Introduction

The provision of utilities is of key importance to the social and economic welfare of any developed or developing economy in the modern world. Such services not only serve to generate revenue for providing firms, they also improve the quality of life and avail decent living, even for low income earners. Utilities consist of piped water supplies, electricity and gas which are provided to the public at set fees. The availability of gas as a utility is, however, more necessary in extreme climate regions where temperatures can drop to below freezing point and is primarily used for heating purposes. This report will cover utilities as required in tropical climate areas. Specifically, the report will examine electricity as a utility in Kenya. It will cover the history of the company, its performance over a number of years and the various types of risks it is exposed to in its operations.

General Overview

Since independence, Kenya has relied greatly on hydroelectric power generation for a bulk of its power supply. As a result, a number of challenges have cropped up throughout history. Due to climate changes and weather pattern alterations, droughts have rendered the generation of electricity more difficult. The most notable instances of these occurred in the 1990s and as recently as 2014, rendering the rationing of electric power necessary. This not only has a negative impact on electricity generating and retailing companies' revenue streams but also on the economy in its entirety through rendering power-reliant transactions unusable. With further financial injection into energy generation in the country, geothermal and thermal power have gained prominence with the passage of time. Kenya's Rift Valley region is rife with steam

deposits, allowing the generation of electricity to complement hydroelectric power already in circulation.

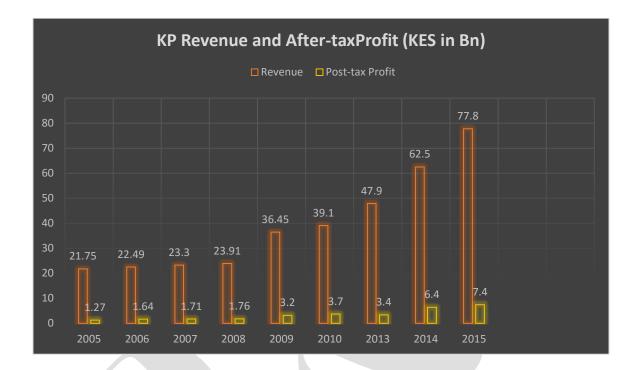
Changing global economics, politics and lifestyle patterns have called for increased use of electricity-reliant machinery and gadgets. Businesses have also come up in the country at a faster rate than was the case in the 1990s and early 2000s, fueled by Africa's increasing potential as an economic powerhouse. Kenya has attracted attention from local and international investors due to a number of factors. Among these are its 2008 launch of the Vision 2030 development program, its relatively stable political climate and its 2015 lower middle income economy status announcement by the World Bank. Industrial capacity is set to grow even further, with statistics indicating a potential demand of 15,000 MW by 2030. As at March 2016, the country's interconnected power capacity stood at a total of 2,341 MW, with an additional 28 MW off-grid installation.

In a bid to keep up with the exponential demand for energy currently and into the future, the Government announced plans to venture into nuclear energy as an alternative to thermal, geothermal and hydroelectric power generation in 2010 as part of Vision 2030. This ambitious project saw the establishment of the Kenya Nuclear Energy Board (KNEB) under the Ministry of Energy through Kenya Gazette Notice No.14188 of 2010. Its key mandate is to oversee the development, generation and use of nuclear energy in Kenya. In September 2015, Kenya's nuclear dream received support from China, with the signing of an agreement to help set up the first nuclear plant by 2025. The first plant is expected to inject 1,000 MW into the national grid, a capacity expected to be boosted to 4,000 MW by 2033.

In 2006, the company's sales were concentrated in the Nairobi region, taking up up to 51% of all electricity sales. Western Kenya and the Coast both accounted for 18% each while the Mount Kenya region accounted for 8% of sales and 0.5% were exports. 2006 pre-tax profits increased to KES2.4 billion compared to KES1.9 billion realized in 2005, with a dividend of KES1.50 paid out to shareholders. Revenue moved up from KES21.75 billion to KES22.49 billion in 2006. 2007 saw KP's revenue pushing upward to KES23.3 billion, which further increased by 2.6% in 2008 to KES23.91 billion. While in 2007 the dividend paid was KES3.00 a share, this increased to KES4.00 per share in 2008, signaling improved profit-making capacity and proper financial management. The growth pattern increased in 2009 going into 2010, with revenues of KES36.45 billion and KES39.1 billion respectively. Despite a tax increment resulting in KES1.9 billion worth of tax, post-tax profits stood at KES3.7 billion in 2010 and a final dividend of KES5.00 per share was paid out.

While in 2006 power generation was limited to geothermal, thermal and hydro sources, by 2014 KP had expanded its horizons to include wind and imports as sources of electricity. Wind as a generation source was made possible by the setup of wind farms, most notably in Turkana in Northern Kenya, allowing the country to join the global community in the use of clean and renewable energy sources. Revenue from the 2014 financial year increased significantly from the 2013 performance, with a realization of KES62.5 billion up from KES47.9 billion. It is interesting to note that the company issued no dividends in 2013 but paid out KES0.30 per share in dividends in 2014. This was occasioned by a slight slowdown of the country's economy due to the political transition brought on by the 2013 general elections in the country. A build up on this performance was realized in terms of revenue in 2015, with KES77.8 billion collected and pre-

tax profits stood at KES12.25 billion, signifying an 11.2% increment. The dividend payout per share in 2015 was KES0.50. This information is graphically illustrated below:



Source: Kenya Power Annual Reports

Corporate Analysis

About Kenya Power and Lighting Company

The Kenya Power and Lighting Company Limited, simply referred to as Kenya Power since 2011 (formerly abbreviated as KPLC, now KP) is a Kenyan utilities company specializing in electricity and power supply. It is headquartered in Nairobi, Kenya and is the country's main electric power retailer and related solutions provider. The company is public in nature and is listed on the Nairobi Securities Exchange, trading under the ticker *KPLC*. KP began life as the Nairobi Power and Lighting Syndicate in 1908. It was incorporated in 1922 after merging with

the Mombasa Electric Power and Lighting Company, gaining formal company status and operating under the name East African Power and Lighting Company Limited. Its name changed to its current name in 1983. Until 1997, the company controlled all electricity generation in Kenya on behalf of the Government of Kenya. Ownership of KP is split between the Government and private investors who also include members of the general public, with the Government controlling a 50.1% stake while private investors command 49.9% shareholding. As at 2016, KP owns the bulk of transmission and retail rights to electricity in Kenya.

Brand Distribution

Due to the fact that KP is the single largest retailer of electricity and operates as a monopoly, it has a nationwide reach with offices in all major towns and cities in Kenya. This allows easier and faster service provision, most of which involves maintenance services. With the word becoming more reliant on technology and less in manual task execution, new power connections have become necessary and KP is also tasked with setting up new power connections to the grid.

Product Portfolio

KP is concerned with matters electricity and is responsible for new connections to the national grid. It serves both a corporate and private client base on a national scale. Overseen include electric line connections to residential and commercial buildings on both pre-paid and post-paid bases. The purchase of tokens equivalent to set units of electricity has allowed more efficient and conscious use of electricity.

Linked to this is the company's public lighting product offering. In 2016, the Government pumped KES7.6 billion into the National Public Lighting Project. The project aims at installing lighting to road and railway networks as well as industrial, commercial and residential centers in a bid to establish Kenya as a 24-hour economy.

Industry Risks

Industry risks encompass eventualities with the probability of having an impact on an industry in its entirety as opposed to affecting a business entity based on its own unique characteristics. This section will examine specific industry risks as they affect KP's industry of involvement.

Business Cycles

The energy industry is faced by a number of business cycles in the country. While some are limited to Kenya and therefore can be considered internal, others are external in nature. Oil, which is used in electricity generation has had price fluctuations which have affected both importing and exporting nations. In 2008, the price of oil internationally dropped to below \$60 per barrel, allowing Kenya to import more and consequently increasing the country's electricity generation and distribution capacity. However, upon prices picking up again, the situation moved from a boom down towards a bust for importing nations, Kenya included, and this saw electricity prices soar. The situation recurred with the 2015 oil crisis. The aforementioned droughts in the country and the unpredictable weather patterns which have affected hydroelectricity generation have additionally created bust scenarios. It is hoped that with the establishment and commissioning of the nuclear power plant in 2025, Kenya's generation and distribution capacity will stabilize.

Technology

With the company being the largest single buyer and distributor of electricity countrywide, the Government has invested heavily in ensuring KP is up to date technologically to keep up with national demand. The company does not itself participate in electricity generation but is well equipped to handle installment and maintenance issues, as well as customer billing services. To keep up with the large number of consumers, KP currently relies on social media platforms for quick feedback gathering and an SMS-based system for mass information communication to the public. Additionally, the need to increase convenience to consumers has seen the company look to internet-based solutions. KP allows consumers to check their electricity bills online, thereby avoiding paper-based billing necessities and the inconvenience caused by the need for customers to physically collect their billing information. Business automation has been made possible through the efforts of a dedicated ICT team in a partnership with global firm IBM to provide real time data.

Entry Barriers

The presence of barriers to entry into a market reduces the level of competition for established entities. While this, may be good news for them, it may also lead to a lapse in the provision of high quality services. KP is a monopoly as far as large scale electricity retail to end consumers is concerned. Factors which restrict entry of new players into the market include the high set-up and operational costs as well as KP's already established nationwide reach, allowing it access to an already seemingly brand-loyal client base. The presence of a limited number of regulatory

authorities as will be discussed in a later section of this report has also presented relative difficulty to new market entrants.

Tastes and Preferences

In power retail, Kenya lacks competition, leaving KP to operate as a monopoly. As a result, tastes and preferences of consumers are in actual sense non-existent, and all individuals and entities rely on KP with the exception of solar power users and individuals reliant on alternative energy sources.

Company Analysis

The company analysis will focus on KP's revenue sources and the stability of the identified revenue sources. The stability of a business entity's revenue streams is key in ensuring it remains a going concern.

KP is involved in its electricity distribution and network grid maintenance, and has not invested in any other alternative source of revenue. As such, it depends on its commercial and residential connection billings for its revenue stream. The fact that KP faces no direct competition in its area of operation leaves it open to no competition, and so its revenue stream despite its narrow operation avenue is highly stable. Additionally, being the sole power retailer on as large a scale as it is puts the company in a position to receive Government support in the face of liquidity challenges, which stabilizes KP's financial position further.

Business Risks

Business risks or company risks consist of potential eventualities and factors which are specific to a given business entity. In the context of this report, the risks covered will affect KP according to its unique operational characteristics.

Operational Diversity

The operational diversity of a company refers to aspects such as the number of plants in operation, the number of businesses that said company or entity runs and the number of product lines it operates. The more operationally diverse an entity is the more stable it is in the event of unforeseen occurrences. The retailer has a number of substations throughout the country, including but not limited to the Nairobi West, Embakasi, Bomas of Kenya, Embori and Kiganjo substations. They are distributed throughout the country, each serving a given region. However, with increased power demand, single substations have had to serve an ever increasing population. This has exposed large geographical areas to black outs in the event of substation malfunctions. Moreover, the fact that KP is involved solely in electricity distribution and retail has significantly limited its operational diversity, forcing the company to focus on service quality and attempt to adequately manage the national client base.

Financial Diversity

Financial diversity is linked to operational diversity in that the more operationally diverse an entity is, the wider its financial netting is spread. This has the effect of exposing the said business entity to a reduced level of risk. KP has a large market but it is limited in the business lines it is

involved in as a company. As such, financial diversity is restricted and thus KP heavily relies on its new connections and existing customers to keep its revenue stream alive.

Regulations

The regulatory environment in which a business operates has the potential effect of both benefitting it or harming operations. With the presence of too many regulatory authorities comes the risk of compliance complications and slowed decision-making and with too little regulation comes the risk of having too many players to compete with. In Kenya, bodies with regulatory authority over electricity with a direct impact on KP are the Ministry of Energy and the Energy Regulatory Commission (ERC). The two are in positions to set prices and provide guiding legislations with which the electricity retailer must comply. The presence of few but well-versed bodies allows KP to operate with considerable ease, absent the need to comply with a myriad of requirements which in some cases may be contradictory. To counter the risk of KP facing increased competition from a perceived ease of entry into the electricity market, costs of establishment and operation are stiff. This way, any potential electricity retailer must be heavily financially secure to pose any significant challenge to KP's dominance.

Management Analysis

The management of KP is hierarchical in nature. It consists of the Cabinet Secretary (Ministry of Energy & Petroleum) who represents the Government, the chairperson and a managing director, below who fall a number of general managers. Among these include general managers in charge of finance, regional operations, human resources and administration, customer service and the

supply chain, among others. The analysis of KP's management will be based on its operational and financial streak as well as its level of risk tolerance or averseness.

Being a public company which is not only a monopoly but also holds such a significant position in Kenyan society, there has been little room for KP's management to experiment with various degrees of risk. It therefore is fair to make the assertion that KP's management is risk averse. With the entire country's electricity connection, billing and maintenance to at stake, it is perhaps understandable why the company has chosen to operate with as minimal a level of risk exposure as possible.

The financial performance streak noted between 2006 and 2015 as earlier presented points to table managerial skills and direction. Revenue has been on an upward trend, attributable to more relaxed electricity connection fees, which has been done in a bid to curb the number of illegal connections which pose a danger to households connected in such a manner. Additionally, illegal connections were to blame for millions in lost revenue. Devolution has also helped the company's performance, owing to more the establishment of schools, hospitals and county government offices requiring additional connections.

Conclusion

Kenya Power exists as a monopoly in Kenya's electricity retail market, this has come with both positives and negatives. Its dominance in terms of revenue and price setting is exceptional, and its monopoly status has eliminated the need to market and advertise, except in cases of new tariffs and product offerings. On the other hand, the monopoly status has led to diminished service quality, with maintenance difficulties, erroneous billings and so on. Going into the future,

the company's performance is set to be boosted by the proposed plans to increase sources through nuclear energy generation. This is set to increase the number of connections onto the national grid and allow new clients such as manufacturing entities to successfully tap into the local market. By so doing, not only will KP justify its monopoly existence and protect its revenue performance, it will also help to power the economy and Kenyan society at large.

