

# ISSN 2278 - 0211 (Online)

# **Evaluating the Challenges Facing Private Vendors in Revenue Collection of the Electricity Company of Ghana in Koforidua, Ghana**

# Francis Kwaku Kuma

Lecturer, Department of Accountancy, Koforidua Technical University, Koforidua, Ghana **Francis Ayensu** 

Lecturer, Department of Accounting & Finance, Ghana Technology University College, Accra, Ghana

Abena Yeboah Abrahams

Lecturer, Department of Liberal Studies, Koforidua Technical University, Koforidua, Ghana
Nelson Boadi Owusu

Lecturer, Department of Liberal Studies, Koforidu, Technical University, Koforidua, Ghana **Dr. Isaiah Miencha Onsarigo** 

Lecturer, Department of Accounting & Finance, All Nations University College, Koforidua, Ghana

#### Abstract:

The study examined the challenges facing private vendors contracted by Electricity Company of Ghana (ECG) in the sale of power in the New Juaben Municipality. The study employed the descriptive methods by using the qualitative methods of collecting and analyzing data from both primary and secondary sources of data. Questionnaire was the main instrument for collecting primary data. Simple random sampling method was use to select the sample size for the study. Two third of the total population was used to calculate the sample size of the study. Data collected was analyzed using frequency tables. Major findings of the study were the main monitoring practices in regulating private vendors are keeping proper records of vending activities, daily collection of proceeds of vendors and submission of monthly financial reports while minor monitoring practices including unannounced inspections and weekly monitoring of vending activities. It is recommended that Management of ECG should place premium on all monitoring activities irrespective of whether it is minor or major in order to ensure efficiency in monitoring private vendors.

#### 1. Introduction

Electricity Company of Ghana (ECG) has introduced the prepaid metering system to replace the traditional credit based system of electricity delivery where the customers consume electricity continuously and make periodic payments to the utility producer. The amount consumed is measured by an electricity meter. ECG staff periodically inspects the meter and the consumer is invoiced for the energy consumed. Depending on the terms of payment consumers have various periods of times to settle their bills. Non-payment may result to consumers being disconnected (llieu, 2005).

The basic principle of pre-payment system is the reverse of the credit metering system where customers decide how much energy they required before they consume it, and pay the relevant amount to the utility company beforehand. The household is then credited with the purchased amount of electricity after the prepaid electricity is consumed; electricity automatically is disconnected, unless the consumer makes a further repayment (Antonell, 2003). Consumers purchase electricity from the Vending stations also called the cash dispensing unit (CDU). The CDU effectively acts as a vending outlet on behalf of ECG (Burger et al, 1992). The system can operate continually where a good communication network is available, but if necessary data can be transferred through the use of floppy disk, the system master station consolidates the pooled information on the various CDU's activities and uploads it to Electricity Company's main frame computers where credit and tariff management systems and its information and billing system consolidate and reconcile the figure of the electricity consumed and the amount paid (Eskom, 2002).

#### 1.1. Problem Statement

The Electricity Company of Ghana has replaced most of its credit based meters with prepaid meters for both residential and non-residential purposes. According to Western Regional Public Relations Officer for Electricity Company of Ghana, Adjei-Larbi (2010), the main aim for the introduction of the prepaid meters is to cut down on the high debt burden and ensure effective revenue mobilization in order to provide more reliable services.

To achieve these aims of introducing the prepaid metering system (PMS) called for effective control systems in order to reduce fraudulent practices, waste and excesses and to ensure that accounting standards are met. Internal control systems in ECG are very crucial in an era where the company has sublet one of its core functions of revenue collection to private vendors. It is behind this observation that the study is conducted to examine the challenges facing private vendors of ECG prepaid meter services in revenue collection practices in Koforidua within the Eastern Region of Ghana.

# 1.2. Research Questions

The study poses the following research questions

- 1. What control practices are used by ECG to monitor the activities of private vendors?
- 2. What are the challenges encountered by of monitoring the activities of private vendors?
- 3. What challenges are encountered by ECG private vendors in the provision of their services?

# 2. Research Methodology

#### 2.1. Research Design

Research design represents a detailed outline of how an investigation is undertaken. A research design typically include how data is to be collected, what research instruments are employed, how the research instruments are used and the intended means for analyzing data collection. In this technique, each member of the population has an equal chance of being selected as subject. The entire process of sampling was done in a single step with each subject selected independently of the other members of the population. The study employed descriptive survey design.

# 2.2. Study Population and Sampling

The study population describes the members or elements of the social entity that is being examined. The study is a descriptive survey that solicits views and opinion of ECG audit staff and private vendors of ECG prepaid services in Koforidua. The number of ECG audit staff at the Regional Office in Koforidua is 24 while number of private vendors in Koforidua is over 200 (Electricity Company of Ghana, 2016).

# 2.3. Research Instruments

The main instrument of data collection was through the use of questionnaires. The questionnaires comprised of both open ended questions and close ended questions. The close ended questions were intended to restrict the responds on the options given while the open ended questions gave them the room to freely express themselves.

#### 3. Results and Discussion

# 3.1. Monitoring Practices to Regulate Private Prepaid Vendors

To bring efficiency and to increase access to vending points in the sale of power for those using prepaid meters, management of ECG contracted part of its major activity of selling power to private vendors of prepaid meter services. This section discusses how ECG monitored the activities of the prepaid vendors and the details are presented in Table 1.

		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Daily collection of proceeds to bank	3	12.5	12.5	12.5
	Keeping of proper records on vendor activities	5	20.8	20.8	33.3
	Weekly monitoring of vendor activities	5	20.8	20.8	54.1
	Monthly audit of accounts	8	33.3	33.3	87.5
	Submission of monthly financial report	3	12.5	12.5	100.0
	Total	24	100.0	100.0	

Table 1: Monitoring Practices to Regulate Private Vendors Source: Field Survey, 2016

From Table 1 it was found out that the main monitoring activity of ECG on the private vendors was to ensure that vendors keep proper records on their sales activities. This constituted 20.8 percent of the responses. The study also revealed that ECG supplied all the private vendors with daily analysis sheet from which all daily sales including the number of customers for the period were recorded. The main idea behind this was to track the sales operations at the vending points and also to reconcile sales made with the records on analysis sheet. The study found out that ECG has a scheduled officer whose main responsibility is to go round to ensure that the vendors entered their daily sales activity right on the analysis sheet. The study further revealed that when the scheduled officer was satisfied with the daily sales analysis, the officer then signed to authenticate the correctness of the record, after which a copy of the analysis sheet was given to the vendor. ECG scheduled officer also takes a copy in addition to the pay slips of the daily lodgments which was used to reconcile with the sales activity for the day. The finding was consistent with Hudson (2012) findings that ineffective monitoring of sales operation can result in fraudulent activities and loss of funds.

Another major monitoring practice was to ensure that vendors lodge their daily sales at a specified bank. This constituted 12.5% of responses. ECG has entrusted this duty to the care of the supervising cashier who required that receipts of daily sales lodgments were properly accounted. The ability to do this prevented the vendors from using ECG money for other things. It was a requirement that a pay slip of any amount paid to the bank should be submitted to the supervising cashier who used the pay slip of the bank in entering in ECG accounting software for future reconciliation with the bank statement.

Submission of monthly financial report on the operations of the private vendors to management was another major monitoring activity of ECG. This constituted 12.5% of the responses. The study found out that Management meet monthly to access district reports. This included reports on sale of power and as part of the sale of power private vendors activities were also considered. At such a meeting, decisions on whether sales vendors were keeping faith to the activities of ECG in terms of sales of power were determined.

Again the decisions to terminate or suspend the operations of nonperforming vendors as well as those involved in fraudulent activities were also considered. The study further found out that at such monthly meetings, the activities of supervising cashiers and field officers involved in supervising vendors were also evaluated for those to be reprimanded considered for an action to be taken against them as well as those who need to be appreciated to be also considered.

Weekly visit to vendors were also seen to be another practice to monitor private vendors, (20.80%). The District Accounts Officer as part of his schedule to visit the private vendors examine their accounts and advised them on any challenges they face as far as sales and keeping of proper accounting standards at the vending stations are concerned. The findings made by District Accounts Officer on private vendors were reported to the Regional Account Manager to be incorporated into his reports for monthly discussion at the management level.

Monthly audit of accounts of private vendors (33.30%) was seen as a minor monitoring practice at ECG. The study revealed that the Account Examination Units (AEU) examines every private vendor account and makes recommendation on every vendor whether they were in good standing or they owed the company or have discrepancies to be reconciled in the accounts. The Accounts Examination Units reported sales as a major input on the status of every private vendor. The monthly audit of account of private vendors was also a final activity usually conducted to close the account of private vendors at the end of every period.

It can be inferred from the above that ECG used a number of monitoring practices to regulate private vendors in order to ensure that power entrusted into their care for sales were properly accounted for.

# 3.2. Challenges Encountered in Monitoring Private Vendors

In order to understand the behaviour of private vendors in the sale of power to prepaid meter users, the researcher explored the problems ECG had with monitoring private vendors and the details are presented on the Table 2.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inadequate logistics	4	16.7	16.7	16.7
	Inadequate auditors	8	33.3	33.3	50.0
	Mistrust between vendors and monitoring team	5	20.8	20.8	70.8
	Unreliable financial report of vendors	4	16.7	16.7	87.5
	Noncompliance with laws and regulations	3	12.5	12.5	100.0
	Total	24	100.0	100.0	

Table 2: Challenges encountered in monitoring Private Vendors Source: Field Survey, 2016

Analysis on the problems with monitoring of private vendors revealed that inadequate auditors (33.3%) constitute a major problem facing ECG in monitoring private vendors. It was found that there were over 200 private vendors in Koforidua. These private vendors were not in one location but scattered in the various suburbs. The study also showed that there was only a four member audit team (AED) who periodically visited the private vendors and ensured that they were keeping to standards. This suggested that the AEU team was overstressed with a lot of work in monitoring the activities of private vendors. Due to these, unannounced inspections were scarcely undertaken at vending stations. The study further showed that another tasks of the audit team was to audit the books of the supervising cashiers and the District Account Officers. This was found to be a huge task for such a small team as such most often the audit team was not able to complete this task within a month implying that they were not able to present a full report on monthly basis for management discussion.

Another problem with monitoring was the mistrust between vendors and monitoring team which represented 20.8% of the responses. It was found out that most often vendors and monitoring team were not on a healthy relationship due to the high level of suspicion. The vendors believed that the monitoring team was coming to check whether they had embezzled money. Due to this perception, the vendors do not often open up. The monitoring team on the other hand saw the vendors as being difficult to work with and as such do not also relate well with them. These poor working relations between the vendors and the monitoring team normally delays a simple monitoring activity since both parties normally take entrenched positions.

Inadequate logistics (16.7% of responses) was a major problem affecting monitoring of private vendors. District Account Officers(DAO) had no vehicles to monitor the activities of the vendors to know problems vendors have in the sale of power and recording of accounts. The audit team also did not have enough vehicles to undertake auditing activities in the various vending stations. Field officer (audit team, supervising cashiers, DAO) were given lap tops and camera scanners for field monitoring activities.

Inadequate logistics in the form of field recording accessories often delayed capturing on the spot data which was needed as evidence to support a claim on any wrong doing at a point. Lack of such inputs from management made the work difficult.

Again 16.70% of respondents noted unreliable financial report of vendors as another challenge encountered in monitoring private vendors. Most often the daily analysis sheet of private vendors did not reflect the actual sales made for the day. This often took an experiences field officer to detect. When this goes undetected, it makes the financial report prepared on vendors unreliable because of the inherent errors concealed by the private vendors.

The inability for private vendors to comply strictly with the rules and regulations governing sale of power for prepaid meter users was a problem for ECG officials. This represented 12.50% of the responses. The study found out that it was a rule that there should be daily lodgment of any sales made but it was discovered that most vendors did not comply to this directly; they accumulated funds and paid at any day convenient to them. It was also found out that instead of paying daily sales directly into ECG account, some vendors rather preferred paying into their personal accounts and thereafter issued ECG a cheque to cover the amount. The inability to submit report on vendors on time to management due to logistic challenges can partly be attributed to vendors' non-compliance with laws and regulations. It can be concluded that ECG has numerous problems in monitoring private vendors, and a major problem is inadequate auditors to undertake periodic audit of private vendors' activities.

# 3.3. Challenges Private Vendors Have in the Sale of Power

In order to have a smooth sale of power there was the need to identify the problems private vendors have. It is also important to identify the problems private vendors have so that field officers will be abreast with such problems whenever they visit the vending stations.

The problems of private vendors have been summarized in Table 3 below.

		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Frequent power outages at vending stations	5	20.8	20.8	20.8
	Frequent network failure at vending stations	8	33.3	33.3	54.1
	Remote vending stations	3	12.5	12.5	66.6
	Poor attitude of customers	2	8.3	8.3	75.0
	Inability to run 24 hour service	6	25.0	25.0	100.0
	Total	24	100.0	100.0	

Table 3: Challenges Private Vendors Face in Collecting Revenue Source: Field Survey, 2016

From Table 3, it was found out that frequent network failure at vending stations (33.3%) was a major problem affecting the sales of power. The study revealed that, when there was no internet connectivity between the vending stations and the prepaid vending points, information on the quantity sold to each customer cannot be relayed to the regional office for the prepaid meter card to be loaded on. Most vending stations were found to have unreliable networks because there were a lot of distractions to the satellite being used.

Inability to run customers services throughout the day in most vending stations was a problem for customers. This represented 25.0% of the responses. The ideal situation was to have all vending stations running 24 hourly services, but unfortunately all the vending station at the municipal mainly operate during the day and close after 10pm each day. Thus, customer who wanted to buy power in the night were not able to do so. Reasons for inability of all the vending stations to run 24 hourly services were the high cost involved and security threats. It was found out that it was costly to run 24 hourly services because the vendor need to engage the services of more than one sales person who will ran a shift system. However most vending stations were not comfortable with this arrangement and only want to sell during the peak period. That is the day and before 6pm. The study also found out that working late in the night has its own security threats since sales persons fear that they could be attacked.

Another major problem facing prepaid vendors was the frequent power outage in the study area. The study found out that, there were frequent power outages and this disrupted the sale of power because all the equipment used in the process of selling depended on power and when there were outages, it became impossible to work. An alternative to this was to get a generator. Most vending stations did not have generators because of the high cost of purchasing and maintaining them.

Inaccessibility to vending stations (12.5%) was found out to be a problem affecting customers of prepaid. It was found out that there are few vending stations in Koforidua making people walk long distances before getting to the vending stations. This situation created inconvenience for prepaid meter users whenever they want to purchase power. There was the need to ensure that there was access to vending stations so that the problem of having to walk long distance can be solved.

The study found out that poor attitudes of customers to prepaid vendors were also a problem. This represented 8.3% of responses. It was found out that most often customers were impatient with vending especially when the network was either slow or down, or when a customer has a damaged card and needed to get to ECG for a replacement. The study also found that most customers got offended when they arrived during break time and the cashiers were out on break. The study further found out that some vendors were also disrespectful to customers on the slightest issues or challenge based on these, some customers would not want to buy from specific stations and some cashiers would not want to sell to some customers creating problems for the sale of power for ECG.

#### 3. Conclusion and Recommendations

The monitoring practices by ECG in regulating private vendor activities include keeping of proper records of vending activity, daily collection of proceeds to bank and submission of monthly financial reports, unannounced inspections and weekly monitoring of vendor activities. It can also be concluded that the main problems associated with monitoring ECG private vendors were inadequate auditors, mistrust between vendors and audit team, inadequate logistics, unreliable financial reports from vendors and non-compliance of guidelines regulating vending activities. Private vendors have numerous problems associated with the sale of power to prepaid meter users, key amongst such problems are frequent network failures at vending stations, inability to run 24 hourly services, and frequent power outages at vending stations. It is recommended that all monitoring activities should be taken seriously by the field staff to enhance effective monitoring of vendors; the need for Management to recruit more auditors to strengthen monitoring activities; Management must help provide reliable internet network to enhance vending activities. Management should ensure that prepaid vendors run 24 hourly services, to ensure flexibility on access of power by prepaid meter users. This also calls for intensified security, especially at night for both the vending officer and the prepaid buyer.

#### 4. References

- i. Anthony, R. (1965). Planning and control systems: A framework for analysis, Harvard Business Press, Boston.
- ii. Anthony, R. N. & Govindarajan V. (2003). Management Control Systems. McGraw-Hill/Irwin. USA.
- iii. Anthony, R. N. & Young D. (2002). Management Control in Nonprofit Organizations. McGraw-Hill/Irwin. U.S.A.
- iv. Cooper, R. & Kaplan R. S. (1998). The Design of Cost Management Systems: Text Cases and Readings, Prentice Hall.
- v. Françoise, G. (2011). Fundamentals of Management Control. Prentice Hall.U.S.A.
- vi. Woods, F. (2010). Financial accounting. Fifth Edition. Financial times. Prentice Hall.
- vii. Griffin, R. W. (2010). Management. 10th edition. South-Western College Publication.
- viii. Hansen, D. R., Mowen, M. M. & Guan, L. (2009).Cost Management: Accounting and Control, 6th edition. South-Western Cengage Learning. Blackwell Publishing.
- ix. Jan, A. P. (2009). Managing Organizational Culture for Effective Internal Control. SPi Publisher Services. London.
- x. Lane, H. W., Distefano, J. J. & Maznevski, M. L. (2000).International Management Behavior: Text, Readings, and Cases, Blackwell Publishing.
- xi. Merchant, K. A. (1998). Modern Management Control Systems: Text and Cases. Prentice Hall.
- xii. Simons, R., Davila A. & Kaplan, R. S. (1999).Performance Measurement & Control Systems for Implementing Strategy: Text and Cases. Prentice Hall College Division.
- xiii. Chenhall, R.H. (2007). Theorizing contingencies in management control systems research, Handbook of Management Accounting Research. London.
- xiv. Hammersley, J., Myers, L. & Shakespeare, C. (2008). Market reactions to the disclosure of internal control weaknesses and to the characteristics of those weaknesses under Section 302 of the Sarbanes Oxley Act of 2002. Review of Accounting Studies 13(1).
- xv. Snell, A. S. (1992). Control theory in strategic human resource management: The mediating effect of administrative information. Academy of Management Journal, 35 (2).
- xvi. Simons, R., (1987). Accounting control systems and business strategy: An empirical analysis, Accounting, Organisations and Society 12.
- xvii. Ronald, O. (2014) Effect of Prepaid Electricity Billing On Revenue Collection Kenya
- xviii. Ogujor, G. & Otosowie, K. (2010). Case study on the introduction of prepaid in Nigeria.
- xix. Dadzie, M. (2012). Report on prepaid meters. Ghana.