

LESOTHO ELECTRICITY COMPANY PTY LTD

Tariff application to the Lesotho Electricity Authority Board

Financial Year 2011-2012

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1.0 Background

LEC is a Government owned company registered in terms of the Companies Act of 1967. It was established in terms of the LEC (Pty) Ltd Establishing and Vesting Act 2006 wherein the assets, liabilities, rights and obligations of the former Lesotho Electricity Corporation were vested in the company. It was subsequently issued a Composite License in terms of Section 50 of the Lesotho Electricity Authority Act, (hereinafter referred to as LEA Act) as amended, to transmit, distribute and supply electricity. It has, in terms of the license, an obligation to supply power to all customers who are within its service territory. It is, however, authorized to supply electricity throughout the country. It is also responsible for economic procurement of power for its customers.

1.2 The economic situation

In the 1990's, Lesotho's economic growth gained momentum after Lesotho Highlands Water Project activities registered a peak. Before 2004, there has been a substantial expansion in the manufacturing sector, more especially in textile and garment industry. Recently mining sector has shown positive trends after the reopening of Letseng, Liqhobong and Kao mines, respectively.

1.3 Manufacturing

This sub-sector is largely dominated by clothing and textile industry. The upward trend that was maintained by this sub-sector since 1999 was negatively distorted by the removal of textile quotas in 2005 but partially recovered in 2006. Manufacturing contribution to the GDP maintained average of 17.7% in the last 5 years after a record peak of 20.4% in 2004. Electricity is a crucial production input. For last five years on average 53.3 % of all electricity consumed in Lesotho was used by the manufacturing and commercial sectors. It is therefore evident that electricity is one of

the intermediate drivers of economy. The same sector's contribution to the total GDP has in last 10 years accelerated from 6% to 17%.

1.4 Mining

Since the reopening of diamond mines, Lesotho has realized diversified sources of revenue, ranging from royalties to other forms of taxation. Mining contribution to the national revenue continues to strengthen Lesotho's position on balance of trade with the rest of the world. Its recent contribution to the GDP has geared up from 0.8% in 2004 to 2.7% in 2008. Increasing demand of Lesotho diamonds in the international market was seen as a niche to attract more investment into the sub sector hence push consumption of electricity up. But the recent global economic slump stabilized the situation as some mines were forced to bring their operations to a standstill. Since 2010, economic trends are currently positive in the diamonds industry as such provision of Electricity to other mines like Likhobong, Kao and Mothae remains crucial. However these mines will be supplied with power by the end of 2012, which will increase consumption of electricity.

For a number of years, sand stone blocks have been used as building material for offices, churches and houses. There are mechanized quarries that produce quality material that is exported regionally. Even though, still done at small scale, sand stone mining has drawn attention of investors and small masons. However, equipment that is utilized to mine and curve stones to required shapes is powered by electricity. Also, the proximity of the quarrying activities to the already existing grid is critical to the efficient operations of the sand stone mining.

1.5 Millennium Challenge Account

In July 2007, the United States of America signed a compact with Lesotho which grants the country M2.5 billion to be spent over a period of 5 years. The eligibility of the grant was benchmarked on positive strides made by the country with regard to good governance, investing in human capital and economic freedom. This grant is envisaged to gear up the revenue and directly boost health, water and private sector development hence country's standard of living. At grass root level, the grant is expected to uplift standard of living by reducing time taken to access health and water services by household. However, these clinics will be supplied with alternative sources of energy due to lack of grid electricity in the rural setting of the country except those that are closer to the national grid.

Given the inherent responsibility of LEC from the importance of electricity in the economy, it is vital that it is financially and technically positioned to respond and deliver on its mandate to these industries.

2 Introduction

One of the license conditions prescribes that LEC must submit an application to the regulator when it needs to increase tariffs.

2.2 Objective

The main objective of the proposed tariff increase is to strive for commercial sustainability of the company.

2.3 Justification

GOL growth strategy recognizes electricity as one of the major stimulants of the economic growth. It is therefore apparent that the demand side has reliable and efficiently priced electricity. To ensure such a milestone LEC should be adequately and financially resourced to maintain the growing network, replace obsolete

equipment and expand infrastructure needs to meet increasing demand thus avoid constraining economic growth.

2.3.1 Increasing Demand

Current increase in electricity demand in Lesotho is characterized by increasing number of customers and consumption. Both aspects have bearing on human resources, and easy access to the company. Staff complement with respect to maintenance and customer services has to be beefed up in the interest of speedy response to faults and minor queries. Due to the surge in growth, the company had to open two offices, in Maputsoe and Butha-Buthe. These offices have to be manned and supported by regional offices in order to render effective service to the communities. Intrinsic in this process, resources like computer systems and networks, desks and other essentials have to be provided to these centres for dispensing customer's services.

For ease of vending, number of sales agents must be made proportional to the increasing demand. There are currently 25 sales agents who are expected to serve 2000 customers in Maseru and 1500 customers out of Maseru as per service standards. The company attaches personnel who on daily basis, has to monitor the operations of the sales agent. Further to that, the company bears costs of installing and maintaining sales equipment. There is always a cost to provision of vending services to customers; LEC has to pay 3% of sales to these agents in Maseru and 5% to those providing services outside Maseru bounds. Over and above that avail the 24 hours support to these vending agents (There is a team that is entirely dedicated to these agents, with an office and a vehicle to attend to their problems). In the face of growing number of connections the sales agent's numbers have to increase in order to comply with regulation. However in these areas, the increasing number of customers is not

translated into noticeable increase in consumption because they are largely low consuming customers.

It has also been observed from the past that non customers tend to pilferage on customers through illegal connections. Tempering of meters by customers also sabotages company's endeavors to maximize revenue collection. Both activities have significant bearing on the company's non technical losses thus inspections increase to minimize these losses. Regardless of budget constraint, the company in conjunction with the private sector is currently assessing technological solutions to arrest the situation. In order to keep the global losses minimal, the frequency of inspections to customer's premises has to increase, thus the increase in fuel and consumables costs to the company.

2.3.2 Network Management

The demand side of electricity in Lesotho is dominated by low consuming customers who eventually lead to a growing but underutilized network. Despite of that, management of growing network poses a challenge as far as resource requirements are concerned. Operating costs associated with growing network are mostly recognized from soaring figures in maintenance, equipment and vehicle wear and tear as a result of a need to regularly monitor the network. Vastness of the network coupled with the topography of country further constrains the company to meet some of its key performance indicators like improved response time to faults.

Continued natural variability coupled with change in climate, where rainy season's patterns are characterized by storms and strong winds hit hard on the already ailing network hence increased faults and unplanned maintenance. There is a need to recover and provide for the costs of network refurbishment to alleviate possible future price shocks to consumers. While there is an urgent need to address prevailing

power cuts, LEC has made significant strides in preparation of refurbishment project which is envisaged to beef up the ailing network in a long run. However, refurbishment program that is currently underway covers only critical areas.

3.3.3 Commercial Viability

Substantial increases in the demand for new electricity distribution network, not only in the country, but also regionally exert upward pressure on the capital cost of investments. On the other hand, to maintain its full operating capacity, the utility needs to be properly financed by significant capital inflows in terms of equity, debt and allowed revenue. Borrowing needs to be repaid within the agreed time period and return on equity must be provided for by future revenues. However, to access financing the company's balance sheet has to prove its capacity to repay debt (profitable). Credibility to employ various financing methods largely depends on regulatory framework for setting future allowed revenues and cost reflective tariff. It is therefore on regulatory hands to allow smooth tariff increases that would enable the utility to maintain its capital requirements, repayment of borrowings and earning appropriate return on assets.

3.3.4 Security of supply

RSA is behind with some of its power expansion projects against increasing natural demand and shortage of power supply in the region which is expected to persist until 2013, hence a problem of plugging the power demand and supply gap. It is upon this premise that the country is encouraged to gear up its local security of supply due to the fact that ESKOM expansion program is not in cognizant of neighboring countries. Thus there are activities that LEC will undertake in facilitation of creating own generation.

4.0 Drivers for tariff increase

4.1 Imports

LEC has a power sales agreement with ESKOM and EDM even though it has a short term contract with the latter. Over the years, these agreements have assisted the country to balance its power deficit with supply from Muela. This arrangement is expected to continue and the purchase forecasts of imported power are expected to increase by 35% and 54% from ESKOM and EDM respectively. In the last financial year, NERSA approved multi year price determination proposed by ESKOM then awarded 24.8% and 25.8 % increase for the financial years 2010/11 and 2011/12 respectively. The main drivers of the need for price increase are to sustain the current business, capital expansion program and operating costs to run a viable business. There is also the possibility of wind energy from Lets'eng which could diversify Lesotho energy mix and provide a cleaner energy profile. But then the challenge would be to incorporate such technology into the already ailing network and affordability of wind bulk tariff.

Annex 1: Provide detailed bulk costs

4.2 Operating costs and maintenance

Given the current growth in distribution network growth, additional resources are required to operate and maintain the expanded asset base. During the era of Interim Management Task Force (IMTF), maintenance on the network was implemented at minimum rate. The repercussions of such an oversight are currently reflected by mounting amounts of maintenance backlog on assets where in some cases it is no longer economic to continue their maintenance, components to repair them are no longer available, their performance are poor, they are no longer suitable or reliable for the task, they have been superseded by technological developments, or they fail to meet current compliance requirements. Following years were also characterized by

foregoing maintenance of assets in the interest of intensifying electrification. That lag with respect to maintenance, dictates the company to engage into an intensive refurbishment, subsequently the maintenance bill will gradually come down as a result of this intensive refurbishment programme. Such works include reconditioning of defective assets to perform the intended function in a cost efficient manner, thus extending its useful life period. In a view of providing improved customer service and better working conditions for employees, LEC in the next financial year will commence to revamp its banking hall to the acceptable standards. The overall increase in operating expenses has gone up by 4% from the previous year which is largely due to cost containing culture that LEC is enforcing and through systems procured for efficiency gains

Annex 2: provides LEC 2011/12 Budget

4.3 Marketing and advertising

Marketing and advertising play a pivotal role in the promotion of customer outreach programs that are aimed at sales deepening, safety and efficient use of electricity. In next financial year, the former is expected to increase by 435% while the latter will respectively increase by 307%. These increases are attributed to increase in media house coverage and soaring advertising rates. Through research and house to house marketing, the company has identified potential areas for new service connections, under utilized network and ran programs that are aimed at intensifying efficient use of electricity. Customer education in the areas of demand side management and services provided by the company will be intensified thus displayed in public areas. It is anticipated that electricity harvested from energy efficiency programs would assist the company to connect more customers without necessarily expanding the already existing capacity.

4.4 Chronic diseases

Even though national statistics show stabilization of HIV and Aids disease in Lesotho, it continues to be dominant in youth and labour active component of the population. Over the years, the disease has sabotaged the productivity of the company in a form of lost man days as a result of affected and infected absenteeism from work. In responses to such a condition, the company will intensify its support to those who are infected and continue to promote preventative measures hence beef up its budget by 78%.

Annex 2: provides LEC 2011/12 Budget

5 Affordability of electricity

Table 1

Basic Electrical Appliances	Monthly Cost 72 Lisente (kwh) unit
Elec. Kettle	24.12
Iron	16.2
CFL bulb	2.18
Radio with Cassette player 2 speakers	4.75
TOTAL	M47.25

The above table shows rough estimates of costs of electricity by different appliances. The minimum costs a person can incur while consuming electricity is estimated to be M47.25 on monthly basis. These costs are very low when compared to other sources of energy. A liter of paraffin costs around M6.00 which a household can use for a maximum of two days, and thus M90.00 per month. Price deviation between these sources of energy is, therefore evident. Further to that, electricity is preferred over other sources of energy while considering its diversified uses.

6.0 Revenue Requirement

The total revenue requirement for the next financial year is estimated at,

M 460 668 681.07, broken down as follows;

Cost of Sales M 212 350 787.03

- Purchases M 198 284 787.03
- Repairs M 13 142 000.00
- Diesel and oil M 924 000.00

Operating expenses M 234 406 765. 91

- Operational M 173 411 447.00
- Depreciation M 46 054 783.00
- Depreciation (2008) M 14 552 181.91

Return on assets M 13 911 128.13

Table 2: Envisaged tariff level exclusive and inclusive of levies;

Energy Charge

Customer Category	Tariff	Customer levy	Electricity Levy	Proposed Tariff including Levies	Current Tariff	Proposed Percentage increase per category (Energy)	Proposed Tariff excluding Levies	Current Tariff excluding Levies	Proposed Percentage increase per category (Energy)
Industrial HV	Two Part	0.0196	0.0150	0.1551	0.1280	21.16	0.120486	0.0934	0.29
Industrial LV	Two Part	0.0196	0.0150	0.1680	0.1380	21.73	0.133386	0.1034	0.29
Commercial HV	Two Part	0.0196	0.0150	0.1551	0.1280	21.16	0.120486	0.0934	0.29
Commercial LV	Two Part	0.0196	0.0150	0.1680	0.1380	21.73	0.133386	0.1034	0.29
General Purpose	One Part	0.0196	0.0300	1.0259	0.8064	27.22	0.976272	0.7568	0.29
Domestic	One Part	0.0196	0.0300	0.9134	0.7192	27.00	0.863784	0.6696	0.29
Lighting	One Part	0.0196	0.0300	0.5401	0.4298	25.65	0.490458	0.3802	0.29

Maximum Demand

Customer Category	Current MD	Proposed MD	Proposed percentage increase
Industrial HV	129.3609	161.7011	25.00
Industrial LV	151.0976	188.8720	25.00
Commercial HV	129.3609	161.7011	25.00
Commercial LV	151.0976	188.8720	25.00

Detailed model, calculations on revenue requirements and proposed tariff schedule are provided in an electronic format.

7.0 Recommendation

LEC management recommends that LEA Board approves the above tariff adjustment levels.