The political-economy of power sector reform in South Africa

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Overview

- Historical development of ESI in SA
- Key features of ESI in SA
- Political-economy of SA
- Drivers for reform
- Key reform episodes since 1990
- Linkages between political-economy and ESI reform
- Final observations
## The first 100 years of power sector development in South Africa

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tr>
<td>1882</td>
<td>First electric street lights&lt;br&gt;Mining industry stimulates power development</td>
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<td>1922</td>
<td>Electricity Act, creation of ESCOM&lt;br&gt;Electricity Control Board&lt;br&gt;Electrification linked to industrial development</td>
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<td>1948</td>
<td>ESCOM buys out last major private generator, competition extinguished</td>
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<td>1973</td>
<td>National grid integrated, increased scale economies</td>
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<td>70-80s</td>
<td>Over-investment</td>
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<td>1983/7</td>
<td>Government commission&lt;br&gt;Eskom commercialisation, improved governance&lt;br&gt;Investments cancelled</td>
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“Electricity in South Africa is as cheap as anywhere in the world, because wasteful competition has been eliminated...There will always be a very large field for private capital...but there are certain industries which...can be driven better by government without loss through wasteful competition”

- Prime Minister Smuts 1939
World Industrial Electricity Prices

*Source: Electricity Association Services Limited

Prices as at 1 January 2000 including local taxes but excl recoverable VAT, from a representative utility for a 2,5 MW 40% load factor customer.
Current structure of the electricity market in SA

- Generation - Eskom 96%
- Transmission - Eskom 100%
- Distribution – Eskom 50%  Municipalities 50%
- No competition
- National Electricity Regulator licences market access and approves all tariffs
- Prices amongst lowest in world
- Until recently, significant generation over-capacity and supply quality good
Political and economic context after 1990

- 1990, ANC un-banned, Mandela released
- 1994, democratic elections
- Populist, state-led development policies: Reconstruction and Development Programme (RDP)
- From 1996/7 self-imposed structural adjustment
  - Growth, Employment and Redistribution (GEAR)
  - Conservative macro-economic management
  - Micro-economic reform / state-owned enterprises
Electrification doubles after 1993 from one-third to two-thirds of population as many households electrified in 7 years as in previous 100 years.
International drivers for reform of the power sector

- Inefficiencies in investment and operations
- Financing for capacity expansion
  - Public resources insufficient -> private
- Part of overall economic restructuring
  - State redefines relationship to SOE’s
- Opportunity to unlock / redistribute economic rent
- Power sector reform as a fad?
  - International role models

How strongly are these drivers experienced in SA?
Drivers for reform in South Africa

- Consolidation of distribution / electrification
- Re-structuring of state-owned enterprises
- Poor investment efficiencies (analysts perspective)
- Black economic empowerment

Within context of macro-economic reforms & perceptions of international trends in ESI reform
Over-investment led to increasing reserve margin.
Electricity prices have followed investment cycles, but are today no lower in real terms than in 1950 or 1970.
Key reform steps in 1990s

- Rationalisation of distribution sector plus funded electrification programme
- Independent regulator
- Corporatisation of Eskom
- Managed liberalisation of electricity market
  - lots of planning, very little progress
South Africa: future electricity market model
Current concerns

- Reliability and quality of supply is deteriorating:
  - Policy uncertainty and slow process of reform results in under-investment in distribution sector

- Capacity shortages by 2006 when demand growth will exceed supply
  - Policy uncertainty and Eskom monopoly deter investment

- Future price increases
  - Will future generation investments be optimal?
  - Will new regulator be effective?

- No political champion for power sector reform
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Will reform gather pace only when there is a crisis?
Conclusions

No simple transition from state-centred ESI to idealised World Bank ESI model; need to understand political-economic to understand nature and pace of reform

- Understand which issues assume political importance and why
- Some issues may be of concern to analysts but are either not understood by stakeholders or are not expressed politically
- Understand the effect of finance, governance, and industrial organisation
Conclusions

- The usual international reform drivers are only weakly felt in South Africa
- Corporatised, commercially run state-owned Eskom has been able to access private capital and has delivered low prices, reliable supply and increased access
- However, historical analysis of Eskom performance reveals that SOEs tend to make hugely inefficient investments
- Policy uncertainty is leading to potential investment and security of supply crisis
- Private investment unlikely without policy certainty and appropriate market reform
Final observations

“cookbook solutions for power sector reform clearly have to be avoided”

“competition, unbundling, private participation are not ends in themselves”

“power sector reforms should be designed to ...promote poverty alleviation and economic growth”

“it is important to consider the full range of options for public-private partnerships”

“the possibilities for different levels of private participation depend on political-economy factors”

“the extent of vertical and horizontal unbundling should be assessed on a case by case basis”

*Public and private sector roles in the supply of electricity services*
*New operational guidance for World Bank Staff*
*February 2004*
Final observation

“At the heart of most power sector reform efforts are a set of interrelated challenges: changing the manner in which new investments are financed, increasing the efficiency and development effectiveness of those investments, and increasing operational efficiency, while addressing equity concerns as the sector expands”

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