



MULTAN ELECTRIC POWER COMPANY LIMITED
(MEPCO)

FINANCE DEPARTMENT

No. 487 \FDM/Tariff

Date: 6/01/2010

The Registrar,
National Electric Power Regulatory Authority,
2nd Floor, OPF Building,
Sector G-5/2,
Islamabad.

Subject: - **TARIFF PETITION – MEPCO (LICENSE # 06/DL/2002)**

Ref: - Your Memo No. NEPRA/R/TRF/-127/MEPCO-2009 dated December 15, 2009.

We are enclosing Tariff Petition for the second quarter (October-December 2009) for the Financial Year 2009-10 for determination of Tariff in accordance with Rule-3 (1) of NEPRA Tariff Standard & Procedure Rules, 1998.

It is therefore, requested to admit attached petition for determination of Tariff for the 2nd Quarter (October-December 2009) as detailed in petition.

It my please be acknowledged.

DA/

1. Affidavit in Original (One Page)
2. Tariff Petition (Pages)

[Signature] 06/01/10
CH. GUFTAR AHMAD
Chief Executive Officer.

Submitted for info nl.

*Chairman
Member (T)*

*Please put at working table
on priority*

AD (MR)

Registrar

Dy. No. *0111*

Dated *11-01-2010*



MULTAN ELECTRIC POWER COMPANY LIMITED

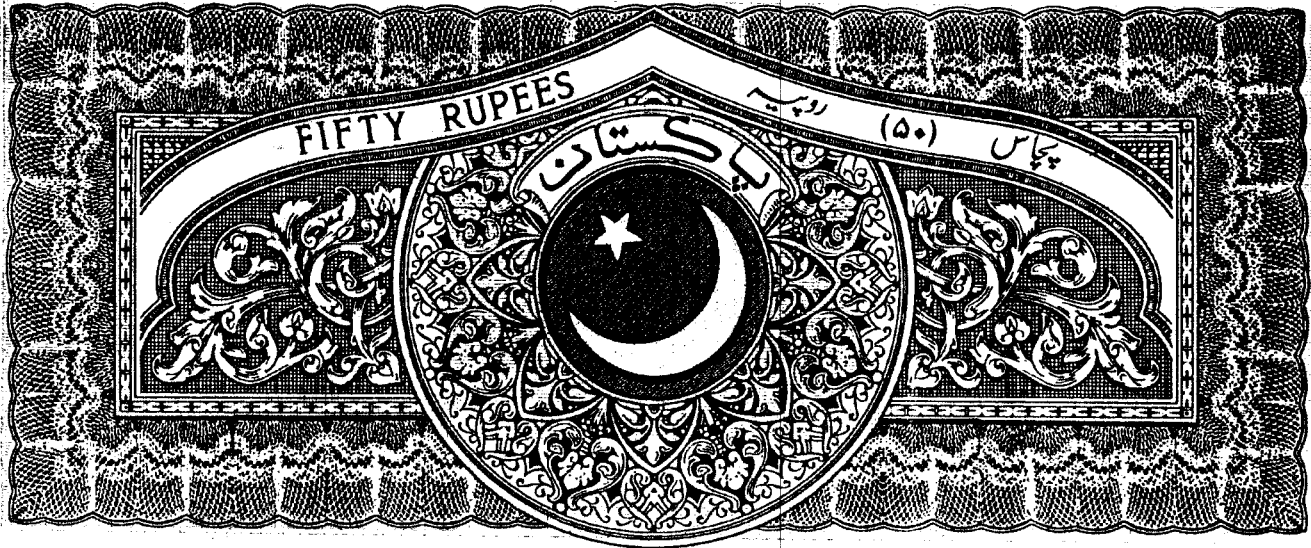
TARIFF PETITION

F.Y. 2009-10

2nd Quarter (Oct-Dec)

DISTRIBUTION LICENSE NO.06/DL/2002

6th January 2010



Before the National Electric Power Regulatory Authority

Affidavit

I, Ch Guftar Ahmed, Chief Executive Officer, Multan Electric Power Company Limited (Distribution License # 06/DL/2002) being duly authorized representative/attorney of Multan Electric Power Company Limited, hereby solemnly affirm and declare that the contents of the accompanying petition/ application No 487/FDM/Tariff dated January 06, 2010 including all supporting documents are true and correct to the best of my knowledge and belief and that nothing has been concealed. I also affirm that all further documentation and information to be provided by me in connection with the accompanying petition shall be true to the best of my knowledge and belief.

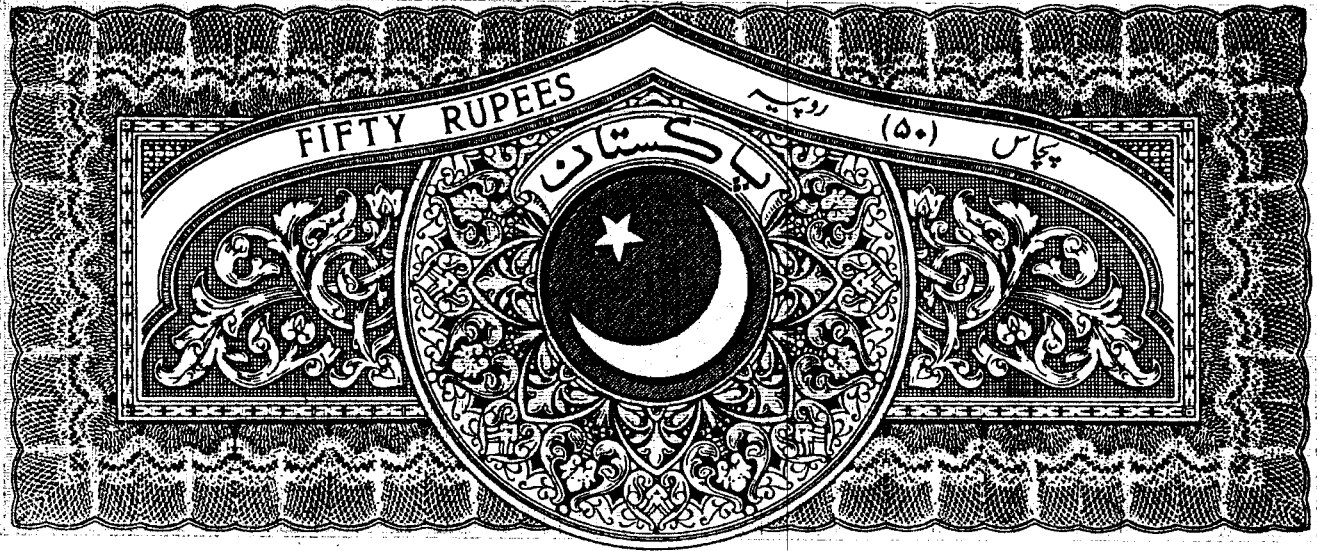
DEPONENT

[Signature] 06/01/10
Ch. Guftar Ahmed
 Chief Executive Officer,
 Multan Electric Power Company Limited
 (MEPCO)

Verified on oath this 06th day of January 6, 2010 that the contents hereof are true and correct to the best of my knowledge and belief and nothing has been concealed.

DEPONENT

[Signature] 06/01/10
Ch. Guftar Ahmed
 Chief Executive Officer,
 Multan Electric Power Company Limited (MEPCO)



**MULTAN ELECTRIC POWER COMPANY LIMITED (MEPCO)
TARIFF PETITION
UNDER SECTION 3(1) OF PART II OF
NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
(TARIFF STANDARDS AND PROCEDURE) 1998**

1. PETITION SUMMARY

1.1 The Petitioner

Multan Electric Power Company Limited (MEPCO)

Multan Electric Power Company Limited, hereinafter referred to as MEPCO or Company, is a public limited company having its registered office at 414- Wapda House, Lahore and principal office at MEPCO Head Quarter, Khanewal Road, Multan. MEPCO as a public utility is engaged in distribution/supply of electric power in its licensed service territory comprising of 13 Administrative Districts of Southern Punjab.

1.1.1 MEPCO is Represented by:

| | |
|---------------------------------|----------------------------|
| • Mr. Ch. Guftar Ahmad | Chief Executive Officer |
| • Syed Mushtaq Hussain Bokhari. | Finance Director. |
| • Hafiz Ashraf Ali | Customer Services Director |
| • Mr. Malik Imtiaz Ahmad | Manager Commercial |
| • Mr. Jahangir Bhutta | Manager Finance (CP&C) |
| • Mr. Shahbaz Ahmad Khan | Company Secretary |

1.1.2. Basis of Petition

Under the 1997 NEPRA Act, NEPRA is responsible for determining tariffs and other terms and conditions for the supply of electricity by the generation, transmission and distribution companies and to recommend these, subject to the need to comply with guidelines not inconsistent with the provisions of the NEPRA Act, to the Federal Government for notification. NEPRA is also responsible for determining the process and procedures for reviewing tariffs and recommending tariff adjustments.

MEPCO is a licensee public utility responsible to distribute/supply electricity to its service area, as set out in MEPCO's Distribution license No. 06/DL/2002, granted by the NEPRA under the NEPRA Act.

The quarterly petition (October-December 2009) is, therefore, being amended and resubmitted on the advice of NEPRA vide their letter No.NEPRA/R/TRF/-127/MEPCO-2009/1217 of December 15,2009 in accordance with the NEPRA Tariff Standards and Procedure Rules 1998 under Part II Section 3 (1) and recent amendment in section 31 of NEPRA act 1997.

1.2 Grounds of Petition

MEPCO tariff has two components i.e. pass through cost and distribution margin .The major portion of pass through cost is power purchased which the company must pay for on regular basis to ensure continuous flow of power in its distribution system. Distribution Margin is equally important, MEPCO must earn sufficient distribution margin to have an adequate stream of cash flow to maintain its system, discharge its financial commitments, and invest on the augmentation and expansion of the network and a reasonable return on the investment.

Stable and predictable tariff rate is beneficial both for Distribution Company and its customers for a long term planning. The length of the review period is important for determining the size of the incentive for MEPCO to improve its efficiency. Longer the period of review, larger the incentive to make efficiency gains, reduce losses or achieve cost efficiencies in stable economic conditions. However, as the authority has been mandated by Regulation of Generation, Transmission and Distribution of electric power (Amendment) Ordinance 2009 to determine tariff on quarterly basis. This tariff petition is, therefore, being filed in compliance with directions of the Authority issued under the ordinance. The authority has determined tariff for MEPCO for the year 2009-10 and its first quarter with the directions to amend and resubmit the petition already filed by MEPCO for the second quarter in the light of the determination .This tariff petition for the second quarter (October-December 2009) also includes points which in the past were raised before the Authority vide a review motion against determination. In addition to the legal requirement, following are the grounds of this petition.

- Unrealistic sales target.
- Unachievable T&D loss target.
- Inadequate O&M cost.
- Delay in determination/notification of tariff.
- Delay/non payment of subsidies
- Diversion in sales mix.
- Low recovery.

The resultant insufficient cash flow is making it difficult for the company to attract outside investment for up gradation of the system because of poor financial health and to meet its financial commitments:

- Pay for electricity purchased.
- Meet other obligations:
 - Investment on the system for T&D loss reduction.
 - Augmentation of the system to cater for growing demand.
 - Expansion of the system.
 - Debt servicing.

1.3 Relief sought

We, therefore, submit to seek the following relief:

- Resetting of sales target.
- Resetting of T& D losses.
- Allowing of adequate O&M.
- Extension in TOU metering deadline.
- Determine consumer end tariff as submitted.
- Any Other relief which the Authority may deem proper.

1.4. Key Aims and Features of the Petition

1.4.1 Aims of the Petition

This tariff petition sets out the tariff methodology, required revenues and timetable for rebalancing tariffs in MEPCO's distribution area for the year 2009-10 including second quarter i.e. October-December 2009. The aim of this petition is to obtain approval for the immediate implementation of proposed tariffs to yield MEPCO's required revenues. The implementation of tariffs will benefit consumers and MEPCO as:

1. Regular due payment to CPPA to ensure regular supply of electricity.
2. The cash flow will enable the co. to improve service quality and reliability.
3. Enable the company to invest on the system for its network expansion.
4. Provide signals for efficient use of this precious national resource.
5. Promote financial sustainability of the company.

i. Features of the Petition

The purpose of petition is as follows:

- Sufficient average tariff to enable MEPCO to recover prudently incurred operating costs and earn a reasonable return on its regulatory asset base to meet its cash flow requirements.

- Incentives for MEPCO to make operating efficiencies and reduce commercial losses.

ii. Structure of the Petition

This petition has three distinct components. The first part deals with the tariff methodology. This is the formula that will be used to determine MEPCO's distribution margin for the year 2009-10 including 2nd quarter (October-December) and the quarters to follow unless there is a fundamental change in the assumptions made. The second part covers the calculation of MEPCO's required revenues during the period. It explains the different components of required revenues including pass through costs (PPP, Income tax etc), operating costs, investment costs and rate of return.

2. Tariff Review Formula and Process

The tariff formula provides a transparent and predictable way of determining MEPCO's distribution margin on quarterly basis. A formula is advantageous as it reduces uncertainty for the utility and for customers. It also provides a simple way for NEPRA to provide incentive to the company to reduce losses and/or make operating efficiencies as required.

2.1 Tariff Methodology

2.1.1 MEPCO's Margin

The formula calculates MEPCO's distribution margin based on forecast unit sales, operating expenses, depreciation, investment and return on investment (cost of capital). Generation and transmission cost, built in the invoice from CPPA, are treated as pass-through. The formula determines revenues for the year and second 2nd quarter (October-December) of the year. The profits or losses that arise from changes in efficiency or demand would, however, be retained by MEPCO.

At the end of the period, the formula would be reapplied to determine the distribution margin for subsequent quarters. Operating expenditure will be subject to an efficiency requirement so that MEPCO will be required to ensure that its increase in costs is below the rate of inflation by an efficiency factor (X) to be determined by NEPRA.

Under the proposed tariff-setting methodology, the average retail tariff would consist of (i) the Power Purchase Price (PPP), which would be passed through to the end users in the retail tariff, and (ii) the average distribution margin, which would be set on the formula-based methodology.

2.1.2 MEPCO Revenue Requirement

Our projected revenue requirement is Rs.91162 (million) for the year 2009-10 out of which an amount of Rs.21802 (million) has been realized in the first quarter ended on October 31, 2009. The annual revenue requirement is briefly posted below:

| | <u>Rs. In Million</u> |
|-----------------------|---------------------------|
| Power Purchase price | 75021 |
| Distribution Margin | 7978 |
| Prior Year Adjustment | <u>8163</u> |
| Total: - | <u>91162</u> |

Sales Growth

MEPCO projected a sales growth of 2% to 9232 mkwh over 9050 mkwh for the year ended on June 30, 2009 which the authority changed to 10521 mkwh while making determination for the first quarter illustrating over 16% growth which is not only unprecedented but is unrealistic in view of hydel situation, progress on the rental power projects and capacity of the system to handle that much growth.

The first quarter growth of 4% has precisely demonstrated our apprehensions, leaving a huge gap of 22 % to be made up in the remaining three quarters which is a very stiff, so does not look achievable. As explained in the following paragraphs, this virtually means further erosion in O&M which is already set low.

In view of the above submissions, the authority is requested to reset the sale target near about 5% i.e. 9503 Mkwh. As the authority determines tariff on quarterly basis, target may be set at 5% above last year and be adjusted on quarter to quarter basis as the actual numbers would suggest.

2.2.1 Power Purchase Price (PPP) and T&D losses

MEPCO pays a Power Purchase Price (in Rs/kWh) for the electricity it procures from CPPA or other sources, which would include the generation and transmission charges (regulated by NEPRA). This Power Purchase Price, adjusted for MEPCO's distribution losses, would then be simply added to MEPCO's overall distribution margin to work out retail tariffs. Thus, the cost of the purchased electricity would be "passed through" to consumers through the retail tariff, *without affecting MEPCO's distribution margin.*

While passing through the PPP, it is recognized that all distribution companies experience some level of distribution losses, defined as the percentage of the difference between the units received by the company and the units invoiced to the consumers. The PPP should thus be adjusted such that MEPCO would be compensated for some losses.

$$\text{PPP} = \frac{\text{Unadjusted PPP}}{1-L}$$

Where;

- Unadjusted PPP is the cost of electricity supply charged by CPPA or any other source at any given time;
- L is the target T&D losses for the period, defined as a percentage of purchased units, in accordance with a schedule established for the control period.

The schedule of losses (Transmission & Distribution) is set to decrease from the current level of 18.4% to 17.50% in the Financial Year 2009-10.

Based on the above formula, the compensation for T&D losses would be automatically adjusted for any change in the power purchase cost. The schedule of target losses, however, would be maintained for the whole year 2009-10, regardless of the actual T&D losses incurred by MEPCO. Thus, if MEPCO were not able to meet the target loss reduction, it would be penalized by not being able to recover the cost of extra units lost from the retail tariffs. If, on the other hand, MEPCO's actual loss reduction outperformed the target level, it would be able to gain extra revenues from the loss adjustments to the PPP.

The authority has set T&D loss target of 15% including 3.5% transmission and 11.5% distribution against 17.5% requested in our tariff petition. The company has the largest network in the country which needs huge investment on continuous basis but remained neglected for a variety of reasons mainly weak cash flows i.e. not a single grid station was built in the last 25 years. The investment made on ELR is too meager with respect to the size of the system and can at the best maintain the loss level but is more than offset by massive rural electrification and tube well connections i.e. MEPCO's share is over 40% on both accounts which are main cause of increase in distribution losses. A study conducted by the company shows technical losses of 15.59% alone which has also been submitted to the authority in response to its directions but has not been acknowledged while making determination for the first quarter. The Authority is requested to consider this study while determining this tariff petition and enhance T&D losses to the level requested by the company.

2.2.2 O&M COST

MEPCO like any other distribution company is working for Distribution Margin including the most important and heavy component of O&M. O&M expenses are directly related with the network which MEPCO is leading amongst all the distribution companies in the country. The increase in O&M for 2009-10 is 14% by taking into account the increase allowed by GOP in Salaries & Wages, Fuel cost, electricity rate, material rates etc.

The company has a right to recover prudently incurred cost. The required revenue is recovered over the number of units sold, so actual O & M depends on actual sale which increases or decreases with actual sales more or less than target sales. As mentioned above the sales target set for the year is unrealistic which means that even built in O&M is unlikely to be realized thereby putting more stress on the company's profitability and liquidity.

- The Authority allowed O&M for the year 2009-10 Rs. 4790 million, as against our demand of Rs. 5655 (m), the actual expenses for financial year 2008-09 was Rs. 5012 (m), the O&M allowed is less by Rs. 222 (m) from the actual audited accounts of the last year. The comparison of last two years is given below.

| | <u>Rs. in million</u> | | |
|---------------------------|-----------------------|----------------|------------------|
| | <u>Actual</u> | <u>Actual</u> | <u>Projected</u> |
| | <u>2007-08</u> | <u>2008-09</u> | <u>2009-10</u> |
| Salaries Wages & Benefits | 2712 | 3443 | 3729 |
| Repair & Maintenance | 388 | 466 | 612 |
| Travelling | 197 | 216 | 250 |
| Vehicle Expenses | 164 | 211 | 240 |
| Power Light & Water | 32 | 34 | 45 |
| Office Supply | 75 | 57 | 75 |
| Collection Charges | 233 | 252 | 265 |
| Authority Overhead | 66 | 50 | 57 |
| Provision for Bad Debts | 331 | 154 | 200 |
| Others | 112 | 129 | 207 |
| Total:- | <u>4310</u> | <u>5012</u> | <u>5680</u> |

- The Salaries wages and other benefits are inclusive of salaries & benefits and actuarial valuation for retirement benefits. The sanctioned strength of the company is 21384 out of which 5199 vacancies i.e. more than 20% are still vacant. The Government of Pakistan has increased in pay as adhoc relief by 15% and 20% to the employees in BPS 17 and above and BPS 16 and below respectively. MEPCO has recently inducted 1341 employees in different grade on the order of Federal Government which has an impact of about Rs. 60 (m) for next six months.
- MEPCO has large network in the country and very old which requires huge amount to maintain the system. The amount allowed in the determination may be enhanced.
- The company has created two operation divisions at end of previous year and one at the start of the current financial year. The company has to mobilize the staff for up keeping and maintenance of the system and to attend public complaints, which does require traveling and vehicle expense. With creation of new operational offices and increase in POL prices the vehicle expenses increase.
- As the MEPCO is doing massive village electrification, the number of consumers is increasing, so the collection charges are related to the number of consumers.

- Due to economic slow down, the debtors of the company is increasing and MEPCO has to make provision for doubtful debts whereas authority has not allowed for such provision.
- The Authority is requested to allow Rs.5655 (M) as O&M for the F.Y. year 2009-10.

2.2.3 Prior year's adjustment

The authority allowed prior year's adjustment of Rs.7717 (million) in the annual determination for F.Y. 2008-09 on account of delayed determination and notification of tariff in the previous year which could not be realized for the same reason in that year too as the tariff was notified in September 09. This year again the second biggest item of revenue requirement after power purchased cost was allowed to be recovered over nine months sales of units but facing the same problem as even first quarter determination is not notified even after lapse of over six months. This essentially means more than double the rate per unit on account of prior year adjustment to make full recovery of the amount in next less than six months, which is neither possible nor practicable meaning thereby landing the company further deeper in the financial difficulties. Our submission to the Authority is address this issue of permanent back log because quarterly determination intended to address this issue has proved counter productive.

2.3 Distribution Margin Formula

The average distribution margin for the for financial year 2009-10 would be set in accordance with MEPCO's expected revenue requirements, based on the following formula:

$$\text{Avg. Margin} = \frac{\text{O\&M} + \text{Depreciation} + \text{RORB} - (\text{Amortization} + \text{Other Income})}{\text{Total Unit Sales}}$$

Where:

O&M is the expected operating and maintenance cost per kWh (for period- t), which includes the estimated cost of technical service and repair, necessary materials for operation, employees cost, mandatory social insurance payments, administration, management and other operating costs related to MEPCO's distribution and supply business.

Depreciation: Depreciation is provided in accordance with the company's policy.

Profit Rate Base: Profit Rate Base is defined as sum of existing fixed assets plus work-in-progress and new investment reduced by accumulated depreciation and deferred credit.

Average Rate of Return is a pre-tax return on the Profit Rate Base. Because the investment is typically financed with a combination of debt and equity, the

appropriate rate of return would be a market-based weighted average of the cost of capital.

Customer-specific retail tariffs will be set as follows:

$$\begin{array}{lcl} \text{Category-specific} & & \text{Category-specific} \\ \text{Retail} & = & \text{PPP} + \\ \text{Tariff} & & \text{Distribution} \\ & & \text{Margin} \end{array}$$

The PPP is the power purchase price. It reflects the amount paid by MEPCO to CPPA. Since it is difficult to estimate future PPP with precision, the PPP is based on 12 months projected by NEPRA in its quarter determination from the financial 2009-10. This will become the reference ppp for setting the tariff rate.

2.4 Revision of Retail Tariff

While it is important for MEPCO to have certainty about the period of the review, of greater importance is the existence of clear rules about the procedures for re-setting tariffs.

Based on the methodology discussed above, possible adjustments to retail tariffs are strictly limited to the following items:

Scheduled Change in Distribution Margins: The retail tariff is subject to revision warranted by fundamental changes in the basic assumptions formulating tariff formula.

Changes in PPP: At any point in time, changes in the Power Purchase Price (e.g. due to fuel cost adjustments) results in a corresponding change in retail tariffs after the authority put in place mechanism of monthly change in tariff on account of variation in ppp.

Inflation Adjustments: The O&M component of the distribution margin would be automatically adjusted for exceptional inflation.

Extraordinary Adjustments: Any justified losses and/or additional expenses incurred by MEPCO due to changes in legislation, legal acts, technical regulation, or other special events that are beyond its control would be reimbursed by adjusting the distribution margin, subject to NEPRA's approval.

3. **CALCULATING MEPCO'S REVENUE REQUIREMENT**

3.1 **Current Tariffs**

Presently, the consumer-end tariff is based on a cross-subsidized structure (which the GOP wants to rationalize over a period of time). This essentially means that whilst some customers are paying substantially less than their cost of service, industrial and commercial customers pay higher prices. Thus, consumers that are paying in excess of their cost of service are effectively subsidizing other categories especially lifeline customers of domestic category.

3.2 **Trends in Customers Numbers and Consumptions**

Annex-1 provides information about demand, customer numbers and tariffs in the MEPCO's service area. As would be observed, consumptions by the subsidized categories generally outpaced others, which has been a major pressure on the tariffs.

The increase in domestic and agriculture consumption relative to industrial consumption has worrying implications for MEPCO's revenues and profitability, especially since domestic customers cost more to serve. As domestic and agriculture consumption increases, and in the absence of cost reflective tariffs, MEPCO's overall costs rise whilst its revenues remain decreases. Meanwhile, industrial customers (the most profitable for MEPCO, as they are more economical to serve) are reducing their consumption (by installing captive generation) resulting in lower revenues for MEPCO.

Table-1 is presented at next page showing the consumption for MEPCO's customers

MULTAN ELECTRIC POWER COMPANY MULTAN

DEMAND ANALYSIS HISTORICAL CONSUMPTION AND FORECAST

Fig. In Million

| CATEGORIES | ACTUAL | | | | projected |
|-----------------------|----------------|----------------|-----------------|----------------|----------------|
| | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 |
| DOMESTIC | 4149.46 | 4623.6 | 4526.66 | 4400.99 | 4770.6 |
| COMMERCIAL | 469.21 | 536.58 | 549.88 | 535.52 | 535.5 |
| INDUSTRIAL | 2496.34 | 2421.54 | 2231.68 | 1989.81 | 2215.6 |
| BULK SUPPLY | 123.09 | 132.22 | 136.25 | 135.51 | 144.0 |
| AGRICULTURE (T/WELL) | 1658.81 | 1809.83 | 1900.99 | 1954.98 | 1802.6 |
| PUBLIC LIGHTING - G-1 | 26.85 | 30.74 | 28.51 | 25.06 | 29.8 |
| RES. COLONIES - H-1 | 12.56 | 10.42 | 6.1 | 6.6 | 3.8 |
| RLY. TRACTION - I | 3.66 | 4.32 | 2.91 | 0.75 | 0.3 |
| CO-GENERATION - J | 1.24 | 1.39 | 3.395 | 1.27 | 0.980 |
| TOTAL:- | 8941.22 | 9570.64 | 9386.375 | 9050.49 | 9503.36 |

- **Village Electrification & Tube well Connections:** MEPCO has to electrify huge number of villages and tube well connections which can adversely affect our targets of reduction in Line Losses. Moreover, it has been assumed that village electrification will be financed by grants from sponsors otherwise consumer end tariff will increase because of interest on loans in case village electrification is to be financed from loans. Village Electrification schemes mostly increase life line consumers and revenue from this category neither justify any loan repayment nor interest thereon.
- **Power Purchase Price (PPP):** PPP of the current year is based on the calculations provided by NEPRA for the next 12 months up to June 30, 2010 i.e. Rs.6.513 /kWh. It has also been assumed that any increase in PPP will be passed on to the end consumers instantly as already determined in the tariff petition for the financial year 2008-09 (monthly adjustment) because any delay in passing on increase in PPP will expose the company to a big liquidity risk.
- Consumer end tariff of life line consumers i.e. Domestic (0-50 units) has also been increased by paisas 80.
- **Purchase Costs:** The cost of electricity purchased by MEPCO has been calculated as the PPP (unadjusted for distribution losses) times the units of electricity purchased. This is also the equivalent of the units of electricity sold times the PPP adjusted for T&D losses (PPP divided by 1 minus the percentage of allowed losses).
- **O&M expenses** are directly related with the network and MEPCO has the largest network among all the distribution companies in the country. The increase in O&M for 2009-10 has taken is 14% by taking into account the increase allowed by GOP in Salaries & Wages, Travelling Expenses, Fuel cost, electricity rate, material rates etc.
- **Asset Base:** This represents projected gross book value of the operating assets at the start of the year. Annex-2.
- **New Investments:** New investments will be made as per the investment plan of the Company Annex-3.
- **Profit Base:** The Profit Rate Base is calculated as sum of existing fixed assets (Less Accumulated Depreciation) new investments, work-in-progress and working capital minus deferred credit.
- **Average Rate of Return:** Average ROR has been estimated to meet cash flow requirements of the MEPCO, which works out to be 16.31 %.
- **Distribution Revenue:** The sum of the O&M, Depreciation, RORB less amortization and other income result in MEPCO's revenue. Dividing this by the total units sold yields the average distribution margin (per kWh).

The results of the calculations are summarized on the next page as Table-II.

MULTAN ELECTRIC POWER COMPANY LIMITED

STATEMENT SHOWING THE SUMMARY OF TARIFF CALCULATIONS

| Sr. No. | PROPOSED 2009-10 | EXISTING 2008-09 |
|-----------------------------|--|---------------------|
| 1 | Year within control period | 1 |
| 2 | Total unit sales (mln KWH) | 9503.03 |
| | Line Losses - Distribution | 14.00 |
| | - Transmission (132 KV System) | 3.50 |
| 3 | Total Losses (in % age) | 17.50 |
| 4 | Total units purchased (mln KWH) | 11518.82 |
| 5 | PPP (Rs / KWH - unadjusted) | 6.51 |
| 6 | PPP (Rs / KWH - adjusted for losses) | 7.89 |
| 7 | Purchase costs (mln Rs.) | 75020.92 |
| 8 | O&M (Rs / KWH sold) | 0.60 |
| 9 | O&M (mln Rs) | 5679.71 |
| 10 | Assets at year start | 50714.31 |
| 11 | Plus New Investment | 6125.40 |
| 12 | Less Depreciation | 16229.22 |
| 13 | Plus Work in Progress | 3733.64 |
| 14 | Less Deferred Credit | 24483.12 |
| 16 | Plus Working Capital | |
| 17 | Profit Rate Base | 19861.01 |
| DISTRIBUTION REVENUE | | |
| 16 | RORB | 3013.42 |
| | Interest on on short term Loans | 290.27 |
| 17 | Depreciation | 1878.40 |
| 18 | O&M (mln Rs) | 5679.71 |
| 19 | | 10861.80 |
| | Less Amortization | 1116.88 |
| | Other Income | 1766.54 |
| | | 2883.42 |
| 20 | Distribution Revenue | 7978.38 |
| 21 | PPP (Ps / KWH) | 789.44 |
| 22 | Distribution Margin (Ps / KWH) | 83.96 |
| 23 | Average Tariff (Ps / KWH) | 873.40 |
| 24 | Average Real Tariff (Ps / KWH) | 873.40 |
| 25 | Prior Year Adjustment | 85.90 |
| 26 | Average Tariff (Ps / KWH) | 959.30 |
| 25 | Distribution Margin / Average Tariff (%) | 0.10 |

MULTAN ELECTRIC POWER COMPANY LIMITED

| CATEGORIES | SALES M/KWH | % to Total Sales | Load Factor | PROPOSED RATES | | PROPOSED REVENUE | | |
|--|-----------------|---------------------|----------------|------------------|---------------------|------------------|---------------------|-----------------|
| | | | | Fixed Charges | Variable Charges | Fixed Charges | Variable Charges | Total |
| DOMESTIC (0-50) | 299.650 | 4.529 | | | 2.40 | | 719.16 | 719.16 |
| DOMESTIC (1-100) | 1489.579 | 22.512 | | | 8.15 | | 12135.82 | 12135.82 |
| DOMESTIC(101-300) | 1157.272 | 17.489 | | | 10.90 | | 12610.96 | 12610.96 |
| DOMESTIC (301-700) | 206.748 | 3.125 | | | 13.40 | | 2769.83 | 2769.83 |
| DOMESTIC (ABOVE 700) | 142.400 | 2.152 | | | 15.15 | | 2156.95 | 2156.95 |
| Temporary | 0.662 | 0.010 | | | 15.50 | | 10.25 | 10.25 |
| TOD (Peak) | 0.331 | | | | 14.85 | | 4.91 | 4.91 |
| TOD (Off-Peak) | 1.000 | | | | 9.95 | | 9.95 | 9.95 |
| DOMESTIC | 3297.641 | 49.836 | | | | | 30417.84 | 30417.84 |
| UPTO 100 UNITS | 196.897 | 2.976 | | | 16.15 | | 3179.32 | 3179.32 |
| ABOVE 100 UNITS | 79.023 | 1.194 | 9.7 | 400 | 16.15 | 446.39 | 1275.99 | 1722.38 |
| above 5 KW | 83.301 | 1.259 | | | 11.65 | | 970.22 | 970.22 |
| TEMP COMMERCIAL | 0.860 | 0.013 | | | 16.40 | | 14.10 | 14.10 |
| TOD (Peak) | 0.095 | | 9.7 | 400 | 14.85 | 0.54 | 1.41 | 1.95 |
| TOD (Off-Peak) | 0.375 | | 9.7 | 400 | 9.65 | 2.12 | 3.62 | 5.74 |
| COMMERCIAL | 360.551 | 5.449 | | | | 449.05 | 5444.66 | 5893.71 |
| INDUSTRIAL (B-1) | 231.514 | 3.499 | | | 12.00 | | 2777.50 | 2777.50 |
| INDUSTRIAL (B-2) | 451.199 | 6.819 | 30 | 400 | 10.80 | 824.11 | 4871.66 | 5695.77 |
| INDUSTRIAL (B-2) TOD Peak | 6.946 | 6.946 | 39 | 400 | 15.00 | 9.76 | 104.16 | 113.92 |
| INDUSTRIAL (B-2) TOD Off-Peak | 34.728 | 34.728 | 39 | 400 | 9.75 | 48.79 | 338.49 | 387.29 |
| INDUSTRIAL (B-3) TOD Peak | 119.623 | 1.808 | 39 | 380 | 14.85 | 159.66 | 1776.05 | 1935.72 |
| INDUSTRIAL (B-3) TOD Off-Peak | 598.113 | 9.039 | 39 | 380 | 9.60 | 798.32 | 5740.18 | 6538.50 |
| INDUSTRIAL (B-4) Peak | 49.653 | | 39 | 360 | 14.70 | 62.79 | 729.76 | 792.55 |
| INDUSTRIAL (B-4) Off-Peak | 248.266 | 3.752 | 39 | 360 | 9.55 | 313.93 | 2370.23 | 2684.16 |
| INDUSTRIAL TOTAL | 1740.040 | 26.297 | | | | 2217.36 | 18708.04 | 20925.41 |
| C-1 (A) | 1.080 | 0.016 | 10 | | 12.00 | | 12.96 | 12.96 |
| C-1 (B) | 18.340 | 0.277 | 10 | 400 | 11.00 | 100.49 | 201.69 | 302.18 |
| C-1(c) 400/230 above 5-500 TOD Peak | 0.283 | | 10 | 400 | 14.75 | 1.55 | 4.18 | 5.73 |
| C-1(c) 400/230 above 5-500 TOD Off-Peak | 1.417 | | 10 | 400 | 9.50 | 7.76 | 13.45 | 21.22 |
| C-2 11/33 KV | 48.935 | 0.740 | 10 | 380 | 10.90 | 254.73 | 533.25 | 787.98 |
| C-2 11/33 KV TOD Peak | 3.293 | | 10 | 380 | 14.70 | 17.14 | 48.40 | 65.55 |
| C-2 11/33 KV TOD Off-Peak | 16.467 | | 10 | 380 | 9.50 | 85.72 | 156.39 | 242.10 |
| C-3 (a) | 4.330 | | 10 | 360 | 10.80 | 21.35 | 46.75 | 68.11 |
| C-3(b) 66 KV TOD Peak (5000 KW) | 0.000 | | 10 | 360 | 14.60 | 0.00 | 0.00 | 0.00 |
| C-3 (b) 66 KV TOD Off-Peak (5000Kw) | 0.000 | | 10 | 360 | 9.40 | 0.00 | 0.00 | 0.00 |
| BULK SUPPLY TOTAL | 94.145 | 1.423 | | | | 488.75 | 1017.07 | 1505.82 |
| AGRICULTURE (SCARP) upto 5 KW | 193.114 | 2.918 | | | 11.85 | 0.00 | 2287.85 | 2287.85 |
| AGRICULTURE (PRIVATE) | 36.320 | 0.549 | 39 | 200 | 7.25 | 25.51 | 263.22 | 288.73 |
| AGRI. (SCARP & Agricultural) above 5 KW Peak | 145.166 | | 39 | 200 | 15.05 | 101.98 | 2184.34 | 2286.32 |
| AGRI. (SCARP & Agricultural) above 5 KW Off-Peak | 725.831 | | 39 | 200 | 7.20 | 509.89 | 5223.91 | 5733.81 |
| AGRICULTURE (T/WELL) | 1100.431 | 16.630 | | | | 637.38 | 9959.32 | 10596.70 |
| PUBLIC LIGHTING - G-1 | 22.000 | 0.332 | | | 14.85 | 0.00 | 326.64 | 326.64 |
| RES. COLONIES - H-1 | 2.000 | 0.030 | | | 13.85 | 0.00 | 27.69 | 27.69 |
| RLY. TRACTION - I | 0.145 | 0.002 | | | 13.85 | 0.00 | 2.01 | 2.01 |
| CO-GENERATION - J | | 0.000 | | | 0.00 | 0.00 | 0.00 | 0.00 |
| MEPCO | 6616.953 | 6616.953 | | 0.000 | 0.00 | 3792.55 | 65903.27 | 69695.82 |
| | | 100.000 | | | | | | |

3.4 Income Tax

Income tax being pass through is the part of RORB. Income tax has therefore been calculated on projected net profit and included in the average and consumer end tariff.

4. Estimated Sales Revenue on the basis of proposed tariff for the three quarters (October 2009-June 2010) for FY 2009-10 is presented on Annex-4.

➤ The category-wise tariffs proposed for FY 2009-10 are presented in Annex-5.

Inputs from MEPCO's Financial Statements audited for the year 2008-2009 and projected for the year 2009-10.

Annex 3:

INVESTMENT

Rs. Million

| | Actual (Audited) | Actual (Audited) | Actual (Audited) | Projected (Oct.-Dec. 09) | Projected |
|---------------------------|---------------------|---------------------|---------------------|-----------------------------|-----------------|
| YEAR | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2009-10 |
| DOP & Others | 175.612 | 180.368 | 119.005 | 124.75 | 499.000 |
| STG | 242.000 | 1168.649 | 1016.853 | 418.500 | 1674.000 |
| ELR | 316.096 | 538.438 | 679.799 | 69.250 | 277.000 |
| DOP,ELR, Capacitors (ADB) | | | | 25.000 | 100.000 |
| ENERGY EFFICENCY COMP. | | | | 5.000 | 20.000 |
| SUB TOTAL | 733.708 | 1887.455 | 1815.657 | 642.500 | 2570.000 |
| VILLAGE ELECTRIFICATION | 2422.141 | 1939.886 | 2356.220 | 375.000 | 1500.000 |
| SUB TOTAL | 3155.849 | 3827.341 | 4171.877 | 1017.500 | 4070.000 |
| CAPITAL CONTRIBUTION | 1933.758 | 2419.274 | 2125.645 | 375.000 | 1500.000 |
| GRAND TOTAL | 5089.607 | 6246.615 | 6297.522 | 1392.500 | 5570.000 |

MEPCO has planned to invest Rs.321 million on Development of Power, Rs.1674 million on STG Programme to improve Grid System, Rs.277 million in Energy Loss Reduction Programme and Rs.1500 million on Village Electrification Programme and Rs.1500 million of Capital Contribution in the year 2009-10.

It is projected that Rs.1500 (m) for village electrification and Rs. 1500 (m) for new connections would be financed by the government and the customers respectively

5- Installation of T.O.U Meters

MEPCO is making sincere efforts to install T.O.U. meters for all the customers having sanctioned load of k KW and above as directed by the Authority in its tariff determination for the year 2008-09. We have so far replaced 17164 out of 89139 and are in the process of resetting over 28000 existing TOD to TOU. The balance is to be met from stock in hand and fresh procurement.

This exercise requires a huge investment in the range of about Rs. 900 (m), the company therefore, submits to the Authority for extension in the dead line upto June 2011 and increase in O&M to generate necessary cash flow.

6- Proposed Amendment

Special tariff for seasonal nature of business e.g. Cotton, Oil, Rice, Ice factories may be designed as seasonal nature of consumers are switching over on no-seasonal relevant industrial tariff to avail the benefit of billing demand and to avoid application of seasonal charges.

7- Addition in clause 5 of special conditions under seasonal tariff at the end of the para as "The facility of none charging of fixed charges due none operating of the season will be only for one season for during whole life of the business

8- Fixed Charges

The Authority while determining tariff for the financial year 2006-07 made a change in the application of tariff for all categories of industrial consumers for fixed charges from Actual MDI or 50% of sanctioned load which ever is higher to Actual MDI recorded subject to fixed minimum charges of Rs. 2000/- for B-2, Rs. 50000/- for B-3 and Rs. 500000/- for B-4 consumers on the other hand, no such change has been made in CPPA/NTDC tariff application mechanism. CPPA/NTDC still apply fixed charges (which infact have increased in power shortage period). The Authority is, therefore, requested to look into this change in tariff application mechanism because this is causing considerable revenue loss to the company.

9- Commercial A-2 (b&c) and tube well D-1 (b) are two part tariffs similar to industrial category where fixed minimum charges are applied on the on recorded maximum demand

indicator (MDI), but no such charges are available for commercial and tube well categories .
MEPCO, therefore, proposes as follows:

- i- Minimum monthly charges for A2 (b&c) be replaced with fixed minimum charges of Rs. 2000/- P.M.
- ii. D-1(B) may levied fixed minimum charges of Rs. 2000/- P.M.
- iii. all sub-categories of tariff "C" except C1 (a) may be levied fixed minimum charges in line with similar categories of two part tariff under (B).

- . . . - . . . -

MULTAN ELECTRIC POWER COMPANY LIMITED

PROPOSED TARIFF PER UNIT CATEGORY-WISE
TO MEET THE REVENUE REQUIREMENTS
FOR 2ND QUARTER (OCT-DEC 2009) F.Y. 2009-10

| TARIFF CATEGORY | EXISTING RS. KWH | PROPOSED TARIFF (Rs. kwh) |
|--------------------------------------|---------------------|---------------------------------|
| | 2008-09 | 2009-10 |
| DOMESTIC | | |
| DOMESTIC (0-50) | 1.6 | 2.4 |
| DOMESTIC (1-100) | 4.15 | 8.15 |
| DOMESTIC (101-300) | 8.00 | 10.90 |
| DOMESTIC (301-700) | 10.5 | 13.40 |
| DOMESTIC (ABOVE 700) | 12 | 15.15 |
| FOR SANCTIONED LOAD < 5KW | | |
| TOD (PEAK) | 12.00 | 14.85 |
| TOD (OFF PEAK) | 7.00 | 9.95 |
| DOMESTIC TEMPORARY | 10 | 15.50 |
| COMMERCIAL | | |
| UPTO 100 UNITS Upto 5 KW | 13.5 | 16.15 |
| ABOVE 100 UNITS Above 5 KW | 13.50 | 16.15 |
| Above 5kw | 9 | 11.65 |
| TOD (PEAK) | 12 | 14.85 |
| TOD (OFF PEAK) | 6.75 | 9.65 |
| TEMPORARY | 13.50 | 16.40 |
| INDUSTRIAL | | |
| INDUSTRIAL B-1 | 9.00 | 12.00 |
| INDUSTRIAL B-2 (a) | 7.25 | 10.80 |
| INDUSTRIAL B-2 TOD (PEAK) | 12 | 15.00 |
| INDUSTRIAL B-2 TOD (OFF PEAK) | 6.75 | 9.75 |
| INDUSTRIAL (B-3) TOD (PEAK) | 11.9 | 14.85 |
| INDUSTRIAL (B-3) TOD (OFF PEAK) | 6.65 | 9.60 |
| INDUSTRIAL (B-4) TOD (PEAK) | 11.8 | 14.70 |
| INDUSTRIAL (B-4) TOD (OFF PEAK) | 6.55 | 9.55 |
| BULK SUPPLY | | |
| C-1 (A) | 9.25 | 12.00 |
| C-1 (B) | 8.25 | 11.00 |
| C-1 (C) < 20KW (PEAK) | 12 | 14.75 |
| C-1 (C) < 20KW (OFF PEAK) | 6.75 | 9.50 |
| C-2 (A) | 8.15 | 10.90 |
| C-2 (B) < 20KW & 5000 KW (PEAK) | 11.9 | 14.70 |
| C-2 (B) < 20KW & 5000 KW (OFF PEAK) | 6.65 | 9.50 |
| C-3 (A) | 8.05 | 10.80 |
| C-3 (B) < 5000KW (PEAK) | 11.8 | 14.60 |
| C-3 (B) < 5000KW (OFF PEAK) | 6.55 | 9.40 |
| AGRICULTURE | | |
| AGRICULTURE (SCARP)>5KW | 8.75 | 11.85 |
| AGRICULTURE (PRIVATE) | 4.00 | 7.25 |
| SCARP AND AGRICULTURAL <5KW PEAK | 12.00 | 15.05 |
| SCARP AND AGRICULTURAL <5KW OFF PEAK | 3.75 | 7.20 |
| PUBLIC LIGHTING - G-1 | 12.00 | 14.85 |
| RES. COLONIES - H-1 | 11.00 | 13.85 |
| RLY. TRACTION - I | 8.00 | 10.80 |
| | | |
| MEPCO AV. TARIFF | 8.12 | 10.5371 |

MULTAN ELECTRIC POWER COMPANY LIMITED (WAPDA)

Calculation of Projected Operating & Maintenance Cost

Rs. In Million

| Actual | | Actual (Audited) | Actual (Audited) | Projected |
|--------|------|---------------------|---------------------|-----------|
| 2006 | 2007 | 2008 | 2008-09 | 2010 |

Particulars of Expenses

| | | | | | |
|--------------------------------------|----------------|----------------|----------------|----------------|----------------|
| Salaries , Wages and other benefits | 2180.71 | 2287.48 | 2712.29 | 3443.47 | 3729.32 |
| Repair and Maintenance | 359.58 | 370.77 | 388.15 | 465.81 | 611.85 |
| Rent rates and taxes | 6.57 | 7.79 | 6.73 | 6.82 | 9.00 |
| Telephone and postage | 24.20 | 23.26 | 30.03 | 26.67 | 42.00 |
| Power light and water | 27.22 | 30.71 | 32.12 | 34.65 | 45.00 |
| Office supplies and other expensess | 43.46 | 49.93 | 75.43 | 56.71 | 75.00 |
| Travelling and conveyance | 165.00 | 186.74 | 197.14 | 216.19 | 250.00 |
| Insurance | 0.00 | 0.02 | 0.00 | 6.63 | 8.00 |
| Professional fee | 8.95 | 9.94 | 10.95 | 16.91 | 17.00 |
| Computer and outside services | 13.34 | 10.18 | 15.62 | 14.29 | 18.50 |
| Transportation | 138.33 | 153.55 | 163.55 | 210.92 | 240.00 |
| Agricultural Relief | | | | 0.00 | 0.00 |
| Electricity bills collection charges | 155.32 | 217.05 | 232.69 | 252.10 | 265.00 |
| Management fees | 13.02 | 16.30 | 21.98 | 24.65 | 0.00 |
| Authority overheads | 60.89 | 65.69 | 65.91 | 50.41 | 57.02 |
| Other charges | 25.90 | 23.94 | 26.35 | 32.53 | 94.18 |
| Amortization of deferred cost | | | | 0.00 | 0.00 |
| NEPRA fee | | | | 0.00 | 17.85 |
| Tariff Petition fee | | | | 0.00 | 0.00 |
| Provision for Bad Debts | | 234.37 | 330.73 | 153.65 | 200.00 |
| Interest on Short Term Loans | | | | 0.00 | 0.00 |
| TOTAL | 3222.47 | 3687.72 | 4309.69 | 5012.40 | 5679.71 |

Net Total 3222.471 3687.723 4309.691 5012.402 5679.711

ANNUAL REVENUE REQUIREMENT

| | |
|--|--------|
| Units Sold MkwH | 6617 |
| Power Purchase Price | 75021 |
| Distribution Margin | 7978 |
| Prior Year Adjustment | 8163 |
| Total | 91162 |
| Revenue Earned During First Quarter (Jul-Sep 09) | 21802 |
| Revenue required for next nine months | 69360 |
| Add PPP Adjustment | 366 |
| Revenue required for remaining nine months | 69726 |
| Average rate required for nine months Rs. Kwh | 10.537 |