for the higher normative loss level, the Mumbai consumers are in effect subsidizing the Maharashtra State Electricity Distribution Company's consumers.

2.2 REL-T's Response

REL-T in its response has agreed to the objections raised and stated that the normative loss of 4.85% is adopted as per the MERC Transmission Tariff Order dated September 29, 2006 based on the principles laid down in the Transmission Pricing Framework Paper dated June 27, 2006

2.3 Commission's Ruling

Individual TSUs are benefited through integrated state grid inter connecting the individual transmission system to receive reliable and stable power supply. Therefore the total transmission loss of the inter-connected system shall be sharable among the Transmission system users (TSU) in proportion to their use. The Transmission loss of the intra state transmission system as approved by the Commission is 4.85% and this is required to be borne by the Transmission System Users pro-rata to their usage of intra- State transmission system. The relevant extract from the Transmission Pricing Framework Order is as under:

"The energy losses in an intra-State transmission system, as determined by the State Load Despatch Centre and approved by the Commission, shall be borne by the Transmission System Users pro rata to their usage of the intra-state transmission system" (Regulation 14 of TOA Regulations)."

The Commission has stated in its Transmission Pricing Framework order and other relevant orders that average intra-state transmission loss being borne by all transmission system users would result in a state-wide uniform transmission loss across all transactions of various transmission system users, irrespective of entry point and exit point. This is akin to 'postage stamp' method of charging the users. Hence intra-state transmission losses of 4.85% as approved by the Commission shall be borne by all the transmission system users of State and the Commission is of the view that Mumbai consumers are not paying any kind of cross subsidy for the Maharashtra consumers.

3 Capital Expenditure and Capitalisation

3.1 Objection Received

Prayas Energy Group and other objectors pointed out that REL-T has stated very high capital expenditure without any clear rationale, in its MYT petition of Rs 379.63 Crore, Rs 651.25 Crore and Rs 319.92 Crore for the 3 years of the Control Period. Further, they also stated that the capitalisation figures as specified in their MYT Petition of Rs 35.77 Crore, Rs 714.50 Crore and Rs 432.77 Crore for the 3 years of the Control Period are very high.

Prayas Energy Group further brought out that REL-T has not spent such huge capital expenditure in the previous years and indicated that the capitalization as a percentage of the capital expenditure was lesser in the previous years. Moreover, they also pointed out that, after proposing such huge capital expenditures, the licensee has not stated any significant improvements in the system performance i.e. transmission loss reduction, quality of supply, etc.

Thus not only the licensee need to justify the reasonableness of the capital expenditure and state the significant benefits that would arise out of such investment, but also the Commission need to examine prudence and cost benefit of such high capital expenditure porposed.

3.2 REL-T's Response

REL-T responded that they have already submitted the Detailed Project Report for some of the projects and that they are in the process of submitting the Detailed project Report for the remaining projects. The Detail project Report contains the need and cost benefit analysis for the projects. Further, they also have stated that the capital expenditure proposed is to ensure good quality and higher reliability of supply, as well as to meet the increasing load growth. REL-T also has responded that the capital expenditure in the past was very less and so REL-T has to invest more now to increase the transmission capacity so as to meet the load growth and as well strengthen the system.

3.3 Commission's Ruling

The Commission ruled that the capital expenditure will be approved only after the thorough analysis of the Detailed Project Report submitted by REL-T, thus ensuring that only reasonable capital expenditure in alignment with the 'State Transmission Plan' are allowed. For this Order, the Commission has considered only non-DPR schemes for approval towards capital expenditure for the control period in the ARR, as no DPR schemes have been approved in principle for the control period due to lack of submission of DPRs by the licensee and lack of data. The details are discussed in Chapter-4 of this order.

4 INCOME FROM OTHER BUSINESS

4.1 Objection Received

Many Objectors pointed out that REL-T is involved in many other businesses other than the electricity business for which REL-T should maintain separate accounts. Further, as per the Section 41 of MERC (terms and Condition of Tariff) Regulation, 2005, the income from these business for which the transmission assets are used, should be set off against the ARR and there by reducing the tariff shock to the consumers.

4.2 REL-T's Response

REL-T in its response has clarified that REL-T does not use the asset for transmission business for any other business and they have also stated that they have submitted the same under affidavit No. 2383 Dated February 23, 2007 as directed by the Commission. Further, they also stated that they maintain separate accounts for all their businesses.

4.3 Commission's Ruling

In line with Section 41 of the Electricity Act, a transmission licensee may engage in utilization of assets of transmission business for other business, the relevant extract is as given below:

"41. A transmission licensee may, with prior intimation to the Appropriate Commission , engage in any business for optimum utilisation of its assets:

Provided that a proportion of the revenues derived from such business shall, as may be specified by the Appropriate Commission, be utilised for reducing its charges for transmission and wheeling:

Provided further that the transmission licensee shall maintain separate accounts for each such business undertaking to ensure that transmission business neither subsidies in any way such business undertaking nor encumbers its transmission assets in any way to support such business:

Provided also that no transmission licensee shall enter into any contract or otherwise engage in the business to in trading electricity:"

In view of this the Commission has directed the licensee to submit the details of income from other business on affidavit. Accordingly REL-T has submitted under above said affidavit that the assets of the transmission business are not utilized for any other business. Therefore based on the affidavit submitted by the licensee, the Commission considered zero income from other business for Transmission business. Hence, for this tariff order the Commission shall not assume any income from other business.

5 Separation of accounts for all Functions of REL

5.1 Objection Received

Many objectors pointed out that REL need to maintain separate accounts for REL Mumbai Licensee areas and other business like BSES Yamuna, BSES Orissa etc. Further they should also maintain separate accounts for the three function of REL i.e. Generation, Transmission and Distribution. It was also mentioned that this accounts should be readily available to the consumers so that the transparency in the system is maintained.

5.2 REL-T's Response

REL responded that they maintain separate accounts for REL Mumbai License area and other business of REL like BSES Yamuna, BSES Orissa etc. Further, they stated that this also can be made available to the consumers. However, REL did not respond to maintaining separate accounts for different functions i.e. Generation, Transmission and Distribution.

5.3 Commission's Ruling

The Commission opines that it is important for REL to maintain separate accounts for its different function i.e. Generation, Transmission and Distribution in a transparent manner. Further, the Commission directs REL to start maintaining distinct regulatory accounts for each of the functions as they are separate licensed businesses. The Commission also intends to prescribe format for the same from accounting perspective.

CHAPTER 4: DETERMINATION OF THE ARR FOR THE CONTROL PERIOD FY 2007 – 08 TO FY 2009-10

1. Principles for Determination of ARR for the Control Period FY 2007-08 to FY 2009-10

REL is a vertically integrated utility involved in Generation, Transmission and Distribution business. However as stipulated by the Commission REL-T has submitted the MYT petition for the Control Period FY 2007 – 08 to FY 2009 – 10 separately for al the three businesses for approval to the Commission. The principle adopted for the implementation of the MYT framework and the approval of the MYT petition is based on the MERC (Terms and Condition of Tariff) Regulation, 2005.

In this Order, the Commission has analyzed the REL-Transmission MYT Petition for the approval of the same.

2. Norms of Operation

2.1. Availability of the AC System and Incentive

REL-T submitted in its MYT petition that in the MERC Order on Transmission Pricing Framework dated June 27, 2006 (Case No. 58 of 2005), the Commission has ruled that the Transmission Licensee shall be entitled to Incentive as an percentage of the annual transmission charge, on achieving Annual Availability beyond the Target Availability as stipulated under the MERC (Terms and Conditions of Tariff) Regulations,2005. The target availability as stipulated by the MERC (Terms and Conditions of Tariff) Regulations,2005 is 98% for HVAC system, for full-recovery of transmission charges.

REL-T submitted in its MYT petition that the system availability for its 220kV equipment will be 99% and hence has claimed an incentive of 1% of annual transmission charges for the entire control period based on the formula laid out by the Commission. The relevant extract of the Transmission Pricing Framework Order issued by MERC is quoted below:

Accordingly, the Commission rules that the transmission licensee shall be entitled to incentive on achieving annual availability beyond the target availability as stipulated under MERC (Terms and Conditions for Tariff) Regulations 2005, in accordance with the following formula:

Incentive = Annual Transmission Charges X [Annual availability achieved –Target Availability] / Target Availability;

The Commission clarifies that the licensee will be entitled to the transmission incentive on system availability based on the guidelines of the MERC (Terms and Conditions of Tariff) Regulations, 2005 and MERC Order on Transmission Pricing Framework dated June 27, 2006, at the end of the year, based only on the actual availability of the AC system and not based on projections.

Therefore, the Commission has not considered any incentive for the three years of the Control Period in this Order.

2.2. Transmission Loss

The Commission as per the principles outlined in the Transmission Pricing Framework order dated June 27, 2006 and Transmission Tariff Order date September 29, 2006 has considered an intra-state transmission loss of 4.85% for the control period.

3. Aggregate Revenue Requirement

3.1. Operation & Maintenance Expenses

3.1.1. Analysis for Determination of Operation & Maintenance Expense

As per clause 50.5.1 of the MERC (Terms and Conditions of Tariff) Regulation, 2005, the Commission may adopt suitable norms for allowance of operation and maintenance expenses relating to the transmission business. The relevant extracts of the regulation are as below:

"The Transmission Licensee shall be permitted to recover all reasonable and justifiable operation and maintenance expenses relating to the Transmission Business:

Provided that the Transmission Licensee shall submit a forecast of all such operation and maintenance expenses along with the application for determination of tariff:

Provided further that such forecast shall be based on past performance and/ or operating norms and shall be supported by detailed calculations that explain the basis for such forecast:

Provided further that the Commission may adopt suitable norms for allowance of operation and maintenance expenses relating to the Transmission Business."

The Commission is of the view that, in an MYT framework where the focus has to be in regulating outputs along with inputs with more emphasis on outputs. Operation and Maintenance Expenses should be linked to the outputs and cost drivers in terms of inflation index, consumers served, line length maintained, substations maintained, quality of supply achieved, etc. These linkages would serve as norms for the control period. This being the first MYT exercise, the Commission opines that norms for the transmission business would be evolved over time through assessing the past performance and benchmarking with similarly placed utilities.

The Commission opines that key cost drivers for the O&M cost are inflationary increase (represented by consumer price index and wholesale price index) and business growth (usually represented by no of bays and line length in transmission business). Quality of supply is also a prominent cost driver.

However, this being an MYT exercise for the first time and due to unavailability of the investment plans corresponding to the business growth, the Commission felt appropriate to approve the O&M costs for the control period based on inflationary increases alone. Therefore, the Commission has adopted an approach of escalating each of the heads under O&M expenses by indexing with appropriate index. Though the Commission has approved the expenses for Employee, A&G and R&M separately, the Commission directs that the licensee may spend the total O&M expenses as approved by the Commission in this order judiciously among the each of heads until the total O&M expenses incurred remain the same as approved.

Though the Commission has not fixed the norms for the transmission business in this tariff order, it shall introduce the principles or an MYT framework to review the performance of the utility with reference to the cost drivers and outputs. This review would be carried along with the annual performance review as per the regulation. This shall also facilitate evolution of the norms for transmission business at a later stage.

The performance review framework is similar to the norm based approach adopted by the CERC for regulating Central Transmission Utility. The cost drivers and outputs for the transmission business considered by CERC are inflationary increase, no. of bays maintained and length of lines maintained. The Commission rules that the performance of

REL transmission business would also be reviewed on similar lines. The principles are as underlined below:

1. The total O&M Costs for all the years should be allocated between bays and line. The Commission directs the Licensee to submit the details O&M expenses per circuit Kilometer of line length and per bay for the last five years, if data is not available on the same, then the licensee should submit the asset details of bays and assets details of lines, along with definition as to what constitutes a bay as per the licensee. This information would help derive a ratio which the Commission would use to allocate the total O&M Costs to bays and lines.

2. Based on the above information the O&M costs per bay and O&M Costs per circuit-km for the past years is computed by dividing the O&M cost for bays / lines with total number of bays / total line length in km. The Commission directs licensee to submit information regarding the number of bays and total length in circuit kilometers for every year. The asset details and O&M Costs as submitted by the Licensee for the period FY 2001-02 to FY 2005-06 are attached as Annexure 2.

3. The operation and maintenance expense norms for the control period shall be derived on the basis of the average of the actual O&M Costs per bay and O&M Costs per circuit-km for the five (5) years ending March 31, 2006, based on the audited financial statements, excluding abnormal operation and maintenance expenses, if any, subject to prudence check by the Commission.

4. The average of such O&M Costs per bay and O&M Costs per circuit-km shall be considered as the costs for the financial year ended March 31, 2004 and shall be escalated at the rate of a composite index that Commission would compute based on Wholesale Price Index (WPI) and Consumer Price Index for Industrial workers (CPI_IW) by assigning appropriate weights to the same, per annum to arrive at operation and maintenance expenses for the base year commencing April 1, 2006.

5. The base operation and maintenance expenses for each subsequent year shall be escalated at the rate of the composite index that Commission would compute as mentioned above to arrive at permissible O&M Costs per bay and O&M Costs per circuit-km for the control period. These values would be reviewed as part of the annual performance review in terms of productivity levels and efficiency factors.

3.1.2.Employee Expense

REL-T in its MYT petition has stated that for exceeding consumer's expectations and compliance of regulatory requirements, REL-T has strengthened its human Resource in terms of skills and proficiency. Further REL-T also has stated that the impact of expected salary revision for staff and officers was proposed in the ARR petition for FY 2006-07 and thus an additional provision of 23% was made towards the salary revision as the same is as per the past trend of agreements with the Union.

Though REL-T has expressed that it is difficult for any utility at the present juncture to retain employees without providing for reasonable revision in the wages appropriately rewarding them to maintain the performance standards as compared to similar utilities in the business, the Commission would like to reiterate its opinion that in a regulated and cost-plus environment, employee expenses due to the salary revision cannot be considered as pass through to the consumer and the Utility should get efficiency gains in return for wage revision or any other business decision to meet such contingencies.

Therefore, for the base year, the Commission has considered the employee expense as approved in the last tariff order dated 3rd October, 2006. This is because the revised estimate submitted for FY 2006 -07 in its MYT petition are not actual audited figures.

Further REL-T also has stated that due to the various changes undergoing in the Transmission Sector in Maharashtra, REL-T would need to strengthen its Human Resources, thus, the Employee Cost has been projected by considering the increase in employee cost of existing human resources @ 7.5% over the control period. However the Commission has observed that as per the formats submitted by the petitioner the Employee expenses have been projected at the rate of 10%, 13% and 13% for FY 2007-08, 2007-09 and 2009-10 respectively.

The Commission has projected the employee expense at the rate of 5.36% YoY for the control period, which is based on average inflation based on consumer price index for industrial workers for the past 3 years i.e. from 2004 to 2006. The employee expenditure projected by REL-T and that allowed by the Commission for the control period is as given below:

Table 2 Employee Expenses for Control Period

(Rs. Crore)

	FY 2007-08	FY 2008-09	FY 2009-10
Licensee	6.34	7.25	8.37
Commission Approved	6.03	6.35	6.69

3.1.3. Administrative & General Expense

REL-T has projected the Administrative and General expenses at the rate of 7% YoY for the Control Period. The expenses have been projected on the revised estimates of A& G expenses that REL-T has submitted for FY 2006-07. For the purpose of projecting the Administrative and General expenses for the control period, the Commission has considered average Wholesale Price Index (WPI) and Consumer Price Index for industrial workers (CPI_IW) for the past 3 years in proportion of 60:40, in line with principles adopted by CERC. The Weighted average index works out to 5.38%, the same has been used to project the A&G expenses over the Commission approved A&G expenses in FY 2006-07.

The A&G expenditure projected by REL-T and that allowed by the Commission for the control period is given in the following Table:

Table 3 A&G expenses for control period

(Rs. Crore)

	FY 2007-08	FY 2008-09	FY 2009-10
Licensee	2.16	2.31	2.47
Commission Approved	2.27	2.39	2.52

3.1.4. Repairs & Maintenance Expense

REL-T submitted that despite stringent controls there will be a growth of 7% YoY on actual expenditure incurred during the year for REL-T. The Commission has considered an increase of 5.39% YoY i.e. average WPI for past three years from 2004 to 2006, for the control period over the Commission approved R&M expenses in FY 2006-07.

The R&M expenditure allowed by the Commission for the control period is given in the following Table:

Table 4 R&M expenses for control period

(Rs. Crore)

	FY 2007-08	FY 2008-09	FY 2009-10
Licensee	2.48	2.66	2.84
Commission Approved	2.49	2.62	2.76

3.2. Capital Expenditure

The Commission has examined the capital expenditure and the amount of capitalisation proposed by REL-T in detail as against the various transmission related capital expenditure schemes approved by the Commission. REL-T has proposed Capital Expenditure for FY 2007-08 , FY 2008-09 and FY 2009-10 as Rs. 379.63Cr, Rs. 651.25Cr and Rs. 319.92Cr respectively and the capitalization during the said period as Rs. 35.77 Cr, Rs. 714.50 Cr & Rs. 432.77 Cr. respectively.

The Commission has considered only non-DPR schemes for approval towards capital expenditure for the control period in the ARR, as no DPR schemes have been approved in principle for the control period due to lack of submission of DPRs by the licensee and lack of data. The Commission observed that despite the requirement for the licensee to submit detailed project reports (DPR's) for all the capital expenditure proposed, REL-T has submitted only DPRs for two schemes of which one has been referred back. The Commission after considering the DPRs submitted by REL-T, the Commission has considered only non-DPR schemes for approval towards capital expenditure for the control period in the ARR, as no DPR schemes have been approved in principle for the control period due to lack of submission of DPRs by the licensee and lack of data.

The Commission considered the CWIP of FY 2006-07 as per the approved capitalization given in the last tariff order to be completely capitalized in the year FY 2007-08. The actual Opening level of GFA for FY 2006-07 has been considered at the same level as approved by the Commission in the last tariff order of REL which amounts to Rs 291.75 Crore. The same maybe trued-up after the actual audited accounts are available.

REL-T in its petition has submitted list of schemes which do not require DPR's (outlay less than or equal to Rs 10 Crore). As per the licensee submission the amount of Capital expenditure for the non DPR schemes for the control period is Rs. 22.78 Crore, Rs.1.9 Crore and Rs.0.47 Crore for FY 2007-08, FY 2008-09 and FY 2009-10 respectively. After analyzing the past trends in amount of capital expenditure made by REL-T, the Commission has approved Rs. 11.39 Crore, Rs. 1.9 crore and Rs. 0.47 Crore towards Capital expenditure for FY 2007-08, FY 2008-09 and FY 2009-10. Based on past trends the Commission has considered the amount of capitalization on the total amount of capex on account of non-DPR schemes to be invested in the first year of control period to be spread across two years i.e. FY 2007-08 and FY 2008-09 in the ratio of 40% and 60% and the amount of capital expenditure shown in FY 2008-09 and FY 2009-10 for non DPR schemes would be capitalized in the same year itself. While Commission has considered the Capital expenditure on non-DPR Schemes, it does not mean approval of capital expenditure of the schemes and that further analysis of Non-DPR schemes would be undertaken by the Commission.

The Commission directs REL-T to submit the information regarding the capital expenditure and the capitalisation details for schemes i.e. Scheme-wise capital work in progress as per the formats appended as Annexure 3 and the Commission would review the same based on the information submitted by the licensee for each year of the control period.

As per the guidelines given in the last tariff order of REL, The Commission holds the view that interest cost during construction (IDC) should not be considered as part of revenue expense, however, the same should be capitalised along with assets, as and when put to use. Accordingly, the Commission had considered capitalised cost including, IDC derived based on normative debt (70% of works capitalised) at the interest rate of 8% for the schemes for both FY 2007-08 and FY 2008-09.

The capitalization details during the control period are summarised in the following Table:

Table 5: Capitalisation Approved for Control Period

(Rs.Crore)

S.No	Particulars	FY 2007-08	FY 2008-09	FY 2009-10
	DPR Schemes			
1.	Works Capitalised	3.78	-	-
2.	Interest Capitalised	0.21	-	-
	Sub - Total	**3.99**	**-**	**-**
	Non - DPR Schemes			

1.	Works Capitalised	4.56	8.73	0.47
2.	Interest Capitalised	0.26	0.49	0.03
	Sub - Total	**4.81**	**9.22**	**0.50**
	Total Capitalisation	**8.80**	**9.22**	**0.50**

3.3. Depreciation and AAD

REL-T in its petition has submitted that the amount of depreciation included in the revenue requirement has been estimated using the Straight Line Method (SLM) and the rates of depreciation are as specified in the Tariff Regulation. The overall depreciation rates as per the submission of REL-T amounts to 3.03%, 2.54%, and 3.22% for FY 2007-08, FY 2008-09 and FY 2009-10 respectively, corresponding to opening GFA of each of the years.

The Commission approved figure of Rs. 6.22 Cr of capitalization for the year FY 2006-07 as per the last tariff order in Case No. 25 of 2005 and 53 of 2005 dated October 3, 2006 has been considered while calculating the opening GFA for FY 2007-08 and the CWIP of Rs. 3.78 Cr has been considered capitalized in FY 2007-08. Accordingly, the Commission has determined depreciation expenditure in accordance with the Tariff Regulations and has applied a rate of 2.57% for the control period on the 220 kV lines.

The capitalization for FY 2007-08, FY 2008-09 and FY 2008-09 has been considered as approved by the Commission and for the amount to be capitalized in the same year, average depreciation has been applied. The depreciation expenditure projected by REL-T and approved by the Commission for the control period, has been summarized in the following Table:

Table 6 Depreciation for the Control period

(Rs. Crore)

	FY 2007-08	**FY 2008-09**	**FY 2009-10**
Licensee			
Depreciation	9.07	8.91	35.56
Opening GFA	299.59	350.37	1103.47
% GFA	**3.03%**	**2.54%**	**3.22%**
Commission Approved			
Depreciation	7.77	8.00	8.13
Opening GFA	297.97	306.77	316.00

% GFA	**2.60%**	**2.61%**	**2.57%**

3.4. Interest on Loans

REL-T has considered a normative Debt Equity Ratio of 70:30 for financing the capital expenditure projects (corresponding to capitalized assets only). The interest on the loan capital is computed based on philosophy outlined by the Commission in its previous tariff order for REL-T.

The Commission in the previous tariff order for REL-T has outlined that interest cost in case of REL-T will have to be determined based on 'normative loan capital', as per Regulation 50.3.2, 47.1 and 47.2 of the Tariff Regulations and accordingly has considered interest cost of normative debt corresponding to capitalized assets only.

A normative interest rate of 10% p.a. has been considered towards interest expense for projects initiated during FY 2004-05 and FY 2005-06 and a normative interest rate of 8% p.a. has been considered towards the interest expense for projects initiated during FY 2006-07. The Commission has considered the interest rate as approved in the previous tariff order for the control period as well. The closing balance of loan as approved in the last tariff order of REL has been considered as the opening balance for FY 2007-08. The details of interest cost are summarized in the table below:

Table 7 Interest on Long Term Loans for Control Period

(Rs. Crore)

	FY 2007-08	FY 2008-09	FY 2009-10
Opening Loan Balance	10.30	15.90	21.47
Capitalisation	8.80	9.22	0.50
Debt as % of funding	70%	70%	70%
Incremental Loans	6.16	6.46	0.35
Repayment	0.57	0.88	1.20
Closing Balance of Loans	15.90	21.47	20.62
Interest on Long Term Loan	1.05	1.49	1.68
Interest Rate	8.00%	8.00%	8.00%

3.5. Interest on working capital

REL-T, in its Petition, submitted that the working capital requirement has been computed in accordance with the Commission's Tariff Regulations, which stipulate the components of working capital of the transmission business. REL-T further submitted that normative interest of 10.25% has been considered using recent Prime Lending Rate (PLR) of State Bank of India (SBI) and since the same was allowed in the last ARR Order dated October 3, 2006, for calculation of interest on working capital.

The Commission has estimated the total working capital requirement in accordance with the provisions of Tariff Regulations. Further, the Tariff Regulations stipulates that Rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on the date on which the application for determination of tariff is made. As the short-term Prime Lending Rate of State Bank of India is 11.50%, the Commission has considered the interest rate of 11.50% for estimating the interest on working capital. The interest on working capital for the control period as estimated by the Commission works out to Rs.0.70 Cr, Rs.0.73 Cr. and 0.75 Cr. as against Rs. 0.09 Cr., Rs.0.11 Cr. and Rs. 0.12 Crore estimated by REL-T respectively for FY 2007-08 , FY 2008-09 and FY 2009-10. The values projected by REL-T are low on account of not including the one-eighth of the expected revenue from Transmission users at the prevailing tariffs in calculation of working capital which is a normative cost item for calculation of working capital. The detailed computation of interest on working capital as approved by the Commission for the control period is given in the table below:

Table 8 Interest on Working Capital for the Control period

(Rs. Crore)

	FY 2007-08	FY 2008-09	FY 2009-10
One-twelfth of the amount of O&M Exp.	0.90	0.95	1.01
One-twelfth of the sum of the book value of stores, materials and supplies	0.01	0.01	0.01
One and half months equivalent of the expected revenue from Transmission users at the prevailing tariffs	5.22	5.41	5.54
Less:			
Amount of Security Deposit from Transmission System users	-	-	-

Total Working Capital	**6.12**	**6.36**	**6.54**
Computation of working capital interest			
Rate of Interest (% p.a.)	11.50%	11.50%	11.50%
Interest on Working Capital	**0.70**	**0.73**	**0.75**

3.6. Return on Equity

REL-T has submitted that Return on Equity (RoE) is computed as per MERC Tariff Regulations, 2005 REL-T has considered the opening balance for FY 2006-07 as approved by the Commission, whereas REL-T has revised the amount of capitalization for FY 2006-07 based on revised estimates and then projected the RoE for the control period based on the revised closing regulatory equity for FY 2006-07. The Commission has computed the RoE in accordance with the Tariff Regulations, which stipulates a 14% return on equity per annum on the regulatory equity at the beginning of the Financial Year for which the return is being computed, and on 50% of the equity component of the projected addition to capital assets during the year. The Commission has considered the closing balance of regulatory equity as approved in the last tariff order of REL as the opening balance for the first year of control period and projected values for the control period. The RoE as approved by the Commission and the detailed calculation for the control period is given in the following Table:

Table 9 RoE for the control period

(Rs Crore)

	FY 2007-08	FY 2008-09	FY 2009-10
Regulatory Equity at the beginning of the year	132.14	134.78	137.54
Capitalisation	8.80	9.22	0.50
Equity funding %	0.30	0.30	0.30
Equity portion of capitalization	2.64	2.77	0.15
Regulatory Equity at the end of the year	134.78	137.54	137.69
Return Computation			
Rate of Return	14%	14%	14%
Return on Regulatory Equity at the beginning of the year	18.50	18.87	19.26
Return on Equity portion of capital expenditure	0.18	0.19	0.01

Total Return on Regulatory Equity	18.68	19.06	19.27

3.7. Income Tax

REL-T submitted that the Commission failed to appreciate that REL-T was entitled to Income Tax on its Licensee business and there was no question of the consumers of Mumbai Licensed Area subsidizing other business of REL-T by way of payment of notional Income Tax and hence REL-T has used the method of calculating Income Tax by grossing up the RoE.

Despite the claims of REL-T, the Commission strongly feels that the grossing-up of RoE component is not the appropriate methodology for computation of Income tax for the licensee and opines that the explanation given in the previous tariff order holds true and the methodology laid out in the same order shall be used for the computation of Income tax. Since the actual income tax liability for FY 2006-07 is unavailable the Commission has considered the apportioned income tax liability of the transmission business of REL-T in FY 2006-07 which is estimated at Rs. 4.53 Crore for the entire control period and the same shall be trued-up based on the actual audited accounts.

3.8. Non Tariff Income

REL-T has considered Non-Tariff Income for FY 2006-07 at Rs. 1.44 Cr based on which the values for the control period have been projected @ 5% YOY growth. REL-T has submitted that the non-tariff income comes from others/miscellaneous receipts and Interest on staff loans & Advances.

The Commission has considered the non-tariff income for FY 2006-07 as approved in the last tariff order of REL, i.e. Rs. 3.12 Cr and projected the values for control period at a growth rate of 5% as given by REL-T. The same shall be trued-up based on the audited actual for FY 2006-07 at the end of the financial year.

The non-tariff income projected by REL-T and that considered by the Commission for each year of the control period FY 2006-07 is given in the following Table:

Table 10 Non Tariff Income for the control period

(Rs. Crore)

Non Tariff Income	FY 2007-08	FY 2008-09	FY 2009-10
Licensee			
Other/Miscellaneous receipts	1.47	1.54	1.62
Interest on staff loans & Advances	0.04	0.05	0.05
Total	**1.51**	**1.59**	**1.67**
Commission approved			
Other/Miscellaneous receipts	3.22	3.38	3.55
Interest on staff loans & Advances	0.05	0.06	0.06
Total	**3.28**	**3.44**	**3.61**

3.9. Contribution to the Contingency Reserve

REL-T has considered contribution to contingency reserves at the rate of 0.5% of the opening GFA projected for each year. The Commission has considered contribution to contingency reserves @ 0.5% of the opening GFA for all the three years, in accordance with the Commission's Tariff Regulations, the figures are as given below:

Table 11 Contribution for Contingency Reserve for control period

(Rs Crore)

	FY 2007-08	**FY 2008-09**	**FY 2009-10**
Opening GFA	297.97	306.77	316.00
Contigency Reserva as % of GFA	0.50%	0.50%	0.50%
Contigency Reserve	1.49	1.53	1.58

3.10. Income from other business

The Licensee has submitted under affidavit No. 2383 Dated February 23, 2007 that the Transmission assets are not utilized for any other Business and as such non tariff income does not have any "income from other business" under section 41 of the EA 2003.

3.11. Aggregate Revenue Requirement (ARR)

The ARR of the transmission business of REL-T is the summation of all the expenses and Return on Equity for the transmission business. The Commission has determined the ARR for the control period, based on the expenses allowed under various heads and the RoE allowed, as discussed above under different heads. The ARR as allowed by the Commission for the first control period i.e. FY 2007-08 to FY 2009-10 is as given in the following Table:

Table 12 ARR for the Control period

(Rs Crore)

	FY 2006-07 (Tariff Order)	**FY 2007-08**	**FY 2008-09**	**FY 2009-10**
O&M Expenses				
Employee Expenses	5.72	6.03	6.35	6.69
A&G Expenses	2.15	2.27	2.39	2.52
R& M Expenses	2.36	2.49	2.62	2.76
Depreciation and Advance against depreciation	7.20	7.77	8.00	8.13
Interest on Long-term Loan Capital	0.80	1.05	1.49	1.68
Interest on Working Capital	0.08	0.70	0.73	0.75
Income Tax	1.36	4.53	4.53	4.53
Contribution to contingency reserves	1.45	1.49	1.53	1.58
Total Revenue Expenditure	**21.12**	**26.32**	**27.65**	**28.64**
Return on Equity Capital	18.37	18.68	19.06	19.27
Less: Non Tariff Income	3.11	3.28	3.44	3.61
Aggregate Revenue Requirement	**36.38**	**41.73**	**43.27**	**44.30**

3.12. Sharing of gains and losses

The Commission has clearly stated the principle for sharing the gain / loss arising out of controllable and uncontrollable factors under Clause 18 and Clause 19 of MERC (Terms and Conditions of Tariff) Regulations, 2005.

In case of variation due to **Uncontrollable factors,** the approved aggregate gains / losses arising out of the same, will be passed through to the consumers as an adjustment in the tariff, for the period as specified by the Commission. Eg:- Fuel Adjustment Charges levied due to variation in the fuel cost of generation / power purchase.

In case of variation due to **Controllable Factors,** the approved aggregate gains and losses will be shared between the consumers and the generating company or the licensee in the following manner;

(a) The approved aggregated gain will be shared in the following manner:

- (i) $1/3^{rd}$ shall be passed through to the consumers as a rebate in the Tariff;
- (ii) $1/3^{rd}$ shall be retained as special reserve for absorbing the impact of any future losses arising out of controllable factors;
- (iii) $1/3^{rd}$ shall be used by the generating company or the licensee in its own discretion.

(b) The approved aggregated losses will be shared in the following manner:

- (i) $1/3^{rd}$ shall be passed through to the consumers as an additional charge in the Tariff;
- (ii) Balance shall be absorbed by the generating company or the Licensee.

3.13. Share of Intra-State Transmssion ARR and Transmission Tariff

REL-T's share of the intra-State transmission ARR and the transmission tariff payable by different users of transmission system along with REL-D business will be elaborated in a separate order issued on the Transmission Tariff payable by different distribution businesses.

3.13.1. ARR determination for the Control Period

The Commission opines that since MYT being the first exercise and since the investment plans have not been finalized owing to delay in submission of DPR and other data and timing issues, the Commission has specified a framework where in the ARR for the future years of the control period would be determined. By specifying the principles for determination of ARR, the Commission holds the view that this would provide regulatory certainty to the licensees and consumers.

The ARR for future years of the control period (i.e. for 2^{nd} and 3^{rd} year of the control period) would be determined based on the following formula:

$ARR_n = ARR^1{}_n + ACC_n + K + Z$

Where:

ARR_n is Aggregate Revenue Requirement for the n^{th} year of the control period;
$ARR^1{}_n$ is the Annual Revenue requirement specified by the Commission at the beginning of the control period i.e. first year of the control period for the n^{th} year.

ACC_n is the addition capital costs (depreciation, interest cost, return on equity) that need to be considered for the n^{th} year of the control period based on the additional DPRs or investments approved by the Commission during the control period.

K is the adjustment to the revenue requirement to be carried out as part of the annual performance review to share the net gains and losses arising out of controllable and uncontrollable factors as per clause 18 and 19 of the MERC (Terms and Conditions of Tariff) Regulations, 2005. This shall include

- Positive and negative variations on account of uncontrollable factor,
- Negative adjustment for clause 19.1 (a) of the regulation which is to pass one-third of the aggregate gain from controllable factors to consumers
- Positive adjustment for clause 19.2 (a) of the regulation which is to pass one-third of the aggregate loss from controllable factors to consumers

Z is an adjustment that the Commission may apply during the control period to pass any appropriate financial implications (positive or negative). This may also include incentives or penalties linked to mandatory standards such as Voltage variations, Safety standards and desirable standards such as Feeder availability, Sub-station availability, Voltage unbalance, Neutral Voltage Displacements (NVD), voltage variation index, System adequacy & System security.

CHAPTER 5: APPLICABILITY OF THE ORDER

This Tariff Order for REL Transmission Business will be valid till March 31, 2008, and shall be deemed to be effective prospectively from the month of April 2007, for all billing purposes. The Commission acknowledges the efforts of Consumer Representatives, other individuals and organizations for their valuable contribution to the ARR and Tariff determination process.

The Commission would also like to put on record the efforts of its advisors, PricewaterhouseCoopers Pvt. Ltd.

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

(Smt. Malini Shankar)

Secretary, MERC

ANNEXURE 1 – LIST OF PARTICIPANT OF TECHNICAL VALIDATION SESSION

Name	Designation	Company
P.S. Pandya	Sr. Consultant	REL-T
Ashok Pendse		MGP
Kapil Sharma	Head - Regulatory	REL-T
A. Tambawala	AVP	REL-T
M Moolwany	Sr. VP	REL-T
M Limaye	Sr. Manger	REL-T
N. V. Bhandhari	Sp (MERC)	BEST
P. V. Chawande	Sr. Manager	REL-T
M. S. Rao	AVP	REL-T
Kamal Kant	AVP	REL-T
Prafulla Varhade	Dy. Manager	REL-T
R. R.Metha	Sr. VP	REL-T
Sharad Nath	Sr. Officer	REL-T
Vijayanand Semlette	Dy. Manager	REL-T
Ganesh Balasubramaiam	Sr. .Office	REL-T
Prashant K Anvekar	Sr. E.E	TPC
S. R. Mehendale	Asst Manager	TPC
Debashish Mishra	Ass. Director	PwC
Sunil Kumar	Principal Consultant	PwC
Santrupta Padhi	Consultant	PwC
PVN Ravi Kumar	Consultant	PwC
Aditya Bansal	Consultant	PwC

ANNEXURE 2 – O&M COSTS AND ASSET DETAILS OF REL-T FOR THE PERIOD FY 2001-02 TO 2005-06

As per Licensee submission

	Particulars	**FY 2001-02**	**FY 2002-03**	**FY 2003-04**	**FY 2004-05**	**FY 2005-06**
1	O&M Costs (Rs. Crore)	5.11	4.73	5.65	8.32	10.66
	Asset Details					
2	Total Bays (Nos)	117	117	130	130	141
3	Total Line Length (Ckt-Kms)	474	474	474	474	482.2

ANNEXURE 3 – FORMAT FOR SCHEME WISE CAPITAL WORK IN PROGRESS DETAILS

Scheme Name MBR Date	Brief Scope of the Scheme	Scheme Cost	Expenditure upto March '06	Capitalisation upto March '06	Opening CWIP	Investment/expenditure during the year 06-07	Projected Capitalisation during the year 06-07				Closing CWIP
							Works capitalised	Interest capitalised	Expense capitalised	Total capitalisation	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	('8)	(9)	(10)	(11)	(12)
TOTAL											