

**THE MULA PRAVARA ELECTRIC CO-OPERATIVE SOCIETY LTD;
SHRIRAMPUR, DIST. AHMEDNAGAR.**

Petition for approval of Aggregate Revenue Requirement for Financial Years 2004-05, 2005-06 and 2006-07 and Tariff Revision for FY 2006-07

EXECUTIVE SUMMERY

A] BACKGROUND

About MPECS

The Mula Pravara Electric Co-operative Society Limited, Shrirampur (MPECS) was established in 1969, as one of the five pilot co-operative societies established in India as a rural electric co-operative Society. It distributes electricity in 183 villages spread over five talukas in the Ahmednagar district. Its consumer base spans around 1.45 lakh consumers having sanctioned load of around 207 MW and MPECS receives power from Maharashtra State Electricity Distribution Company Ltd (MSEDCL) at 33 kV and 11kV interface points.

Initially, MPECS was provided with a 20 year licence under the Indian Electricity Act 1910 by the Government of Maharashtra on January 28, 1971. Further, this licence was extended for a period of 20 years i.e. upto 2011 by the Government of Maharashtra (GOM) vide its Government Resolution (GR) dated May 21, 1999.

MPECS, as pioneering 'rural electric co-operative' has created infrastructure for rural electricity distribution, which forms a role model for other utilities/licensees to follow. As outlined under subsequent paragraphs, Hon'ble Commission has also recognized that MPECS operations are far efficient and superior in comparison to MSEB in a comparable distribution circles as regards several key performance parameters and service parameters such as distribution losses, collection efficiency, average billing rates, consumer receivables, operation and maintenance costs and distribution transformer failure rates.

However, in order to ensure long term sustainability of operations, it is critical that some form of support through direct subsidy mechanism by government or sustainable bulk supply arrangements is available for rural electricity supply on account of adverse consumer mix (with predominant agriculture and domestic consumption) and hence, limited revenue earning capacity of the rural distribution licensees. As outlined in subsequent paragraphs, Hon'ble Commission has also recognized this need in its recommendations to GOM regarding viability of MPECS and its continuation as 'distribution licensee'.

The National Electricity Policy (Clause 5.1.5) also clearly recognizes this requirement of subsidizing rural electricity supply.

Further, Central Government has published National Policy for 'Rural Electrification and management of local distribution and bulk purchase of power in rural areas' on August 23, 2006. The relevant extract of the said policy as regards 'bulk power purchase' by such 'rural electric utility / co-operative are as under:

“Bulk purchase of power:-

9.13 Persons exempt under Section 13 may procure power from the existing licensee of the area or from any other source.

9.14 Where such persons purchase power from the licensee of the area, they would be treated as a separate category by the Appropriate Commission for the determination of the Bulk Purchase Price (“BPP”) to be paid by them to the licensees.

In such cases the tariff for retail sale to the consumers in the area of such persons would be as determined for the licensee by the Appropriate Commission.

9.15 If not determined competitively, the BPP should be set on a normative basis based on representative consumer mix and should not vary on a case-to-case basis. The BPP set along with margins prescribed for the local distribution enterprise should be such that consumers tariff is maintained at the same level. This BPP would be fully factored into the submissions of the State Utilities to the State Electricity Regulatory Commissions for their revenue requirements.

B] PROCEDURAL HISTORY

MERC: Detailed Note on findings and recommendations on the viability of MPECS

In accordance with the Hon’ble High Court’s (Nagpur Bench) Order in the matter of writ petition: 3399/2000, GOM solicited advice from MERC to examine a) whether MPECS’ operations are efficient as compared to similar distribution circles of MSEB b) advice on preparation of time bound action plan for turn around of MPECS c) determination of parameters and formula for viable bulk rate of purchase and advise GOM accordingly. In this context, Hon’ble MERC had provided its advice and recommendations on the issues raised by the GOM under its ‘detailed note on the findings & recommendations on the viability of MPECS’ forwarded to GOM during January 2004. Essentially, MERC’s recommendations include following:

- a. The Commission finds that MPECS operations are more efficient than MSEB in comparable distribution areas on key performance and service parameters such as distribution losses, collection efficiency, average billing rates, consumer receivables, operation and maintenance costs and distribution transformer failure rates;
- b. The Commission is of the view that a time bound improvement program is essential for sustained viability of operations of MPECS.
- c. The Commission is also of the view that, in the present economic context, the rural power supply would require some form of continuous assistance. Further, the Commission recommended that GOM may consider provision of capital subsidy which would enable MPECS achieve self-sufficiency and long term sustainability of its operations;

In its detailed note, under ‘Section A7: Key Recommendations’ in Para 7.8, the Hon’ble MERC on the basis of its analysis and findings had considered in detail the following three Options:

- a. Option 1: MPECS to continue as licensee with transparent direct subsidy arrangements
- b. Option 2: MPECS continue as licensee with Creation of “Regulatory Asset”
- c. Option 3: MPECS as Management Contractor/ Franchisee

GOM GR dated August 24, 2004 and Comments/Response on it

Further, based on the report and advice forwarded by Hon'ble MERC, the GOM has decided vide its GR dated August 24, 2004 to allow MPECS to continue its operations as a Licensee and directed MPECS to approach MERC for determination of 'tariff' to be charged by MPECS to its consumers.

The salient features of GOM decision communicated vide its GR dated August 24, 2004 include –

- a) MPECS has been allowed to continue its operations as 'Distribution Licensee'.
- b) In order to improve its operations further, the MPECS will have to adhere to the time bound action plan as per key recommendations given by MERC and GOM shall extend requisite subsidy support till such time turn-around in operations of MPECS is achieved.
- c) The quantum of required revenue subsidy support is estimated to be around Rs 72 Crore per annum which GOM shall provide to MSEB directly.
- d) In order to enable MPECS undertake time bound action plan as recommended by MERC and to undertake rural electrification works and other capital expenditure schemes, the GOM shall extend capital subsidy support to MPECS of around Rs 4 Crore per annum.
- e) MSEB shall treat the past arrears from MPECS as 'Regulatory asset' in its books and not to charge any further interest on the past arrears henceforth. MSEB shall recover the said regulatory asset from MPECS upon turnaround of operations of MPECS.

The decision of GOM to continue operations of MPECS as distribution licensee is very important for MPECS. At the same time, MPECS recognizes that the proposed mechanism together with the conditions outlined under the said GR entails several regulatory issues that would require approval of the Hon'ble Commission and would have significant influence on the long term viability and operations of MPECS.

Hon'ble Commission's Order dt. 16-12-2005 and other Regulatory Developments

Hon'ble Commission, upon inviting comments from the stakeholders and upon detailed deliberations in respect of said GR (in the matter of Case 33 of 2005) through its Order dated 16th December 2005 has acknowledged and validated all aspects the said GR as regards continuation of MPECS as distribution licensee except 'regarding creation of Regulatory Asset' pertaining to past power purchase dues and has advised the State Government (GOM) to expedite the process to remedy the said GR.

While GOM is yet to issue its remedied GR as regards treatment of past power purchase dues, MPECS continues to be a 'Distribution Licensee' and being a 'deemed licensee' as per provisions of the Electricity Act 2003, is required to comply with various provisions of EA 2003 and regulations thereof, including filing of petition for the approval of the annual revenue requirement and determination of tariff.

Accordingly, MPECS has filed its petition for approval of Annual Revenue Requirement (ARR) for FY2003-04, FY2004-05 and FY2005-06 and its proposal for regulatory treatment of revenue gaps in the respective years including Petition for revision in Retail Supply Tariff (RST) and Bulk Supply Tariff (BST) for FY2005-06 on 13th June 2005 before Hon'ble Commission.

Subsequently, Hon'ble Commission through its Order dated 20th December 2005 has deferred requirement to file Multi Year Tariff (MYT) application by one year for all distribution licensees with Maharashtra, thereby deferring applicability of first control period to FY08 to FY10 and also directed all licensees to file ARR/Tariff application for FY07.

Accordingly, MPECS had filed its Petition for FY05, FY06 and FY07 on February 20, 2006 in accordance with the applicable provisions of the EA2003 and in line with the regulations notified by Hon'ble Commission for the purpose of filing of ARR Petition, expected revenue from tariff and charges and determination of tariff, keeping in view long term sustainability of operation of MPECS as 'distribution licensee'.

Further, as directed by the Commission during the Technical Validation session held on November 8, 2006, MPECS submitted the **Additional Information** based on following:

- Updated actual performance and financial/account related information for FY2005-06 based on audited financial statement for FY2005-06 as against earlier information, which was based on actual data for 8 month (April 2005 to November 2005) and projections for remaining 4 months (December 2005 to March 2006).
- In addition, projections for FY2006-07 have been updated to include actual performance for six months (April 2006 to September 2006) and projections for remaining period of six months (October 2006 to March 2007).

Issues being considered in the filing of the ARR / Tariff Petition:

MPECS believes that commenting on the quantum of subsidy requirement, loss reduction trajectory and investment plans would require detailed analysis which has been dealt with in detail as a part of this Petition. The said GOM GR dt August 24, 2004 has thrown up several regulatory issues, which would require approval and clear directive from Hon'ble Commission in order to ensure regulatory clarity and regulatory certainty to the sector and in the interest of long term sustainability of operations from MPECS perspective.

The key regulatory issues that need to be addressed include:

- a) Retail Supply Tariff (RST) determination for MPECS (principle of statewide uniform RST or differential RST)
- b) Bulk Supply tariff applicable to MPCES (long term and short term)
- c) Quantification of revenue subsidy requirement and manner of compensation
- d) Quantification of capital subsidy requirement and manner of compensation
- e) Performance Targets
- f) Recovery of 'Regulatory Asset'.

Subsequent to earlier submission of MPECS for ARR and Tariff Petition for FY04, FY05 and FY06, significant regulatory developments have taken place, which need to be taken into consideration while dealing with ARR/Tariff Petition for above referred annual periods as well as for the ensuing year 2006-07. Thus, in this ARR/Tariff Petition for FY07, MPECS has strived to take into consideration following regulatory developments that have significant bearing on its ARR/Tariff Petition not only for ensuing year but also on its earlier submission.

- a. Hon'ble Commission has notified MERC (Terms and Conditions for Tariff) Regulations 2005 on 25th August 2005.
- b. Central Government has notified National Tariff Policy (NTP) on 6th January 2006 as per requirement under Section 3 of EA 2003.
- c. Central Government has issued National Policy for Rural Electrification and for bulk purchase of power and management of local distribution in rural areas as per requirement under Section 4 and Section 5 of EA 2003.
- d. Hon'ble Commission has issued its Order dated 16th December 2005 in the matter of Case 33 of 2005 regarding continuation of MPECS as distribution licensee and has addressed therein, the issues related to GR issued by GOM on 24th August 2004.
- e. Earlier submission was based on audited/actual results for Fy2003-04 and actual information available for part period of FY2004-05. However, further to earlier submission, financial information and audited account statements for FY2004-05 are available and actual operating performance upto Dec 2005 (i.e. 9 months of Fy2005-06) is available.

Accordingly, the petition for approval of the Annual Revenue Requirement (ARR) for financial years FY 2004-05 (PY), FY 2005-06 (CY) and FY 2006-07 (EY) and Petition for approval of the proposed regulatory mechanism for treatment of revenue gap for financial years FY 2004-05 (PY), FY 2005-06 (CY) and Proposal for Tariff Revision for FY 2006-07 (EY) had been filed before the Hon'ble Commission in accordance with Part VII (Section 61 to Section 65) of the Electricity Act 2003, Maharashtra Electricity Regulatory Commission (Terms and conditions of Tariff) Regulations, 2005 and Maharashtra Electricity Regulatory Commission (Conduct of Business) Regulations, 2004.

The objective of this Petition is to seek approval for ARR of MPECS for FY2004-05, 2005-06 and FY2006-07 and to seek approval for proposed regulatory mechanism for treatment of revenue gap of FY2004-05 and FY2005-06 and revision in tariff for FY 2006-07.

C] OPERATING PERFORMANCE AND PROJECTIONS

Sales Projections

MPECS has projected the category wise sales for the metered categories on the basis of past trend using 5 year Compounded Annual Growth Rate (CAGR) and after considering the impact of the severe load shedding being presently undertaken by the MSEDCL.

The sales for the un-metered LT Agri category has been projected based on the agricultural consumption norm derived on the basis of the energy audit data. Based on agricultural feeder audit, consumption norm for un-metered LT agriculture category has been estimated as 1535 kWh/HP/annum and 1742 kWh/HP/annum for FY 2004-05 and FY 2005-06 respectively. Further, based on 12-monthly moving average basis, the consumption norm of 1767 kWh/HP/annum has been considered for the purpose of projections for FY 2006-07.

Summary of Sales

The summary of sales for each consumer category for FY 2004-05, FY 2005 -06 and FY 2006-07 has been provided below.

Summary of Consumer Category wise Sale

Sale in Million Units	Previous Year	Current Year	Ensuing Year
	FY2004-05	FY2005-06	FY2006-07
Category	Actual	Actual	Projection
LT Category			
Domestic (LD-1)	40.66	40.34	41.95
Non-domestic (LD-2)	9.97	9.78	10.17
General Motive Power (LTP-G)	10.66	11.45	11.91
Public Water Works	3.38	3.53	3.53
Agriculture Consumers (metered)	1.03	4.22	5.27
Agriculture Consumers (un-metered)	261.29	298.79	307.16
Public Street Lighting	2.46	2.24	2.24
Temporary	0.01	0.01	0.01
Sub-total (LT)	329.47	370.36	382.24
HT Category			
HTP-II (Industrial, others)	30.74	28.30	29.62
HTP-IV (PWW-others)	1.66	1.64	2.00
HTP-VII(Agriculture)	5.73	7.15	7.33
Sub-total (HT)	38.13	37.09	38.95
TOTAL (LT + HT)	367.60	407.45	421.19

Distribution Losses

For the purposes of assessment of distribution losses, MPECS has adopted the methodology as stipulated by Hon'ble Commission in it's Tariff Order in the case of MSEDCL for energy accounting. MPECS has initiated agriculture feeder audit since year 2002. During April 2002, 19 number of DTC's were sampled and sample size was increased to 34 metering points till March 2003. During FY 2003-04 average 63 number of DTC were sampled and during FY 2005-06 around 71 DTCs were sampled.

Particulars	Previous Year	Current Year	Ensuing Year
	FY2004-05	FY2005-06	FY2006-07
	Actual	Actual	Projection
Power Purchase/Requirement, MU	551.51	611.61	623.98
Metered Sale, MU	106.31	108.65	114.03
Unmetered Sale, MU	261.29	298.79	307.16
Total Sale, MU	367.60	407.44	421.19
Total Loss, MU	183.91	204.17	202.79
Loss %	33.35%	33.38%	32.50%

DJ ANNUAL REVENUE REQUIREMENT AND PROJECTIONS

Financial Performance and Projection of Expenses

MPECS has considered audited accounts for working out the ARR for FY 2004-05 and 2005-06. Projection of ARR for FY 2006-07 has been estimated on the basis of the past trends of expenses.

i] The power purchase expenses account for almost 63% of the total expenses and hence forms a major component of the total expenses of MPECS. The sub-components of the total power purchase expenses are energy charges, demand charges and fuel cost adjustment charges, renewable purchase obligation. Other charges levied by MSEB on account of power purchase include delayed payment charges (DPC) and interest on energy bill arrears. Even though these charges are related to power purchase expenses but are not actual power purchase expenses and hence, these have not been considered as a part of the power purchase costs for ARR and Tariff determination for the PY and CY and have been shown separately in the profit and loss account under the head 'Other Expenses - DPC and Interest on DPC'.

Particulars	Previous Year	Current Year	Ensuing Year
	FY2004-05	FY2005-06	FY2006-07
	Actual	Actual	Projection
Power Purchase/Requirement, MU	551.51	611.61	623.98
Total Power Purchase Cost, Rs Cr	126.23	146.20	200.22
Per Unit cost of Power Purchase, Rs/U	2.29	2.39	3.21
PU Demand Charge, Rs/kWh	0.63	0.60	0.63
PU Energy Charge, Rs/kWh	1.50	1.50	2.19
PU FCA charge, Rs/kWh	0.16	0.27	0.39

During FY2004-05, the power purchase expenses of MPECS amounted to Rs. 126.23 Crore. The effective cost per unit purchased is 2.29 Rs./kWh which include 1.5 Rs./kWh towards energy charge, 0.63 Rs./kWh derived towards demand charge and 0.16 Rs./kWh towards FOCA charge from MSEB.

During FY2005-06, MPECS had purchased energy equivalent to 611.61 MU from MSEB. The power purchase expense of MPECS amounted to 146.20 Crore. The effective cost per unit is 2.39 Rs./kWh which include 1.50 Rs./kWh toward energy charge, 0.60 Rs./kWh derived toward demand charge and 0.27 Rs./kWh toward FOCA charge payable to MSEB.

As regards, projection of power purchase costs for FY2006-07 is concerned, Hon'ble Commission had issued a Tariff Order in case of MSEDCL's ARR/Tariff Petition for FY2006-07 on September 20, 2006. According, to the said Order the tariff for bulk supply to MPECS has been revised to Rs 2.80 per unit from Rs 1.50 per unit and the FCA has been reduced to 'nil'. Also, demand charges has been retained at existing level of Rs 200 /kVA/month. Above Order has been made effective from October 2006. Accordingly, we have considered power purchase cost from April 2006 to September 2006 at earlier BST rate and have projected power purchase cost from October 2006 to March 2007 at the revised BST as directed by the Commission during Technical Validation session.

Accordingly, overall per unit power purchase cost of energy amounts to 3.21 Rs/kWh for the FY 2006-07, which includes 2.58 Rs./kWh towards energy charge and 0.63 Rs/kWh towards demand charges. Hence, the total power purchase expenses for the EY are estimated at Rs. 200.22 Crore. A detailed monthwise projection of power purchase cost based on existing BST (Apr-06 to Sep-06) and revised BST (Oct-06 to Mar-07) is summarised in the following table

Source of Power (Station wise)	Month	Utility-share-(MW)/Billing Demand (kVA)	Energy Received (MU)	Demand Charges, Rs/kVA/month	Total Annual Fixed-Demand charges (Rs lakh)	Energy Charge, Rs/unit	Capacity-Energy Charges (Rs Lakh)	Fuel Price Adjustment Charge (Rs/kWh)	Fuel Price Adjustment Cost (Rs Lakh)	Total Variable Charges (Rs Lakh)	Total Cost of Energy Received (Rs Lakh)	Avg cost of energy received (Rs/kWh)
	(a)	(b)	(c)	(d)	(e)=(b)x(d)	(f)	(g) = (c)x (f)	(h)	(i) = (c) x (h)	(j) = (g+i)	(l) = (e+j)	(m)=(l)/(c)
MSEDCL	Apr-06	164285	56.95	200.00	328.57	1.50	854.29	0.78	444.23	1298.52	1627.09	2.86
	May-06	160183	52.87	200.00	320.37	1.50	793.09	0.96	507.58	1300.67	1621.04	3.07
	Jun-06	152372	50.29	200.00	304.74	1.50	754.30	0.98	492.81	1247.11	1551.85	3.09
	Jul-06	151945	50.07	200.00	303.89	1.50	751.12	0.88	440.66	1191.78	1495.67	2.99
	Aug-06	160608	41.88	200.00	321.22	1.50	628.18	1.03	431.35	1059.52	1380.74	3.30
	Sep-06	153660	47.22	200.00	307.32	1.50	708.35	0.25	118.06	826.41	1133.73	2.40
	Oct-06	139033	39.97	200.00	278.07	2.80	1119.27	0.00	0.00	1119.27	1397.34	3.50
	Nov-06	152883	51.22	200.00	305.77	2.80	1434.25	0.00	0.00	1434.25	1740.01	3.40
	Dec-06	170302	54.95	200.00	340.60	2.80	1538.64	0.00	0.00	1538.64	1879.24	3.42
	Jan-07	168891	59.85	200.00	337.78	2.80	1675.92	0.00	0.00	1675.92	2013.70	3.36
	Feb-07	176120	61.88	200.00	352.24	2.80	1732.57	0.00	0.00	1732.57	2084.81	3.37
Mar-07	184343	56.81	200.00	368.69	2.80	1590.72	0.00	0.00	1590.72	1959.40	3.45	
Sub-total (MSEDCL)	Apr-06 to Mar-07	161219	623.98	200.00	3869.25	2.80	13580.70	0.39	2434.68	16015.38	19884.63	3.19
RPO Pool contribution	Apr-06 to Mar-07	3.00%	18.72			3.30	617.74	(2.57)	(480.46)	137.28	137.28	0.73
Total		161219	623.98		3869.25		14198.44		1954.22	16152.66	20021.91	3.21

Apart from above, there are several other regulatory issues that need to be addressed as regards ascertaining of power purchase quantum and cost for MPECS, namely, (a) Defining of interace points for supply to MPECS (b) Accounting of energy input and estimation of losses (c) Recording of Maximum Demand on Simultaneous Maximum demand basis (d) Average billing and meter reading.

ii] During FY05 and FY06, MPECS incurred R&M expenses of Rs 126 Lakh and Rs 217 Lakh respectively. The R&M expenses have a direct relation with the wear & tear of the Society's assets and account for 1.23% of the GFA during the PY. Due to paucity of funds, the curtailed R&M expenses actually incurred during the PY would not be representative for the future projections. Accordingly, while projecting the R&M expenses for the EY, this aspect has been taken into consideration. Thus, R&M expenses have been projected at Rs. 236 lakh for EY.

iii] The Administration and General (A&G) expenses comprises rent, rates, taxes and insurance, licence and registration fees, travelling and conveyance, printing and stationery, books and periodicals, photocopying expenses, telephone, postage and telegram, electric & water charges, legal charges, audit fees, MERC tariff filing and consultancy charges, advertisement expenses, general meeting expenses, system development expenses, computer training expenses and miscellaneous expenses. During FY05 and FY06, MPECS had incurred A&G expense of Rs 68 Lakh and Rs 85 Lakh respectively. The A&G expenses as a percentage of total expenses amounts to 0.32% of the total expenses of MPECS during the PY. The A&G expenses for EY, have been projected at Rs. 110 lakh.

iv] The employees expenses for the CY (FY2005-06) have increased from Rs.1504 lakh during PY to 1899 lakh on account of pay revision. The employee expenses for EY have been projected at Rs 2222 Lakh

v] The other expenses include the following heads of expenses:

- a. Concession & Rebates to consumers;
- b. Other debits, write-offs and provisions;
- c. DPC & Interest on energy bill arrears;
- d. Extraordinary expenses; and
- e. Provision for doubtful debts.

Other expenses include delayed payment charges and interest charges for past power purchase dues to the extent of Rs 6391 Lakh for PY and Rs 7064 Lakh for CY. While GOM is yet to issue its remedied GR as regards treatment of past power purchase dues, MSEDCL continues to charge 'delayed payment charges' (DPC) and interest on past power purchase dues during PY (2004-05) and CY (2005-06) to MPECS. It is envisaged that, GOM would remedy the said GR to address the issue of 'past power purchase dues' and interest thereof shortly as advised by MERC under its Order dt. 16th December 2005 (Case 33 of 2005), a separate mechanism will have to be evolved to address treatment of the past power purchase dues so that future operations of the MPECS are not overburdened with the past power purchase dues, which has arisen due to factors beyond the reasonable control of MPECS. Accordingly, it is assumed that in the ensuing year, once GOM issues its remedied GR, which is expected to address the issue of past power purchase dues, the question of projecting interest cost and DPC related charges pertaining to past power purchase dues, will not arise.

vi] As per clause 63.7.1 of the notified MERC (Terms of Conditions of Tariff) Regulations 2005, a distribution licensee is permitted to recover an amount towards contribution to Contingency Reserve upto 0.25 per cent of original cost of fixed assets, as part of its ARR. Accordingly, MPECS has provided a sum of Rs 18.86 L, Rs 31.03 L and Rs 33.99 L during CY, PY and EY respectively, as contribution towards contingency reserve.

vii] As regards depreciation, MPECS has been applying the Straight Line Method (SLM) and at the rates prescribed by the Central Government's Ministry of Finance. However, MPECS notes that Hon'ble Commission has notified MERC (terms and conditions of tariff) Regulations 2005 on 24th August 2005. As per clause 63.4 of the said Tariff regulations, the depreciation for the purpose of ARR and tariff determination has been worked out at the rates as prescribed under the Annexure of the said Tariff Regulations. The depreciation expenses for the CY work out to Rs. 341.32 lakh and for the EY work out to Rs. 388.74 lakh.

viii] The interest expenses of MPECS basically can be classified into three categories being interest on existing loans, interest on new loans to fund capital investment and interest on working capital requirement. MPECS has already undertaken several initiatives for strengthening the distribution network through addition of new sub-stations and augmentation of capacities of some of the existing substations and other system improvement schemes. This has resulted in significant capital outlay requirement necessitating funds from various financial institutions. However, MPECS notes that as per clause 61.1 and Cl. 63.3.1 of MERC Tariff Regulations, Hon'ble Commission shall approve the interest cost for capital expenditure incurred on or after 1st April 2005 on normative debt:equity of 70:30. In view of above, while MPECS is yet to finalise/tie up its loan

requirement for the proposed capital outlay from the identified loan sources, MPECS has proceeded to include interest cost on normative basis in accordance with the Tariff Regulations notified by the Hon'ble Commission. Accordingly, interest expense has been considered as Rs 41.51 Lakh for PY, Rs 90.20 Lakh for CY and Rs 113.62 Lakh for EY. Further, interest on security deposit has been considered as Rs 45.30 L for PY, Rs 46.95 L for CY and Rs 48.60 L for EY.

ix] Since MPECS has been a loss-making rural electric co-operative, no tax provision has been considered on its income.

x] Capital Base and Return on equity has been estimated in accordance with the notified MERC Tariff Regulations. The return equity amounts to Rs 125.58 Lakh for PY, Rs 162.01 Lakh for CY and Rs 186.71 Lakh for EY.

The Aggregate Revenue Requirement of MPECS is summarized as below:

Sr. No.	Particulars	2004-05 PY	2005-06 CY	2006-07 EY
	(Rs. in Lakhs)	Actual	Actual	Projected
A	Revenue expenses			
1	Power purchase expenses	12623.29	14620.39	20021.91
2	Operating expenses	1699.30	2190.14	2553.28
3	Financial expenses	393.61	478.47	550.96
4	Other expenses	6632.85	7247.08	245.53
	Sub-total	21349.05	24536.08	23371.68
B	Reasonable Return	125.58	162.01	186.71
C	Aggregate Revenue Requirement (A+B)	21474.63	24698.09	23558.39
D	Less: Non-tariff income	(450.81)	(435.46)	(489.00)
E	Net Revenue Requirement	21023.82	24262.63	23069.39

E] REVENUE AT EXISTING TARIFF FOR FY05 (PY), FY06(CY) AND FY07 (EY)

MPECS had earlier filed an application consisting of a tariff revision proposal before the Hon'ble Commission for FY 2002-03. In connection with the above, the Hon'ble Commission in its interim order dated 18th July 2002 has directed MPECS to adopt the tariff notified for MSEB in its tariff order dated 10th January 2002 for its retail consumers. Subsequently, MPECS had filed petition on 13th Jun 2005 before Hon'ble Commission for revision in retail supply tariff as well as revision in bulk supply tariff for FY2005-06. Pending disposal of above petition, MPECS, until now, continues to bill all its consumer categories on basis of the earlier tariff order as directed by Hon'ble Commission.

Further, Hon'ble Commission approved revised tariff schedule for consumers of MSEB through its Tariff Order in respect of MSEB's ARR/Tariff Petition for FY 2003-04. However, pending approval from Hon'ble Commission MPECS has continued billing its consumers on previous tariff order (i.e. as per Tariff Order for FY2001-02) for MSEB retail consumers till date. However, MPECS has been charging FOCA charges from the consumers in line with MERC's FOCA Order to be applicable for MSEB from time to time.

Hon'ble Commission had issued Tariff Order in case of MSEDCL petition for ARR/Tariff Order for FY2006-07 wherein it had revised retail supply tariff for MSEDCL consumers

under its Order dated 20th September 2006. It is understood that the retail tariff determination is the licensee specific activity. However, it is desirable that uniform retail tariff in respect of various consumer categories is maintained across the State to the extent possible. It is also noted that Hon'ble Commission in its statutory advice to the GOM in respect of restructuring of MSEB vide its letter dated May 14, 2004 as per Clause 2, (Distribution company formation) has also advocated the concept of uniform retail supply tariff for particular tariff category across State.

Accordingly, projections of revenue for October 2006 to March 2007 are based on revised retails supply Tariff as approved by the Commission for MSEDCL consumers under its Order dated 20th September 2006. The revenue of MPECS for PY, CY and EY is summarised in the following Table.

Particulars	Previous Year	Current Year	Ensuing Year
	FY2004-05	FY2005-06	FY2006-07
	Actual	Actual	Projection
Sales, MU	367.60	407.44	421.19
LT Sales, MU	329.47	370.35	382.24
HT Sales, MU	38.13	37.09	38.95
Revenue, Rs Lakh	6160.47	6426.83	7426.80
LT Revenue, Rs Lakh	4817.26	5128.20	6033.07
HT Revenue, Rs Lakh	1343.21	1298.63	1393.73
Per Unit Revenue, Rs/kWh	1.68	1.58	1.76
PU LT Revenue, Rs/kWh	1.46	1.38	1.58
PU HT Revenue, Rs/kWh	3.52	2.97	3.58

F] REVENUE GAP FOR FY05 (PY), FY06(CY) AND FY07 (EY)

Following table summarises the Aggregate Revenue Requirement, Net Revenue Requirement and revenue gap before taking into consideration the revenue subsidy to be received from the GOM. The ARR per unit of sale during the PY is Rs. 5.84 p.u. which increases to Rs. 6.06 p.u. during CY and is projected to reduce to Rs. 5.59 p.u. during EY mainly on account of proposed non-applicability of interest on past power purchase dues and delayed payment charges.

Sr. No.	Particulars	2004-05 PY	2005-06 CY	2006-07 EY
	(Rs. in Lakhs)	Actual	Actual	Projected
A	Sales (MU)	367.60	407.44	421.19
B	Revenue expenses			
1	Power purchase expenses	12623.29	14620.39	20021.91
2	Operating expenses	1699.30	2190.14	2553.28
3	Financial expenses	393.61	478.47	550.96
4	Other expenses (incl. DPC and interest on arrears)	6632.85	7247.08	245.53

Sr. No.	Particulars	2004-05 PY	2005-06 CY	2006-07 EY
	(Rs. in Lakhs)	Actual	Actual	Projected
	Sub-total	21349.05	24536.08	23371.68
C	Reasonable Return	125.58	162.01	186.71
D	Aggregate Revenue Requirement (A+B)	21474.63	24698.09	23558.39
E	ARR per MU, Rs/ unit	5.84	6.06	5.59
F	Less: Non-tariff income	(450.81)	(435.46)	(489.00)
G	Net Revenue Requirement	21023.82	24262.63	23069.39
H	Net Revenue Requirement per MU, Rs/ unit	5.72	5.95	5.48
I	Revenue at existing tariffs	6,160.47	6426.83	7426.80
	PU Revenue	1.68	1.58	1.76
J	Revenue Gap	(14,863.35)	(17835.80)	15642.59
K	Revenue Subsidy			7,200.00
L	Revenue Gap including revenue subsidy	(14,863.35)	(17835.80)	(8442.59)
M	Revenue Gap including revenue subsidy per MU, Rs/ unit	-4.04	-4.38	- 2.00

The revenue gap works out to Rs. 14,863.35 lakh, Rs. 17835.80 lakh for FY 2004-05, FY 2005-06 respectively. The revenue gap for FY2006-07 is projected at Rs 15642.59 Lakh. Upon taking into consideration revenue subsidy of Rs. 7,200 lakh, as envisaged to be received as per the provisions of the GOM GR dated August 24, 2004, uncovered revenue gap for FY 2006-07 remains at Rs 8442.59 Lakh.

F] MECHANISMS TO BRIDGE THE REVENUE GAP

The reasons for projected Revenue Gap for FY2004-05 (PY) and FY2005-06 (CY) and FY2006-07 can be mainly ascribed to un-sustainable power purchase costs arising out of bulk supply tariff for supply of power by MSEDCL to MPECS. It is for the same reason; the Hon'ble Commission in its recommendations to GOM regarding long term viability of MPECS has discussed various mechanisms to address this issue of historical cost burden.

The GOM has issued its GR taking into consideration above recommendation of Hon'ble Commission and GOM in its GR dated August 24, 2004 has stated that MSEB shall treat the past arrears from MPECS as 'Regulatory asset' in its books and not to charge any further interest on the past arrears henceforth. MSEB shall recover the said regulatory asset from MPECS upon turnaround of operations of MPECS.

However, pursuant to issuance of the Order by Hon'ble Commission dated 16th December 2005 in the matter of Case no. 33 of 2005, Hon'ble Commission has ruled that provision of creating 'regulatory asset' in the books of MSEB to treat past power purchase dues of

MPECS shall not be operative and instead had directed GOM to remedy the said GR and address the issue of past power purchase dues, separately.

While GOM is yet to issue its remedied GR as regards treatment of past power purchase dues, MSEDCL continues to charge interest on past power purchase dues and 'delayed payment charges' (DPC) during PY (2004-05) and CY (2005-06) to MPECS, thereby resulting into significant revenue gap for MPECS. The past power purchase dues (including interest charges and DPC) accumulated are Rs 53205.16 Lakhs as on 31-Mar-2005. In fact, the same has increased upto Rs 83470 lakhs as on October 2006.

In this context, MPECS would like to highlight that National Tariff Policy recently notified by Central Government on 6th January 2006 also recommends that opening level of 'uncovered revenue gap' must be covered through transition financing arrangements or capital restructuring.

Further, as per clause 8.2.1 of National Tariff Policy, the past losses can be attributed to utilities/consumers, **only if** they have arisen due to 'controllable factors'.

Thus, it is clear that while 'Regulatory Asset' as a mechanism is an acceptable principle for recovery of un-covered revenue gap, it needs to be verified and ascertained whether it is appropriate to pass on 'past losses' to utility/consumers especially arising due to uncontrollable factors. Besides, as indicated in the earlier paragraphs, the quantum of past power purchase dues of Rs 83470 lakh is very high to be able to be recovered from future consumers of MPECS, given size of operations of MPECS and its consumer mix thereof.

In view of above, MPECS has not proposed any mechanism for treatment of revenue gap upto FY2005-06. MPECS has requested Hon'ble Commission to kindly grant leave to separately propose suitable mechanism for treatment of 'un-covered revenue gaps' in the previous years upto FY2005-06, in case GOM fails to address this grave concern of MPECS in a timely manner.

Further, in line with National Tariff Policy as outlined above, it would be critical to implement uniform retail supply tariff across the State. For MPECS, with predominant agriculture consumption and on account of characteristic consumer mix, sales mix and load profile, this limits the revenue earning potential for MPECS as distribution licensee. Hence, it would be essential that for MPECS, which do not have any generating capacity of its own and is entirely dependent on MSEB for its bulk power purchase requirements, the 'Bulk Supply Tariff', so determined by Hon'ble Commission does not render MPECS operations un-viable neither in short term nor in long term.

Accordingly, MPECS has proposed a 'Revised Bulk Supply Tariff' proposal for FY 2006-07 for the kind consideration of the Hon'ble Commission under its submission dated 20th February 2006.

Quantification of Revenue Subsidy from Government and manner of compensation

As per the GOM GR dated August 24, 2004, the level of revenue subsidy requirement is estimated to be around Rs 72 Crore per annum and the same shall be provided as direct compensation to MSEDCL. As it is clear from above submissions that level of subsidy requirement is dependent on the retail supply tariff and bulk supply tariff to be applicable for MPECS. Thus, level of subsidy requirement is to be derived as balancing figure based on

pre-agreed formula and the same is not subjected to any minimum (floor) or maximum (cap) levels in a year.

Thus, it is submitted that there should be 'in-principle' agreement on formula/mechanism for determination level of subsidy requirement rather than specifying any absolute level.

Revision in Retail Supply Tariff

MPECS's tariff schedule for its consumer has not been modified over a considerable period of time since 2002 and it has continued to apply Tariff Schedule as directed by Hon'ble Commission. The MSEB Tariff Schedule was subsequently modified under the Tariff Order for FY 2003-04 and FY 2006-07. As outlined in previous section it is envisaged that uniform Retail Supply Tariff across the State is desirable to the extent possible and in line with Hon'ble Commission's recommendation to GOM regarding restructuring of MSEB.

Accordingly, it is proposed to modify the current Tariff Schedule for MPECS to be in line with Tariff Schedule applicable for MSEB as per Hon'ble Commission Tariff Order for MSEDCL for FY 2006-07.

Proposal for revision in Bulk Supply Tariff

As per the provisions of Section 61 (b) of the Electricity Act 2003, '*the business of generation, transmission or distribution should be carried out on commercial principles*'; accordingly the uncovered revenue gap of MPECS amounting to Rs. 8442.59 lakh during the FY 2006-07 is required to be bridged.

Further, in line with the National Tariff Policy, it would be critical to implement a 'uniform retail supply tariff' across the State. For MPECS, with predominant agriculture consumption and on account of characteristic consumer mix, sales mix and load profile, there is a limitation on the revenue earning potential for MPECS as a distribution licensee. Hence, it would be essential that for MPECS, which does not have any generating capacity of its own and is entirely dependent on MSEDCL for its bulk power purchase requirements, the 'Bulk Supply Tariff', so determined by Hon'ble Commission does not render MPECS operations unviable neither in short term nor in long term.

A brief analysis of the options considered for meeting uncovered revenue gap is presented below:

- **Further increase in consumer tariff:** Further increase in consumer tariff will make various consumers susceptible to sudden tariff shock. Revision in Tariff from FY01-02 to FY06-07 itself is significant hike for many consumer categories and hence further tariff hike is not feasible.
- **Reduction of power purchase expenses:** Due to the peculiar consumer mix, revenue realisation of MPECS is poor. Average revenue realisation with the existing tariff is Rs. 1.55/kWh, which is proposed to be increased to Rs. 1.76 /kWh. The average cost of supply is Rs. 5.48/kWh with the recently revised MSEDCL bulk supply tariff including FCA charges.

- **Increase in Government subsidy.** As confirmed by GOM in its GR dated 24th August 2004, revenue subsidy support to the extent of Rs. 7,200 lakh shall be provided. Accordingly, the Government subsidy accounts for Rs. 1.70/kWh.

Thus, a downward revision in 'Bulk Supply Tariff' presents a viable option for bridging the proposed un-covered revenue gap for MPECS for FY 2006-07. In order to bridge the revenue gap of **Rs. 8442.59 Lakh**, the 'Bulk Supply Tariff' from MSEB/MSEDCL is required to be reduced by around **Rs. 2.02/kWh** during FY 2006-07.

Accordingly, MPECS humbly submits that the revenue gap for FY06-07 is proposed to be met by way of revision in retail supply tariff as well as revision in Bulk Supply Tariff. It is humbly prayed that Hon'ble Commission may kindly approve the above proposed mechanisms for bridging the revenue gap, as submitted under its Petition.

G] PRAYER

In view of the above, MPECS respectfully prays that this Hon'ble Commission may:

- i) Accept this Petition for approval of the ARR for FY 2004-05, FY 2005-06 and FY 2006-07;
- ii) Approve the ARR of MPECS for FY 2004-05 and FY 2005-06 and the projected ARR for FY 2006-07 and submission in respect of the expected revenue from tariffs and charges for the corresponding financial years;
- iii) Pending action by GOM to remedy its GR to address issue of past power purchase dues, in line with Order dated 16th December 2006 (Case 33 of 2005) of Hon'ble Commission, MPECS requests Hon'ble Commission to kindly grant leave to MPECS to separately propose suitable mechanism for treatment of 'un-covered revenue gaps' in the previous years up to FY2005-06, in case GOM fails to address this grave concern of MPECS in a timely manner.
- iv) Accept the Proposal for Tariff Revision and approve the proposed mechanism outlined under the Petition for revision in retail supply tariff for MPECS and revision in bulk supply tariff to MPECS for FY 2006-07;
- v) Condone any inadvertent omissions/ errors/ short comings and permit MPECS to add/ change/ modify/ alter this filing and make further submissions as may be required at a future date; and
- vi) Pass such Orders as the Hon'ble Commission may deem fit and proper.