101 Example of Financial Economics SRFE

www.srfe.journals.es

# ROLE OF PROCUREMENT PROCEDURES AT KPLC IN SUCCESSFUL ELECTRICITY INSTALLATION IN CENTRAL RIFT REGION

### METHODIUS NJOROGE KIARIE

#### **Abstract**

The availability of electricity is a key pillar of the economic development and achievement of Kenya's vision 2030 development milestone. However, despite the efforts made by the government to increase electricity installation across the country, connectivity remains relatively low. Some of the efforts undertaken to increase electricity installation include Umeme Pamoja, Stima Loan, and rural electrification programmes amongst others. This study objective of the study was to establish the role of procurement procedures at KPLC in successful electricity installation in Central Rift Region. The study was guided by a descriptive research design and structured questionnaires were used for data collection. The sample size used for the study was 100 respondents consisting of the KPLC electricity installation customers and staff. The SPSS version 21 was used for the data analysis. The study found that the relationship between procurement procedures and electricity installation is not statistically significant (r =0.168; p >0.05). Therefore, the null hypothesis that there is no significant statistical relationship between procurement procedures and electricity installation timelines was accepted. The study concluded that the procurement of the items needed for electricity installation is a major hindrance to easy and efficient installation. The study recommends that KPLC ensures that customers are awareof all items needed for electricity installation at the point of engagement to avoid delays in procuring the items which lead to timeframes for customers' electricity installation being affected.

Keywords: Procurement, Procurement Procedures, Project

### I. INTRODUCTION

It is estimated that 40% of Kenya's population is urban and nearly half of the entire population will be urban by the year 2020 (Ogutu, 2014)). The country is expected to achieve a gross domestic product (GDP) growth rate of 10% by the year 2030 as well as provide electricity connectivity to 40% of the rural population by 2020 (Oketch, 2013). The contribution of the energy sector to the overall tax revenue is about 20%, equivalent to 4% of GDP (Ngatia, 2013). The country is experiencing major challenges in the energy sector due to the high expectations and demand in the manufacturing, agricultural, tourism, transport and other sectors due to sharp increase in population, rural urban migration and economic growth (Wepukhulu, 2014). Statistics from the Kenya Institute of Public Policy and Analysis (KIPPRA) shows that the electricity demand is projected to grow from 5035Gwh in 2003/04 to 8561 Gwh in 2013/14 (Ngumbau, 2013).

Responding to the limited access to electricity, many governments have adopted the rural electrification programs (Ogutu, 2014). Rural electrification is the process of bringing electrical power to rural and remote areas. Electricity is used, not only for lighting and household purposes but it also allows for mechanization of many farming operations such as threshing, milking and hoisting grain for storage. In areas facing labour shortages, this allows for greater productivity at reduced cost. The Rural Electrification Authority (REA) that is mandated with implementing the rural electrification programme in Kenya came into operation in July 2007 (Ngatia, 2013) This agency was also expected to increase the speed of implementation of several electricity projects had been lined up for implementation throughout the country including the development of a comprehensive rural electrification

ISSN:2173-1268 42 | V 1 7 . I 0 1



# www.srfe.journals.es

master plan which provided crucial information for selecting projects for funding at a given time (Omuoso, 2013). The Kenya Power and Lighting Company (KPLC) projected over 150,000 connections annually by the year 2010 (Kutswa, 2011). The high grid expansion costs, high connection costs, upfront investments, low threshold demand and low population densities affected electricity connections (Kitungu, 2014).

The other efforts that KPLC has undertaken in order to increase the electricity installations include the provision of the stima loan, umeme pamoja initiative, maximization, pre-investment, and slum upgrading(Wambugu, 2010). The KPLCStima Loan is a facility that has been introduced to enable needy customers' access credit from an internally managed Revolving Fund (RF) for payment of electricity connection. This facility joined the flagship brand, Stima Loan, which was being executed through Equity Bank. The company has benefited positively through creation of a customer base, increase in connectivity and increase in revenue collection. The general public benefited from the Stima Loan and fully supported it as they also found it affordable since the connection cost was low. The process of applying for Stima Loan was also not complicated hence catering for both literate and illiterate customers.

Another initiative promoting electricity access in the rural areas is "Umeme Pamoja", which translates as "Electricity Together". This campaign aims to establish a joint group of households, so as to connect them collectively to the grid, thus saving costs. This scheme is financed by the group settlement electrification schemes created by the Kenya Power. According to Nyakoe (2014), this scheme is aimed at making electricity connection easier, affordable and faster. It is set to enable as many Kenyans as possible get electricity. It involves organizing potential customers in the same neighbourhood to team up and apply jointly so as to reduce individual costs.

The energy sector has been restructured through the sessional paper number of 2004 and the energy act number 12 of 2006 to create diverse institutions with specialized roles. These institutions include the Ministry of Energy (MOE), Energy Regulatory Commission (ERC), Kenya Generating Company (KenGen), Kenyan Power and Lighting Company (KPLC), the Electrification Authority (REA), Kenya Electricity Transmission Company Rural (KETRACO), Geothermal Development Company (GDC) and Independent Power Producers (IPPs) (Mutuku, 2013). Kenya Power owns and operates most of the electricity transmission and distribution system in the country and sells electricity to over 2.6 million customers (Ngumbau, 2013). The Company's key mandate is to plan for sufficient electricity generation and transmission capacity to meetdemand; building and maintaining the power distribution and transmission network and retailing of electricity to its customers (Oketch, 2013). The Government has a controlling stake at 50.1% of shareholding with private investors at 49.9% (Nyakoe, 2014). Kenya Power is listed on the Nairobi Securities Exchange. The KPLC is divided into nine regions that is Central Rift, Coast, Mount Kenya, Nairobi North, Nairobi South, Nairobi West, North Eastern, North Rift and West Kenya regions. The central rift region is composed of Naivasha, Nyahururu, Molo, Ravine, Narok, Maralal, and Nakuru sub branches.

### II. LITERATURE REVIEW

### **Empirical Review**

There has been significant evolution and change in the regulatory aspects on procurement in

ISSN:2173-1268 43 | V 1 7 . I 0 1



# www.srfe.journals.es

the country (Boraya, 2013). The public procurement issues are unregulated in the early 1960s and governed by the treasury circulars from 1969, the supplies manual (1978) and the exchequer and audit (public procurement) regulations of 2001(Ngotho, 2014). The 2000s saw the evolution of the public procurement in Kenya and development in legal regulation of the same. The 2001 saw the consolidation of all the circulars issued by the ministry of Finance over the years into one document based on the United Nations Commission on International Trade Law (UNCITRAL) model (Mauki, 2014). These regulations were to be used for all public procurement except in situations that the ministry of finance in consultation with the procuring authority opted for a different option in the interest of national security (Mwangi, 2014). There were several regulatory laws passed that govern the procurement industry. These laws include the public procurement and disposal act (2005), public procurement and disposal regulations (2006), supplies management practitioners act (2007), the public procurement and disposal general manual, and the public procurement and disposal (public private partnership) regulations. The Public Procurement and Disposal Act, 2005 created the Public Procurement Oversight Authority (PPOA), the Public Procurement Advisory Board (PPAB) and the continuance of the Public Procurement Complaints, Review and Appeals Board as the Public Procurement Administrative Review Board (PPARB) (Telewa, 2014).

According to the public procurement acts of 2005 and 2006 there are seven public procurement methods in Kenya; open tender, restricted tendering, direct procurement, requests for proposal, request for quotations, and low value procurements (Oyugi, 2012; Simbiri, 2010). The open tender is the most commonly used public procurement method competition among diverse suppliers, contractors providers(Ngotho, 2014). The open tendering involves preparation of the specifics of the items to be procured, advertisement in the media and the submission of bids by interested parties (Mungai, 2014). Thereafter there is the technical evaluation of bids that is followed by the financial evaluation making an evaluation report to the tender board for the award of the tender (Oyugi, 2012). While open tendering process is transparent, it has been criticized for its lengthy process that often leads to delays in procurement of goods and services (Ngotho, 2014). Apart from the open tendering, the other alternative methods of public procurement are only utilized subject to a written authority for the Public Procurement Oversight Authority (PPOA) (Mutua, 2010). The restricted procurement is used subject to limited number of suppliers of the specific goods due to the complexity or specialization of the required services and is subject to a limit in the context of budgetary allocation(Ngotho, 2014). In this type of public procurement, the competition among the different suppliers is limited to the prequalification stage(Telewa, 2014). The direct procurement of goods is used in the context of the urgent need for the procurement of goods, works or services (Mbae, 2014). The law indicates that the purpose of the direct procurement must not be the avoidance of competition and the purchase agreement must be done in writing (Njoroge, 2012). The request for proposals procurement methods is used for services that are advisory, predominantly intellectual (e.g. consultancies) or within specific project phases that require specialized technical skills or machinery (Simbiri, 2010). The request for the proposal is done in two stages that is the technical proposal and the financial proposal. The request for the proposal procurement method can be used when the goods are commonly available while the low value procurements is used in the purchase of items for daily office use that are low value (Mutua, 2010).

ISSN:2173-1268 44 | V 1 7 . I 0 1

The South Relate of Financial Economics Sare

www.srfe.journals.es

# **OBJECTIVE OF THE STUDY**

To establish the role of procurement procedures at KPLC in successful electricity installation in Central RiftRegion.

### **Research Hypothesis**

**H<sub>0</sub>:** There is no significant statistical relationship between procurement procedures at KPLC and successful electricity installations in Central Rift.

**H**<sub>A</sub>: There is a significant statistical relationship between procurement procedures at KPLC and successful electricity installations in Central Rift.

### III. METHODOLOGY

The study adopted the descriptive research design. The target population of this study was the people that KPLC Central Rift region targeted for connection in the 2014-2015 period. The study utilized a sample size of 100 respondents. Therefore, 100 structured questionnaires were distributed to the respondents and 85 questionnaires were found to be complete, which formed the basis of the data analysis in this study. In this context, the response rate for this study was 85.0% which was deemed sufficient for data analysis. According to Mugenda (2003), a response rate of above 80% is deemed sufficient for the study and therefore this response rate at 85.0% was considered sufficient for the study.

### IV. FINDINGS AND DISCUSSIONS

Procurement procedures affect the pace in which the electricity installation is done from the initiation to completion. Among the procurement procedures included the time of acquiring the required items, the effect of the procurement process on price of electricity installation, the level of engagement with different teams during the electricity installation process, and the effect of procurement on the whole procurement process. The respondents were asked on whether the procurement of the needed items took time hence affecting the timeframes for the electricity installation. There was a relatively huge percentage of 36.1% of respondents who felt the procurement of the required items took time hence affecting electricity installation process. In the context of the procurement of the electricity installation items leading to price fluctuation, 5.0% of the respondents strongly agreed, 20.6% agreed, 50.0% were uncertain, and 24.4% of the respondents disagreed. Lengthy and opaque electricity installation process leads to customers' feeling the need to engage with the staff at a personal level to quicken the process hence resulting in increased costs. In this context, 38.4% of the respondents agreed that they felt a necessity to engage KPLC staff at a personal level to quicken the process. The engagement of the KPLC staff outside the formal channels leads to incurring of extra expenses as indicated by 62.8% of the respondents as compared to 24.4% of the respondents who were uncertain and 12.8% of the respondents who disagreed. The role of procurement as a hindrance towards making an easy and efficient electricity installation was cited by up to 76.7% of the respondents as a hindrance.

**Table 1: Distribution Frequencies of the Procurement Procedures** 

Statement	SA	A	U	D	SD
The procurement of the needed items took time hence affecting timeframes for my electricity installation process	6.0%	30.1 %	27.9 %	24.4 %	11.6 %

ISSN:2173-1268 45 | V 1 7 . I 0 1



# www.srfe.journals.es

The procurement of the electricity installation items led to fluctuating price of electricity installation process	5.0%	20.6 %	50.0 %	24.4 %	0%
The procurement of needed items for electricity installation items led to the necessity to engage KPLC staff at personal level to quicken the process			37.2 %	24.4 %	0%
led to the necessity to incur extra expenses to KPLC staff to quicken the process	39.5 %	23.3	24.4 %	12.8 %	0%
		33.7 %	23.3 %	0%	0%

#### V. HYPOTHESIS TESTING

Table 2 shows the relationship between procurement procedures and electricity installation. The findings show that the relationship between procurement procedures and electricity installation is not statistically significant (r = 0.168; p > 0.05). Therefore, the null hypothesis that there is no significant statistical relationship between procurement procedures and electricity installation timelines was accepted.

**Table 2: Pearson Correlation Procedures** 

		Electricity Installation
Procurement Procedures	Pearson Correlation	.168
	Sig. (2-tailed)	.121
	N	86

# VI. CONCLUSION

From these findings, the study concluded that there is no significant statistical relationship between procurement procedures and electricity installation by KPLC. The study also concluded that the procurement of the items needed for electricity is a major hindrance to easy and efficient electricity installation.

### VII.RECOMMENDATION

The Kenya Power and Lighting Company should ensure that customers are aware of all items needed for electricity installation at the point of engagement to avoid delays in procuring the items which lead to timeframes for customers' electricity installation being affected.

### References

- 1. Boraya, N. (2013). Collaborative Public Procurement and Performance Among State Corporations in Kenya. Journal of Business and Management, 1(4), 29–32.
- 2. Kitungu, A. K. (2014). Supply Chain Factors and Delivery of Power Generation Projects at the Kenya Electricity Generating Company Limited. Journal of Sustainable Development in Africa, 2(3), 29–35.
- 3. Kutswa, C. (2011). Challenges of Implementing Enterprise Resource Planning Strategy at the Kenya Electricity Generating Company. Journal of Management and Business Studies, 1(1), 29–34.
- 4. Mauki, R. (2014). The Regions Perspective of the Factors Infleuncing the Implementation of Public Procurement and Disposal ACT in the Kenyan Judiciary. Journal of Management Research, 2(3), 19–24.
- 5. Mbae, L. (2014). Public Procurement Law and Procurement Performance of County Government in Kenya;

ISSN:2173-1268 46 | V 1 7 . I 0 1



### www.srfe.journals.es

- Case of Machakos County Government. International Journal of Research in Management, Economics and Commerce, 2(2), 14–19.
- 6. Mungai, N. (2014). Factors Influencing Implementation of Public Procurement and Disposal Act, 2005 in Public Day Secondary Schools in Mukurwe-ini Sub County, Nyeri County, Kenya. International Journal of Science and Research, 2(3), 12–19.
- 7. Mutua, O. (2010). Public Procurement Practices: Policy Implications and Service Delivery in Selected Ministries Headquarters in Naiorbi County, Kenya. Interdisciplinary Journal of Contemporary Research in Business, 2(1), 17–22.
- 8. Mutuku, A. (2013). Operations Management as a Path to World Class Status Firm; A Study of Kenyan Energy Sector. International Review of Management and Business Research, 3(3), 31–36.
- 9. Mwangi, M. (2014). The Impact of Public Procurement Policy on Teaching and Learning in Selected Public Secondary Schools in Kahuro District, Murang'a County, Kenya. Interdisciplinary Journal of Contemporary Research in Business, 2(3), 25–36.
- 10. Ngatia, G. (2013). Maintenance Practices and Power Plants Operational Performance In Kenya. International Journal of Business and Management Invention, 2(3), 14–25.
- 11. Ngotho, M. (2014). Public Procurement Practices and Development of MSEs in Kenya; Case of Roads Sector. International Multidisciplinary Journal, 2(2), 26–29.
- 12. Ngumbau, D. (2013). Challenges of Implementing Performance Management System at the Kenya Electricity Generating Company (KENGEN) Limited. Journal of Management Research, 2(2), 35–40.
- 13. Njoroge, K. (2012). Effects of Public Procurement Procedures on Financial Performance of Farmers' Cooperative Societies in Kiambu County. International Review of Management and Business Research, 2(3), 24–30.
- 14. Nyakoe, E. (2014). Impact of Information and Communication Technology on Kenya Power's Performance. International Multidisciplinary Journal, 1(1), 41–45.
- 15. Ogutu, J. (2014). Entreprise Resource Planning Systems and Performance of Power Sector in Kenya. International Journal of Humanities and Social Sciences, 1(1), 7–13.
- 16. Oketch, J. (2013). An Analysis of the Challenges that Affect Performance of Utility Regulators in Kenya; A Case Study of Energy Regulatory Commission. International Journal of Business and Public Management, 2(1), 29–35.
- 17. Omuoso, K. (2013). Challenges Affecting Implementation of Corporate Strategies in the Electricity Sector in Kenya (A Case of Kenya Electricity Generating Company Limited). Ivey Business Journal, 1(2), 64–71.
- 18. Oyugi, D. (2012). A study of the Effects of Privatisation on Tea Product and Management in Small Scale Tea Sector (KTDA) in Kisii District (A Case of Kiamokama Tea Factory). International Journal of Research in Management, Economics and Commerce, 1(1), 25–29.
- 19. Simbiri, A. (2010). Investigation of the Barriers to Small and Medium Enterprises Accessing Public Procurement Market.

International Journal of Humanities and Social Sciences, 1(1), 17–20.

- 20. Telewa, S. (2014). Sustainable Procurement Practices in the Public Water Sector Institutions in Kenya. Journal of Management and Business Studies, 2(3), 19–25.
- 21. Wambugu, C. (2010). Operations Strategies of Managing Effects of Drought on Hydropower Generation: A Case Study of Kenya Electricity Generating Company Limited. Journal of Sustainable Development in Africa, 2(3), 29–35.

ISSN:2173-1268 47 | V 1 7 . I 0 1