

## 16<sup>TH</sup> UPDEA CONGRESS, NAIROBI KENYA

### ELECTRICITY REGULATION IN KENYA: THE NEXUS BETWEEN ELECTRICITY CONNECTIVITY AND ENERGY REGULATORY COMMISSION

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## PRESENTATION OUTLINE

- Introduction
- Genesis of Regulation in Kenya
- History of Customer Connections
- Economic Regulation
- Technical Regulation
- Conclusion

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## INTRODUCTION

### What is regulation?

- Regulation is inter-disciplinary notably in law, economics, political science, sociology, history, psychology, geography, management & social administration disciplines
- Regulation comprises a portfolio of state actions designed to influence socio-economic behaviour of firms/individuals
- Includes franchises, specific contracts, resources deployment, direct state control

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## Objective of Regulation

- To bring about desirable social outcomes which cannot otherwise be attained by market forces per se
- Such outcomes include environmental conservation or high safety standards
- Regulation therefore is govt activity aimed at inducing economic agents to act in ways that are compatible with the social good
- There are certainly costs incurred by economic agents in attaining social outcomes e.g. generators installing scrubbers to minimise harmful emissions

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### Genesis of Electricity Regulation in Kenya

- World bank heralded reforms of the 80s led to the restructuring of the electric power sector
- Creation of arms length commercial relationships b/w sector entities
- A legal and regulatory framework conducive to private sector participation
- Electric Power Act, 1997 was a key output which facilitated the participation of IPPs

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### Genesis of Electricity Regulation in Kenya continued

- Electricity Regulatory Board was established under section 119 of the Act (now repealed)
- Regulator was empowered to set & review tariffs, enforce EHS regulations, investigate consumer complaints, ensure competition & approve power purchase, transmission & distribution service contracts

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### Conference theme & Role of ERC

- “Good Governance of National Power Sector as a key factor for realization of access to electricity for all peoples of Africa”
- Has the existence of ERC influenced a paradigm shift in good governance practises by national power sector player which in turn has accelerated access to electricity?

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### History of Customer Connections in Kenya

Year	1982	2003	Growth Rate
Period I	178,223	643,274	6.3%
Year (Post Regulator)	1999	2008(Feb)	
Period II	505,591	1,011,763	50%

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## History of Customer Connections in Kenya continued

- National access rate stands at 15%
- Rural access rate is 4% and citizen dissatisfaction is palpable
- *"KPLC was established 85 years ago. It has taken that long to connect 1 million customers. This works out to just over 30 customers a day for 85 years," a distraught contributor in a national newspaper.*
- The Energy policy envisages an accelerated access rate comparable to other emerging African economies e.g. Tunisia at over 95%
- The vital role of the regulator in facilitating speedy access to electricity is appreciated by KPLC in their "Strategy for enhancing connectivity".
- The regulator must ensure that all stakeholder interests are served & protected during connectivity programme.

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## Role of Other players in Connectivity

- The paper recognises the role of Govt as a catalyst for accelerated economic growth & improved incomes which then increase the potential customer base.
- Formulation of energy sector policies that are conducive for customer growth
- Govt's continued funding of rural electrification & overall resource mobilisation
- Development partners/financiers

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## Other factors influencing connectivity

- National Economic growth which increases potential power market
- Geographic location of potential customers in relation to the national grid
- Commercial viability of proposed power system which is dependent on potential load & revenue in relation to capital and maintenance costs recovery
- Availability of resources to implement power system extension projects with limited funding

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## Economic Regulation

- Economic theory postulates that a monopolist restricts output & charges prices way above Marginal Cost hence the need for a regulator act as surrogate competition thereby forcing prices down towards the Marginal Cost
- The regulator in addition regulates the quality & quantity of service provided
- One such outstanding service indicator is accelerated connectivity

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## Economic Regulation continued

- Economic regulation has two regime types;
  - a) Price Cap regulation
  - b) Rate of Return (RoR) regulation
    - The Energy act allows the regulator to employ either regimes
    - Price cap regime gives incentive to the utility to cut costs while maintaining the inbuilt quality of supply parameters
    - Under RoR, the utilities define their own investment & quality levels
    - Both regimes contain the imperative need for some kind of quality of supply regulation

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## Economic Regulation continued

- ERC's mandate on tariff setting has a direct bearing on connectivity
- Thro' the development of the Retail Electricity Tariff Review Policy, 2005
- A Key feature is on Lifeline Tariff

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## Technical Regulation

- Regulation of customer service, commercial relationships, continuity of supply & voltage quality;
- Standards and quality of service delivery, reliability of supply & Complaint handling & resolution parameters
- Public awareness
- ERC's periodic interrogation of the Utility's Connection Policy to ascertain affordability & non-discrimination
- Licensing and approval of PPAs facilitates enhanced generation to meet need customer driven demand

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## Technical Regulation continued

- Licensing of electricians & contractors to service the clients premises before connectivity
- Monitoring of safety standards of utilities to guarantee reliability of supply
- ERC role of testing, certification & type approval of energy meters impacts on customer growth
- Commercial quality regulation is achieved by mix of license conditions as well as codes & regulation governing access, connection, supply & metering
- ERC has put in place a Grid Code
- KPLC has also developed a draft Customer Charter

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## CONCLUSION

- Grid power remains the cheapest source of energy but the road to high connectivity is long with about 85% un-connected
- Periodic Financial analysis of utilities' by ERC has guaranteed a measure of stability in the sector
- Plato's analogy of "attention on who is steering the ship rather than look outside the ship to evaluate the weather & stars so hey navigate safely" is an appropriate challenge to policy makers.
- Economic stability as a driver to faster access to electricity cannot be over-emphasised

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## THANK YOU

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