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State, Market and Competition – Can Eskom be rescued?

By Lumkile Mondi

Lumkile Mondi is senior lecturer, School of Economics and Business Sciences at the University of the Witwatersrand.

Introduction

Eskom is a vertically integrated monopoly, wholly owned by the state, supplying about 90 per cent of the electricity consumed in South Africa. Measured by generating capacity, it is the eleventh largest power utility in the world. It is the sixth largest company in Africa across all economic sectors. And, until recently, it was globally recognised for the quality of its management: in 2001 it was rated the Global Power Company of the Year. Little wonder then, that it is for many the entity that sits closest to the heart of South Africa's version of state capitalism.

Eskom's business model is rooted in its history as a core pillar of industrialisation. Its primary purpose was to generate low-cost electricity using South Africa's abundant coal reserves, providing cheap power to the country's mines and heavy industries. Because the supply of electricity increased significantly with each new power station that came on line, Eskom's business model was premised on cyclical periods of oversupply necessitating sub-economic pricing, the protection of its monopolistic position, and state support. Thus in oversupply phases, Eskom would encourage the construction of new energy-intensive projects often refineries and smelters, by committing to supply cheap electricity for the long-term. Historically, these agreements have had profound implications for Eskom's commercial viability.

Eskom is the largest state owned company (SOC) within the Department of Public Enterprises (DPE) portfolio, with revenues of R177,1 billion and an asset base of R770 billion as at the end of March 2017. Government has significant exposure to Eskom, and had issued debt guarantees of R350 billion to it by 2016 (out of a total of R410 billion in guarantees issued over the last 15 years). These are critical for Eskom and in their absence, the organisation would have considerably more difficulty accessing capital markets. Indeed, government guarantees climbed from zero in 2008/9 to over R200 billion in 2017/8, equal to 10 per cent of the total government debt, and to 90 per cent of all guarantees extended to SOCs, a

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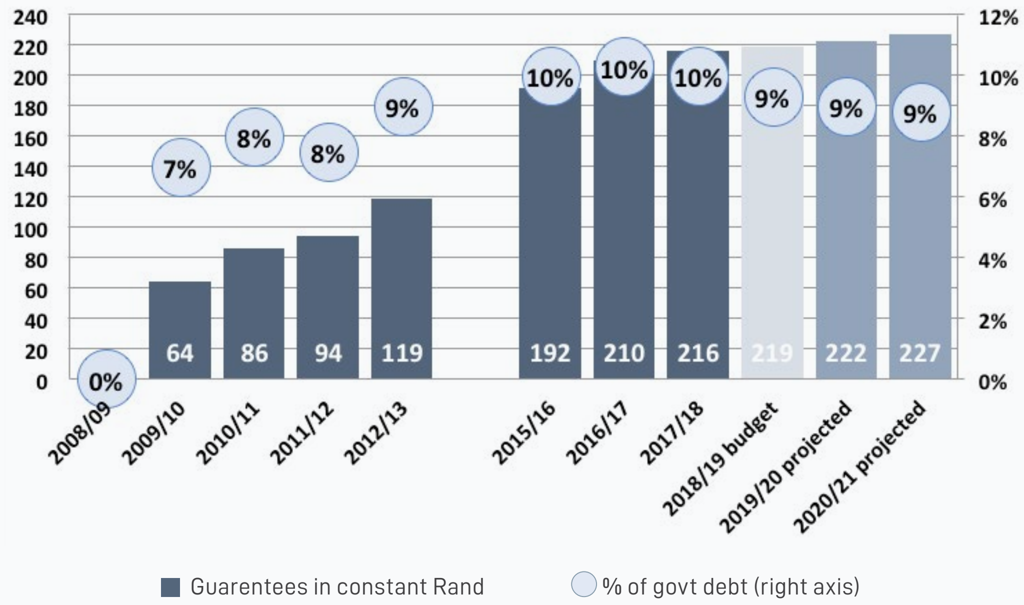
Figure 1: Treasury guarantees of Eskom debt, in billions of constant (2016) Rand and as a percentage of total net government loan debt



Source: (TIPS, March 2018)

figure that Treasury expects will fall to 9 per cent in 2018/9 (Figure 1).

On 30 January 2018 Eskom presented its Interim Financial Results as at 30 September 2017. It reported a net profit after tax of R6 billion (down from R10 billion a year earlier), with higher depreciation and net finance costs due to new build units coming online. Earnings before interest, tax, depreciation and amortisation (EBITDA) of R30 billion (down from R32 billion) was achieved by cost-containment despite a modest 2.2 per cent tariff increase and declining sales. However, the net cash from operations of R22 billion was R10 billion lower than the previous period due to lower profit and increase in arrears on municipal debt. Liquid assets of R9 billion were two-thirds lower than the R30 billion in the previous period.

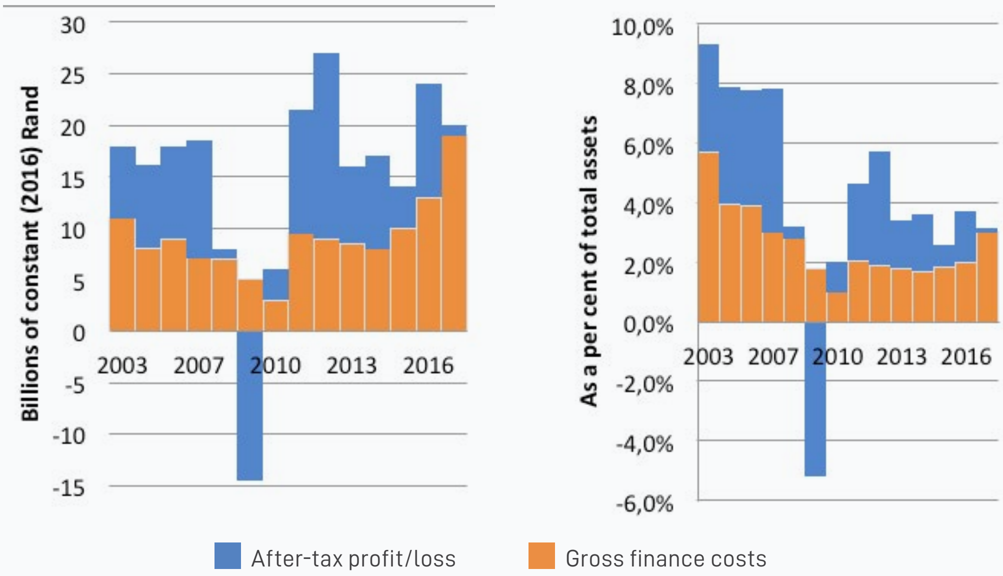
Also in January 2018, the Public Investment Corporation (PIC) advanced a R5 billion bridging loan to the power utility for one month to strengthen Eskom's liquidity position. The precarious position had forced Eskom to seek further funding despite its current debt of R360 billion and a gearing ratio (i.e. the ratio of debt to equity) of more than 70 per cent. The utility is also battling dwindling sales volumes and growing municipal arrears debt. External auditors qualified their findings and noted worries about Eskom's status as a going concern. This report:

- Analyses the current Eskom business model and argues that the strategy of relying on rising tariffs to offset falling demand and rising costs is not viable.
- Discusses some of the factors that have had an impact in Eskom's operations and financial management.
- Asks whether the restructuring of the electricity market is a prerequisite for ensuring the continuous supply of electricity at the most competitive prices and whether the privatisation of Eskom is necessary to achieve this.

Eskom's business is increasingly unviable

In the "Review of SOC Business Model" published by the Trade and Industrial Policy Strategies (TIPS) in March 2018 the Eskom business model is analysed. TIPS confirms that Eskom's profitability is unsustainable since it depends heavily on its tariffs, which are set by the National energy regulator of South Africa (Nersa).Given Eskom's monopoly position, this is essential, but the tariff-setting process has sometimes proved an obstacle to raising Eskom's revenues. In addition, Eskom is facing serious problems with falling

Figure 2: Eskom after tax profits/loss and finance costs in constant Rand and as a percentage of its assets



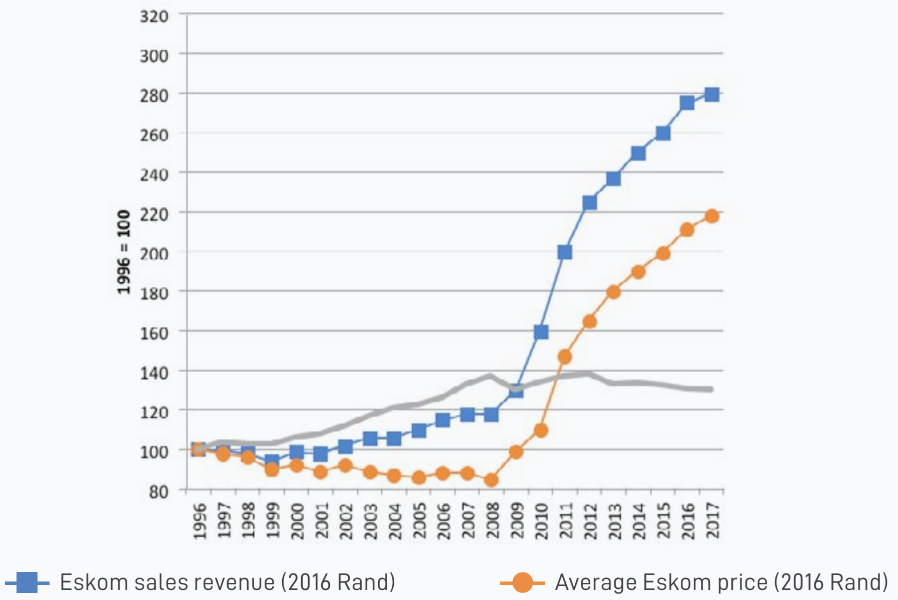
Note: Deflated with CPI. Source: Eskom Annual Reports, relevant years

demand for electricity and rising financing costs. Since 2012, this has resulted in a steady decline in its profits as measured by return on assets, and a rapid increase in finance costs, as a percentage of its assets as depicted in Figure 2.

A central risk for Eskom has been declining demand. As shown in Figure 3 Eskom's demand has shrunk since 2008 and revenues have grown only because tariffs have risen rapidly, effectively tripling in real terms between 2008 and 2017.

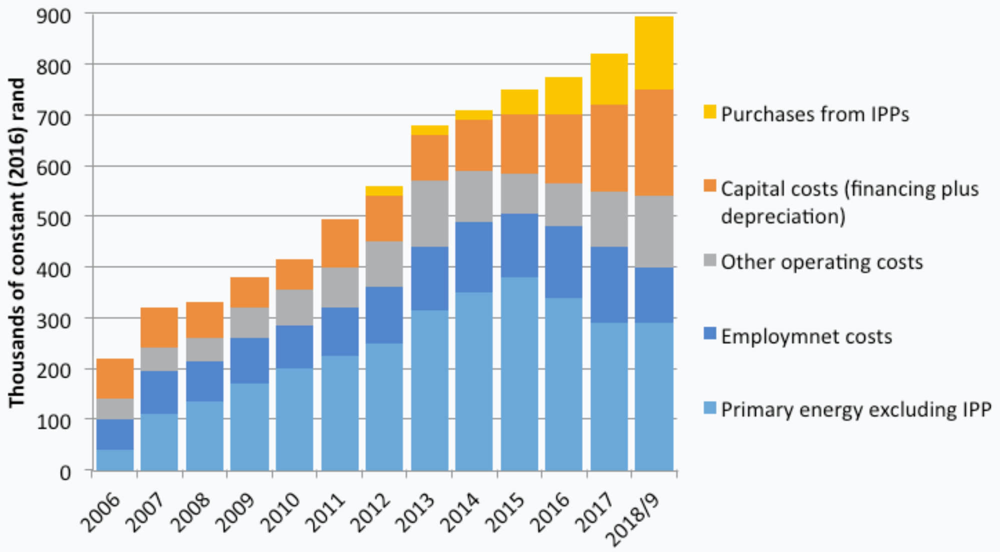
In large part the decline in demand reflects a move toward less electricity-intensive technologies as

Figure 3: Indices of Eskom's average tariff and sales revenue in constant (2016) Rand (a) and sales in GWh (1996 = 100)



Note: (a) deflated with CPI. Source: Eskom Annual Reports, relevant years

Figure 4: Eskom cost drivers in constant (2016) rand per GWh (a)

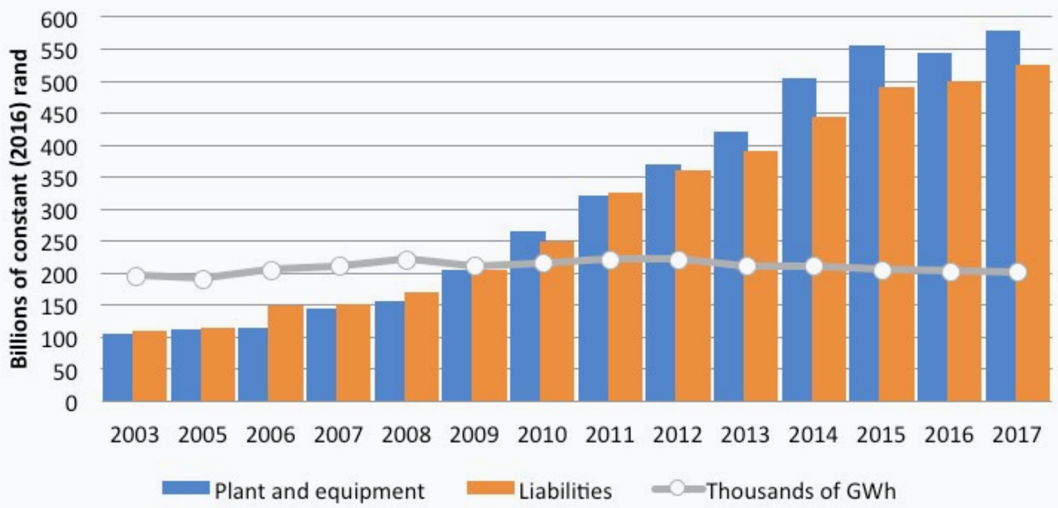


Note: (a) deflated with CPI. Source: Eskom Annual Reports, relevant years

well as the changing structure of the economy, including reduced output from the country's aluminium, steel and ferro-alloys refineries after the end of the metals boom. Indeed, the decline in Eskom's sales largely reflects trends in the mining value chain. As gold production declined, it has been replaced by less energy-intensive production of iron ore, coal and platinum. The share of the mines and refineries in Eskom's total sales fell from half to just over a third between 1998 and 2017.

An important structural change in Eskom's business is that its capital costs have become its main cost-driver, as have purchases of renewable energy. As Figure 4 shows, these costs have risen steeply in the past few years, despite stagnant sales in volume terms.

Figure 5: Eskom assets and liabilities in constant (2016) rand (a) (TIPS, March 2018)



Note: (a) deflated with CPI. Source: Eskom Annual Reports, relevant years

Eskom has seen a very rapid increase in its assets and liabilities associated with its very large build programme. At the start of the century, Eskom accounted for around 1,5 per cent of South Africa's total fixed capital; by 2016, the figure had risen to over 5 per cent.

Eskom's financial and governance crises

It is important to understand Eskom's current crisis in the context of its history.

Christie (1984) argues that the competitiveness of South Africa's power generation rested on the country's geological conditions, its social structure, and its method of accumulation. He argues that the geological nature of our coal seams, the fact of our compound system and pass-laws, along with the reserves that guaranteed cheap labour, meant that the state could supply cheap electricity for transport, mining and manufacturing. Therefore, our whole economy was underpinned by the competitiveness of power generation under Apartheid.

Jaglin & Dubresson (2016) argue that through its founding father Hendrik van der Bijl, Eskom embodied a perfect symbiosis between state body and private company. Van der Bijl managed to protect the entity then known as "Escom" from political pressures by stressing the legitimacy of its technical know-how, vision and action. This relative autonomy did not necessarily mean that there was a definitive separation of technology and the politics. Instead, the boundary was policed by engineers "techno-politics" – the deliberate use of knowledge and technical choices to promote a socio-political vision aligned with that of government. The authors observe that the inherited techno-political regime was disrupted by the ANC's programme of transformation, which led to the departure of individuals with considerable technical and professional competence, the loss of skill, and mounting difficulty in filling these positions. Thus techno-political competence was lost and not replaced as cadre deployment at Eskom and the Department of Public Enterprises (DPE) reduced the strategic capacity and influence of the engineers. The state has not demonstrated its own capacity or willingness to promote efficient techno-politics within the power and energy sector. All of which has been worsened by Eskom's rejection of processes of transparency, accountability and constitutionalism.

An important factor in explaining Eskom's twin crises of governance and financial sustainability is the manner in which a faction of the ANC translated legitimate dissatisfaction with the progress of black participation in the economy into a programme for radical economic transformation that would use the SOCs as a vehicle for as a vehicle for achieving their goals.

In a widely circulated 2017 report, Professor Mark Swilling and his co-authors argue that the protagonists of radical economic transformation built their programme on a claim to speak for "ordinary people" - those who are not well educated, who do not speak English as a first language, live in shacks or small towns and rural areas and who are excluded from the economy and the formal institutions of the state. The politics of this constituency they argued, is profoundly mistrustful of the formal 'rules of the game', whether of the constitution or of government. For them, the formal rules are rigged in favour of whites and urban elites, and against ordinary people. Radical economic transformation is thus presented as a programme that must frequently break the rules – even those of the Constitution.

The limited participation of black people in the economy was politicised and transformed into a political project by the Zuma-centred political elite. Theirs was an empty rhetorical commitment to radical economic transformation. Although the ANC's official policy documents on radical economic transformation encompass a broad range of interventions that take the National Development Plan as a point of departure (ANC, 2014), the Zuma-centered power elite emphasised the role of the SOCs, particularly their procurement spend. The battle to transform the economy shifted away from the economy itself to the state and, in particular, to who controlled government's procurement budgets (Swilling, 2017). The stakes were large: if procurement rules could be changed, it might be possible to use enormous public investment spending (running at nearly R1 trillion every three years, the bulk of which was in just two companies – Eskom and Transnet) for transforming the economy.

One reason why Eskom's procurement budget was so large (and attractive) is that it had been corporatised after 1994 as part of a wider approach to development that would see the SOCs as engines of growth. As part of that process, Eskom SOC became a tax-paying entity in preparation for liberalisation. Over time, it also became an instrument of transformation through Preferential Procurement in a development state favouring a particular elite. During this period governance collapsed and Eskom became a primary vehicle of vehicle of state capture - a process through which state institutions and processes are repurposed and suborned to the interests of an exceptionally small elite and involves large scale looting of state resources. In turn, this created a continuous source of enrichment and funding for the power elite and their patronage network (Swilling, 2017).

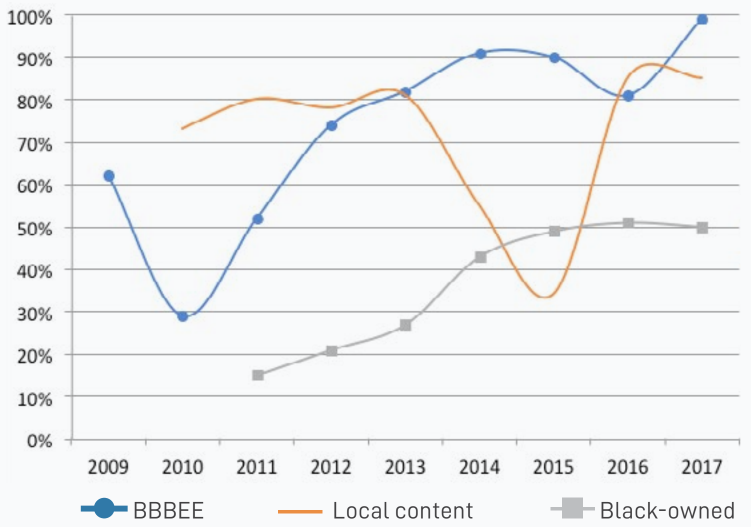
The process of capturing the SOCs took off in 2009 when the National Treasury announced that, with the help of the Department of trade and Industry (DTI), it had revised its preferential procurement regulations for government to align them with the B-BBEE Act. On 6 June 2011, Minister Pravin Gordhan promulgated corresponding National Treasury regulations and extended the remit of these regulations to include SOCs. Yet six months later, he reversed his decision, excluding all the major public entities from these regulations and from the remit of B-BBEE.

This must have seemed a clear signal to the Zuma-centred power elite and the proponents of radical economic transformation that the National Treasury was not prepared to play ball. And it may have been in response to this development that one of the highlights of the ANC's 2014 election manifesto was the call for a State Tender Board. Explaining ANC policies at the time, President Zuma said:

"The state must buy at least 75 per cent of its goods and services from South African producers. The state's buying power will support small enterprises, co-operatives and broad-based black economic empowerment. We will ensure that large public entities such as Eskom and Transnet buy specified goods for the infrastructure build programme locally [...] to further prevent corruption, tender processes will be centralised under a central tender board (ANC, 2014)."

Even though a central tender board was never established, the central goal set out by President Zuma was achieved: by 2017 Eskom's procurement from B-BBEE firms accounted for 98 per cent of measured procurement (most of which is coal

Figure 6: Share of Eskom procurement from local producers, empowered suppliers and black-owned firms (TIPS, 2018)



Source: Eskom Annual Reports, relevant years and other sources of energy). Of locally procured goods and services, half came from black-owned companies. As Figure 6 shows, both these measures were significantly higher than they had been in 2011.

Swilling identifies four steps that became a kind of 'repurposing modus operandi':

- A new minister changes the board composition of a SOC
- The SOC announces a major new acquisition or build project
- People brought on to the board are either strongly in favour of radical economic transformation and/or have close personal links to some of the bidders
- The tender is awarded in circumstances where there is a clear conflict of interest

Perhaps the most flagrant examples of this manipulation of procurement processes took place at Eskom. In a December 2014 cabinet reshuffle, Malusi Gigaba was replaced as Minister of Public Enterprises by Lynn Brown. She then proceeded to change the Eskom board and subsequently brought Brian Molefe over from Transnet to be Eskom's new CEO.

Critically, as a subsequent investigation by the Public Protector (2016) showed, almost all the new appointments to Eskom's board had one thing in common: links to the Gupta family, its businesses and/or its political friends. Nazia Carrim, for example was married to Muhammed Sikander Noor Hussain, a family member of Salim Essa. Romeo Khumalo was a director alongside Essa at Ujiri Technologies. Mark Pamensky was a former director of the Gupta's Oakbay Resources and Exploration. Marriam Cassim used to work at Sahara Computers – owned by the Guptas. Ben Ngubane was also a director with Salim Essa at Gade Oil and Gas. As the board chair of the South African Broadcasting Corporation (SABC) he had overseen controversial deals between the broadcaster and ANN7, the Gupta's television station. Devapushum Viroshini Naidoo was also Kuben Moodley's partner.

Board members who were not part of this network were removed.

The Eskom board in other words, was a tangled web of mostly undeclared, personal and business associates, all linked to Salim Essa and the Gupta family. This, coupled with an unsustainable business model that is reliant on tariff increases without focussing on internal operational and financial efficiency, means that the current model has ceased to be viable. What is needed is a complete restructuring of Eskom as we have known it. In the next section we discuss government's attempts at stabilising Eskom and then explore different ways in which Eskom can be restructured in a new menu of electricity supply.

Restructuring of the electricity market

The 1998 Energy White Paper proposed reducing Eskom's share of generation capacity to 70 per cent by introducing competition from the private sector. The Transmission Network (together with the system operator) was first to be corporatised and then placed in a separate state-owned company (a so called "Independent System and Market Operator) which could then "impartially" manage the market). Until this state-owned company was established, policy dictated that no new investment in generating capacity would be allowed.

In addition, as part of the process of comprehensively removing oversight of the system from Eskom and establishing a level playing-field for private sector participation, the Policy Department would be responsible for a range of processes associated with the role of supplier of last resort. The granting of these powers to the Policy Department was not based on any milestones demonstrating that the department had the capacity to deliver on its responsibilities, which included:

- Long-term planning for capacity requirements and the mix of technologies that would be deployed to meet these.
- Determining who would be mandated to provide energy.
- Procuring power from private power producers.
- Drafting a legally binding energy conservation scheme.
- Defining and implementing demand management scheme.
- Developing a protocol for load shedding.

The liberalisation approach gelled well with the strategy of the DPE, which at the time, emphasised the restructuring of SOCs. Eberhard (2007) also notes that the drivers for electricity sector reform internationally were the desire to improve investment and operational efficiencies, to raise capital from new private sources for unlocking the value of existing assets to reduce government debt, and, finally, to be fashionable. There was he writes, " a need to follow the wave of reform that is now so powerfully sweeping through nearly all power sectors around the world."

Thus the model of power sector reform laid out in the White Paper mirrored the standard model followed internationally: vertical and horizontal unbundling in order to separate out the potentially competitive components of the industry (generation and retail supply) from the natural monopoly components (transmission and distributions wires); the introduction of competition through new private players; non-discriminatory, open access to transmission; and independent regulation. Eskom however, didn't completely fit the model of a utility in need of restructuring: as Eberhard notes, at the time, it was able to access private capital markets while delivering cheap, reliable supply and also increasing access to energy.

But that is now in the past, and the Eskom of today is commercially unsustainable, and the industry in which it operates is undergoing massive technological disruption. So how should the market be restructured?

There are two broad paradigms to the governance of the energy sector. One involves the establishment of a vertically integrated state monopoly and is focused on realising economies of scale, and using the provision of electricity as a tool for industrial policy. This suffers from the problems associated with abuse of monopoly power and the absence of competition to drive efficiency. The second involves designing institutions to support a market-driven solution to realise the benefits of competition by establishing an electricity market where generation capacity is predominantly owned by competing private entities.

The problem associated with the second approach is that it is institutionally extremely complex, in that private sector players want to transfer risk to the state through various guarantees, while the state can become captive of incumbents on whom it becomes increasingly dependent. This approach fudges the reality that ultimately the state is the only stakeholder with an inherent interest in ensuring security of supply for the economy as a whole.

Insofar as there is an answer, it must lie in the pragmatic development of a hybrid solution between these two approaches based on the institutional strengths and constraints and their impact in a particular context. Present policy and institutional arrangements are not adequate in that "prudent" tools that can be employed to secure the system are not being employed, probably because the institutional design was driven by ideological rather than pragmatic concerns about whether the relevant institution had the capabilities and capacity to deliver. Consequently, Eskom needs to be split into three parts; generation, transmission and distribution.

In April 2001, Cabinet approved the proposals for the electricity generation and transmission sectors' reform strategy, which would ensure that South Africa has a modern Electricity Supply Industry (ESI) that promotes economic and social development. Cabinet also approved specific timeframes for the introduction of ESI reforms. Cabinet recommended a managed liberalisation approach to realise benefits from competition and the Multi Market Model while ensuring Eskom plays a role in the development of South Africa.

In accordance with government's managed liberalisation approach, the second phase would have focused on the creation of subsidiary companies within Eskom and the development of the governance and regulatory framework. Eskom Generation power plants were to be established as clusters to allow competition in generation, while reducing Eskom's own generation capacity progressively. The Cabinet's decision envisaged Eskom enjoying a generating capacity of no less than 70 per cent in the short term as Independent Power Producers buy part of Eskom's cluster to the maximum of 30 per cent of the existing electricity generating market sector. This would have also opened up opportunities for foreign direct investment and black economic empowerment. The involvement of BEE for about 10 per cent of the existing electricity generating market sector was also proposed. However, this was overtaken by political decisions following President's Mbeki re appointment for a second term in office. Mbeki adopted new policy model calling his government a development state with the ambition of using state-owned companies as vehicles for economic development. This resulted in the postponement of the implementation of the 2001 Cabinet decision.

The splitting of Eskom along the same lines as proposed in the 2001 April Cabinet decision is still possible and is, if anything, even more desirable today. Moreover, additional electricity generation capacity to the South African economy and the financing thereof holds implications for both the economy and Eskom.

Investment in infrastructure has a positive impact on the economy, though, the financing options chosen for funding the investment could have far-reaching repercussions for economic growth and inflation, particularly in the current environment where national government debt is approaching a fiscal cliff.

In this context, selling 30 per cent of a cluster of the existing capacity would reduce the burden on Eskom in servicing its short-term commitments which have been a subject of negotiations between the Minister of Finance, the Minister of Public Enterprises and the financial services sector. The generation business unit will then form the core of Eskom where all the debt will be loaded. The remaining two subsidiaries of transmission and distribution would be valued separately. In addition to the sale of 30 per cent of the generation business, government would buy Eskom's transmission business by injecting equity into Eskom generation and taking over the debt into the national fiscus. Thereafter, the transmission business will be transferred to Nersa to allow other players to transmit at a fee.

In the short-term the existing Eskom generation could have three players outside the independent power producers, with Eskom owning 60 per cent of existing generation capacity, new private sector players 30 per cent, with BEE firms owning the remaining 10 per cent. In relation to generation, through the Renewable energy Independent Power Procurement (REIPP), South Africa has been able to introduce private sector players. An opportunity remains for a gas powered station and cogeneration opportunity by energy intensive users with the prospect of a dynamic competitive energy generations sector and cheap electricity and low inflation due to competition.

Transmission would be transferred to Nersa as proposed where the user will pay an annual access fee.

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TIPS. An Initial review of State Owned Companies, Volume 1, March 2018, Pretoria, Pg.16

Endnotes

[1] Source: TIPS, An Initial review of State Owned Companies, Volume 1, March 2018, Pretoria, Pg. .

[2] Source: TIPS, An Initial review of State Owned Companies, Volume 1, March 2018, Pretoria, Pg.16.

[3] Source: TIPS, An Initial review of State Owned Companies, Volume 1, March 2018, Pretoria, Pg.16.

"Betrayal of Promise: How South Africa is being stolen", PARI. Johannesburg: State Capacity Research Project

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5 Eton Road, Parktown, Johannesburg 2193, South Africa | PO Box 72445, Parkview, 2122
Tel +27 11 482 5140 | info@cde.org.za | www.cde.org.za