

Poor Revenue Realization Efficiency of Power Distribution Utilities - A Critical Analysis of MPMKVVCL

*Dr. S.K.Khatik

**Er. R.V.Saxena

The on going power sector reforms in India has clearly revealed that the weakest link in the entire power business is the **Distribution Activity**. The success of any power company depends on how efficiently the distribution business of that company is run. Currently the biggest challenge faced by the distribution companies is the **poor realization of revenue**. While considerable effort, resources and money have been invested to formulate strategies to improve collection efficiency by the utilities, these strategies have yielded little results.

This paper identifies and highlights some of the significant factors that contribute to the low collection efficiency in the Madhya Pradesh Madhya Kshetra Vidyut Vitaran Co. Ltd.(MPMKVVCL). Though this paper covers the collection inefficiencies in MPMKVVCL, the issues are general in nature and are relevant to the utility business in any developing country.

Revenue or Finance is defined as the provision of money at the time when it is required. Every enterprise, whether big or small, needs finance to carry on its operations and to achieve its targets. Finance refers to management of flows of money through an organization. It concerns with the application of skills in the manipulation, use and control of money.

Revenue function is the most important of all business functions. It remains a focus of all activities. It is not possible to substitute or eliminate this function because the business will close down in the absence of Revenue. It may be considered the **lifeblood** of an organization. The need of money is continuous. It starts with the setting up of an enterprise and remains at all times. The development and expansion of business needs more commitment of funds. The success of Revenue function will depend upon its planning. The aims of Revenue function are:

- ❖ Acquiring sufficient funds.
- ❖ Proper utilization of funds.
- ❖ Increasing profitability.
- ❖ Maximizing Concern's value.

OBJECTIVES OF THE STUDY :

This study has been conducted to fulfill following objectives :

- i. To analyze the factors responsible for poor revenue realization because of problems faced by consumers.
- ii. To study the lacuna in the system which is responsible for poor revenue realization efficiency.
- iii. To examine the psychological factors affecting both the consumers and the staff.

*Dr.S.K. Khatik is Reader & Ex Head, Department of Commerce and Ex Chairman, BOS, Barkatullah University, Bhopal.

**Er.R.V.Saxena, B.E.(Elect.),M.B.A.(Fin.) is an Accredited Energy Manager and is working as Addl. Executive Engineer in City Dn.(North), MPMKVVCL, Bhopal.

CRITICAL ANALYSIS :

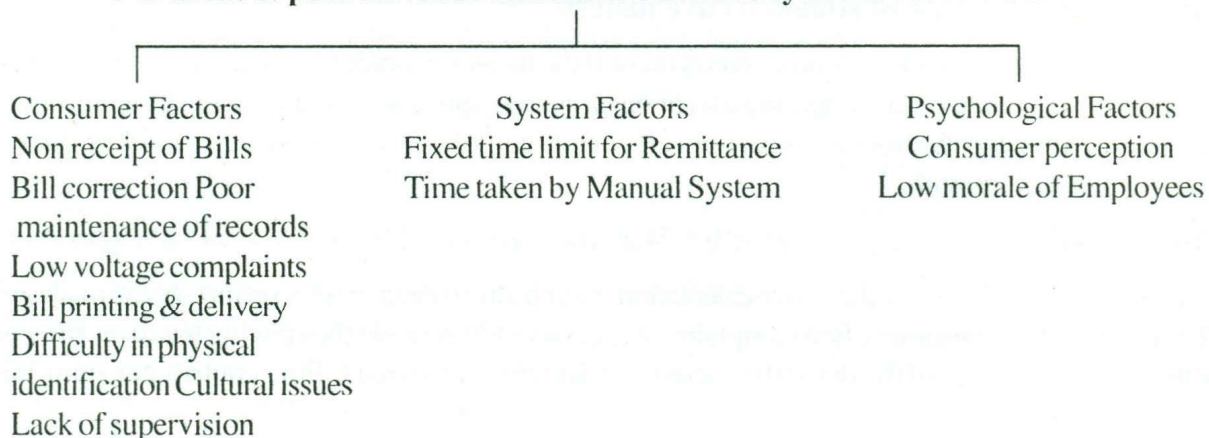
Management of a Company is an important factor for revenue collection. MPMKVVCL has been using traditional management technique which is not suitable in present scenario. New management techniques have arrived and hence traditional techniques have become outdated. In this light , we have considered the factors which may be responsible for poor revenue realization.

Three factors are mainly responsible for poor revenue realization of MPMKVVCL.

In this context we have taken three dimensional areas which are as follows:

- Factors related to consumers .
- Factors related to system prevailing in MPMKVVCL.
- Factors related to psychology of consumers & employees.

3-D areas of poor Revenue Realization Efficiency of MPMKVVCL



The issues impacting the collection efficiency of MPMKVVCL can be broadly categorized under the following heads:

A. FACTORS RELATED TO CONSUMERS :

- **Non receipt of bills:**

The major cause of poor collection is the non-distribution/ late distribution of energy bills. Usually the energy bills are produced in the monthly cycle where the consumers are allowed two weeks time for payment. The final date for making the payment is known as due date. Often due to the poor communication system as well as due to the poor monitoring of the bill distribution activities, the bills are distributed late or not distributed at all. This leads to consumer dissatisfaction - the regular consumer also stops paying as he receives the bill much after the due date and has to pay a penalty for no fault of his.

- **Bill correction**

If a consumer receives an incorrect bill, it often takes months together for the utility company to resolve the complaint and serve a correct bill. The consumer has to run from pillar to post and approach at least three people before it gets corrected. The bill correction officer sits at the Distribution Center office, which is typically some 15 kilometers away from the consumer’s place. Often the net result is that the bill correction remains unresolved and the consumer stops paying the dues.

Meter reading also contributes to collection inefficiency. Some of the metering issues that affect collection are described below:

i) Reading Absent:

In rural MP, the meter is seldom read and the bills are generated primarily on the basis of past average consumption. This leads to a situation where the consumer complains of excessive billing and stops paying the dues. This non-payment also leads to penalizing the consumer in the form of surcharge.

ii) Wrong reading (table reading).

In this case the meter reader never visits the consumer's premises and puts an arbitrary meter reading – adding some more units to the previous meter reading shown in the meter reading diary. The consumer disputes the same and stops paying. In absence of a counter checking mechanism with the manual meters in consumer premises, the utility also cannot take any major disciplinary action against the dishonest meter readers.

iii) Assessment in case of stop/defective meters

In absence of a meter in the consumer premises or if the meter is stop/defective or burnt, the billing is done either on a past average consumption basis or on an assessment basis depending on the load connected in the house. Suppose the house has a connected load of 1 kilo watt, the billing would be done for the following units per month.

20% of (1 kilowatt * 30 days in a month * 24 hours in a day) = 20% of 720 = 144 kWh per month.

The billing is done based on the above calculation, month after month, with no efforts being made to correct the situation. The consumer often complains of excessive billing and stops paying the dues. In a company where more than 30% of the domestic meters are defective, assessed billing contributes significantly to poor collection efficiency.

- **Poor Maintenance of Records:**

Manual record maintenance as well as poor recording systems often leads to a situation where the non-availability of relevant consumer information makes bill correction impossible. For example, the consumer could complain of wrong billing for a five month period during which his power supply was actually disconnected. However this information may not be recorded in the disconnection / reconnection register - making it impossible for the field staffs to waive off the excessive charged amount. The failure/ delay in correction of bills delays the cash collection process.

- **Low voltage complaints by consumers:**

Often rural areas experience low voltages. The network system is heavily overloaded with the demand for energy far exceeding the supply. This problem gets aggravated during the peak demand hours, normally 6 to 10 (evening and morning) during the Rabi and Kharif season. During that time, the voltage drops to as low as 110 to 130 volts against the standard 220 volts. This leads to a situation where the consumer cannot use the energy for any productive use where as he is billed for full amount - especially if he has a defective / no meter scenario. The consumer stops paying the bill raised by the utility due to the poor quality of service.

- **Bill Printing And Bill Delivery Procedures consume time:**

Usually in MPMKVVCL, the billing is done at a central office location and the hard copy of the energy bill is sent to the distribution centre office physically, after the printing is over. The printing usually takes 1 to 2 days time and remitting the bill to the distribution centres takes about another 1 to 2 days time. The concerned officer again takes 1 to 2 days to sort the bills according to the geographical location (the billing data base is usually very poorly maintained and does not have sorting capability). The bill distributor takes almost 5 to 10 days to distribute the bills to the consumers. Due to improper addresses, poor transportation and communication facilities, the bill distributor many a times does not distribute the bill at all.

If the time elapsed between the bill generation date to the final bill delivery date is calculated, a bill delivery time of 10 to 12 days for the bill to reach the customer is taken. With the due date being two weeks from the bill printing date - the consumer receives the bill just on due date or after the due date rendering it difficult for the consumers to pay the bill on time.

Apart from the specific issues identified and highlighted above, there are a number of other related issues that clearly impact collection efficiency. Some of them are discussed below:

- **Difficulty in physical identification of the consumer in the field.**

The consumer database generally does not reflect an electrical reference address in it. Consequently, the physical identification of the consumer in the field becomes a problem. The entire consumer database becomes individual centric rather than system dependent. This leads to a situation where the actual consumer who initially applied for the connection dies, his legal heirs names do not get reflected in the database. Hence identifying the consumer physically in the field becomes near to impossible. The rules of the power company should state that when the original consumer dies, his legal heir have to apply for a change of consumer name. In reality very few consumers bother to do so.

- **Issues pertaining to culture:**

The Indian male dominated family structure also contributes a lot towards the poor collection efficiency. Usually the financial head of the family is the male member of the family. When the utility company sends out a special task force in rural areas to boost up the collection, the male member of the family would be unavailable in the house during the door to door special collection drive (the drive is normally undertaken during official working hours). The other members of the family (usually female members) are unable to address the issue - thus defeating the purpose of the special collection drive.

- **Monitoring of performance of employees.**

The performance monitoring of the employees of the organization does not take into account the contribution of the employee towards improving the collection efficiency. The performance is judged primarily based on the uninterrupted supply of power in the area. In the absence of such commercial orientation, the employees take little interest in improving revenue collection efficiency.

- **Lack of supervision on employees:**

The local staff (popularly known as the line man and helpers) collect money from the consumers with a promise to deliver the required money receipt to the consumer once the lineman deposits the money at the cash counters. These workers are not authorised to collect money and are not provided with money receipt books. Sometimes, the staff fails to deposit the money at the cash counters and spends the money

personally. As a result the consumer loses faith and stops paying subsequent dues - increasing the debtors list of the utility company.

- **Non-availability of updated Disconnection Orders to the field officer:**

One of the prime reasons for low collection in the business is the non-availability of the updated payment position data to the field officer. The field officer at any point of time has to rely on at least 1-month-old data for credit control activities like disconnections. The officer in charge depends fully on the head office for any payment related information and the head office does not have a system in place to pass on the information to the field officers at an early stage. In the absence of updated information, the field officer is severely handicapped.

B. FACTORS RELATED TO SYSTEM PREVAILING IN MPMKVVCL :

The working hours of the cash collection counters most often do not take into consideration the consumer's convenience and adheres to official timings. Usually the cash collection counters operate from 9 am to 1 pm (average 4 hours). In the Indian context, where the male members of the house most often take care of financial transactions, this becomes an issue which cannot be easily solved. Often he cannot make it to the cash counter during the specified counter timings since he is away at work.

To compound the issue further, the working days of the cash collection counters coincide with the normal working days of the consumer. Hence the consumer has to take off from work to pay up the utility bill. On a monthly billing cycle, this implies that 12 times a year (once every month) the consumer has to take leave to deposit the utility bill. Finally, at the cash collection counter the consumer has to wait for his turn in a long queue - with the queue moving rather slowly.

In rural areas the location and distance of cash collection counters also poses a problem. Here the consumer density is much lower than urban areas, while the geographical spread of the distribution center would be much higher than that of urban distribution center. Invariably, the rural business units operate over a radius of more than 15 kilometers with thin consumer density.

Since the energy bill is collected at the Distribution Center office, the consumer has to travel at least fifteen kilometers to pay his electricity bill. The poor rural transportation system ensures that it takes two to three hours to reach the cash collection counter. And when the consumer reaches the cash collection counter - the availability of the cash collection clerk is not assured. Often, the clerks come once or twice in a week to the counter and collect the cash from the consumer with a back dated money receipt. The back-dating of receipts helps the clerks in establishing their presence on all working days. For the consumers, these systems cause inconvenience and uncertainty leading to de-motivation in payment of bills. From the power companies end, monitoring of such activities becomes difficult due to the distance and poor transportation systems.

All the utility companies designate clerks who are authorized to collect the revenue. The availability of the bill collection clerks in the rural areas is very low and for very short durations. When the bill collection clerk visits the rural cash collection counter, he has to close the counter by the middle of the day and leave the counter to deposit the collected cash at the designated bank or the head office. In rural MP, the bank or head office is typically not less than 15 kilometer from the cash collection counter. The bill collection clerk also faces the threat of robbery while transporting the cash for remittance. The utility company rarely makes any arrangements for the safety of the cash collection clerks. Hence the bill collection clerks discourage the collection of cash from the field to avoid large cash accumulations.

The specific Regional Account Office decides a common bank (preferably a nationalized bank) where the daily cash collections gets deposited and an account is maintained. However, the penetration of these banks in rural areas is quite less. For example, if the head office decides to keep an account with State Bank of India, all the business units are bound to deposit the cash collection in the nearest branch of the State Bank of India.

The penetration of any nationalized bank in rural area is quite poor and the bill collection clerk finds it extremely difficult to deposit the collected cash. The proximity of the designated bank from the collection counter runs into kilometers (on an average ten kilometers). To aggravate the problem, the working hours of the cash collection counters and the bank coincide. As a result the bill collection clerk closes the cash collection counter early to get to the bank before closing hours.

- **Fixed Time Limit For Remittance :**

Almost all the utility companies set a time limit within which a cash collection clerk has to deposit the cash collections in the division office/ bank. While this period is short, the cash collection clerk often shortens the cash counter collection time to visit the divisional office to remit cash. This system also leads to foul play due to lack of supervisory control by the utilities.

- **Time Taken By Manual Recording System :**

The manual recording system adopted at cash collection centers is cumbersome and time consuming. The cash collection clerk has to shut down the cash collection activities at least two hours before the available time to prepare the documents for cash remittance. For example, if the cash collection is done till 1 o'clock in a day - it takes at least two hours to document the cash transactions. The daily collection sheet needs to be prepared, the collected cash needs to be bundled as per denominations and then the cash has to be remitted to the head office/ bank etc.

Apart from the above problem, in the absence of cash counting machines in the collection counters, if a consumer deposits a large amount (say Rs 5000/-) with smaller denomination currency notes - it takes a lot of time to count the notes and to account for it. This slows down the collection process significantly.

C. FACTORS RELATED TO PSYCHOLOGY OF CONSUMERS & EMPLOYEES :

- **Change in Consumer perception :**

In the 80's and early 90's , the majority of consumers used to consume electricity honestly and make payment of electricity bills regularly. But due to general fall in the ethical values of society in the country and the absence of role model nowadays, more and more consumers try to use dishonest means and indulge in theft of energy. Also they try to make less payment against power consumed. Nowadays, consumers have developed such psychology where there is no place for values, moralities, ethics and accountability towards nation.

- **Low morale of Employees :**

One of the main factors affecting collection efficiency of utilities is low morale of lower cadre employees .Most of the utilities employ negative motivational techniques rather than positive ones. Besides the targets of collection given to lower cadres are not only impractical but also unattainable. In case incentives are declared ,the performance level expected is so high that no one is able to get the rewards.

FINDINGS :

It has been conclusively proved that poor revenue realization efficiency in MPMKVVCL can be attributed to three major factors which arise due to

- a) Problems faced by the consumers .
- b) Problems of the system implemented by MPMKVVCL .
- c) Psychological problems .

In the first instance the consumers have to face problems due to faulty policies of Power utilities .If the consumer is not getting the bill timely ,how is he expected to make the payment ? Here the responsibility of providing correct bill timely to the consumer lies with the Utility .After all ,it is in utility's interest to provide correct bill to consumer sufficiently in advance before due date so that consumer gets enough time to make the payment .

Another problem which the consumer faces is that once he gets an incorrect bill ,he has to run from pillar to post to get the bill corrected . This results in consumer not paying the bill until the bill is corrected .Thus the payment which is to be made to Utility stops resulting in poor revenue realization .The Utilities must ensure that incorrect bills of consumers are corrected speedily and within the prescribed time limit .The Utilities must also ensure that the reasons for incorrect billings (reading absent ,table reading etc.) must be eliminated or reduced substantially.

The utilities must ensure that bill printing and bill distribution process must take minimum time .The time elapsed between bill generation date and bill delivery date must be as small as possible .Recently ,Spot Billing has started in Bhopal City which has reduced the abovementioned time to 3 minutes .Here the meter reader is provided with a palm- top computer which he takes to consumer's premises .He takes the reading in the presence of consumer's representative and prints the bill on the spot and gives it to the consumer .This has resulted in reducing the complaints regarding erroneous readings and non receipt of bills to a very great extent .

Most of the Utilities adopt traditional management techniques and have not upgraded themselves to modern techniques .In the present scenario of globalization ,only the fittest will be able to survive .Modern methods of financial transactions have not been followed by most Utilities .Most of the consumers ,whether urban or rural ,are not able to spare time on normal working days to pay the bills during office hours .Modern methods of financial transactions like On-line payment or by ATM must be adopted.

Another major factor contributing to poor revenue realization is non cooperative attitude of employees towards the consumers .Lack of supervision may be attributed as one of the reason for this .However , employees' viewpoint in this regard is that they have to face similar type of consumer grievances day in and day out and have to bear the brunt of consumer's wrath for errors for which the meter readers are responsible .Senior officers do not pay heed to their suggestions . Hence frustration creeps in which results in indifferent attitude of employees.

The fall in moral values and lack of ethics in society in general also contributes to poor revenue realization efficiency .The present generation think of themselves as heroes by not adhering to government diktats which includes timely payment of electricity bills .They intend to flaunt their independence by showing their neighbors that they are not afraid of government machinery .On their parts ,the Utilities also fail to take proper and strict action against defaulter consumers.

SUGGESTIONS :

On the basis of this study ,following suggestions are given :

I. Evening cash counters:

The utility should arrange for cash counters to remain open during evening hours(6 to 10 PM) so that male members of the rural household can make use of this facility .However , safety of cash must also be ensured.

II. Employee Involvement :

The employees closest to the customer should be encouraged to boost collection. The lineman and helpers are the people who have a close relationship with the consumer and have better access to them. They must *be asked to stimulate the consumers and ensure monthly payment of bills by consumers .If possible, suitable incentives may also be given.*

III. More utility bank accounts :

The utility should identify more number of banks with which to open the cash collection deposit accounts. The spread of co-operative banks in the rural areas are much more than the branches of the nationalized banks. An effective cash management tool can help the utility business to keep a tab on the bank co-ordination. The utility could also explore options like post offices and local schools for cash collection.

IV. Private collection counters :

The utility companies could encourage the private local youths to join the collection process. The utility can appoint certain private agents in the rural areas on commission basis to boost up the collection. The mechanism for issuing money receipt book to these private parties can be against some specified security deposits collected from the agents.

This methodology can benefit the utility, its employees and consumers in several ways -

- a) Reducing the operational cost of the utility for cash collection.
- b) Maximizing the cash collection counters with a greater reach to the customers.
- c) The customer can avoid visiting the utility cash collection counters.
- d) The private bill collectors could keep a watch on the power theft and credit position of the locality - as these things affect the collection.

This arrangement would keep the consumers closer to the utility company as they will get greater attention than the earlier situation.

V. Psychological Factors:

A change in consumer perception is the need of times. The consumers who indulge in theft or non payment of dues normally get away lightly. They must be severely reprimanded so that it acts as a deterrent for others. The law should be framed on these lines. Besides, messages should be issued through billboards, mass media and magazines which motivate consumers to pay their bills on time in national interest. Suitable incentives may be given to consumers who have paid their bills regularly for a period of say 1 year. Carrot and Stick approach is suitable for such cases. But one must keep in mind that it will take time for consumer's habits to change .

The employees who are at present a de motivated lot require positive motivation . As has been rightly said," It is easy to collect a group of people, but it is very difficult to build a dedicated team of employees." Employees are asset of an organization and should be treated as such .

VI. Modernization of collection techniques :

Most of the consumers ,whether urban or rural ,are not able to spare time on normal working days to pay the bills during office hours .Modern methods of financial transactions like On-line payment or by ATM must be adopted .

VII. Spot Billing :

Spot Billing has started in Bhopal City which has reduced the bill generation to bill delivery time to 3 minutes .Here the meter reader is provided with a palm- top computer which he takes to consumer's premises .He takes the reading in the presence of consumer's representative and prints the bill on the spot and gives it to the consumer .This has resulted in reducing the complaints regarding erroneous readings and non receipt of bills to a very great extent .

VIII. High Precision and Advanced Technology meters be used :

The companies should use advanced technology meters which do not get defective easily .This will result in consumer satisfaction and will increase consumer confidence on the Utility .

IX. Incentives and Offers to consumers :

Various offers in the form of discounts, gifts, certificate and public honor must be extended to consumers who are regular payee of bills. This will motivate defaulter consumers for making the payment regularly.

In this paper some of the major issues that result in low collection efficiency in the Indian utility markets and particularly MPMKVVCL have been identified. Some simple remedial and intervention methods to correct inefficiencies have also been suggested. The suggestions, if properly implemented, will certainly result in improvement of Revenue Realization Efficiency of any Power Distribution Utility.

REFERENCES :

- Bajpai ,GN (2004) Norms of Indian Depository Receipts on the anvil, www.deccanherald.com
- Dalal ,K and Mandavia ,H (2004) IDRS One more step in Globalization ,Business line internet edition, www.blonnet.com
- Dean ,DJ (1992) Making codes and ethics real ,Journal of business ethics 11,285-290
- Ford ,FA & Herren ,RV (1995) The teaching of work ethics-current practices of work.
- Gregson ,JA (2001) Work values and attitudes –instructions as viewed by secondary trade and industrial education instructors ,Journal of industrial teacher education 28(4)
- Haspeslagh, P Noda, T and Boulos, F It's not just about numbers, Harvard Business Review 79(7)
- Henderson ,FS(1989) ,Historical context of work ethics ,Students Business Education Forum, 33(7)
- Hill ,RB (2001) ,Historical context of work ethics ,University of Georgia
- John , Maxwell ,There's no such thing as Business Ethics ,Boston –Warner Book Inc .
- Kern Charles ,D(2003) Creating and sustaining an ethical work place culture ,Greziadio Business report ,vol 6 ,no. 3.
- Luthans, Fred (2006) Organizational Behavior; McGraw Hill International Edition.
- Martin Seligman (2003) Authentic happiness ; Newyork , Free Press.
- Panchalan, P (2003) ,Agreement and adherence to employee ethics –A case study of Indian Management , July PP –17-23.
- Sanghi Sema (2003) Ethical issue at work: A comparative study between UK and Indian Manager, Vikalp 1-27, No 1 Jan – Mar.
- Seshaiiah, K (2004) Business values and ethics, Indian Management, July PP 72-76.