

# **South Africa's Energy Conundrum: The potential limiting effects of departmentalism on policy decision-making.**

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# South Africa's Energy Conundrum: The potential limiting effects of departmentalism on policy decision-making.

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## ABSTRACT

This thesis examines the departmentalism dilemma which South Africa's energy sector is faced with today. Many stakeholders play a vital role in addressing the production, distribution and consumption issues of the energy sector. However, many of these stakeholders do not work in a joined-up cooperative manner. This leads to incoherent, uncoordinated and incomplete policy decision-making which cripples the policy cycle.

Today the energy sector is faced with the dilemma of climate change and how this directly affects what energy resources should be used to meet the demand of energy needs. Different stakeholders have differing interests when it comes to what types of energy policies should be integrated into the energy sector. As it stands, coal amounts for almost 95% of the energy mix while nuclear, gas and renewable energy are included in the balance of the energy mix.

Coal is a low grade, dirty energy that has a dire impact on the environment. As 11 coal-fired power stations operate across the country with the construction of 2 more over the next 5 years, the amount of carbon dioxide that is released into the atmosphere from the burning of coal is on the increase. It is in the best interest of all energy stakeholders to adapt their energy strategies to include climate change mitigation action plans and work in a coordinated and cooperative manner.

The National Planning Commission has continued to stress the importance of Joined-up governance. By managing this policy strategy and information, a central government department can promote a coherent, "joined-up government" policy approach within and across departments and spheres. This approach should surely encourage better horizontal and vertical coordination and cooperation between stakeholders in the energy sector.

In reality, improved cooperation and coordination cannot be achieved due to the self-focused attitudes of stakeholders. It is evident that out of the many energy stakeholders, Eskom, the dominant incumbent monopoly has captured energy policy decision-making. The theory on regulatory capture is an important theory to discuss in this case as it highlights how the policy making space is altered by an information asymmetry and how this impacts on role players and their grasp of the complexity in this space. The Department of Energy's dependence on Eskom has led to the loss of information and control and an information asymmetry and reliance is developed. Departmentalism and regulatory capture thus mutually reinforce each other. The legacy of domination, control and resistance of Eskom has recently been

challenged by NERSA who has pushed back on much of Eskom's requests, to ensure that the public interest is protected. However, this is adversely affecting joined-up governance as it is deepening departmentalist tendencies. The role of Eskom and its tentative relationship with NERSA and the Department of Energy enhances departmentalism characteristics and promotes incoherent policy decisions.

In order to tackle problems such as global climate change and poverty, successfully, energy policymakers need to consider ways in which departmentalism and regulatory capture, resulting in poor, incoherent policies, might be overcome.

## **LIST OF ACRONYMS**

**ANC** African National Congress

**CO<sub>2</sub>** Carbon dioxide

**DEA** Department of Environmental Affairs

**DME** Department of Minerals and Energy

**DOE** Department of Energy

**DPE** Department of Public Enterprise

**DTI** Department of Trade and Industry

**DWA** Department of Water Affairs

**EDI** Electricity Distribution Industry

**EIUG** Energy Intensive User Group

**ESKOM** Electricity Supply Company

**GW** Gigawatt

**GWh** Gigawatt Hours

**IDC** Infrastructure Development Cluster

**IEP** Integrated Energy Plan

**IPP** Independent Power Producer

**IRP2010** Integrated Resource Plan 2010-2030

**ISEP** Integrated Strategic Electricity Plan

**JUG** Joined-up Governance

**LTMS** Long Term Mitigation Scenario

**MEC** Mineral-Energy Complex

**NDP** National Development Plan

**NIRP** National Integrated Resource Planning

**NPC** National Planning Commission

**NER** National Energy regulator

**NERSA** National Energy Regulator of South Africa

**REBID** –Renewable Energy Bidding

**REFIT** Renewable Energy Feed-In Tariff

**REIPPPP** or **REI4P** Renewable Energy Independent Power Producers Procurement Programme

**SANERI** South African National Energy Research Institute

**UCT** University of Cape Town

## CHAPTER 1

### INTRODUCTION AND OVERVIEW

Explaining the continual animosity amounting from the lack of coherent policy decision-making practices by the energy sector of South Africa is a very dirty business. One cannot fully understand this policy process without understanding the role different stakeholders play in the promotion of self-interest or goals. The potential limiting effects of departmentalism on energy policy decision-making is becoming more of a problem throughout all departments in South Africa with little to no method of conceding it. Departmentalism within the energy sector of South Africa can and will only be radically changed if a joined-up working approach is efficiently and effectively institutionalised.

From the outside, one can view South Africa as a country which;

“...aspires to be a sustainable, economically prosperous and self-reliant nation state that safeguards its democracy by meeting the fundamental human needs of its people, by managing its limited ecological resources responsibly for current and future generations, and by advancing efficient and effective integrated planning and governance through national, regional and global collaboration”<sup>1</sup>.

However, this dream is far from reality as national goals of sustainability, integrated planning and governance are harder to obtain due to the irrational interests of departments and the stifling effects of departmentalism.

#### Understanding South Africa’s Energy Sector In The Face of Climate Change

Internationally, coal is the most widely used primary fuel. It accounts for approximately 36% of the world’s energy production <sup>2</sup> and it is predicted that it will remain the most widely used fuel into the 2020s. South Africa’s energy mix has been dominated by coal since the 1880s as coal was used to supply the Kimberly diamond fields. Today, coal supplies approximately 96%<sup>3</sup> of the primary energy needs of South Africa, followed by nuclear energy (5%).<sup>4</sup> This

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<sup>1</sup> Department of Environmental Affairs (2009) *South Africa’s Green Economy Strategy*. Available at [http://www.enviropaedia.com/topic/default.php?topic\\_id=342](http://www.enviropaedia.com/topic/default.php?topic_id=342). (12/06/2012)

<sup>2</sup> Eskom (2013a) *Coal Power*. Available [online]; [http://www.eskom.co.za/c/article/200/coal-power/\(12/05/2013\)](http://www.eskom.co.za/c/article/200/coal-power/(12/05/2013))

<sup>3</sup> Eskom (2013a)

<sup>4</sup> Pegels, A (2010) *Renewable energy in South Africa: Potential, barriers and options for support*. Energy Policy 38. 2010.

low grade coal is in abundance and is an affordable commodity unlike the indigenous and renewable energy sources such as wind, solar and biomass which remains virtually untapped.

South Africa is a significant member of the global coal market.<sup>5</sup> According to the 2010 BP Statistical Energy Survey, South Africa is the 5<sup>th</sup> largest coal producer in the world as it roughly produces 3.68% of the world total with over 227 million tons of marketable coal, annually.<sup>6</sup> Its coal reserves are estimated at 53 billion tonnes which could potentially support the South African energy industry for another 200 years due to the current production rate.<sup>7</sup> 25% of energy production is exported and other 53% is used for energy generation for the country's local industries. South Africa's coal industry is a low cost producer, has the world's largest coal export terminal and can export competitively with either Europe or the East due to its position between the Atlantic and Pacific.<sup>8</sup>

Coal mining contributes to the economic growth of South Africa by reducing the country's negative trade balance and account deficit.<sup>9</sup> The industry and its exports increase economic growth, job creation and individual socio-economic wellbeing. In 2009, the South African coal mining industry became the largest component of the South African mining industry. The coal mining sector employs over 70 703 labourers and pays R12.8 billion in wages.<sup>10</sup> Coal mining is an integral part of South Africa's economy as it is used in export (60.47 million metric tons), electricity (118.16 million metric tons) and industry (59.83 million metric tons).<sup>11</sup> 47.3% of coal is exported out of 56.2% of all mining commodities; highlighting that coal is an integral part of SA's GDP and development.<sup>12</sup>

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<sup>5</sup> Eberhard, A (January 2011) *The Future of South African Coal: Market, Investment and Policy Challenges*. Freeman Spogli Institute For International Studies. Working Paper No. 100. pp 1

<sup>6</sup> Mbendi Information Services. *Coal Mining in South Africa*. Available [online]; <http://www.mbendi.com/indy/ming/coal/af/sa/p0005.htm> (16/05/2013).

<sup>7</sup> Eskom (2013a)

<sup>8</sup> Eberhard, A (January 2011) pp1

<sup>9</sup> Ibid, pp1

<sup>10</sup> Department of Labour (2011) *Annual Labour Market Bulletin*. Available [online]; <https://www.labour.gov.za/downloads/documents/annual-reports/labour-market-bulletin-report/2010-2011/almb201011.pdf>. (12/03/2013)

<sup>11</sup> Chamber of Mines South Africa (2010) *Facts and Figures 2009*. Available at: <http://www.bullion.org.za/Publications/Facts&Figures2009/F&F2009.pdf>. (12/06/2012)

<sup>12</sup> International Energy Agency (2010) *Coal Information*. OECD, Paris.

Eskom, the 7<sup>th</sup> largest electricity generator in the world explains that about 51% of South African coal mining is done underground and 49% is done through open cast methods.<sup>13</sup> The coal-fired industry is highly concentrated with 5 main companies who supply over 80% of the coal (Anglo-American, Exxaro, Sasol, BHP Billiton and Xstrata).<sup>14</sup> The domination of high coal producers and users can have an influential and, at times, potential limiting impact on policy decision-making, which will be discussed in detail later in this paper.

The advantages of coal-generated electricity are that South Africa's infrastructure is well established unlike that of sustainable alternatives and that burning coal is the most cost-efficient and effect way to generate energy. However, the disadvantages of coal-generated electricity far outweigh the advantages. The burning of coal produces the most waste - sulphur, nitrogen oxides, ash, greenhouse gases and heavy metals - as well as acid mine drainage, soil erosion, reduced agricultural production and water pollution.<sup>15</sup> Also, the cost of establishing a coal-fired power plant is a long and very expensive process. Due to the location of the South African coal mines, in Mpumalanga (Ermelo, Highveld and Witbank) and Limpopo, locations for coal-fired power plants are limited.<sup>16</sup> Coal exports also face barriers due to "...inadequate transportation infrastructure and lack of coordination and cooperation between privately owned mines, state-owned rail infrastructure and port capacity".<sup>17</sup>

Due to the increasing importance of coal in energy security around the world, its demand is high. However, many disadvantages highlight that coal-generated electricity is one of the most environmentally unfriendly methods of energy production. As the world becomes more aware of climate change, and the impact dirty energy has on it, international pressures have urged South Africa to shift its policies from a brown-dependent economy towards an energy mix that is more environmentally friendly. For several years, South Africa has been bound to international treaty obligations to reduce greenhouse gases such as Conference of The Parties and the Kyoto Protocol. South Africa agreed and committed to reducing its greenhouse gases below a 'business-as-usual' scenario (34% in 2020 and 42% in 2025) in the Copenhagen

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<sup>13</sup> Coal Mining. Available [online]; <http://www.mbendi.com/indy/ming/coal/af/sa/p0005.htm> (16/05/2013)

<sup>14</sup> Eberhard, A (January 2011) pp 4

<sup>15</sup> Ibid, pp 4

<sup>16</sup> Eskom (2013a)

<sup>17</sup> Eberhard, A (January 2011) pp 1

Accord.<sup>18</sup> President Zuma made this voluntary commitment conditional upon the “provision of financial resources, the transfer of technology and capacity building support”.<sup>19</sup>

At this stage, South African government has finalised its climate change mitigation strategy which includes its own long term mitigation scenarios. It has also released a National Climate Change Response Paper in 2011. The importance of these policies is to ensure that South Africa’s energy mix radically altered to include more renewable energy. How this will be done is by introducing carbon budgets for departments and industry as well as introducing a carbon tax in 2015. The impact of these measures will be directly felt by Eskom and other large coal suppliers and users, who will transfer these tax costs to the citizens.

The current energy related climate change policy direction, as discussed by Tyler<sup>20</sup>, are as follows;

- Emissions will peak between 2020 – 2025, plateau until 2030 and then decline to 2050.
- Renewables and nuclear will contribute in equal measure to a long-term carbon-neutral grid, with interim targets by 2030. Feed-in tariffs will support renewable energy.
- CCS will be mandatory for new coal-fired power generation and will be explored for existing coal plants and CTL.
- Energy efficiency measures will be immediately implemented, building on the electricity crisis response. A mandatory national efficiency programme will be introduced;
- Economic (carbon pricing), fiscal instruments and regulation will be employed to support a low carbon economy;
- In the transport sector, vehicle efficiencies will be pursued, as well as electric vehicles, R&D for hybrids and passenger modal shift, and;
- Institutional support for the above will be fast-tracked.<sup>21</sup>

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<sup>18</sup> Ibid, pp 1

<sup>19</sup> Ibid, pp 36

<sup>20</sup> Tyler, E (2009) *Aligning South African Energy and Climate Change Mitigation Policy*. Energy research Centre. University of Cape Town.

<sup>21</sup> Ibid, pp 5

The overuse, dependence and local strain on coal-based investment in coal has resulted in South Africa's growing burden to develop policies that will enhance the mitigation of increased CO<sub>2</sub> emissions. The cost of climate change on South Africa's economy will be drastically heightened if the country's total emission, calculated by the Long Term Mitigation Scenario (LTMS), peaks more than 470mt CO<sub>2</sub> by 2020, raising the temperature by 2 degrees or more.<sup>22</sup> Eskom currently emits more than 224 Mt of carbon dioxide per annum.<sup>23</sup> Thus, it is integral for South Africa's energy policy decision-makers to work jointly to ensure that future energy costs are not as the result of environmental degradation and climate change, but only costs that build a cleaner, sustainable country.

The coal-sector of South Africa offers both challenges and opportunities to policy-makers due to the interplay between many stakeholders who dominate the policy process. At this stage, it remains to be unseen whether South Africa will ever develop integrated policies, regulatory frameworks and investment programmes which could surely ensure sustainable development.

Policy decision-making between many different stakeholders has played an important role in influencing the energy sector and its policy outcomes. The Department of Environmental Affairs (DEA)<sup>24</sup> stresses that South Africa's natural resource base is under severe pressure caused by the national energy crisis resulting in the 2008 blackouts because of the increasing demand and reliance on the use of coal as the main source of energy generation and policy incoherence. The department highlights that there needs to be a greater focus on climate change and a shift in attention to alternative energy sources to promote a greener, cleaner environment.<sup>25</sup> Currently the DEA does not have the necessary institutional strength to drive a policy position which entails transformation in the energy sector.<sup>26</sup> The NPC and politicians will have to help drive the policy direction if transformation is to occur because Eskom and the DoE are overpowering the policy decision-making processes at this stage.

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<sup>22</sup> Earthlife Africa (1 June 2010) *Comments on the Proposed Planning assumptions in the IRP2*. Sustainable Energy and Climate Change Project.

<sup>23</sup> Eberhard, A (January 2011) pp 15

<sup>24</sup> Department of Environmental Affairs (2010) *Draft National Strategy on Sustainable Development and action Plan 2010-2014*. General Notice 393.Pretoria. pp 5

<sup>25</sup> Ibid, pp 6

<sup>26</sup> Tyler, E (2009) pp5

## The Effects of a Dominant Incumbent Monopoly

There is evidence of regulatory capture by the dominant incumbent monopoly - Eskom – which has dominated the policy decision-making arena by resisting the Department of Energy's (DoE) and has maintained control over much of the information that is available about the sector.

The regulation of South Africa's energy utility domain has largely been the preserve of a small and closed policy relationship, dominated by the DoE and Eskom's powerful dominant incumbent monopoly. Historically, the DoE and Eskom relationship was very close as Eskom was heavily relied upon by the DoE as the dominant electricity producer in the country. Eskom enjoyed great political influence as its relationship with the DoE was built on mutual favours. The DoE protected Eskom from competition and, in return, the DoE obtained benefits such as shares in power plants and other political and financial favours. As will be discussed in chapter 4, there has always been a strong link between the head of the DoE and the head of Eskom. At times, officials from the DoE have moved to senior management positions in Eskom or vice versa.

NERSA, South Africa's energy independent regulatory agency is slowly becoming a central actor in decision-making as it is trying to regulate the relationship between Eskom and the DoE and limit their unaccountable and non-transparent decision-making processes and improve their limited consultation of publication and information.

Majone stresses that independent regulatory agencies, such as that of NERSA, can “obtain procedural legitimacy through more transparent and pluralistic policy-making and greater accountability than offered by state ownership and regulation by government.”<sup>27</sup> As discussed, NERSA is an independent body with its own responsibilities given under public law and has been given special oversight powers to block or improve mergers, issue and enforce licences and to prevent unfair competitive practices that may otherwise jeopardize accountable and transparent policy decision-making practices.<sup>28</sup> NERSA was not directly elected nor managed by elected officials of the DoE or other departments.

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<sup>27</sup> Majone, G (1999) *The regulatory state and its legitimacy problems*. West European Politics 22(1): pp 1-24

<sup>28</sup> Thatcher. M (2011) *Regulation after delegation: Independent regulatory agencies in Europe*. Journal of European Public Policy. 9:6. Pp 954-972

Recently, NERSA has had some success in limiting Eskom's capture of the policy and regulatory process. Eskom has had to justify their costs and provide in depth analysis of what money is needed to run the utility. NERSA has final say over how much Eskom can raise its tariff costing and when, after doing in depth research to make sure Eskom is not abusing their position. NERSA has also greatly helped by creating a space for competition and reducing the previous monopoly of incumbent Eskom by inviting other actors to compete and express their views.

There are a greater number of debates and public consultation forums which suggests that NERSA is trying to alter the decision-making process away from the previously closed and private processes. NERSA has ensured that the DoE and Eskom produce consultation papers which invite comments. As they try to be more accountable and transparent, NERSA has been seen to publish more information than the DoE ever did – mainly on information pertaining to costs, profits and market shares.<sup>29</sup> NERSA may not have as many resources available to it but has built up a reputation of having more experts than that of the DoE which monitor, regulate and evaluate the procedures of the DoE and Eskom. More often than not, NERSA has given rationale for its decisions and has aided in providing consistent knowledge to the public about operations.<sup>30</sup>

One policy which the DoE has managed to implement – with the help of NERSA and its regulatory push back on Eskom - is the Integrated Resource Plan 2010<sup>31</sup> on 1 April 2011. This policy promotes the need for a change in the energy mix to minimise climate change and greenhouse gas emissions. This policy document encourages the need for a balanced change of energy resources by allowing the energy sector to lock into, at least, another ten years of intense carbon resource use alongside the development of renewable energy projects. The DoE is also pushing for a massive expansion of nuclear energy which will cover the demand of energy projected by the IRP2010.<sup>32</sup>

The IRP provides for a diversified energy mix that comprises:

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<sup>29</sup> Ibid, pp 967

<sup>30</sup> Ibid, pp 969

<sup>31</sup> Department of Energy (25 March, 2011) *Integrated Resource Plan for Electricity 2010-2030*. Revision 2. Final Report. Available [online]: [http://www.energy.gov.za/IRP/irp%20files/IRP2010\\_2030\\_Final\\_Report\\_20110325.pdf](http://www.energy.gov.za/IRP/irp%20files/IRP2010_2030_Final_Report_20110325.pdf). (20/04/2013).

<sup>32</sup> Ibid, pp 6

- coal at 14% (government's view is that there is a future for coal in the energy mix, and that it should continue research and development to find ways to clean the country's abundant coal resources)
- nuclear at 22,6%
- open-cycle gas turbine at 9,2% and closed-cycle gas turbine at 5,6%
- renewable energy carriers, which include hydro at 6,1%, wind at 19,7%, concentrated solar power at 2,4% and photovoltaic at 19,7%.<sup>33</sup>

The IRP is intended to:

- improve the long-term reliability of electricity supply through meeting adequacy criteria over and above keeping pace with economic growth and development;
- ascertain South Africa's capacity investment needs for the medium-term business planning environment;
- consider environmental and other external impacts and the effect of renewable energy technologies, and;
- provide the framework for ministerial determination of new generation capacity (inclusive of the required feasibility studies) as envisaged in the new generation capacity regulations.<sup>34</sup>

NERSA is the custodian of the South African Grid Code and Eskom, the licensed Transmission Network Service Provider, play a vital joined-up role in ensuring end-users and other consumers gain adequate access to Eskom's service.<sup>35</sup> The Code attempts to align the transmission network with the DoE's IRP 2010 country plan and also tries to provide equitable and fair access to the grid for IPPs. New electricity load supplied by Eskom as well as the quickly emerging renewable energy from the IPPs both have access to Eskom's grid, unlike in the past due to Eskom's regulatory capture and dominance over the policy making space.

Different key constraints and flaws are identified in this document. These constraints and flaws may jeopardize the environment and sustainable development or increase economic

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<sup>33</sup> Ibid, pp 6

<sup>34</sup> Ibid, pp 6

<sup>35</sup> Eskom (2012) *Transmission Ten-Year Development Plan 2013-2022*. Available [online]; <http://www.eskom.co.za/content/TransDevPlanBrochure2013-2022.pdf> (23/06/2013)

cost burdens if not managed efficiently and effectively through joint-up working. Reasons for these constraints are closely connected to the relationship between the DoE, Eskom and other intensive coal users and suppliers as well as the DoE's blinkered focus on its own goals and interests.

These key constraints include:<sup>36</sup>

- how carbon emissions are supposed to be efficiently and effectively reduced;
- how new technology uncertainties such as costs, operability and lead time to build, may interfere with goals;
- the limitation on the amount of available water;
- how industry will create jobs but only in localised areas;
- how South Africa's need for regional development and integration impact on energy availability, and;
- how will security of supply be maintained?

As indicated, the main focus area of the IRP2010 is the cost of electricity production versus the country's national objective to limit carbon emissions<sup>37</sup>, but there is evidence to suggest that the department has not found a balance between these two.

The IRP2010 stresses that it addresses the global energy challenge with a balanced energy mix that respects resources available in South Africa, however, this energy mix is hardly balanced. There is no evidence of planning for long-term storage, climate regulation, and waste disposal of nuclear waste and coal, which will hamper the environment in the long term.<sup>38</sup> The projected demand for energy has been found to be inaccurate by the Infrastructure Development Cluster of the inter-ministerial committee but has been ignored to date.<sup>39</sup> Also, the cut in CO<sub>2</sub> emissions which is needed to meet other policy goals such as that of the Renewable Energy White Paper and the Climate Change Response Paper is not being fulfilled due to high costs and insufficient industry and political support.

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<sup>36</sup> Ibid, pp 8

<sup>37</sup> Department of Energy (4 October 2010) *Statement of the inter-ministerial Committee on Energy regarding the release of the country's electricity plan*. Available [online]: [http://www.energy.gov.za/files/media/pr/IMC\\_draft\\_press\\_release.pdf](http://www.energy.gov.za/files/media/pr/IMC_draft_press_release.pdf). (18/04/2013). pp 31

<sup>38</sup> Department of Environmental Affairs (2010) *Draft National Strategy on Sustainable Development and action Plan 2010-2014*. General Notice 393.Pretoria. pp 5

<sup>39</sup> Business Day (26 April 2013) *State Should Use Extreme Caution in Nuclear Decision*. Available at: <http://www.bdlive.co.za/opinion/2013/04/25/state-should-use-extreme-caution-in-nuclear-decision> (09/05/2013).

The tentative relationship between the DoE and Eskom may play an integral role in this policy incoherence. It is blatantly evident that Eskom has captured the policy-making process restricting and influencing the DoE's policy decisions on climate change mitigation action and environmental sustainability attempts. Many of the DoE policies are made in a silo, influenced by external pressures and politics, but un-consultative with other energy stakeholders.<sup>40</sup> Eskom does not take into account that its push for high carbon intensive policies could potentially be to the detriment of rational, manageable policy decisions in the future. Sustainable development has been put on the back-burner because Eskom is struggling to share its coal-dominated energy industry with other more environmentally friendly power producers.<sup>41</sup> This tentative relationship enhances departmentalism characteristics and promotion of incoherent policy decisions.

At this stage in energy policy decision-making, policies are being designed without clearly thought through approaches on how to deal with the implications of structural, political, environmental and developmental costs. Departments are limiting the amount of consistency, cooperation and coordination that should happen in the decision-making process as a result of self-interests. This, along with the regulatory capture legacy of Eskom is enhancing departmentalist tendencies.

#### Departments and Their Limitations

South African government has attempted to ensure a more network approach to policy decision-making as departmentalism has become a common feature causing inadequate policy decision-making.

The National Planning Commission (NPC) was designed to help facilitate the action of coordinated joint working and is the “embodiment of government’s efforts to improve long term planning and rally the nation around a common set of objectives”<sup>42</sup>. The NPC states that its main priority foci are on “development, strengthening institutions, nation-building and the

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<sup>40</sup> Times Live (26 February 2012) *SA Ready To Roll Out R300bn Nuclear Stations*. Available online: <http://www.timeslive.co.za/politics/2012/02/26/sa-ready-to-roll-out-r300bn-nuclear-stations>

<sup>41</sup> Ibid.

<sup>42</sup> The Presidency (12 August 2009) Revised Green Paper: National Planning Commission. Government Gazette. Pretoria. Pp 2. Available [online]; [http://www.thepresidency.gov.za/docs/pcsa/planning/gp\\_nsp.pdf](http://www.thepresidency.gov.za/docs/pcsa/planning/gp_nsp.pdf). (04-04-2013).

making of a developmental state”<sup>43</sup>. However it highlights that efforts to drive these common set of objectives can be hampered due to lack of a coherent long-term plan which is primarily due to weakness in the horizontal and vertical coordination of government to address silo tendencies that will potentially lead departments to make irrational, self-interested decisions.<sup>44</sup>

The NPC has continued to stress the importance of Joint-up government (JUG) – “a policy strategy which seeks to coordinate the development and implementation of policies across government departments and agencies, especially with aim of addressing complex problems such as that of climate change and socio-economic development”<sup>45</sup>. Government needs to promote a coherent, “joint-up government” policy approach within and across departments and spheres and the NPC highlight that this can only be achieved “if there is a common understanding in enough detail of the long-term objectives and direction of our society”<sup>46</sup>. This must be joined with bureaucratic-will to ensure constant and sustainable development rather than short term benefits.

The NPC has adopted this JUG approach from Britain which could be effectively used in South Africa if implemented properly and all bureaucratic actors fulfil what is expected of them. Britain’s JUG approach aims to

“put sustainable development at the heart of government through its general commitment to deliver more joined-up government”<sup>47</sup>.

The understanding of joined-up government;

“Seeks to align the activities of formally separate organisations towards particular goals of public policy where it aims to coordinate activities across organisational

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<sup>43</sup> Ibid, pp 4

<sup>44</sup> Ibid, pp 5

<sup>45</sup> Efficiency Unit (April 2009) *Joined-Up Government*. Available [online]; [http://www.eu.gov.hk/english/publication/pub\\_bp/files/joined\\_up\\_government.pdf](http://www.eu.gov.hk/english/publication/pub_bp/files/joined_up_government.pdf) (20/05/2013)

<sup>46</sup> The Presidency (12 August 2009) pp 9

<sup>47</sup> Ross, A (2005) *The UK approach to Delivering Sustainable Development in Government: A Case in Joined-up Working*. Journal of Environmental Law. Oxford University Press Vol 17 (1). pp 27

boundaries without removing the boundaries themselves...and initiatives must align organisations with different cultures, incentives, management and aims”<sup>48</sup>.

Pollitt also describes that this kind of organisation needs horizontally and vertically coordinated thinking and action which the energy sector do not have at this stage.<sup>49</sup> With these structures in place, then the considerable conflict and contradiction within overall government policies could potentially be reduced.

Ross<sup>50</sup> highlights that cross-cutting is not a panacea but costs versus benefits need to be weighed up to determine whether it is more beneficial that government departments jointly work together or work in silos, undermining each other’s policies objectives. Joined-up government can also potentially cause the breakdown in accountability and transparency because there are often more stakeholders to take into account with regard to decision-making.<sup>51</sup> British government has implemented several forms of legislation that aim to address this problem, including the Modernising Government White Paper, 2008.<sup>52</sup>

Throughout this paper evidence of many departments and stakeholders in South Africa’s government not working in a JUG fashion, but rather in silos and are not consulting other departments before implementing their own department’s interests, will be examined. The lack of coordination, transparency and accountability between departments because of the dominant incumbent monopoly, Eskom, is continually heightening conflict and undermining policy implementation as well as development.

It has been seen that the uncoordinated and uncooperative policy decision-making process has taken precedence over coherent joined-up working. This is causing conflict and contradiction within and between national departments, independent regulatory authorities such as that of NERSA, and Eskom, causing policy uncertainty. It seems as if all stakeholders in the energy sector have their own bureaucratic agendas which enhance silo tendencies. In reality, having so many competing policies and weak, uncooperative decision-makers will not benefit the development of coherent and integrated policy.

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<sup>48</sup> Ling, T (2002) *Delivering Joined-Up Government in the UK. Dimensions, Issues and Problems*. Public Administration. Vol 80 (4). Pp 639

<sup>49</sup> Pollitt, C (2003) *Joined-up Government: A Survey*. Political Studies Review. pp 37

<sup>50</sup> Ross, A (2005) pp 30

<sup>51</sup> Ibid, pp 32

<sup>52</sup> Ibid, pp 32

One can argue that the dilemma of departmentalism and regulatory capture mutually reinforce each other given that the Department of Energy's reliance on Eskom for information. It is evident that the legacy of domination, control and resistance of Eskom has recently been challenged by NERSA who has pushed back on much of Eskom's requests, to ensure that the public interest is protected. However, this is adversely affecting joined-up governance as it is deepening departmentalist tendencies.

In addressing this dilemma of departmentalism, one always needs to assess at the agenda in which policies are being made and who the actors are influencing and being influenced by the energy sector.

The departmentalist tendency of the energy sector due to contentious regulatory capture has resulted in creating contentious discussions and decisions within and between departments. The outcome of this study found that energy policy decision-making is significantly influenced by the structure of the South African energy system.<sup>53</sup> Thus, in order to tackle problems such as global climate change and poverty successfully, energy policymakers need to consider ways in which to overcome departmentalism, regulatory capture and dominant incumbent monopolies.

Through better coordination and management between departments and stakeholders and more accountability and communication, the government will be directly affected and has a better chance of meeting developmental demands and address climate change issues hand-in-hand. Independent regulators such as that of NERSA, if managed correctly, will also have significant success in minimising the departmentalist effects of incumbent monopolies such as Eskom and will create a space for push back on regulatory capture. It is integral that the consequences of departmental and policy conflict are eradicated so that the effects do not continually hamper the development of South Africa.

The way departments and stakeholders work together, both horizontally and vertically, to ensure accountability and transparency will determine South Africa's agenda which will have a direct impact on economic development, energy security and climate change mitigation action. The reduction of departmentalism and regulatory capture is a forefront matter in

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<sup>53</sup>Marquard, A (2006) *Origins and Development of South African Energy Policy*. Unpublished PhD Thesis, UCT.

addressing this challenge. In not achieving this, any further policy made could potentially be made in an incoherent and unmanageable manner.

### Research Question

This thesis dissects the effects that the dominant incumbent monopoly – Eskom – has on policy decision-making due to its legacy of regulatory capture and how this is directly linked to the formation and domination of departmentalism in the energy sector. It looks at the need for coherent networks, joined-up government working, independent regulator push-back, and long term policy plans that are for the benefit of rational policies for South Africa.

My research question therefore seeks to inform the reader about the dilemma of departmentalism that has gripped the energy sector of South Africa because of the continued dominance of Eskom and its regulatory capture. It is important to examine what policy decisions are being made by the DoE and NERSA to try and alleviate some of Eskom's dominance so to minimise its monopoly of information, resources and industry. The attempts to work independently, or in a silo, have the potential to drastically affect coherence and integration in providing for a sustainable and manageable energy sector.

This question for research was chosen because of the global focus on the need for climate change mitigation action policies and the international attempt of joined-up government working. With the need for climate change mitigation action and cleaner energy policies in mind, it is interesting to see how South Africa's energy sector is struggling to develop coherent and coordinated policy decisions because of bureaucratic red-tape, self-interests, poorly developed and implemented mandates, policy capture and departmentalist tendencies.

The hypothesis is that energy-focused departments, who are working in silos, are the driving force of incoherence and irrational energy sector outcomes, incoherent policies and may potentially limit all policy decision-making in the future if departmentalism isn't dissolved. There is both national and international pressure to reduce carbon emissions through coherently changing the energy mix in South Africa. However, government departments have not readily acted upon in a transparent, integrated manner. My hypothesis assumes that the DoE and Eskom has assumed departmentalism tendencies in which policies are drafted and later implemented without coordinated consultation with other stakeholders and lack of referral to the guidance of the NPC or its inter-ministerial committee.

## Research Design

This study is a qualitative desktop examination of academic articles, theory, energy stakeholders, policy documents and public debate in the media. The thesis uses the theory of departmentalism and principle relation theory to discuss and understand the underlying effects of poorly coordinated, poorly integrated and incoherent policy decision-making and implementation within the energy sector of South Africa. The international attention on climate change and the national need for a renewed energy mix is also a focal imperative for this paper.

## Organisation of Thesis

Chapter 1 provides an introduction and background information into the theme of the energy sector in South Africa and the controversial energy mix. A literature review of the situation is undertaken to examine and explain how climate change is influencing the energy policy decisions that are being made in South Africa. Furthermore, these policy decisions are made on the foundations of the theory of departmentalism whereby actors are trying to maximise their benefits and minimise their costs through policy decisions<sup>54</sup>.

Chapter 2 firstly highlights and expands on the issue of regulatory capture by the dominant incumbent monopoly of Eskom. This directly ties to the second part of this chapter which presents the theoretical debate on how regulatory capture and departmentalism mutually reinforce on another. This chapter looks at how departmentalism potentially has the ability to directly affect the policy decisions made by any organisation that takes on this isolated silo character. This chapter highlights the parallels of departmentalism, and the theory of regulatory capture, as a variant of rational choice theory. It will then go on to discuss that there is a remedy to the departmentalist tendencies, through Joined-up working and highlights that in South Africa, the National Planning Commission has attempted to implement such joined-up working parameters but failing to fully control departmentalist tendencies of the energy sector. With the help of NERSA and its push-back on Eskom's capture of the policy space, NPC may be able to create a space for JUG, limiting departmentalism.

Chapter 3 examines the many actors who influence or are influenced by the energy debate. This chapter looks at the National Planning Commission and its role in the energy sector and

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<sup>54</sup> Perri. B, Leat. D, Seltzer. K, and Stoker. G (1999) *Governing in the Round: Strategies for Holistic Government*. London: Demos

its attempts to create a joined-up working approach to coordination and integration between departments.<sup>55</sup> This chapter then goes on to examine the Department of Energy, Eskom, the Inter-ministerial Committee and high industrial energy users and their role in this energy debate.

Chapter 4 examines the dominant incumbent monopolistic nature of Eskom and its regulatory capture of the policy decision-making process. Additionally, this chapter aims to redefine the content of chapter 2, providing examples of cases where Eskom has captured the policy decision-making process in the past and how NERSA is currently creating a push-back to ensure that the public interest is looked after. A short summary of different policies introduced, including the White Paper of Energy 1998, formulated and implemented by the DoE will be discussed. Then this paper will highlight both the departmentalist tendencies and joined-up government attempts of the DoE and how intensive coal suppliers and users influence the DoE and Eskom's relationship, which then directly affects policy decision-making today and the potential erosion of decision-making in the future. Policy documents such as that of the White Paper on Energy 1998 and the IRP2010 clearly show evidence of departmentalism and the lack of coordination, integration and discussion between other energy actors.

Chapter 5 concludes this thesis and highlights the fact that energy policy is not made in a coherent and integrated manner which limits all decision-making within and between departments. This thesis highlights the limitations which were found while research was done and concludes with further areas of research that may be of interest.

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<sup>55</sup> Ibid, pp 13

## CHAPTER 2

### THEORETICAL FRAMEWORK

#### Introduction

In the case of the departments within the energy sector of South Africa, departmentalism is seen as a common theory that explains why uncoordinated functions and lack of coherent decision-making is justly evident. Departmentalism is undermining the policy making and implementation process of the energy sector as departments are too concerned with their own tasks to let other departments, their policies and mandates, influence goals.<sup>56</sup>

This theory is best used to explain the incoherent, inconsistent and uncoordinated character of many policy decisions that are made within government. Many actors, departments and institutions, all play a vital role in influencing the policy making process. Many of these actors feel threatened by other departments because of their independent goal and task driven mentality which often does not match up with other departments.<sup>57</sup> It is integral to understand that, in the South African energy sector, the dominant incumbent monopoly – Eskom – has played a vital role in enhancing departmentalism due to its legacy of regulatory capture of the policy decision-making process, the asymmetry of information and its unwillingness to release control.

Below, this paper will first explore the theory of regulatory capture and how this applies to South Africa's energy sector. Secondly, this paper will thoroughly examine the meaning of departmentalism and how both departmentalism and regulatory capture reinforce one another. Thirdly, this paper will examine joined-up governance. This chapter and its theory are integral to understand before one can move on to understanding the current crisis in the energy sector.

#### The Theory of Regulatory Capture

Broadly speaking, regulation is the encompassment of all forms of state intervention in an economy. However, for the matter of this paper, a narrower definition of regulation is

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<sup>56</sup> Kavanagh, D and Richards, D (2001) *Departmentalism and Joined-Up Government: Back to the Future?* Parliamentary Affairs. Pp 5

<sup>57</sup> Perri, B et al (1997) pp 10

focused on the control of natural monopolies.<sup>58</sup> Regulation is needed to ensure that dominant incumbent monopolies do not exploit the state's market power. Regulation is also needed to protect the consumer from monopolistic abuse and attempts to control departmentalist tendencies. When a regulator cannot control a dominant incumbent monopoly, the term 'regulatory capture' is used. By definition, "regulatory capture occurs when a once regulated monopoly ends up manipulating the state agencies that are supposed to control them".<sup>59</sup> Regulatory capture is a form of government failure when the interests of the public are not looked after as the dominant incumbent monopoly can make policy decisions in a silo.

Adams et al. argue that "regulatory capture occurs when officials inappropriately identify with the interests of a client or industry."<sup>60</sup> When the regulator begins to favour the demands of the industry or utility, over public interest, regulatory capture exists. Both physical capture as well as favourable discretionary capture exists when reluctance to implement certain policies, regulations and even tardiness of the regulator results between the regulator and the utility. As Adam et al. highlight "regulatory capture is one of the risks which may occur during the performance of the regulatory function".<sup>61</sup> Regulatory functions to;

- allocate rights;
- certify or licence a product, person, or place;
- identify an organisation as a certain type;
- register professionals and non-professionals;
- set industry standards;
- provide 'protective' social policy, and;
- collect taxes, fees or other revenue.<sup>62</sup>

Utilities need regulation if their stakeholder number is too large to control. Dal Bo argues that

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<sup>58</sup> Dal Bo, Ernesto (2006) *Regulatory Capture: A Review*. Oxford Review of Economic Policy. Vol 22(2). pp 203

<sup>59</sup> Ibid. pp 203

<sup>60</sup> Adams. G, Hayes. S, Weierte. S and Boyd, J (2007) *Regulatory Capture: Managing the Risk*. Australian Public Sector Anti-Corruption Conference.

<sup>61</sup> Adams, G et al (2007) pp 3

<sup>62</sup> Ibid, pp 3

“excessive group size could hamper successful organisation of the beneficiary group. Such organisation requires the resolution of the well-known collective action problem. This problem arises from the temptation that each potential beneficiary has to shrink his obligation and goals in the common lobbying effort.”<sup>63</sup>

According to Yu, regulators go through a life cycles whereby they initially start with vigorous enforcement of rules and regulation and then become the protectors of the regulated utilities at the end of its cycle.<sup>64</sup> Regulatory capture always occurs hand-in-hand with misconduct when regulator officials inappropriately identify with the interests of the utility rather than that of the public interest.<sup>65</sup> Little to no transparency, accountability, coordination, sharing of information and cooperation is present leading to poor coordination, management and performance. Misconduct, in most cases, occurs when units have sole discretion and responsibility for providing a service. Officials are given freedom to interpret regulations in their own manner and this can often lead to mismanagement and poor decision-making processes without consultation with other stakeholders. There is a high risk that regulatory capture can exist for long periods of time due to both the regulated and regulator not wanting to disclose their subtle relationship.

There is a difference between regulatory capture and policy capture, which will be used later on in this paper to describe the South African energy sector situation. Regulatory capture occurs when a regulatory authority or agency, created to act in the public interest, advances the concerns and interests of individuals or groups. Resources and energies are focused on certain policy outcomes that the individual or group prefer and not on others. This results because of government failure to encourage the regulator to operate for the greater public good. On the other hand, policy capture results when an individual or group controls or influences the entire policy decision-making process and has the dominant monopoly over all policy decision-making in the sector.

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<sup>63</sup> Dal Bo, E (2006) pp 205

<sup>64</sup> Yu, G (2011) *The Development of the Chinese Legal System: Change and Challenges*. Routledge Press. Pp 231

<sup>65</sup> Adams, G et al (2007) pp 6

For transition and reform to occur and limited regulatory capture, de-monopolisation, de-regulation, de-stabilisation and even privatization have to become evident.<sup>66</sup> By introducing this approach to reform, it ensures that state owned enterprises which were previously inefficient and wanting to maintain regulatory control in isolation to competitors, lose that control and performance is improved. Competition is greatly increased which, in turn, increases efficiency and effectiveness, lows prices, increases management operations and reduces government interference.<sup>67</sup>

### The Theory of Departmentalism

“The core problem for government is that it has inherited from the nineteenth century a model of organization that is structured around functions and services rather than solving problems. Budgets are divided into separate silos for health, education, law and order and so on. The vertical links between departments and agencies in any one field and professional groups such as the police, teachers, doctors and nurses are strong. The horizontal links are weak or non-existent”<sup>68</sup>.

Departmentalism, as highlighted by Kavanagh and Richards<sup>69</sup>, is the “silo” management of a government department through a rational choice theory model. Silos, such as that of farm storage silos, are tall, narrow buildings with no windows and air, and many silos can be close to each other with no way of communicating between them.<sup>70</sup> In academic terms, the homogenous state of officials makes an organisation or department susceptible to small changes down the hierarchy. This rational choice model highlights that policy decision-makers are self-seeking utility maximisers.<sup>71</sup> They have a full range of options to choose from when deciding on the best choice.<sup>72</sup> The role of this policy decision-maker is to ensure that they identify and analyse all possible policy alternatives and explore possible consequences. All departments and organisations are preoccupied with their own preferences

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<sup>66</sup> Gabriele, A (2004) *Policy alternatives in reforming energy utilities in developing countries*. Energy Policy 32. Pp 1319

<sup>67</sup> Ibid, pp 1320

<sup>68</sup> Perri, B et al (1997) pp 9-10

<sup>69</sup> Kavanagh, D and Richards, D (2001) pp 2

<sup>70</sup> Hotaran. I (2009) *Silo Effect vs. Supply Chain Effect*. Review of International Comparative management. Pp 216

<sup>71</sup> <sup>71</sup> Kavanagh, D and Richards, D (2001) pp3

<sup>72</sup> <sup>72</sup> Ibid, pp 3

and goals and little thought is given to the main purpose that a service needs to be delivered to a client as fast and as efficient as it can be.<sup>73</sup>

In the case of departmentalism, bureaucrats are seen as rational actors that seek only the department's interests and everything else that fall outside the department is often undermined or ignored. As Perri<sup>74</sup> highlights, departmentalism is reinforced by their clearly defined objectives through concentrated power and resources which make them easy targets for interest groups, media and other networks.<sup>75</sup> The absence of horizontal links that Perri so strongly points out is, in part, blamed for the failure to resolve any sort of cross-cutting issues that take place between departments.<sup>76</sup> To overcome these cross-cutting issues, departments are required to work in an innovative, coordinated manner whereby they share all knowledge, information and expertise.

However, it has been seen that departments, who fall into this trap of departmentalism will not realise that they have created a working environment where professional tensions are evident. These departments often fail to share knowledge because they fear that they may lose position, responsibility or their own independence and interests.<sup>77</sup> This organisational culture is ingrained in bureaucrats who believe that certain policies, external to their own immediate interests, could potentially get in the way of them fulfilling their departmental goals. This perspective is the central reason for many inadequate policies and failed service delivery.

Wilson<sup>78</sup> highlights that departments are unwilling to share knowledge, responsibility and tasks because “If getting promotion, or holding your job, or finding a new one is based on the knowledge you possess—what incentive is there to reveal that knowledge and share

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<sup>73</sup> Hotaran, I (2009) pp 217

<sup>74</sup> Perri et al (1997) pp 10

<sup>75</sup> Keast, R and Brown, K (2002) *The Government Service Delivery Program: A Case Study of the Push and Pull of Central Government Coordination*. Public Management Review. Vol 4(3). pp 14

<sup>76</sup> Bundred, S (2010) *Solutions to silos: Joining up Knowledge in “Public Money & Management”*. Vol 26. No. 2. Pp 125-130. (125).

<sup>77</sup> Ibid, pp 125

<sup>78</sup> Wilson, T. D. (2002) *The nonsense of ‘knowledge management*. Information Research. Vol 8 (1). Pp 40

it?”<sup>79</sup>. By not sharing information and knowledge to contribute to the policy decision-making process, departments do not efficiently and effectively operate.

Foucault said that “the production of knowledge and the exercise of administrative power intertwine, and each...enhances the other”.<sup>80</sup>

Resisting sharing knowledge and information, through fiercely independent professional silos, represents a serious impediment to good knowledge management and, in turn, causes departments to work against each other.<sup>81</sup>

To make matters worse, many departments are seen to break down their large organisation into smaller self-contained business units that focus on specific interests.<sup>82</sup> This causes even greater barriers to knowledge transfer. Policy makers are seen to move further away from the direct provision of services that are needed and lose more knowledge, information and understanding of how these services operate and what the needs of the services users are.<sup>83</sup> The hierarchy system that develops within the department will cause more problems to knowledge flow internally and external to the department.

The larger the department the greater the number of specialisation units which, therefore, leads to the greater need for coordination.<sup>84</sup> Many staff will occupy these different units and the need for interface is ultimately important. Many meetings will need to take place to ensure coordination, but it is evident that, in most cases, these meetings are not used correctly, but rather mutate from coordination meetings to fractures resulting from groups within the departmental units promoting their own interests at the expense of others or the departments.<sup>85</sup> These units tend to be highly individualistic with very competitive cultures and antagonistic relationships. The profession in the unit is mainly focused on identity and

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<sup>79</sup> Wilson, T (2002) pp 45-46

<sup>80</sup> Foucault, M (1980) *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*. Vintage; First American Edition, Stained edition. Pp 121

<sup>81</sup> Perri, B et al (1997) pp 10

<sup>82</sup> Bundred, S (2006) pp 127

<sup>83</sup> Ibid, pp 126

<sup>84</sup> Schutz, P and Bloch, B (2006) *The “silo-virus”: diagnosing and curing departmental groupthink*. Team Performance management. Vol 12. No. 1/2. pp 32

<sup>85</sup> Ibid, pp 32

loyalty rather than on the employer or the public sector.<sup>86</sup> This results because many of the staff within these units regards themselves as highly skilled professionals and that no one else can do their job better. They often do not have any respect for or trust in professionals outside their department. This is because they believe that these external professionals do not look out for the best interests of the department but rather just their own personal self-interests.<sup>87</sup> Both external and internal department actors have their own agendas to complete tasks or maintain a goal at the expense of others.

The delivery of services or policy decision-making becomes a slow and tedious process as the departments are independent, closed off and do not have the appropriate resources to develop adequate decisions, resources and services that are needed.<sup>88</sup>

Schutz and Bloch<sup>89</sup> also highlight that departments are unable to talk to each other which, more often than not, produces frictional stresses and strains than actual work. They stress that efficiency and effectiveness fall by the wayside when departments focus only inwardly and often issues, such as turf wars and departmental myopia become detrimental issues that undermine any form of efficiency that exists.<sup>90</sup> Once managers enter into these turf war debates they often push their own opinions onto others and disregard any advice given to them. This leads to departmental isolation. Schutz and Bloch describe this departmental isolation “resembling huge grain silos in lonely landscapes”.<sup>91</sup>

“They function like foreign bodies – impersonal and often oversized. Nothing penetrates to the outside world. There is no window into what goes on inside. The silos are filled from above”.<sup>92</sup>

Gerodimos<sup>93</sup> argues that no single institution has adequate power to realise a policy decision through their own self doing. He highlights that each department has their own resources and

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<sup>86</sup> Richards, S. (2003) *Leadership—An Exploration of Issues Relating to Leadership in the Public Domain* (Northern Ireland Review of Public Administration, Belfast).

<sup>87</sup> Bundred, S (2010) pp 128

<sup>88</sup> Currie, G. and Brown, A. D. (2003) *A narratological approach to understanding processes of organizing in a UK hospital*. Human Relations. Vol 56 ( 5). 572.

<sup>89</sup> Schutz, P and Bloch, B (2006). pp 33

<sup>90</sup> Ibid, pp 31

<sup>91</sup> Ibid, pp 32

<sup>92</sup> Ibid, pp 32

knowledge that are integral to be shared with other departments to achieve the maximum development of goals and strategic aim.<sup>94</sup> However, the achievement of a strategic aim fully depends on the successful matching of actors for different departments, their interests, goals, hierarchical structure and best use of coordination. Gerodimos<sup>95</sup> stresses that “This goes beyond the traditional ‘zero-sum’ notion of government where one actor’s profit is another one’s cost” and is not a reality in many department cases. Rather, departments exist in isolation and are inward focused; only sharing knowledge, interests and goals internally.

One can see that departmentalist tendencies of government departments have a direct and dire effect on coordinated, efficient and coherent policy decision-making. In the case of South Africa’s energy sector, one can clearly see signs of this departmentalist character seeping through and hampering the development of the sector, along with consistent and manageable policies. Before this chapter interrogates the character and nature of the South African energy sector, one must understand that there are ways in which departmentalism can be overcome if dealt with in a rational and comprehensible manner.

When the concerns and needs of public interest are not met, government service delivery has failed. The relationship between the regulator and the regulated also becomes more intense and the regulator is willing to fight for the interests of the utility in the decision-making process because of the benefits it will gain by doing so. The regulator becomes dependent on the regulated utility for information, shares, finances and political support. The regulated utility benefits great political influence and protection from competition through mutual favours. Overtime, departmentalism becomes one of the most salient features in politics and policy decision-making in that sector.

The National Planning Commission within South Africa’s Presidency has adapted a British response to departmentalism through Joined-up governance (JUG) as departmentalist tendencies and regulatory capture are becoming more evident in different sectors. JUG, however, has not had a significant role in turning around departmentalist tendencies in South African departments, and in particular, the energy sector. This next section will discuss JUG and how the NPC has tried to fulfil an agenda of JUG.

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<sup>93</sup> Gerodimos. R (2004) *The UK BSE Crisis As A Failure Of Government*”. Public Administration. Vol. 82 No. 4. Pp 911-929 (912)

<sup>94</sup> Ibid, pp 192

<sup>95</sup> Ibid, pp 192

## The Need For A Joined-Up Working Approach

Departmentalism is very difficult to counteract in the policy making realm. This is because it is strategic in nature and Russel and Jordan<sup>96</sup> emphasise that it is “dominated by political bargaining related to competing departmental interests”. However, one way governments have worked to solve this issue of departmentalism is through the use of a JUG approach. It must be understood that JUG in the policy making realm operates differently to JUG in the policy implementation realm. As this paper focuses on how departmentalism affects policy decision-making, it will not go into any detail on policy implementation. Also, this paper has found that in existing literature, there is a lack of clarity on how JUG is and should be pursued. Most of the literature read indicates that a centralised or diffused government increases the progress of JUG. Russel and Jordan highlight that a centralised approach limits the amount of time and influence a department has in policy decision-making on cross cutting issues and decision-making power is given to central actors. This approach is seen to minimise departmentalist tendencies, but does not allow for flexibility when it comes to sectoral constraints and needs. The central actors are also overburdened with administrative policy issues.<sup>97</sup>

On the other hand, a diffused government allows for departments to control and coordinate more of the policy decision-making process than the centralised actors. Centralised actors should only be involved when there are policy differences between departments and a decision needs to be made effectively and efficiently. Contrary to the centralised approach, central actor’s burdens are therefore limited and department expertise can fulfilled the policy decision-making needs.<sup>98</sup> A lack of steering from central actors can lead to departments following their own priorities and goals and a new form of departmentalism can emerge.

All democratic governments have attempted at one stage or another to coordinate governmental and organisation activity to ensure that common goods and services were delivered in the most effective and efficient manner.<sup>99</sup> Most democracies have had little

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<sup>96</sup> Russel. D and Jordan. A (2007) *Joining-Up or Departmentalism? Coordinating Policy for Sustainable Development in the United Kingdom*. CSERGE Working Paper EDM 07-01. Pp 2

<sup>97</sup> Ibid, pp 3

<sup>98</sup> Ibid, pp 3

<sup>99</sup> Davies, J.S (2008) *The limits of joined-up government: towards a political analysis*. Institute of Governance and Public Management

success in fulfilling a full-proof JUG approach. The JUG approach was first used in the Blair administration to enhance departmental interdependence in securing sustainable development and to address cross-cutting issues.<sup>100</sup> This approach was later adapted by South Africa's National Planning Commission (NPC).

Pollit describes JUG as;

“A phrase which denotes the aspiration to achieve horizontally and vertically co-ordinated thinking and action. Through this co-ordination it is hoped that a number of benefits can be achieved. First, situations in which different policies undermine each other can be eliminated. Second, better use can be made of scarce resources. Third, synergies may be created through the bringing together of different key stakeholders in a particular policy field or network. Fourth, it becomes possible to offer citizens seamless rather than fragmented access to a set of related services”.<sup>101</sup>

Departments are urged to work in a more network approach and joined-up working. As Rhodes note, “networks put fragmented bits back together”.<sup>102</sup> This highlights that no one person or department should have primacy over decision-making and that leadership and responsibility, directed from a central agency – this being the NPC in the case of South Africa - can be devolved.<sup>103</sup>

The Hong Kong Efficiency Unit highlights JUG as;

“A policy strategy which seeks to coordinate the development and implementation of policies across government departments and agencies, especially with the aim of addressing complex problems”.<sup>104</sup>

In essence, JUG is a policy strategy that aspires to achieve both horizontally and vertically coordinated thinking and action unlike that of departmentalism. Its main focus involves government and its departments paying more attention to coordination in an attempt to

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<sup>101</sup> Pollitt, C (2003) *Joined-up Government: A Survey*. Political Studies Review

<sup>102</sup> Rhodes, R. A. W. (1996). *The New Governance: Governing without Government*. Political Studies Vol 40 (4) pp 95

<sup>103</sup> Chisholm, R. (1996) *On the Meaning of Networks*. Group and Organizational Management. Vol 21 (2). pp 216.

<sup>104</sup> Efficiency Unit (April 2009)

increase and improve government services.<sup>105</sup> Society, interest groups and volunteer associations are also important stakeholders in the coordination process with departments. Christensen<sup>106</sup> states that;

“JUG is an overall concept for the public sector but it is most relevant to service-providing functions and is based on the idea that public problems often cut across sectors”.

It is no longer the sole responsibility of one department to formulate and implement policy, but rather a joined collaboration of leaders, resources and interests.<sup>107</sup> Keast and Brown highlight that while governments may take up JUG working techniques, it does not mean that departments lose their own values and core objectives.<sup>108</sup> This approach can both positively and negatively influence the stability of the network of how information, knowledge and power are shared.<sup>109</sup>

The motives for the move away from departmentalism and the implementation of a JUG strategy in governments is ultimately to eliminate policies which undermine each other, exchange scarce resources, improve the flow of good ideas and increase cooperation. This allows citizens to buy into a more seamless rather than fragmented service that provides for their best interests and needs.<sup>110</sup>

So therefore, how is JUG achieved? The JUG strategy underlines the fact that there needs to be a strong central government that coordinates all departments and their functions, by allowing cooperation between departments through sharing of knowledge, skills, information and resources. All departments and organisations need to learn how to pursue shared goals so that partnerships can be formed, increasing efficiency and effectiveness.<sup>111</sup> Departments need to work towards shared goals that are clearly defined, realistic and mutually agreed upon.<sup>112</sup>

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<sup>105</sup> Christensen, T (2006) *Smart Policy*, in Moran. M. et al (Eds.) “the Oxford Handbook of Public Policy”. Oxford: Oxford University Press.

<sup>106</sup> Ibid, pp 23

<sup>107</sup> Keast, R and Brown, K (2002) pp 444

<sup>108</sup> Ibid, pp 441

<sup>109</sup> Ibid, pp 444

<sup>110</sup> Ibid, pp 444

<sup>111</sup> Davies, J.S (2008)

<sup>112</sup> Christensen, T (2006)

This shared attitude does not eradicate the importance of organisational or departmental boundaries but allows for the flow of knowledge and resources across these boundaries.<sup>113</sup>

They also need to have a sense of shared responsibility to their own department and to other departments. This can be achieved through agreed structures, processes and roles. There needs to be a measuring and evaluating tool that diagnoses progress towards the set goals. To achieve these goals efficiently and effectively departments need to share resources and time through better instruments of communication and contact, political and administrative taskforces, public committees, working groups and intra/inter-administrative programmes.<sup>114</sup>

Central government and its departments benefit from JUG because departments are able to take a wider view of processes, policies and needs than the one departmental focus. With a greater focus, departments are able to promote innovation through their contribution to cross-cutting initiatives and improve cost effectiveness by eradicating duplication. This directly improves delivery and creates greater access to government services for citizens.

As mentioned above, JUG has both vertical and horizontal dimensions. This can be broken up onto two main points. First, the horizontal dimension of JUG relates to the efficiency and the effectiveness aspects of smart policy decision-making. Efficiency will increase if sectors, policies, programmes and projects are coordinated better. Also, effectiveness will increase by better coordination of policy and programme goals, of the interests of different governmental stakeholders and of the activities of service providers.<sup>115</sup>

Secondly, the vertical dimension of JUG relates to making political signals to subordinate institutions or levels less ambiguous. This allows for departments to pursue central policy aims more effectively.

There are, however, several issues related to this JUG strategy which, in some cases, has led departments to become even more isolated and silo-like than before. Chapter 4 will highlight the vertical and horizontal attempts of JUG through the policy on Regional Energy Distributors (REDS), an infamous case of JUG failure and policy reversal.

Bogdanor comments that JUG “seems to come into conflict with pluralism, since it presupposes an agreed and unified approach between various partners who might be

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<sup>113</sup> Pollitt, C (2003) pp 39

<sup>114</sup> Keast, R and Brown, K (2002) pp 444

<sup>115</sup> Christensen, T (2006)

ideologically incompatible”.<sup>116</sup> It is evident that there are less clear lines of accountability as there is more than one person to report to or involved in the decision-making process. There is also great difficulty in measuring effectiveness and impact as too much time and organisational and transactional costs are spent on establishing and sustaining cross-cutting arrangements.<sup>117</sup>

Often direction and objectives of JUG are set by members and this may cause departments to move away from original intentions and may not achieve original purposes if there is no strong agency at the top to guide JUG working.<sup>118</sup> This may lead to the creation of a new set of organisational units – entrenching departmentalist characteristics. Departments need to recognise the value of relationship building between their spheres of interest to reduce the constraints of departmentalism. Politics is central in causing these problems and as 6 argues;

“JUG is the eternal and ubiquitous problem in public administration”.<sup>119</sup>

The following chapter examines the many actors who are influenced or being influenced by the energy debate. This chapter looks at the National Planning Commission role in the energy sector while attempting to create a joined-up working approach to coordination and integration between departments.<sup>120</sup> This attempt is aided by the Inter-Ministerial Committee on energy. The chapter highlights the glaring characteristics of departmentalism within the Department of Energy and Eskom and what effects this has on policy decision-making and implementation.<sup>121</sup>

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<sup>116</sup> Bogdanor, V (2005) *Joined-Up Government*. Oxford University Press

<sup>117</sup> Rhodes, R. A. W. (1996) *The New Governance: Governing without Government*. Political Studies Vol 40 (4) pp 655

<sup>118</sup> Ibid, pp 657

<sup>119</sup> 6, P (2004) *Joined-Up Government in the Western World in Comparative Perspective: A Preliminary Literature Review and Exploration*. Journal of Public Administration Research and Theory. Vol. 14(1). pp 131

<sup>120</sup> Perri, B et al (1999)

<sup>121</sup> South African Government Information (2013) *Energy*. Available [online]; <http://www.info.gov.za/aboutsa/energy.htm> (12/05/2013).

## CHAPTER 3

### A NETWORK OF ENERGY STAKEHOLDERS

#### The Structure of South Africa's Energy Sector

Since Apartheid there has been a great need to redress the past economic and social power imbalances and reconstruct a functional coordination mechanism between departments of government that would allow for better service delivery, environmental awareness, and developmental sustainability as well as social and economic needs. Greater inclusion, transparency and accountability are needed to address the equality expressed in the constitution.<sup>122</sup>

There is a severe need for inter-departmental coordination in formulating, administering and implementing energy policies in South Africa. When departments do not work efficiently and effectively together certain departments dictate policy directions that are undermining development of coherent energy policies. The energy sector has no excuse for its departmentalist characteristics. Different stakeholders in the energy sector play different roles in enhancing or lessening the construction of departmentalism and its disadvantageous effects on policy decision-making.

Departmentalism, as discussed in chapter 2, is created when departments or organisations work towards self-focused and desired outcome without consulting with other departments or organisations. Within the South African energy sector, it is evident that, departments and organisations such as the DoE and Eskom have not worked in a joined-up manner as interests are swayed by stronger, more influential departments or organisations and politics when a certain goal is desired.

Understanding who influences the energy policy decision-making in South Africa and then analysing the policies that are produced, helps to determine the hierarchical order and relationship between energy stakeholders and how departmentalism comes about. To achieve this determination, this chapter will look at 6 main stakeholder groups who have influence in the energy sector of South Africa. Not all stakeholders involved in the energy sector are included, only a select few. This chapter only highlights a brief description of the desired role

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<sup>122</sup> Malzbender, D (2005) *Domestic Electricity Provision in the Democratic of South Africa*. University of Pretoria. pp 3

of each stakeholder, and then details of how these stakeholders influence the energy policy making process and departmentalist tendencies will be discussed in the chapter that follows.

The intensive coal producers have huge influence over Eskom which, in turn, has been seen to capture most policy decision-making processes of the DoE. The DoE and Eskom have the tendency to work together at times but, more often than not, work against each other's policy mandates to protect their own financial, political and social interests. The National Planning Commission and the Inter-Ministerial Committee try to influence their policy decision-making processes by creating barriers against departmentalist tendencies that enhance joined-up working between the DoE and Eskom. Currently the effort for joined-up working is continually overshadowed by departmentalist tendencies associated with the DoE and Eskom and their self-interests. This is because of the negative effects of the centralist approach to JUG as discussed in chapter 2. A thorough discussion on the DoE and Eskom's departmentalism and their relationship with other stakeholders will take place in chapter 4.

#### Energy Sector Stakeholders

##### National Planning Commission

The NPC is an initiative of government which is chaired by the Minister in The Presidency for National Planning. It was appointed by President Jacob Zuma in May 2010 to draft a vision and national development plan. This Commission is responsible for the development of a long-term vision and strategy for South Africa while dealing with cross-cutting issues that impact the country and its governance<sup>123</sup>. 26 people act as the advisory body for development.

President Zuma stated;

“The mandate of the commission is to take a broad, cross-cutting, independent and critical view of South Africa, to help define the South Africa we seek to achieve in 20 years time and to map out a path to achieve those objectives. The Commission is expected to put forward solid research, sound evidence and clear recommendations for government”<sup>124</sup>.

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<sup>123</sup> NPC Online. State Owned enterprises: challenge and opportunity. Available [online]: [http://www.npconline.co.za/\(10/06/2013\)](http://www.npconline.co.za/(10/06/2013))

<sup>124</sup> Diagnostic. NPC. Available [online]; <http://www.info.gov.za/view/DownloadFileAction?id=147192> pp 1

The NPC is able to achieve this mandate through the National Development Plan – “Our future-make it work”, a document that acknowledges the need for future government planning. This document focuses on the need for the eradication of poverty, the creation of full employment, the reduction of inequality, the path towards a united, non-racial, non-sexist, democratic society that works jointly.<sup>125</sup>

The NPC is a hub of decision-making around key national policies and has undertaken the task of coordinating joined-up working within and between departments through formal rules of collaboration as they are seen to have more power in terms of resources and political influence<sup>126</sup>.

Keast and Brown<sup>127</sup> highlight that agencies like that of the NPC should have control over funding policies and management of people and their departments through direct and indirect authority. Departments, in turn, need to respect this central authority to maintain efficiency and effectiveness of policy decision-making. The NPC objectives of joined-up working are important because they can help resolve traditional departmentalism that is evident throughout departments in the South African government.

The NPC is driven to improve the public service through several pressures placed on them such as the government’s demand for continuous improvement, higher service user expectations, media reporting, and pressures from regulators that are independent judges of performance outcomes.<sup>128</sup> The NPC was designed to help facilitate the “embodiment of government’s efforts to improve long term planning and rally the nation around a common set of objectives”<sup>129</sup>.

The NPC states that its main priority foci are on “development, strengthening institutions, nation-building and the making of a developmental state”<sup>130</sup>. However it highlights that effort to drive these common set of objectives can be hampered due to lack of coherent long term

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<sup>125</sup> NPC Online (10/06/2013)

<sup>126</sup> Keast, R (2004) *Network structures: working differently and changing expectations*. Public Administration Review. Vol 64 (3).pp 365

<sup>127</sup> Keast, R and Brown, K (2002) Pp 449

<sup>128</sup> Bundred, S (2006) Pp 128

<sup>129</sup> The Presidency. Green Paper on National Planning Commission. South Africa. 12 August 2009. Available [online]: [http://www.thepresidency.gov.za/docs/pcsa/planning/gp\\_nsp.pdf](http://www.thepresidency.gov.za/docs/pcsa/planning/gp_nsp.pdf). (15/05/2013). pp 2

<sup>130</sup> Ibid, pp 2

planning of departments which is primarily due to weakness in the coordination of government.<sup>131</sup>

Government needs to promote a coherent, “joined-up working” within and across departments and spheres and the NPC highlight that this can only be achieved “if there is a common understanding in enough detail of the long-term objectives and direction of our society”<sup>132</sup>.

Within this paper, it is seen that the NPC highlighted the fact that energy production and consumption needs to be one of the main subjects of focus around government cross-cutting issues. Government departments need to work together to promote economic, social and sustainable development.<sup>133</sup>

#### The Inter-Ministerial Committee

At a national level, Ministerial Clusters were designed in 2009, in which the Department of Energy was placed in the Infrastructure Development Cluster. This cluster is chaired by the Minister of Transport, Mr. Benedict Martins and Deputy Chair Minister of Public Enterprise Mr. Malusi Gigaba. These departments are accompanied by other departments including, Department of Communications, Department of Cooperative Governance and Traditional Affairs, Department of Economic Development, Department of Finance, Department of Human Settlement, Department of Public Works, The National Planning Commission, Department of Transport and Department of Water and Environmental Affairs.<sup>134</sup>

The Infrastructure Development Cluster (IDC) was developed to ensure that implementation of key infrastructure projects (energy, transport, information and communication technologies, public works and water) is achieved through joined-up working between these above mentioned departments.<sup>135</sup> This cluster, through integrated governance programmes,

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<sup>131</sup> Ibid, pp 2

<sup>132</sup> Ibid, pp 3

<sup>133</sup> Ibid, pp 5

<sup>134</sup> Parliamentary Monitoring Group. (March 1, 2010) Statement of the Infrastructure development Cluster (Poa) delivered by Minister of Transport S. Ndebele. Available [online]: [\(http://www.pmg.org.za/briefing/20100301-infrastructure-development-cluster-media-briefing\)](http://www.pmg.org.za/briefing/20100301-infrastructure-development-cluster-media-briefing). (09/03/2013)

<sup>135</sup> South African Government Information (2013) *Guide to Government: What are the government clusters and which are they?* Available [online]; <http://www.info.gov.za/faq/guide.htm> (04/05/2013)

aims to help drive the country onto a new developmental growth path in which decision-making, service delivery and government planning are key features.<sup>136</sup> For an integrated approach to governance to fully function, the inter-ministerial clusters help to ensure proper coordination of all programmes at national, provincial and local levels.

There are a total of 43 major infrastructure projects that are run by this cluster – of which R300 billion is in the energy sector.<sup>137</sup>

It is evident from research undertaken that the IDC supports several energy projects that have been implemented by the DoE. The main project includes the Integrated Resource Plan 2010-30 which commenced several policies and strategies that address the need for energy provision and unsustainable dependence on coal.<sup>138</sup> These policies, buttressed by the IDC, include the Renewable Energy Independent Power Producers Bidding Programme, electricity tariff increases, the Integrated National Electrification Programme, the Electricity Regulation Amendment Bill, the Grand INGA project and the up-scaling of nuclear capacity.<sup>139</sup> Attempts to manage these projects and policies, through joined-up working, are evident.

The IDC coordinates joined-up working within and between departments in its cluster. One important joined-up working strategy is between the DPE and Eskom. Eskom is a parastatal enterprise which falls within the DPE, a department which is responsible for the needs and funding options of Eskom. Together these actors focused on energy security and supply which highlights the close joined-up working relationship between them.<sup>140</sup> The Minister of DPE has always been the Minister of Eskom of which the Minister of DoE plays an umbrella role on energy policy decision-making.<sup>141</sup>

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<sup>136</sup> Parliamentary Monitoring Group. Statement of the Infrastructure development Cluster (Poa) delivered by Minister of Transport S. Ndebele. March 1, 2010. Available [online]: [http://www.pmg.org.za/briefing/20100301-infrastructure-development-cluster-media-briefing.\(09/03/2013\)](http://www.pmg.org.za/briefing/20100301-infrastructure-development-cluster-media-briefing.(09/03/2013))

<sup>137</sup> Minister of Transport S’bu Ndebele: The Infrastructure Development Cluster media briefing, Cape Town. Available [online]: <http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=25423&tid=58231> (16/05/2013)

<sup>138</sup> Ibid.

<sup>139</sup> Ibid

<sup>140</sup> Parliamentary Monitoring Group (March 1, 2010)

<sup>141</sup> Ibid.

## NERSA

The National Energy Regulator of South Africa was established in terms of the National Energy Regulator Act, 2004 (Act No. 40 2004). It presides over the electricity supply Industry and acts as an economic regulator. It was given a mandate to ensure functioning of the National Energy Regulatory (in the Electricity Act of 1987 -as amended), the Petroleum Pipelines Regulatory Authority (in the Petroleum Pipelines Act of 2003) and the Gas Regulator (in the Gas Act of 2001). NERSA is also mandated to achieve goals and objectives set out in policy by the DoE and is commissioned to “take necessary regulatory actions in anticipation of and in response to the changing circumstances in the energy industry”.<sup>142</sup> It is also mandated to ensure competition, boost economic growth and reduce monopolistic tendencies of the energy sector.<sup>143</sup> One regulator for these three industries is important to cut costs, duplication and ensure efficiency, accountability and joined-up coordinated working. It also limited Eskom’s capacity to dominant and capture the regulation of the electricity industry which it has done so for many years. NERSA’s involvement strives to provide a level playing field for all private and public stakeholders and limit abuse.

NERSA’s vision is “to be a world-class leader in energy regulation” and its mission is “to regulate the energy industry in accordance with government laws, policies, standards and international best practices in support of sustainable development”.<sup>144</sup>

NERSA’s role is to:

- Settling and approving tariffs and charges;
- Mediating disputes between the public and private stakeholders;
- Issuing licences;
- Gathering information on all utilities, and;
- Promoting the optimal use of resources.<sup>145</sup>

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<sup>142</sup> NERSA (2013), *Profile*. Available [online];  
<http://www.nersa.org.za/ContentPage.aspx?PageId=231&PageName=Profile> (18/06/2013)

<sup>143</sup> Department of Energy (2013a) *Basic Electricity: NERSA*. Available [online];  
[http://www.energy.gov.za/files/esources/electricity/electricity\\_nersa.html](http://www.energy.gov.za/files/esources/electricity/electricity_nersa.html) (18/06/2013)

<sup>144</sup> NERSA (2013)

<sup>145</sup> Department of Energy (2013)

One of the most controversial roles of NERSA is its advocacy role. NERSA is to regulate the rates and conditions of service which Eskom (and Sasol) set. Historically, Eskom was able to negotiate with the DME about pricing of electricity. However, now, Eskom cannot increase its rates without NERSA approving that the increase or change is merited or justified. NERSA's advocacy role is to represent the side of consumers such as intensive energy users and citizens as an independent body. NERSA thoroughly investigates all options within Eskom's application and concludes on the best option after negotiated agreements with Eskom.

NERSA also has other oversight powers whereby it has attempted to encourage deregulation and privatization through more private sector investment and involvement through Independent Power Producers as well as developing off-grid technologies that will help meet rural needs envisaged in the White Paper on Energy (1998) and the Integrated Resource Plan 2010-2030 which will be discussed below.<sup>146</sup>

For many years, the DoE was the non-independent regulator of Eskom until NERSA was created, greater liberalization occurred and NERSA, an independent arms length regulator has started to make progress in asking more questions about Eskom's role in policy decision-making regarding information in setting tariffs.

#### The Department of Energy

Just before the NPC came into effect, President Jacob Zuma and his cabinet reorganised and renamed several national departments. This reorganising took place in 2009 whereby the Department of Minerals and Energy (DME) split into two departments creating a mining and minerals portfolio and an energy portfolio.<sup>147</sup> The White Paper on Energy 1998 which was formulated by the DME was only partially implemented and policy indecision was evident through incoherent and uncoordinated action taken by the department. By splitting the department into two departments, the DoE was given its own mandate to focus only on energy issues and to reassess the poignant energy crisis which the country faced. It was able to implement the Energy Act which focused on energy planning, generation and consumption

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<sup>146</sup> EDF (19 November, 2010) Comments on IRP2010. EDF South Africa (Pty) Ltd. Johannesburg. pp 10. Available [online]: [http://www.doe-irp.co.za/irpJHB/EDF\\_SA.pdf](http://www.doe-irp.co.za/irpJHB/EDF_SA.pdf). (18/05/2013).

<sup>147</sup> Department of Energy (2013) *Who we are*. Available [online]; [http://www.energy.gov.za/files/au\\_frame.html](http://www.energy.gov.za/files/au_frame.html) (14/05/2013)

issues and renewable energy. One thing that was not taken into consideration, however, was that these narrow goals do not take into consideration the wider perspective of energy use in mining. These goals are proving to isolate the department and cause it to function in a silo.

The Department of Energy (DoE)<sup>148</sup> has two visions that it strive to fulfil. The first, Vision 2014 highlights that the DoE wants “A transformed and sustainable energy sector with universal access to modern energy carriers for all by 2014” and the second, Vision 2025’s aim is “Improving our energy mix by having 30% of clean energy by 2025”<sup>149</sup>.

The DoE’s mission statement is “to regulate and transform the sector for the provision of secure, sustainable and affordable energy”. The DoE has 7 engrained key values which it attempts to meet. These values include: Batho Pele, excellence, professionalism, integrity, loyalty and Ubuntu, through their legislative mandate that aims “to ensure secure and sustainable provision of energy for socio-economic development”<sup>150</sup>.

Due to the restructuring of departments in 2009, it is evident that the President and its cabinet wanted more coordinated, coherent and cooperative policy decision-making between different departments and stakeholders. For the DoE to fulfil this priority it can be seen that several parastatals such as that of Eskom, Electricity Distribution Industry Holdings, National Nuclear Regulator, National Energy Regulator, Central Energy Fund Group, and the Nuclear Energy Corporation, and their subsidiaries (Highlighted in Schedule 2 or 3 of the Public Finance Management Act) are all positioned under the DoE in an effort to promote and support the DoE’s mandated goals.<sup>151</sup> Each state owned entity is supposed to report to the DoE’s Minister, to enhance the coordination of management of service delivery, economic development, energy investments. For joined-up working to fully result, the DoE has been placed on all state-owned entity boards except for NERSA and Petroleum Oil and Gas Corporation which are kept independent as an oversight power.<sup>152</sup> These sector organisations play a big role in monitoring the joined-up working of the DoE and aim to regulate the energy industry policy throughout South Africa.<sup>153</sup> The DoE has two branches which it tried

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<sup>148</sup> Ibid.

<sup>149</sup> Department of Energy (2011). Annual Report 2010/2011

<sup>150</sup> Ibid.

<sup>151</sup> Ibid.

<sup>152</sup> Ibid.

<sup>153</sup> EDF 19 November, 2010) pp 12

to operate which includes nuclear and hydrocarbons and the energy planning and clean energy branches.<sup>154</sup>

Prior to the political transition in 1994, energy policy was made in four different subsections; electricity, coal, liquid fuel and nuclear.<sup>155</sup> Marquard highlights that all different subsections made their own policies in isolation for the others.<sup>156</sup> Energy supply communities dominated policy decision-making and implementation processes in these subsections, creating silos. Post 1994, the domination of these communities was reduced and several policies were formulated and implemented by the DoE to ensure security of supply. These include; the White Paper on Energy for the Republic of South Africa (1998), the White Paper on the Renewable Energy Policy for the Republic of South Africa (2003), the Energy Act (2008) and the Integrated Resource Plan (2010-2030).

The White Paper on Energy for the Republic of South Africa (1998) was formulated in a response to the countries changing political domestic and international space. This change was due to the end of apartheid and the need for a renewed energy policy that would focus on the new demand and supply needs of the country.<sup>157</sup> The policy objectives were substantially wider than previous objectives which now included environmental and societal concerns. Poverty issues were rife due to the apartheid exclusion policies and the Department of Minerals and Energy (DME) needed a policy that would facilitate optimal energy consumption and production – delivered to all South Africans. This policy was driven by the Department of Public Enterprise which wanted to enhance the capacities of Eskom. By working jointly with DoE, Eskom would potentially become more transparent and cooperative. Government supported this joined-up working attempt. However, Eskom only supported it, provided its monopoly over the electricity industry was not damaged.<sup>158</sup>

5 key objectives were laid out in the White Paper on Energy (1998)<sup>159</sup> which highlights areas of focus that were integral for development and social redress. It is evident however that

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<sup>154</sup> Tyler, E (2009) pp 7

<sup>155</sup> Ibid, pp 8

<sup>156</sup> Marquard, A (2006) pp 13

<sup>157</sup> Department of Minerals and Energy (1998) *White Paper on the Energy Policy of the Republic of South Africa*. pp 17 Available [online]: [http://www.energy.gov.za/files\\_wp.pdf](http://www.energy.gov.za/files_wp.pdf). (15/05/2013).

<sup>158</sup> Eberhard, A (2007) pp 247

<sup>159</sup> Department of Minerals and Energy (1988)

many of these objectives have flaws which have not been addressed by the DoE or wider government even though it was specifically stated that the government will play an integral role in energy resource development and management.<sup>160</sup>

The White Paper on energy (1998) objectives include: 1) increasing access to affordable energy services, 2) improve energy governance, 3) stimulate economic development, 4) manage energy-related environmental and health impacts and 5) secure supply through diversity.<sup>161</sup>

The White Paper on Energy (1998) prioritised the following;

- 1) Developing a policy for electrification of households, including planning and financing, improving energy delivery of households, including electrification; standardise the approach to both in and off grid electrification.
- 2) Improving government's capacity to govern the energy sector, improving the policy formulation process, promulgate a new regulatory bill to consolidate the electricity regulatory regime.
- 3) Appoint an authority to oversee the restructuring of the electricity distribution industry.
- 4) Monitor the effects of electrification on the number and severity of fires caused by candles and paraffin
- 5) Develop the Southern African Power Pool to the mutual benefit of all its members.<sup>162</sup>

It is evident that these objectives and priorities can only be achieved if the DoE is willing to cooperate and work with other departments to achieve the national objectives. The failure of the White Paper objectives and priorities is further examined in chapter 4.

#### Intensive Coal Suppliers

5 companies account for about 80% of coal production in South Africa – Anglo-American, Exxaro, Sasol, BHP Billiton and Xstrata.<sup>163</sup> Two thirds of domestic coal consumption of electricity generation by Eskom. Coal-to-liquid-fuel (CTL) plants, operated by Sasol account

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<sup>160</sup> Bond, P (2000) *Elite Transition: from apartheid to neoliberal South Africa*. Pluto Press.

pp 51

<sup>161</sup> Department of Minerals and Energy (1998)

<sup>162</sup> Ibid.

<sup>163</sup> Department of Mineral Resources (2009) Unpublished Coal Statistics. Pretoria.

for another fifth of coal consumption. 2% small merchants who sell to residential users and small businesses, metallurgical industries use 3% and cement, chemical and other industries consume the remaining 5%.<sup>164</sup>

It is evident that all coal mining in South Africa is undertaken by private companies. Richard Bay, the main coal port in South Africa is also controlled by private shareholders. Transportation of coal via rail (Transnet) is the only state-owned infrastructure in the coal production industry. On the other hand, the largest local coal user, Eskom is state-owned. Sasol is privatised and owns its own coal mines while Eskom relies on long-term contracts with the five major coal producers.<sup>165</sup>

Anglo-American (AA) has been South Africa's largest company for many years and has its origins in gold mining. Today it is one of the country's top five major coal producers. AA operates eight mines in South Africa and more than 70% of the coal is mined for export.<sup>166</sup> These mines include Goedehoop, Greenside, Kleinhopje, Landau, Kreil, New Denmark, Mafube, New Vaal, and Isibonelo. AA also operates several mines for Eskom and Sasol. In 2008, AA sold 36.2 Million tons (Mt) of coal to Eskom and 5Mt to Sasol.<sup>167</sup>

Exxaro owes its origins to the obvious empowerment politics of the new South Africa. After 1994, policies were initiated to promote black economic ownership. Eyesizwe and an Iscor division merged to produce Exxaro. Today, Exxaro and smaller black-owned coal companies now control more than 30% of South African coal production.<sup>168</sup> Exxaro operates 8 mines and a 50% share in a 9<sup>th</sup> mine – Mafube, with AA. Exxaro produces roughly 36.3 Mt of coal for Eskom and 3.3 Mt for export. It is evident that Exarro has signed a 40 year coal contract with Eskom. It is to supply 14.6 Mt per annum to Medupi once it is built and operational.<sup>169</sup>

Sasol Mining (Pty) Ltd is South Africa's third largest coal producer today. It approximately produces between 39 Mt and 46 Mt per annum. It sells a very small amount of coal to Eskom

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<sup>164</sup> Ibid.

<sup>165</sup> Eberhard, A (January 2011) pp 9

<sup>166</sup> Ibid, pp 9

<sup>167</sup> Ibid, pp 9

<sup>168</sup> Prevost, X (2009/10) *Unpublished SA coal statistics*. DME / XMP Consulting, Pretoria.

<sup>169</sup> Ibid.

and other industries but the majority of its coal production goes to its Sasol's coal-to-liquids and chemical processes.<sup>170</sup>

BHP Billiton is South Africa's fourth largest coal company and has its origins in Gencor. Gencor/Billiton's South African coal company was previously known as Ingwe.<sup>171</sup> BHP Billiton Energy Coal South Africa (BECSA) is BHP Billiton's largest coal operation in the world as it produces between 31.7 Mt and 45 Mt of coal per annum. In 2009 it sold one of its mines, Optimum and in 2012 sold Douglas mine. There are only 3 fixed and operational mines run by BECSA to date and one 50:50 joint partnership with Anglo Coal.<sup>172</sup> BECSA sells its coal to Eskom at a fixed price.

Xstrata Coal South Africa (XCSA) has its origins in Glencore and Duiker Mining and is South Africa's fifth largest coal producer. It produces between 15 Mt and 20 Mt of coal per annum. It operates 5 mines in Mpumalanga. The African Rainbow Minerals (ARM) owns 51% of XCSA's subsidiary, RM Coal. XCSA has a 20.9% interest in the Richards Bay Coal terminal Company Ltd too.<sup>173</sup>

#### Energy-Intensive Consumers

In 1999, the government set up a voluntary, non-profit association called the Energy Intensive Users Group (EIUG) which aimed to protect the interests of those consumers in the group from incoherent, uncoordinated and ineffective policy decisions. This group was also set up at the time of the restructuring in the electricity supply industry and regulatory changes and is in constant negotiation and engagement with NERSA, the DoE and Eskom. This group consists of 32 members who consume more than 44% of the electricity sold in South Africa on an annual basis<sup>174</sup>. Membership comprises of organisations in the mining, material manufacturing and materials beneficiation industries. Many of the coal suppliers to Eskom also EIUG members as they use the electricity supplied by Eskom to continue mining.

The EIUG has three main focus areas which include;

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<sup>170</sup> Eberhard, A (January 2011) pp 12

<sup>171</sup> Ibid, pp 12

<sup>172</sup> Ibid, pp 13

<sup>173</sup> Ibid, pp 14

<sup>174</sup> Energy Intensive Users Group (2013) Available [online]: <http://www.eiug.org.za/about/> (29/07/2013).

- 1) Assisting the members of the group to make favourable contractual agreements with Eskom for electricity supply.
- 2) Engage in lobbying to ensure that all members are not adversely affected by departmentalist policy decision-making and the energy crisis
- 3) Protecting the interests of all members – ensuring that Eskom’s supply is reliable, low in cost, capacity generation and that the energy sector is regulated by NERSA<sup>175</sup>

EIUG plays both an internal and external advocacy role. Its internal advocacy role aims to assist members with policy and technical issues. This role helps members participate in solution making when concerns are brought up which may impact on different organisations. The external advocacy role of EIUG operates when the EIUG assists stakeholders – organisations, government, Eskom, NERSA and other political bodies by offering technical support, expertise and clarifying issues revealed in the internal advocacy forum.<sup>176</sup>

## ESKOM

The South African energy industry is monopolised by state-owned national utility Eskom. As noted earlier, it receives all of its coal from the 5 main coal producers and uses 70% of the total amount of coal produced in its generation of over 96% of the country’s electricity.<sup>177</sup> Due to the fact that Eskom produces the most electricity in the country; it operates 13 coal-fired power stations and is in the process of building 2 more. 9 coal-fired power stations have long-term contracts (6 are cost-plus and 3 are fixed prices). Many of these stations have experienced problems due to the poor coal qualities that are brought in on conveyor belts and rail. There are also smaller coal contractors that supply Eskom with short/medium contracts of coal via road transport.<sup>178</sup> Eskom has signed contacts with many of these smaller coal contractors as they are black-owned firms and this supports the governments overall black-economic empowerment policy drive.<sup>179</sup> The dependence on this provision of coal however, means that Eskom is responsible for the maintenance of road infrastructure.

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<sup>175</sup> Ibid.

<sup>176</sup> Ibid.

<sup>177</sup> Prevost, X (2009/10).

<sup>178</sup> ESKOM (2010). Available [online];

[http://www.eskom.co.za/live/content.php?Item\\_ID=443](http://www.eskom.co.za/live/content.php?Item_ID=443)

<sup>179</sup> Eberhard, A (January 2011) pp 16

All of Eskom's energy pricing is determined and regulated by the National Energy Regulator of South Africa (NERSA).<sup>180</sup> The price of which Eskom has to pay for coal has also increased due to its supply through short term contractors. Eskom's coal costs are however still lower than many international prices. Department of Mineral Resources 2009 Annual report<sup>181</sup> highlighted that coal cost approximately R112/tonne and energy production costs averaged R23.1 billion.

Between 1999 and 2004, the South African government drafted policies that considered the unbundling of Eskom and the prohibition of building new coal-fired power stations. This was due to the fact that Eskom was trying to meet the country's electricity demands and denying any help from other power producers. Policies were discussed and private investment of generation was strongly encouraged. By encouraging investment, government thought that this may improve competitiveness and efficiencies of state-owned utilities as they were becoming lazy. There was much push back from unions, insufficient political buy-in and a very resistant and reluctant Eskom. Eskom's tactic of resistance against Independent Power Producers (IPPs) enabled it to continue expanding on its own policies and programmes.<sup>182</sup>

By 2006 black-outs started to occur as the DME was not controlling policy decisions made by Eskom on behalf of the energy sector. Demand outstripped supply because of the poor operating performance of Eskom and its lack of coal supply due to unseasoned rain, higher burn rates, bad financial planning and supply problems. Eskom had also failed to negotiate and lock into more long term coal contracts and many of the contracts that did exist did not express the need to meet higher burn rate requirements.<sup>183</sup> Olsen stressed in 2007 that;

“Eskom's Generation Primary Energy division as it is structured and managed cannot meet current needs much less future requirements...It is haemorrhaging staff and is left with those who have delivered it to its current condition”.<sup>184</sup>

The Eskom CEO of the time ignored warning such as this and by 2008 blackouts became a very common trend around the country. Many high energy users such as mines and industries were placed under load-shedding orders to ensure that the Eskom power system wouldn't

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<sup>180</sup> ESKOM (2010)

<sup>181</sup> Department of Mineral Resources (2009).

<sup>182</sup> Eberhard, A (January 2011) pp 16

<sup>183</sup> Ibid, pp 17

<sup>184</sup> Olsen, S (2007) Generation Primary Energy. Confidential Memo to Jacob Maroga, Eskom CEO. Wingfield Consultancy, New Hampshire, USA.

totally collapse due to poor leadership, investment, knowledge and direction. They were given electricity consumption quotas to which they had to strictly comply with until the end of 2008.

Today, even though the Eskom CEO was eventually fired and a new executive team has been established, coal supply and quality problems still exist. Eskom has had to rely on funding from the World Bank in 2010 to ensure that delivery of coal was made possible as most coal is now delivered via road.<sup>185</sup> It has started an investment programme which seeks to increase capacity by 12000MW by 2020 and most of Eskom's energy generation will still be coal-fired even though climate change issues are becoming more prevalent and more departments across government are implementing green policies.<sup>186</sup>

The new IPPs - Medupi and Kusile coal-fired power plants - are to be designed to ensure that they are carbon-capture ready if technologies need to be added to the plant to ensure greener production of energy. Due to the environmental issues surrounding the construction of these two new coal-fired power plants, there is no evidence of further developments in this area after both plants are built. However, nuclear power stations are on the DoE's policy agenda even though it is beyond Eskom's means to finance it at this time.

This year, 2013, new renewable energy projects have been introduced by the DoE as IPPs to contribute to the energy mix and new carbon mitigation action policies. Discussions around the development of nuclear power industry have also taken place without coordinated consultation and expert research into demand needs. These new initiatives are detrimental to the coal industry and may also influence Eskom's dominance over electricity generation.

#### Stakeholder Influence of Policy-Decision-Making

Strong coalitions have formed between all stakeholders in the energy sector which has had a direct impact on stakeholders, individually and collectively, influencing the energy policy decision-making process. The motivations of each stakeholder have been identified above and each motive is different in character depending on the needs and goals of the stakeholder.

The National Planning Commission and the inter-ministerial committee has pushed for joined-up working in the energy sector to ensure available, cheap and sustainable flow of

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<sup>185</sup> Eberhard, A (January 2011) pp 16

<sup>186</sup> Ibid, pp 19

energy that meets the government's climate change mitigation action agreements as well as meeting the demand for electricity of citizens and industry. Government believes that through joined-up working in the energy sector, development, investment and growth will occur. Their influence over policy decision-making is limited, however, because the DoE has run ahead with its own goals and commitments and Eskom has captured the policy making process.

The DoE is interested in maintaining control over its policy decision-making process to ensure that its goals in former policies are obtained. Many of these goals are influenced by external pressures such as political interference, private investment and international deliberations. As will be discussed in chapter 4, the attitude and attempt of the DoE to maintain control has directly led the department to act independently without coordinating, integrating and cooperating with other stakeholders.

Unfortunately, for many years, the DoE has plainly ignored the governmental shift in attention from the use of greenhouse gas-producing resources such as coal to renewable resources. This shift was an attempt to promote social, economic and sustainable development in South Africa. Instead the DoE has implemented its own policies that contradict and undermine the legitimacy of several other policies and the need for a balanced energy mix.<sup>187</sup> Due to the tentative relationship of the DoE with Eskom, it is not surprising to see this happening. Even though the DoE is the umbrella department over Eskom, more often than not, the DoE relies too heavily on Eskom who, as the dominant incumbent monopoly in the electricity sector, captures much of the policy making process to meet its own needs and goals. This regulatory capture has slightly shifted over the years as NERSA has become more involved in legitimately regulating the industry. This will be discussed in greater detail in chapter 4.

NERSA has been given a mandate to determine electricity tariffs, approve licenses, oversee import and export of electricity and set the conditions under which electricity can be sold.<sup>188</sup> However, it is evident that it promulgates policies of its own accord, without consultation. It does not have the right experts, resources and finances to enact these programmes and this has led to several failed attempts to operate energy programmes. It does, however, have

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<sup>187</sup> Earthlife Africa (2011)

<sup>188</sup> National Energy Regulator of South Africa (NERSA) (2011) *Consultation paper, review of renewable energy feed-in tariffs*.

legislative rights to regulate Eskom and its decisions. As discussed previously, NERSA is trying to alter the decision-making process away from the previously closed and private processes which took place between Eskom and the DoE. This helps to facilitate public consultation and debate. NERSA has been published more information on price regulations, profits and market shares, than the DoE or Eskom has ever released.<sup>189</sup>

Eskom's domination over policy decision-making helps it to maintain control over the electricity industry through managing electricity generation, its infrastructure and distribution. The industrial sector, both producers and consumers of coal, want to maintain influence over policy decisions that are made, to ensure that coal is bought at a reasonable market price and then sold to energy intensive industries at a cheaper price, to ensure competitiveness.

The main coal producers are integral to the operations of the energy sector. They all have a direct relationship with Eskom, which buys the coal at a fixed prices or cost-plus prices. As the South African government is becoming more aware of carbon emissions and climate change, these industries are threatened to lose sales as the amount of coal that is represented in the energy mix is becoming less. In the near future, the coal industry will be competing with the renewable energy resource industry and nuclear industry as they are considered cheaper and more viable for sustainability and development. The DoE and NERSA do not have control over what cost coal is sold at and, therefore, Eskom tries to facilitate negotiations with the coal industry, letting them influence policy, to ensure the Eskom can purchase affordable coal and then generate electricity that can be sold according to the NERSA standards. Also, to date, speculation exists that the DoE or NERSA has not seen most of the commercial contracts between Eskom and the coal producers as there is no evidence to the contrary.

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<sup>189</sup> DME (2008/9) pp 967

## CHAPTER 4

### POLICY DECISIONS AND DEPARTMENTALIST TENDANCIES

The analysis in this section draws on normative data from the energy sector of South Africa. This sector represents an example of a multi-actor policy issue with high potential for negative environmental impacts, thus necessitating more coordinated action. It is evident in the case of the energy sector of South Africa that much of the policy decision-making that is taking place has been captured by the dominant incumbent monopolist - Eskom. The one topic that has not held sufficient attention by policy analysts is the fact that organisations, industry or government departments can hold dominant and even exclusive power over the policy making process. Majone highlights that institutions that have the power to control the policy making agenda also have to power to manipulate that agenda too.<sup>190</sup> The regulatory capture of the energy sector, by Eskom, has resulted in many years of inconsistent and incoherent policy decisions. Due to recent restructuring of the energy sector and the creation of NER and then NERSA, the regulatory capture of Eskom has diminished in its capacity to control and dominate pricing, legislative frameworks and policy decision-making.

#### Power Struggle Over Policy

Energy is possibly one of the most environmentally unsustainable sectors in the country because of its reliance on non-renewable energy resources. It is also a classic example of a multi-stakeholder sector which is fraught with departmentalism and requires more joined-up working. The lead department in the energy sector is the DoE along with Eskom, the Department of Public Enterprise and the National Planning Commission. However, other government departments are also accountable for and influenced by energy policies namely, Department of Communications, Department of Economic Development, the National Treasury, the Department of Cooperative Governance and Traditional Affairs, Department of Human Settlements, Department of Water and Environmental Affairs, Department of Transport, the Department of Public Works and the Department of Trade and Industry.

The huge problem that South African departments and stakeholders face is that conflict results between departmental goals and the need to commit to joint, overriding goals set by the National Planning Commission which include; the eradication of poverty, more inclusion, an enhanced developmental state and job creation. There is a high degree of risk involved

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<sup>190</sup> Majone, G (2006) *Agenda Settling*. Oxford Handbook on Public Policy.

that departments are often not willing to undertake.<sup>191</sup> For joined-up working to be effective in South Africa, three main characteristics are needed to be achieved. These include a common goal, member interdependence and a unique structural arrangement where the government, public and private sectors are merged to work together.<sup>192</sup> Departments and stakeholders in South Africa however express little attitude of trust between each other and this results in the lack of change and effective and efficient service delivery outcomes.<sup>193</sup>

There is much evidence of departmentalist tendencies creeping into the policy decision-making of the DoE and Eskom causing a strain on decision-making and implementation processes. South Africa's energy policy decision-making is happening in a context whereby goals and interests of stakeholders are constantly changing. There are instances where policy decisions have been identified as incoherent, overlapping and pose a serious challenge to development of the sector. But one must not ignore the fact that these stakeholders do attempt JUG at certain times too, depending on interests and influences. The following section underlined several instances whereby departmentalism has had a limiting effect on policy decision-making in the energy sector and instances where the NPC's JUG attempts have succeeded. All stakeholders discussed in chapter 3 are highlighted at different stages, throughout this chapter, for their role in influencing policy decisions and how Eskom or the DoE have acted upon these influences – either in a JUG manner or reverted to departmentalism.

#### The Department of Energy Working Jointly

It is evident that the DoE does, at times, work jointly with other departments at both national and international levels. One of the main examples of the joined-up working is through the South African Black Economic Empowerment initiatives which ensure many of the previously disadvantaged population gain access to the energy sector.<sup>194</sup>

At an international/regional level, organizations and stakeholders work jointly with DoE to help promote global coordination and networks of which institutions such as the International

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<sup>191</sup> Keast, R (2004) *Network structures: working differently and changing expectations*. Public Administration Review. Vol 64 (3). Pp 365

<sup>192</sup> Ibid, pp 365

<sup>193</sup> Ibid, pp 365

<sup>194</sup> Department of Energy (4 October 2010) *Statement of the inter-ministerial Committee on Energy regarding the release of the country's electricity plan*. Available [online]: [http://www.energy.gov.za/files/media/pr/IMC\\_draft\\_press\\_release.pdf](http://www.energy.gov.za/files/media/pr/IMC_draft_press_release.pdf)

Energy Agency, the Southern African Alternative Energy Association and the World Energy Council are three of the biggest actors. Many neighbouring countries work with, and are dependent on the DoE and its parastatal, Eskom. This relationship between the department and other international departments strengthens regional potential for development.<sup>195</sup>

Many of the activities and policies implemented by the DoE have attracted interest groups such as the *Coalition against Nuclear Energy*, *Friends of the Earth and Earthlife Africa*, who encourage the DoE to be more accountable and transparent to other government departments, the citizens and international donors. This enables the DoE to work jointly with other stakeholders to ensure that socio-economic rights and environmental development are not undermined. With the help and collaboration of other stakeholders, and the DoE working in a joined-up manner, the energy sector of South Africa is able to develop and policy can be made in a more coherent manner.

The DoE relies heavily on IPPs who are seen to work more effectively and efficiently than Eskom. This is mainly because IPPs have greater incentive through competition as stakeholders with SAPPI and Sasol to produce and supply additional power and not cause conflict of the same nature caused by Eskom with the DoE.<sup>196</sup>

There is evidence of the DoE working with other departments and stakeholders such as the Department of Water Affairs (DWA). DoE and DWA work jointly on projects such that of the planning and implementation of the Mokolo-Crocodile Water Augmentation Project which looks at the provision of water to Eskom's Medupi Power station and the local town of Lephalale.<sup>197</sup> The DoE and DWA are also jointly working together on the Komati Water Augmentation Scheme in Mpumalanga where the Province is being developed to provide more and better water for energy.<sup>198</sup>

The DoE, DPW and DT are seen to work hand in hand in developing the operationalisation of Integrated Public Transport Networks through network Task Teams to deliver services.<sup>199</sup> As these departments work jointly, infrastructure development, job creation, Public Works

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<sup>195</sup> EDF. (19 November, 2010) pp 1 -12.

<sup>196</sup> Parliamentary Monitoring Group. (March 1, 2010)

<sup>197</sup> Department of Energy (4 October 2010)

<sup>198</sup> Parliamentary Monitoring Group. (March 1, 2010)

<sup>199</sup> Department of Energy Strategic Plan. 2011/2012. Available [online]:

<http://www.energy.gov.za/files/aboutus/doestratplan2010.pdf>. (14/05/2013).

programmes and coherent policies are made. Evidence of this in effect can be found in the development of the Freight Rail, coordinated by the DT. This project aims to increase the efficiency within the coal delivery business. The DT is also working with the DoE to improve the supply and security of energy produced by Eskom through the construction of the New Multi Product Pipeline (Transnet Pipelines).<sup>200</sup>

### Dominant Incumbent Monopoly

The goal of policy for the energy sector is to pursue efficient, effective and sustainable energy service delivery. In order for these goals to be realised, policy makers must create an environment where new industry can equally and freely compete for business. As Economides suggests

“Economic theory predicts that competition on a level playing field will lead to efficient production, efficient pricing and the highest benefits for consumers and producers”.<sup>201</sup>

There is little to no evidence of a competitive playing field in the energy sector in South Africa. The existence of the dominant incumbent monopolist – Eskom – the weakness in competition law in the country and the heavy reliance of the DoE in Eskom has, for many years, enabled Eskom to dictate terms and conditions that limit competition and limit or exclude potential entrants into the energy sector.<sup>202</sup>

A dominant incumbent monopoly is different from a perfect competition market. This is because more barriers in the market stop smaller industry for entering. In order for a dominant incumbent monopolist to succeed, such as Eskom, it needs to dominate the policy-making process through regulatory capture and departmentalist tendencies. Often government and society is left paying much higher prices for lesser goods and services if the dominant incumbent monopoly continues to monopolise access to services. New industry entering the market can threaten the dominant incumbent in several ways. The new industry can take the

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<sup>200</sup>Department of Energy (4 October 2010)

<sup>201</sup> Economides, N (1995) *Principles of Interconnection: A Response to Regulation of Access to Vertically-Integrated Natural Monopolies*. Submitted to the New Zealand Ministry of Commerce. Available [online]; <http://www.stern.nyu.edu/networks/principi.pdf>. (02/08/2013).

<sup>202</sup> Ibid, pp 5

market share away from the dominant incumbent and, therefore, reduce its share in profits.<sup>203</sup> Also, new industry can reduce the share in profit just by intensifying competition. The way in which Eskom has strategised over the years to reduce the entry and threat of rivals in the energy sector is by working closely with the DoE, and capturing the regulation policy efforts of the DoE.

For the playing field to be levelled out, it is vital for government and an independent regulator to structure policies that will reduce the dominance of Eskom and the overwhelming benefits it gains from being the dominant incumbent.

Prior to the establishment of NER and later NERSA, there was no significant regulatory oversight body of the energy sector of South Africa. The DME and Eskom relationship was very close because of the DME's reliance on Eskom as the dominant incumbent monopolist in the energy sector. The DME made attempts to act as the regulatory body over Eskom, but as the theory in chapter 2 points out, this regulatory body soon became weak in enforcement of laws, regulations and legislation and, rather, became dependent on Eskom for information and service provision. Instead of dictating price determination to Eskom, both parties negotiated a 'price compact' which effectively set electricity prices until 2000.<sup>204</sup> Eskom was allowed to dictate to the DME what policies it wanted and what policies it didn't approve of.

One of the main reasons for the implementation failure of the White Paper on Energy 1998 was that the DME had underlined that the central tenet of restructuring the electricity industry was to insure wholesale competition as well as altering the electricity distribution industry into smaller regional distribution entities (REDS).<sup>205</sup> The development of IPPs and REDS would ensure that Eskom would lose some control over regulation, production and distribution. However, regression has resulted. Due to the nature of the relationship Eskom had with the DME, Eskom was able to manipulate the DME in limiting several implementation outcomes of the White Paper on Energy 1998. Without the full control over the implementation of this White Paper policy, the DME and now the DoE has had continual

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<sup>203</sup> Ibid, pp 6

<sup>204</sup> DME (2008/9) *Annual Report: The Governance of Power: Shedding a light on the Electricity Sector in South Africa*. Available [online]; <http://electricitygovernance.wri.org/files/egi/EGI-SA%20final%20report%20-%20Appendices.pdf> (28/08/3013).

<sup>205</sup> Ibid.

battles with Eskom over its irrational capture of the policy decision-making and implementation processes.

The establishment of NERSA has given way to some form of improving the lack of data and transparency of information but besides that, not much progress, coordination and capacity strengthening has resulted. NERSA has on a few occasions limited Eskom's capture of policy regulation which has had a huge impact on the way in which Eskom can dictate and control the DoE and has, at times, caused Eskom and the DoE to take on departmentalist characteristics as their goals and interests are not being met by NERSA.

Other evidence of the failure of the White Paper on Energy 1998 is that the promise of alignment of energy policy with climate change mitigation initiatives has shown “substantial backtracking less so in the written policy and more so in the institutional policy environment”<sup>206</sup> whereby cheap coal and high energy consumption is still the greatest focus.

The White Paper on Energy 1998 has evidence of failure of energy planning, coordination and liberalisation. The provisions of integrated energy planning (IEP) as well as national integrated resource planning (NIRP) were made. NERSA has managed to first two NIRPs and Eskom fully managed, without consultation, the third NIRP. In reality, these undertaken provisions have not been fully realised. The White Paper highlights a lack of capacity in the sector and the stalling of the IEP has brought this to light “(the Paper cautioned that the level of planning envisioned requires data which was not at the country's disposal at the time)”<sup>207</sup>. No coherent policy guidance is being given to amend this problem.

The planning process of the energy sector has mainly focused on Eskom's internal investment process, the integrated strategic electricity plan (ISEP). This was supposed to be handled by NERSA which has resources and skilled professionals. As Tyler indicates;

“A potential paradigm 2 (supply-demand) policy tool has been subverted to that of a paradigm 1 (energy supply) tool, focusing solely on an individual energy supply sub-sector in isolation of substantive consultation with the broader energy community or society at large. This reduces the electricity sector's ability to respond to climate

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<sup>206</sup> Tyler, E (2009) pp 9

<sup>207</sup> Ibid, pp 9

mitigation challenges to that of the utility, whose objectives are not necessarily aligned with national objectives.<sup>208</sup>

The White Paper on Energy is fully committed to energy policy alignment to climate change policy but in reality, the regulation, targets and implementation is inadequate. The targets are lower than what is required to change the current policy direction of the energy sector. A dire misalignment exists between the written attempts and reality.

The failure of government to fully realise planning, coordination and liberalisation in the energy sector – through the White Paper on Energy 1998 - has meant that the centralised, supply-side oriented monopolistic energy sector which is based on coal, has been maintained.<sup>209</sup> Depending on what priority the NPC places on energy and climate policy considerations – a drive for better coordination could result in the future, if the NPC gains higher authority over the dominant incumbent monopoly.

#### Policy Capture and Departmentalism

To understand the departmentalism dilemma in the energy sector of South Africa, one needs to examine the way in which energy policies were and are designed, under what conditions and who influenced the final decision-making process. This thesis highlights that departmentalism limits the decision-making process because departments and stakeholders are often unwilling to work in a cooperative manner as they are self-seeking utility maximisers. Evidence of these self-seeking utility maximiser attempts can be seen in the dominant incumbent monopolist - Eskom's capture of the policy making process and its previous role in regulatory capture.

Much of the electricity sector has been governed through the Electricity Regulation Act of 2006. However, due to the silo tendencies of departments, and Eskom's capture of most policy, it is not clear how and where policy is being made.<sup>210</sup> This thesis has found that the DoE is responsible for planning and setting any programme or policy relevant to energy. However, in reality, Eskom has exerted formal and informal influences over many of the decisions about policy or programmes that they DoE may have made. Other stakeholders

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<sup>208</sup> Ibid, pp 9

<sup>209</sup> Ibid, pp 10

<sup>210</sup> Baker, L (2011) *The Governance of Clean Development: wind, coal and power struggles*. Working Paper 015

such as NERSA, the IDC, the NPC, coal suppliers and industry, also influence the policy made by the DoE.

One of the main areas of stakeholders working uncooperatively is in the coal export industry. In the 1970s energy sector stakeholders pushed for infrastructure programmes that would lead to coal export growth. However, it is evident today that the government is not pursuing this initiative at all and leaving other stakeholders to battle the process on their own. The greatest of these issues is that there is no coordination between the plans of coal suppliers to invest in export opportunities, the ill-managed and uninterested state-owned Transnet rail infrastructure (Transnet changed management in the 1990s and thereafter has declined in performance, inadequate investment, poor governance and inadequate incentives to cooperate) and the expanding development of Richards Bay Coal Terminal port to meet the needs of the coal producers.<sup>211</sup> Failure of government to cooperatively expand and invest in rail infrastructure development and maintenance is slowly eroding away and policy opportunities for export capacity and internal transportation of coal between mines and industries to meet the demand needed to maintain energy security in the country.

There is a great emphasis that needs to be placed on government policy decision-making and its role in securing the energy sector of South Africa. The lack of cross-sector planning has exacerbated the huge capacity challenges in the energy sector, even though the NPC has pushed for greater integrated and joined-up development.

Yelland<sup>212</sup> stresses that the Energy Intensive User's Group and Eskom's coal suppliers appear to be more influential than any other stakeholder due to the fact that they control the amount of coal sold and the amount of energy used. It is evident that, frequently, the DoE delegates to Eskom over matter of planning and implementation of policy. Evidence of this was when the DoE delegated to Eskom on the IRP2010 document discussed later in this chapter.

South Africa has no explicit coal policy which highlights the post 1994 preoccupation with the need to increase household access to energy. This focus ignored the need for security of supply and industrial energy issues. Eskom, has in recent years, initiated a forum for government departments and enterprises to discuss electricity sector related coal supply

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<sup>211</sup> Ibid, pp 38

<sup>212</sup> Yelland, C ( 30 March, 2011) *Huge renewable nuclear build ahead for South Africa but coal is here to stay* in "Daily Maverick". Available [online]; <http://www.thedailymaverick.co.za/article/2011-03-30-huge-renewable-nuclear-build-ahead-for-sa-but-coal-is-here-to-stay> (12/04/2013)

issues. Several policies, forums and initiatives have been designed to ensure better coordination and cooperation between stakeholders within the energy sector.<sup>213</sup> Eskom, the country's monopolistic state-owned utility, is South Africa's biggest energy supplier, generating 96% of the country's energy.<sup>214</sup> Eskom, currently, is also generating 45% of all electricity used in Africa.<sup>215</sup> Eskom supplies energy to over 4.3 million customers and of these, 138 high energy users consume nearly 40% of the energy who, at times, influence the policy outcomes to suit their needs.

A reliable electricity supply of acceptable quality is pertinent for South Africa's development. This supply is also a prerequisite for socio-economic development as it contributes to access to education, healthcare and jobs. However, Eskom is struggling to build an extra 20 000MW of energy generation that is needed to meet the growth of the population by 2025 and it refused to share its grid for many years with other independent power producers.<sup>216</sup>

The previous chapter highlighted that the DoE implemented its Energy Policy White Paper in 1998. It was supposed to help Eskom with its generation capacity and transmission issues. However, much of what it says is invalid today because of Eskom's capture of the policy decision-making process over the years. The major issue which it fails to address is "the issue of South Africa's carbon intensive economy and its potential future exposure to international climate change treaty commitments aimed at reducing greenhouse gas emissions".<sup>217</sup>

The DoE's Energy White Paper 1998 agreed to facilitate 30% of the country's generation to come from IPPs and REDs. It is evident that Eskom played an aggressive agent in resisting this initiative, and in the end, the appropriate legislation was never enacted until 2003... a little too late!

Traditionally, electricity distribution has been managed by Eskom as well as local government and their municipalities. There was little evidence of coordinated and coherent policy decision-making between the national and local spheres of government as both national and local spheres were working in silos. In 2000, the DME sought to consolidate all

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<sup>213</sup> Eberhard, A (January 2011) pp 29

<sup>214</sup> Khosa, M (2002) *Infrastructure and service delivery in South Africa 1994-1999*, in S. Parnell et al (eds), "Democratizing Local Government". Cape Town: UCT Press. pp. 150

<sup>215</sup> Ibid, pp 150

<sup>216</sup> Eskom (2010)

<sup>217</sup> Eberhard, A (January 2011) pp 29

the distributors into six REDs. These six distributors included; Buffalo City, City of Cape town eThekweni Electricity, Ekurhuleni Metropolitan, City Power Johannesburg, Mangaung Local Municipality, Nelson Mandela Metropolitan Municipality, Polokwane Municipality, Tshwane Metropolitan Municipality and Msunduzi Municipality. This move was an initiative to limit Eskom's dominance over distribution and also potentially improve service delivery and tariff costing.<sup>218</sup> This move was also an attempt for vertical coordination (JUG) to occur between the national and local government so that better efficiency and effectiveness in policy decision-making as well as in service delivery was enabled.

The Electricity Distribution Industry (two-tiered and highly fragmented) was to be consolidated into REDs to enhance financial viability as the EDI was in "financial crisis" due to differing tariffs, poor reliability and poor billing processes initiated by the haphazard development of the Industry in the apartheid era.<sup>219</sup> Municipalities would also benefit from this restructuring and vertical coordination because of their history of thefts, inefficiencies, lack of capacity and non-payment of users. The DME also found that "there was an extent of electricity cross subsidising other essential services within certain municipalities, which requires significant financial restructuring and ring fencing"<sup>220</sup> Eskom's mismanagement of funds and the debt incurred on its bulk supply would also better managed if the amalgamation took effect.

Once the REDs were established, they would remain under the control of the EDI Holding Company in the event of any REDs needing transitional financial support for the first 5 years of their establishment. The establishment of REDs was also to provide confirmation to IPPs that reform was taking place in the energy sector and that IPPs would be allowed easier access to the grid and market as Eskom would not dominate the generation and distribution of the sector.<sup>221</sup> The public ownership of the REDs would limit Eskom's control, however, it was not queried that government, both national and local, would treat their investment in the REDs like any investor would – by looking for returns on investments rather than focusing on

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<sup>218</sup> PriceWaterhouse Coopers (2001) *Electricity Distribution Industry Restructuring Project*.

Department of Mineral and Energy Affairs. Available [online]; [www.dme.gov.za](http://www.dme.gov.za)

<sup>219</sup> Ibid, pp 3

<sup>220</sup> Ibid, pp 3

<sup>221</sup> Malzbender, D (2005)

the need for service delivery efficiency and effectiveness.<sup>222</sup> REDs was an approach to privatise the electricity distribution sector.

It is evident that the REDs were never established because of conflicting interests between national and local ideals as the local level voted against REDs. This was because local government feared that they would obtain less fiscal support from national government as the REDs would have to maintain and develop on their own accord and would potentially privatise if investment was handled properly. This policy reversal and failure of JUG indicates the pressure of working jointly with other departments and spheres of government and how one department or sphere had the capacity to reject policies because their own interests and goals had not been realised. Local government had acted in an irrational, departmentalist, manner and had not taken into consideration the energy sector as a whole but, rather, focused on its interests and goals and what it would or would not get out of the establishment of REDs.

The 2003 Renewable Energy White Paper released by the DoE facilitated in the contribution of 10 000 GWh of renewable energy by 2013 to the energy mix. This programme did not fully take off and by 2009, NERSA, with limited consultation with other departments and stakeholders, had formulated guidelines in which the Renewable Energy Feed-in Tariff (REFIT) was introduced.<sup>223</sup> This programme would allow for independent renewable energy generation over and above that of Eskom's generation and tried to limit Eskom's domination of the energy policy making process.

The reason for this initiative was to encourage potential investors to invest in renewable energy and therefore fast-track the development of renewable energy in the country.

Four feed-in tariffs were proposed;

1. Landfill gas
2. Small hydro
3. Wind

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<sup>222</sup> Ibid, pp 28

<sup>223</sup> Fritz, W (2012) *Renewable Energy Feed in Tariffs, REBID, SASGI and The Smart Grid*. Cape Peninsula University of technology. Available [online]; [http://eepublishers.co.za/images/upload/energize\\_2012/09\\_ST\\_01\\_Renewable-energy.pdf](http://eepublishers.co.za/images/upload/energize_2012/09_ST_01_Renewable-energy.pdf)

#### 4. Concentrated solar power trough with storage.<sup>224</sup>

Eskom's power hold over the electricity grids, however, made it very difficult for renewable IPPs to tap into the grid as they did not provide Eskom and its coal providers with any incentive to allow renewable energy to encroach on coal-produced energy. Also, renewable energy was more expensive to commission as the source of energy that would help Eskom improve its efficiency.<sup>225</sup>

As financial issues have become more of a burden on Eskom, different policies have needed to be enacted to ensure that Eskom receives help in energy generation and transmission.

As the DoE continues to allow Eskom to create carbon-intensive energy, the more likely South Africa's economy will struggle in the future due to environmental barriers against coal exports. Also, when Medupi and Kusile coal-fired power stations are built, CO<sub>2</sub> emissions are going to increase, even though several other older coal-fired power stations will be decommissioned. There are no relevant policy decisions at this stage that are committed to any of this.

Without the DoE's input, Eskom has pursued several of its own strategic actions which will allow it to maintain its dominance over the policy decision-making arena. First, it has developed a portfolio of long, medium and short term coal contracts. This will enable Eskom to control the quality and cost of coal coming in and select what beneficiation will operate in each station. It will also be also to invest in rail and conveyor coal transport needs, allowing for greater cooperation between all stakeholders.<sup>226</sup>

In 2005 Eskom launched the New-Build Programme which aims to adding over 17 000MW of energy to the national grid by 2018 (Over 5 000MW of new generation capacity had been added by mid-2011 and over 3 000km of transmission lines had been connected.<sup>227</sup> All of this energy was to come from coal-produced energy as renewable energy potential was still ignored by Eskom and its coal producers as Eskom wanted to continue supplying energy to the country on its own.

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<sup>224</sup> Ibid, pp 2

<sup>225</sup> Ibid, pp 2

<sup>226</sup> Eberhard, A (January 2011) pp 30

<sup>227</sup> Fritz, W (2012)

With pressures from the DoE to follow policy mandates, Eskom coordinated the development of a Coal Energy Forum which includes unions, coal producers, governmental ministries and departments and Transnet. This Forum was designed to coordinate all investment needs, programmes, skills development, price determination and rights of all stakeholders involved and allow for a space in which all stakeholders could discuss their needs according to government policies. But, there was a lack of DoE involvement and leadership progress in these areas due to a difference in goals, pressures and influences.

The result of this lack of involvement in the Coal Energy Forum by the DoE led to a South African Coal Roadmap implemented in 2007 which aimed to fundamentally shape the future of the coal industry and to identify what the best options were for all stakeholders, moving forward. However, its main purpose was to influence and facilitate policy decision-making, planning and development. The Roadmap was to ensure coordination and cooperation between all stakeholders and this was managed by the Fossil Fuel Foundation. This initiative aimed to expand on the intentions of the Coal Energy Forum and include the management and development of issues such as markets, safety, health, environment, climate change, technology, economics and international policy and regulations, on top of mining, infrastructure and beneficiation issues.<sup>228</sup>

Due to stakeholder and the government's difference in opinion and goals and lack of interest, this initiative failed to produce adequate cooperation, coordination and leadership for integrated and coherent policy proposals. The main reason government lost interest in this initiative was due to the 2009 split of the DME into two separate departments. Once the split happened, neither department knew who was responsible for what and did not communicate on ways in which to work jointly. The DoE was then responsible for energy policy and plans but not mining rights and was limited from making any decisions about mining without the Department of Minerals input.<sup>229</sup>

Eskom has admitted to “over-capacity” which had occurred over a decade ago due to lack of capacity investments and in the maintenance of existing power plants around the country.<sup>230</sup> Eskom has had several issues concerning a shortage of electricity since January 2008. For Eskom to overcome these issues, it needs to create more than 50GW of new electricity

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<sup>228</sup> Eberhard, A (January 2011) pp 30

<sup>229</sup> Ibid, pp 36

<sup>230</sup> Lana, J (2010) *Electricity price hike in South Africa*. Available [online]; <http://www.southafricaweb.co.za/article/electricity-price-hike-south-africa>. [20/04/20103]

capacity by 2028.<sup>231</sup> The only way that this can be achieved however is if the GDP growth rate is maintained at 4.6% over the next 20 years or so. Also Eskom has to ensure that at least 10GW of existing capacity is decommissioned and 3.4GW is created through demand side management programmes.<sup>232</sup>

Eskom's dominance and monopoly over regulation, production and distribution of energy has long been questioned as it has not allowed for competitive prices and alternate energy sources. It is becoming more evident that Eskom can no longer maintain this position and needs to look further afield in supporting IPPs that will be able to contribute to the energy mix without costing government too much in subsidies. It is imperative that Eskom looks at external producers that support sustainable development initiatives through the usage of different power sources such as renewable resources and nuclear energy.<sup>233</sup>

In July 2009, 6 technologies were added to NERSA's feed-in tariff list to ensure that renewable energy was taken seriously by Eskom. These included biogas at R0.96/kWh, PV at R3.94/kWh, concentrated solar power trough without storage at R3.14/kWh, concentrated solar power with storage at R2.31/kWh, concentrating PV with no determined tariff, and solid at R1.18/kWh.<sup>234</sup>

In December 2009, President Jacob Zuma along with the NPC (excluding the DoE or Eskom comment) committed to the Copenhagen Accord to reduce its carbon dioxide emissions. This commitment, alongside the previously incoherent or unmanageable policy, led to the drafting and publishing of the IRP1 on the 31 December 2009.

This was one of the greatest examples of departmentalism as it was evident that the DoE introduced the IRP1 without consulting with other departments within the Infrastructure Development Cluster and policies external to it.<sup>235</sup> This in turn, led to the forced re-evaluation of the Plan as it did not meet with the goals of other stakeholders. This was later re-introduced as the IRP2010.

The IRP1 objectives were to install 1 million solar water heaters, new generation plants developed from renewable energy technologies were to be built adding 10 000 GWh to the

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<sup>231</sup>Ibid, pp 2

<sup>232</sup>Ibid, pp 2

<sup>233</sup>City Press (2013)

<sup>234</sup>Fritz, W (2012) pp 2

<sup>235</sup>Department of Energy (25 March, 2011)

energy mix, and the development of a financial incentive scheme for energy efficiency that was to be procured from REFIT and other Eskom and NERSA programmes.<sup>236</sup>

The goals of the IRP1 were not realistically attainable as Eskom did not have the financial, infrastructural, policy means in which to carry it out. Finances for coal-fired production would be reduced and Eskom would have to change the grid access to include solar-made electricity. The document considered was a mere 3 pages and was not completed with expert opinion.

On 24 February 2010 NERSA indicated the electricity tariff increase that would take place at 25% until 30 March 2013. Baker highlighted that this led to huge public outcry as certain stakeholders were not included to pay this price hike and were given special treatment from Eskom.

“This was swiftly followed by public outcry over special purchasing agreements for energy intensive users such as BHP Billiton, Anglo American and Xstrata, some of which had been agreed during the apartheid era”<sup>237</sup>.

These stakeholders had much policy decision-making sway over Eskom and threatened to sell their coal elsewhere if their industrial electricity prices increased.

In South Africa, as opposed to the global north, Eskom still continues to support the energy intensive sectors as well as its above mentioned coal producers. A T-sec economist, Mr Schussler, highlighted that "the difference between what Eskom charges its residential users and industry customers is 168%, compared to the international tariff of residential versus industry tariffs, which is 51 percent".<sup>238</sup> However, it has been noted that the (EIUG) of South Africa oppose this argument, stating that "it is much cheaper for the electricity utility to provide large amounts of electricity at higher voltages to a single entity, than it is to provide power to a large number of residences, covering a larger area, at a much lower voltage."<sup>239</sup>

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<sup>236</sup> Ibid, pp 6

<sup>237</sup> Baker, L (2011) *The Governance of Clean Development: wind, coal and power struggles*. Working Paper 015

<sup>237</sup> Ibid.

<sup>238</sup> Eskom (2009) *Annual Report. Business and Sustainability Performance Review*.

[Available] [http://www.eskom.co.za/annreport09/ar\\_2009/profile\\_exec\\_summary\\_02.htm](http://www.eskom.co.za/annreport09/ar_2009/profile_exec_summary_02.htm) (21/06/2013).

<sup>239</sup> EIUG. Energy Intensive User Group of Southern Africa. Available [online]; [http://www.eiug.org.za/about/\(20/05/2013\)](http://www.eiug.org.za/about/(20/05/2013)).

They forget to mention the highly negative impacts on socio-economic rights and environmental degradation because South Africans do not have any other means of accessing energy other than through means of coal supply.

Another controversy arose on the 8 April 2010 when the World Bank approved a \$3 billion loan for the construction of Eskom's Medupi coal-fired power station. The World Bank argued that it was also loaning \$260 million for a wind and solar power projects.<sup>240</sup> The evidence of departmentalism is seen in the fact that both the DoE and Eskom operate in a self-interested manner at times when it comes to political and financial interests in certain programmes, policies or projects, such as that of the building of Medupi. A sign of departmentalism can be evidenced by the fact that political parties, may at times, determine the policy decision-making processes. In the case of the DoE, it is evident that the President elected the DoE's Minister who is also an ANC affiliate. One cannot fully ignore the fact that all individuals are rational self-interested actors and aim to seek out the ultimate way to achieve personal agendas. The DoE may, at times, seek the agenda of the ruling party to protect certain interests and goals. This approach on policy decision-making may be direct or indirectly influenced by the party's mandate to stay in power.

One of the most prominent issues of late which deal with this affiliation issue is evident in the case where the Democratic Alliance publically reported that the ANC would be enriched through certain energy deals which the DoE coordinated for Eskom. The ANC would gain roughly R1 billion because it had a 25% stake in the Hitachi Africa which was given a boiler contract on the construction of the Medupi coal-fired power plant.<sup>241</sup> This is not to say that all energy policy is influenced by the ANC but rather that the DoE and its departmentalist tendencies can be caught making policy decisions that are not benefiting the government and its people as a whole and therefore not working in a cooperative, integrated and equality driven manner.<sup>242</sup>

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<sup>240</sup> SAPA. World Bank approves Eskom Loan. April 8, 2010. Available [online]: <http://www.fin24.com/Economy/World-Bank-approves-Eskom-loan-20100408>. (18/05/2013).

<sup>241</sup> Earthlife Africa (1 June 2010) *Comments on the Proposed Planning assumptions in the IRP2. Sustainable Energy and Climate Change Project.*

<sup>242</sup> Mail and Guardian (13 April, 2010). *Chancellor House not selling Hitachi stake* in Mail and Guardian online. Available [online]; <http://mg.co.za/article/2010-04-13-chancellor-house-not-selling-hitachi-stake> (12/05/2013)

The Green Paper on the National Climate Change Response was gazetted on the 25 November 2010, released by the Department of Environmental Affairs.<sup>243</sup> This document led to more discussions around the need for renewable energy, Eskom's contribution to providing access to the grid and infrastructure access and the National Treasury's debate on carbon taxing. This policy was formulated and implemented without a considerable amount of coordination and reference to the DoE or Eskom and has had consequential effects on Eskom and its coal producers in maintaining a strong and viable coal-produced electricity sector.

In March 2011, the near final version IRP2010 was released as many technical and environmental advisors, lawyers and financial advisors all provided input to ensure that this policy was more coherent than the previous one. Departments and organisations were seen to be working jointly on the policy making process.<sup>244</sup> This programme was to procure a minimum of 1025 MW of renewable energy hybrid technologies and a cogeneration feed-in tariff was proposed (energy produced from heat by-product from the industrial processes).

The IDC has not managed to fully coordinate joined-up working between the DPE and DoE. The DPE has, on many occasions, criticised the DoE for not fulfilling the needs of Eskom, but rather implementing policies that suit its own mandate and goals. The DPE criticises the DoE efforts to provide certainty for long-term security of electricity supply through the use of renewable energy, coal, hydro and nuclear balance.<sup>245</sup> This is because the DPE stated that its own objectives are not being met by the DoE as the IRP2010 "was not a plan that deals with the wider infrastructure plan for the country and does not look at its overall energy need"<sup>246</sup>.

Also, the revised REFIT paper was scheduled for completion in March 2011. However, administrative problems and lack of trust, cooperation and coherence in the programme, delayed this. Creamer wrote that;

"South Africa's director-general for electricity, nuclear and clean energy Ompi Aphane admitted in March 2011 that delays to REFIT were likely to result in South

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<sup>243</sup> Department of Environmental Affairs (2011) *National Climate Change Response White Paper*

<sup>244</sup> IRP2010-2030 (25 March, 2011)

<sup>245</sup> Department of National Treasury. Republic of South Africa. Public Institutions listed in PFMA Schedule 1, 2, 3A, 3B, 3C and 3D. 31 December 2011. Available [online]: <http://www.treasury.gov.za/legislation/pfma/public%20entities/2010-1231%20Public%20institutions%20Sch%201-3D.pdf> (13/05/2013)

<sup>246</sup> Parliamentary Monitoring Group. (March 1, 2010)

Africa failing to meet its renewable energy white paper target of 10,000 GWh of renewable energy consumption by 2013”.<sup>247</sup>

It is evident that NERSA promulgated REFIT by acting outside its mandate. NERSA, according to its mandate, is restricted and unable to make decisions outside of the IRP2010 and is only allowed to determine electricity tariffs, approve licenses, oversee import and export of electricity and set the conditions under which electricity can be sold.<sup>248</sup> By seizing the promulgation of a renewable energy programme from Eskom and then releasing a poor revision of REFIT, NERSA showed rational behaviour by acting in a silo as it tried to capture the policy decision-making process and created tensions between stakeholders. Another example of attempted regulatory capture is evidenced by the DoE capture of the procurement process of electricity Regulations on New Generation Capacity in 2010 from NERSA and Eskom.

The weak institutional capacity of the DoE, Eskom and other stakeholders has allowed for a systemic lack of clarity on who is commissioned to do what within their mandate and departments and organisations act in a rational manner to achieve their own goals rather than working in a joined-up cooperative and coordinated manner.

IDASA highlighted that there is;

“a systemic lack of clarity concerning roles and responsibilities in the electricity sector in South Africa, with an associated extended period of policy opacity and uncertainty” and finds that “a lack of policy coordination has contributed to chronic under-capacitating, compounding the complex and profound social and environmental challenges that confront the country”.<sup>249</sup>

In September 2011, the DoE requested information for potential private developers of renewable energy projects who would be interested in partaking in the REFIT process. This programme was intended to help manage some of Eskom’s provision and generation capacity

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<sup>247</sup> Creamer, T (2011) *DoE opts for phased introduction of independent grid operator*. Engineering News, Available [online]; <http://www.engineeringnews.co.za/article/doe-opts-for-phased-introduction-of-independent-grid-operator-2011-03-08>. (15/06/2013)

<sup>248</sup> National Energy Regulator of South Africa (NERSA) (2011).

<sup>249</sup> IDASA (2010) *Submission on the draft integrated resource plan assumptions*. Available [online]; [http://toolkits.reeep.org/file\\_upload/8917\\_tmpphpdB31JQ.pdf](http://toolkits.reeep.org/file_upload/8917_tmpphpdB31JQ.pdf). (09/06/2013)

International Energy Agency (2010) *Coal Information*. OECD, Paris. Pp 4

issues. As the DoE did this, it, along with the National Treasury extended line after line of credit to Eskom so that its capital expansion programme could be developed to stable its funding crisis as it was still investing in coal-fired electricity production and not renewable energy or nuclear programmes.

This REFIT Programme did not work out as intended as bureaucratic red tape hampered the advance of licences for the investors. Also, many investors feared that the government would reduce the tariff price to fit in with goals of the IRP2010.<sup>250</sup> The complications and lack of interdepartmental coordination that resulted between NERSA, Eskom and the DoE led to the abandonment of the REFIT Programme. In its place, a new initiative, Renewable Energy Bids (REBID) was introduced. It has also been known as the Renewable Energy Independent Power Producers Procurement Programme (REIPPPP or REI4P).<sup>251</sup>

This programme would function as a renewable energy technology auction. It would allow for 1,415 MW of renewable generation to be awarded through PPAs.<sup>252</sup> This was achieved by encouraging international investors to compete for MW of capacity and renewable energy technology. Unlike REFIT, REBID is run by the National Treasury and not by NERSA so that NERSA has less control over policy decision-making that affects the DoE and Eskom's mandate. Bidders would have to pay R20 000 to obtain documentation and would only be considered if they promoted social and economic development to South Africa.<sup>253</sup>

In December 2011 government announced that 28 Renewable energy projects would be awarded in the first window of bidding. These projects would provide for renewable generation from wind, solar (photovoltaic and concentrated), biomass, landfill gas and hydro.<sup>254</sup> Eskom has stated that it will cross-subsidise these 28 projects. In May 2012 another 19 bidders were awarded which would contribute another 1043, 9 MW from wind and solar.<sup>255</sup>

Eskom continues to work towards its own best interests. This is evident as Eskom has approached NERSA on several occasions to increase its electricity tariff percentage (through its multi-year price determination) to ensure that Eskom meets its own infrastructure

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<sup>250</sup> Creamer, T (2011)

<sup>251</sup> Fritz, W (2012) pp 2

<sup>252</sup> Ibid, pp 2

<sup>253</sup> Ibid, pp 2

<sup>254</sup> Ibid, pp 2

<sup>255</sup> Ibid, pp 2

development objectives and can afford the coal supplied to it via coal producers. Eskom, however, was given less than what it asked for. In March 2013, Eskom asked for a 16% tariff increase from April 2013 to May 2018. However, NERSA only approved an increase in Eskom's tariffs by 8% from 1 April 2013 and will continue to do so for the next five years so that it can meet its investment targets in new coal-fired power plant development, renewable energy and nuclear.<sup>256</sup> This is half the percentage that Eskom applied for but it is argued that this will still push up costs from a competitive point of view. Municipalities will also place their own costs on the electricity over and above the 8% therefore putting strain on household access. For 2013/14 the average cost for electricity will be 65.51 cents/kWh and will increase to 89.13 cents in 2018 (excluding other costs such as that of the Carbon tax).<sup>257</sup> 3% of this 8% will go to covering the IPPs which are expected to add 2% of renewable energy to the energy mix.<sup>258</sup> A 2c/kWh levy has also been charged by government for environmental sustainability efforts (levied on the sale of electricity generated from non-renewable sources) until 2015 whereby the Carbon Tax will be implemented.<sup>259</sup>

This carbon tax could have detrimental effects to the access and affordability of electricity. The reason being is that Eskom's current tariffs do not include the cost of the tax. The carbon tax rate will charge R120 for ton of CO<sub>2</sub> equivalent and is set to increase per annum. As Eskom emits over 230 million tons a year, this will impose an estimated R11 billion tax on Eskom.<sup>260</sup> Eskom will be unable to carry the financial burden and is surely to pass on this cost to consumers through increased tariffs<sup>261</sup>. Energy analysts have estimated that this burden will add 12c/kWh on Eskom prices. As it stands at the moment, Eskom has indicated that for every R2 billion spent on costs, 1c/kWh is added to its tariff.

The National Treasury has indicated that it will discount tax costs if they can see that Eskom or any other stakeholder can prove that they are actively reducing their CO<sub>2</sub> emissions and implementing more clean energy technologies. Deloitte analysts calculated that South Africa

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<sup>256</sup> NERSA (2013)

<sup>257</sup> Allix, M and Maswanganyi, N (1 March 2013) *Eskom's reduced hike 'bad news dressed as good* in Business Day. Available [online]; <http://www.bdlive.co.za/economy/2013/03/01/eskoms-reduced-hike-bad-news-dressed-as-good> (20/05/2013).

<sup>258</sup> Ibid.

<sup>259</sup> Eskom (2009)

<sup>260</sup> City Press (2013) *Eskom may pass on new tax burden policy*. Available [online]; <http://citypress.co.za/business/eskom-may-pass-on-new-tax-burdenpolicy>

<sup>261</sup> Ibid.

would potentially make R82.5 billion in revenue from the tax which could go towards any state development initiative.<sup>262</sup>

### Conclusion

Due to Eskom's successful attempts to undermine the White Paper on Energy 1998 and the DoE's historical legacy of dependence on Eskom, Eskom has, for many years, been able to capture the policy making processes of the energy sector, allowing for departmentalism to exist and limit policy decision-making processes. The problem Eskom faces now, however, is NERSA and its policy push-back on Eskom's capture of the regulatory system, limiting Eskom's control over the policy decision-making processes. Also, there is evidence of the DoE working jointly with other departments to fulfil its own, and other department's interests, which indicates that there is still room for JUG and improved coordination to take effect in the sector. All stakeholders in the energy sector, may it be local government, the EUIG, Eskom, the DoE, the Inter-Ministerial Committee and the NPC, all play a vital role in the collective organisation, collaboration and coordination of the sector. If all stakeholders continue act in an irrational manner then the policy space in the energy sector will continue to flounder.

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<sup>262</sup> Ibid.

## CHAPTER 5

### CONCLUSION

This thesis examines the departmentalism dilemma which South Africa's energy sector is faced with today. Many stakeholders play a vital role in addressing the production, distribution and consumption issues of the energy sector. However, many of these stakeholders do not work in a joined-up cooperative manner. This leads to incoherent, uncoordinated and incomplete policy decision-making which cripples the policy cycle.

Policy certainty has never been a key feature of the energy sector in South Africa as the gap between energy policy statements and the actual implementation of policy strategies continues to widen. Policies from different stakeholders are, at times, contradictory and do not take the goals of other departments into consideration.

Today the energy sector is faced with the dilemma of climate change and how this directly affects what energy resources should be used to meet the demand of energy needs. Different stakeholders have differing interests when it comes to what type of energy policies should be integrated within the energy sector. As it stands, coal amounts for almost 80% of the energy mix while nuclear, gas and renewable energy are included in the balance of the energy mix.

Coal is a low grade, dirty energy that has a dire impact on the environment. As 11 coal-fired power stations operate across the country and two more are in construction over the next 5 years, the amount of carbon dioxide that is released into the atmosphere from the burning of coal will inevitably increase, contributing to global climate change. Eskom, along with other governmental entities in South Africa ranked the 11<sup>th</sup> largest carbon dioxide emitters across the globe<sup>263</sup>. It is in the best interest of all energy sector stakeholders to adapt their energy strategies to include climate change mitigation action plans and work in a coordinated and cooperative manner.

The key objective of this paper was to provide a critical examination of departmentalism in South Africa's energy sector and its potential limiting effects on policy decision-making. The examination of the theory of regulatory capture of a dominant incumbent monopolist and

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<sup>263</sup> Pressend, M (2009) *South Africa's Electricity Crisis: Beyond the Price Debate*. Pp 22. Available [online]; [www.sacsis.org.za](http://www.sacsis.org.za) (19/04/2013)

how this often leads to departmentalism is important to fully understand why the energy sector of South Africa has been in disarray for many years.

Using rational choice's departmentalism theory as a means to better understand South Africa's energy role players, who either influence or are influenced by the sector, provides helpful insight into the policy decision-making process that takes place. Bureaucrats and high powered energy elitists are hugely influential in determining what policies will be developed to suit their interests first and foremost because of their incumbent monopolistic tendencies.

On the other hand, the NPC has continued to stress the importance of Joined-up governance (JUG) – “a policy strategy which seeks to coordinate the development and implementation of policies across government departments and agencies, especially with the aim of addressing complex problems such as that of climate change and socio-economic development”<sup>264</sup>. By managing this policy strategy, a central government department can promote a coherent, “joined-up government” policy approach within and across departments and spheres. This approach should surely encourage better coordination and cooperation between stakeholders in the energy sector.

In reality, the NPC's attempt to JUG in the energy sector have failed because some of the critical issues relating to the energy policy decision-making process - such as reliance on coal, CO<sub>2</sub> emissions, renewable energy and infrastructural development programmes - have not been met in a coordinated, cooperative and joined-up manner. This was evidenced by the failed attempt to implement REDs and how policy reversal took place. JUG cannot be achieved due to the self-focused attitudes of stakeholders as well as the unsustainable role that dominant incumbents play.

As this paper has highlighted, policies and programmes continually seem to be enacted by the DoE, but are poorly structured, show signs of miscommunication and lack of coordination and cooperation between stakeholders and departments. It has been identified that the leadership of each policy decision-making process of the DoE, Eskom or NERSA has often resulted from the external political, financial and social pressures of different stakeholders. It is also evident that of the many stakeholders, Eskom, the monopolistic state-owned entity has a legacy of capturing the energy policy decision-making process and influencing policy

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<sup>264</sup> Efficiency Unit (April 2009)

outcomes around regulation and law according to its own interests and goals. These interests and goals have, in turn, been influenced by coal suppliers who can control how much or how little coal Eskom receives. If the DoE policy mandates are not in the best interests of these intensive stakeholders, Eskom has little reason to follow the DoE's direction.<sup>265</sup>

The tentative relationship between Eskom and the DoE enhances departmentalism characteristics and promotion of incoherent, uncoordinated and uncooperative policy decisions.

There is little evidence of proactive commitment from the NPC to successfully coordinate joined-up working in the energy sector. The several committed attempts to JUG may have also led to a relapse into departmental resistance and departmentalism in the policy making process. The DoE, Eskom and NERSA are mandated to achieve the ideal goals of the NPC's JUG attempts and coordinate policy decision-making processes in a joined-up manner. However, as this paper has identified, many cases exist whereby these stakeholders fulfil their own narrow departmental objectives rather than looking at the broader picture of development. There is very little evidence found in research to prove that cross-cutting government best practices have been thoroughly thought through or accomplished in the DoE.

The departmentalist tendencies of the energy sector and the policy decisions that have resulted are creating contentious discussions within and between departments. The outcome of this study found that energy policy decision-making is significantly influenced by the structure of the South African energy system and the legacy of Eskom<sup>266</sup>. Thus, in order to tackle problems such as global climate change and poverty successfully, energy policymakers need to consider ways in which to overcome regulatory capture, departmentalism and dominant incumbent monopolies.

Therefore, a normative conclusion can be drawn from the fact that the dominant incumbent legacy of Eskom and its capture of the policy decision-making process has created a weakness for departmentalist tendencies in the energy sector of South Africa.

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<sup>265</sup> Times Live (26 February 2012) *SA Ready to Roll out R300bn Nuclear Stations*. Available online: <http://www.timeslive.co.za/politics/2012/02/26/sa-ready-to-roll-out-r300bn-nuclear-stations>

<sup>266</sup> Marquard, A (2006)

If NERSA continues to limit Eskom's attempts to full regulatory capture and limit the dependency relationship of the DoE on Eskom, then attempts to more coordinated, consistent and concise policy decisions may result. However, if the DoE and Eskom continue along the line of departmentalism as they have done so for many years, there will never cooperative and well-coordinated attempts to JUG.

### Limitations

Primarily, the limitations to this thesis were based on the fact that for an in-depth analysis to take place, stakeholders needed to be examined in their own chapters in greater detail; their roles, stressors, influence, power, legitimacy and organisational structure. However, due to the length limitation of this paper, this could not be achieved as in-depth as desired and all stakeholder discussion had to take place in one short and concise chapter. Also, each stakeholder then needs its own chapter to explain how it portrays departmentalism or JUG characteristics and whether or not each stakeholder plays as big a role in the policy capture process as Eskom does, at different times.

Other limitations to this thesis were found primarily in the fact that each stakeholder is an independent, rational actor and one cannot fully understand or determine why they portray departmentalism or JUG characteristics. There is little research that indicates when stakeholders are likely to make cooperative, coordinated and coherent policy, and when they are not.

The issue of Eskom legacy of capturing the energy policy in South Africa is a known fact, but not an academic one. There has been a limit to the availability of appropriate research and documentation that discusses this issue since the White Paper on Energy was released in 1998. In an attempt to find these documents, I contacted Eskom and the Department of Energy, but was unsuccessful in obtaining anything useful. I had to, therefore, rely on the limited documents that were available on Eskom and the Department of energy's websites, the Parliamentary Monitoring Group and the media. The implication of the lack of primary information is that this thesis may not have a complete understanding of what actually happens, when and why, and who the top stakeholders are influencing the policy decision-making process. All this thesis can accomplish is to understand and explain that departmentalism and JUG do take place at different times, with different energy stakeholders and has had disadvantageous effects on the way policy making takes place because of the lack of coordination, consistency, cooperation and coherence.

## Areas of Further Research

The application of departmentalism and JUG theory research to other sectors, departments and stakeholders within South Africa has the potential to divulge the intense network of influence that all departments, stakeholders and sectors have on each other. Policy making cannot happen in a silo and not be expected to influence the direction of other goals and policies indirectly linked. This would be an interesting and worthwhile study as research could potentially help explain the influence departmentalism has on the country's policy outcomes and why JUG is integral for development.

By studying South Africa's policy decision-making process, this could contribute new literature to the very thin and scarce developing world literature field that exists at the moment (Policy literature is primarily focused only on the developed world). New case studies on departmentalism could, potentially, add to the policy literature field for a greater and more concise understanding on why, when and how departments – and different stakeholders - do what they do.

In terms of South African policy, further areas of study could include research into the effects departmentalism will have in the future within the energy sector. Research could be conducted into the progress, or lack of progress, the IRP2010 document has made and what affect this document might have on Eskom, intensive coal producers and climate change mitigation action plans. Also, further research could be done into the costs of using mixed energy sources; coal, nuclear and renewable energy, and how departmentalism is causing costs to continually increase.

There is also space for research to be undertaken in a comparative manner. Departmentalism within South Africa's energy sector could be compared to departmentalism in other developing (India, Brazil) or developed (United States of America, Europe) countries and how different departmentalism tendencies, stakeholders and decisions influence the final energy policy outcome. Also, how departmentalism is dealt with in different countries is also an interesting area of study.

## LIST OF REFERENCES

- Adams. G, Hayes. S, Weierter. S and Boyd. J (2007) *regulatory Capture: Managing the Risk*. Australian Public Sector Anti-Corruption Conference.
- Allix, M and Maswanganyi, N (1 March 2013) *Eskom's reduced hike 'bad news dressed as good* in Business Day. Available [online]; <http://www.bdlive.co.za/economy/2013/03/01/eskoms-reduced-hike-bad-news-dressed-as-good> (20/05/2013).
- Baker, L (2011) *The Governance of Clean Development: wind, coal and power struggles*. Working Paper 015
- Bond, P (2000) *Elite Transition: from apartheid to neoliberal South Africa*. Pluto Press
- Bogdanor. V (2005) *Joined-Up Government*. Oxford University Press
- Bundred, S (2006) *Solutions to Silos: Joining Up Knowledge*. Public Money & Management, Vol 26 (2). Pp 116-142.
- Business Day (26 April 2013) *State Should Use Extreme Caution in Nuclear Decision*. Available [online]; <http://www.bdlive.co.za/opinion/2013/04/25/state-should-use-extreme-caution-in-nuclear-decision> (09/05/2013).
- Chamber of Mines South Africa (2010) Facts and Figures 2009. Available [online]; <http://www.bullion.org.za/Publications/Facts&Figures2009/F&F2009.pdf>. (12/06/2012)
- Chisholm, R. (1996) *On the Meaning of Networks*. Group and Organizational Management. Vol 21 (2) p216.
- Christensen, T (2006) *Smart Policy*, in Moran. M. et al (eds.) "the Oxford Handbook of Public Policy". Oxford: Oxford University Press.
- City Press (2013) *Eskom may pass on new tax burden policy*. Available [online]; <http://citypress.co.za/business/eskom-may-pass-on-new-tax-burdenpolicy> (14/05/2013)
- Creamer, T (2011) *DoE opts for phased introduction of independent grid operator*. Engineering News. Available [online]; <http://www.engineeringnews.co.za/article/doe-opts-for-phased-introduction-of-independent-grid-operator-2011-03-08>. (15/06/2013)
- Currie, G. and Brown, A. D. (2003) *A narratological approach to understanding processes of organizing in a UK hospital*. Human Relations. Vol 56 (5). 572.

- Dal Bo, E (2006) *Regulatory Capture: A Review*. Oxford Review of Economic Policy. Vol 22(2). pp 203
- Davies, J.S (2008) *The limits of joined-up government: towards a political analysis*. Institute of Governance and Public Management
- Department of Energy (4 October 2010) *Statement of the inter-ministerial Committee on Energy regarding the release of the country's electricity plan*. Available [online]: [http://www.energy.gov.za/files/media/pr/IMC\\_draft\\_press\\_release.pdf](http://www.energy.gov.za/files/media/pr/IMC_draft_press_release.pdf)
- Department of Energy (25 March, 2011) *Integrated Resource Plan for Electricity (IRP) 2010-2030*. Revision 2. Final Report. Available [online]: [http://www.energy.gov.za/IRP/irp%20files/IRP2010\\_2030\\_Final\\_Report\\_20110325.pdf](http://www.energy.gov.za/IRP/irp%20files/IRP2010_2030_Final_Report_20110325.pdf) (16/05/2013)
- Department of Energy (2012) *Department of Energy Strategic Plan. 2011/2012*. Available [online]: <http://www.energy.gov.za/files/aboutus/doestratplan2010.pdf>. (14/05/2013).
- Department of Energy (2013) Available [online]; [http://www.energy.gov.za/files/au\\_frame.html](http://www.energy.gov.za/files/au_frame.html) (21/06/2013)
- Department of Energy (2013a) *Basic Electricity: NERSA*. Available [online]; [http://www.energy.gov.za/files/esources/electricity/electricity\\_nersa.html](http://www.energy.gov.za/files/esources/electricity/electricity_nersa.html) (18/06/2013)
- Department of Environmental Affairs (2009) *South Africa's Green Economy Strategy*. Available [online]; [http://www.enviropeadia.com/topic/default.php?topic\\_id=342](http://www.enviropeadia.com/topic/default.php?topic_id=342). (12/06/2012)
- Department of Environmental Affairs (2010) *Draft National Strategy on Sustainable Development and action Plan 2010-2014*. General Notice 393.Pretoria. pp 5
- Department of Environmental Affairs (2011) *National Climate Change Response White Paper*
- Department of Labour (2011) *Annual Labour Market Bulletin*. Available [online]; <https://www.labour.gov.za/downloads/documents/annual-reports/labour-market-bulletin-report/2010-2011/almb201011.pdf>. (12/03/2013)
- Department of Minerals and Energy. *White Paper on the Energy Policy of the Republic of South Africa*. December 1998. Pp 23-27 Available [online]: [http://www.energy.gov.za/files\\_wp.pdf](http://www.energy.gov.za/files_wp.pdf). (15/05/2013).
- DME (1998/9) *Annual Report: The Governance of Power: Shedding a light on the Electricity Sector in South Africa*. Available [online];

- <http://electricitygovernance.wri.org/files/egi/EGI-SA%20final%20report%20-%20Appendices.pdf> (28/08/3013).
- Department of Mineral Resources (2009) Unpublished Coal Statistics. Pretoria
- Department of National Treasury. Republic of South Africa. Public Institutions listed in PFMA Schedule 1, 2, 3A, 3B, 3C and 3D. 31 December 2011. Available [online]: <http://www.treasury.gov.za/legislation/pfma/public%20entities/2010-1231%20Public%20institutions%20Sch%201-3D.pdf> (13/05/2013)
- Diagnostic. NPC. Available [online]; <http://www.info.gov.za/view/DownloadFileAction?id=147192> (16/05/2013)
- Earthlife Africa (1 June 2010) *Comments on the Proposed Planning assumptions in the IRP2. Sustainable Energy and Climate Change Project.*
- Eberhard, A (January 2011) *The Future of South African Coal: Market, Investment and Policy Challenges.* Freeman Spogli Institute For International Studies. Working Paper No. 100. pp 1
- EDF (19 November 2010) *Comments on IRP2010.* EDF South Africa (Pty) Ltd. Johannesburg. pp 1-12. Available [online]: [http://www.doe-irp.co.za/irpJHB/EDF\\_SA.pdf](http://www.doe-irp.co.za/irpJHB/EDF_SA.pdf). (18/05/2013).
- Efficiency Unit (April 2009) *Joined-Up Government.* Available [online]: [http://www.eu.gov.hk/english/publication/pub\\_bp/files/joined\\_up\\_government.pdf](http://www.eu.gov.hk/english/publication/pub_bp/files/joined_up_government.pdf) (20/05/2013)
- EIUG. Energy Intensive User Group of Southern Africa. Available [online]; <http://www.eiug.org.za/about/>(20/05/2013).
- Eskom (2009) *Annual Report. Business and Sustainability Performance Review.* [Available] [http://www.eskom.co.za/annreport09/ar\\_2009/profile\\_exec\\_summary\\_02.htm](http://www.eskom.co.za/annreport09/ar_2009/profile_exec_summary_02.htm) (21/06/2013).
- ESKOM (2010) Available [online]; [http://www.eskom.co.za/live/content.php?Item\\_ID=443](http://www.eskom.co.za/live/content.php?Item_ID=443) (21/06/2013)
- Eskom (2011) Annual Report 2010/2011.
- Eskom (2012) *Transmission Ten-Year Development Plan 2013-2022.* Available [online]; <http://www.eskom.co.za/content/TransDevPlanBrochure2013-2022.pdf>(23/06/2013)
- Eskom (2013a) *Coal Power.* Available [online]; <http://www.eskom.co.za/c/article/200/coal-power/>
- Fritz, W (2012) *Renewable Energy Feed in Tariffs, REBID, SASGI and The Smart Grid.* Cape Peninsula University of technology. Available [online];

[http://eepublishers.co.za/images/upload/energize\\_2012/09\\_ST\\_01\\_Renewable-energy.pdf](http://eepublishers.co.za/images/upload/energize_2012/09_ST_01_Renewable-energy.pdf). pp 1-3

- Foucault, M (1980) *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*. Vintage; First American Edition, Stained edition. Pp 1-288
- Gabriele, A (2004) *Policy alternatives in reforming energy utilities in developing countries*. Energy Policy 32. Pp 1319-1337
- Gerodimos, R (2004) *The UK BSE Crisis As A Failure Of Government*". Public Administration. Vol. 82 No. 4. Pp 911-929 (912)
- South African Government Information (2013) *Guide to Government: What are the government clusters and which are they? Available [online];* <http://www.info.gov.za/faq/guide.htm> (04/05/2013).
- Hotaran, I (2009) *Silo Effect vs. Supply Chain Effect*. Review of International Comparative management.
- IDASA (2010) Submission on the draft integrated resource plan assumptions. Available [online]; [http://toolkits.reeep.org/file\\_upload/8917\\_tmpphpdB31JQ.pdf](http://toolkits.reeep.org/file_upload/8917_tmpphpdB31JQ.pdf). (09/06/2013)
- International Energy Agency (2010) *Coal Information*. OECD, Paris.
- Integrated Resource Plan for Electricity 2010-2030. Revision 2. Final Report. Department of Energy. 25 March, 2011. Available [online]: [http://www.energy.gov.za/IRP/irp%20files/IRP2010\\_2030\\_Final\\_Report\\_20110325.pdf](http://www.energy.gov.za/IRP/irp%20files/IRP2010_2030_Final_Report_20110325.pdf) (16/05/2013)
- Kavanagh, D and Richards, D (2001) *Departmentalism and Joined-Up Government: Back to the Future?* Parliamentary Affairs. Pp 1-18
- Keast, R (2004) *Network structures: working differently and changing expectations*. Public Administration Review. Vol 64 (3).
- Keast, R and Brown, K (2002) *The Government Service Delivery Program: A Case Study of the Push and Pull of Central Government Coordination*. Public Management Review. Vol 4(3). Pp 1–21.
- Lana, J. (2010) *Electricity price hike in South Africa*. [Available] <http://www.southafricaweb.co.za/article/electricity-price-hike-south-africa>. [20/04/2010]
- Ling, T (2002) *Delivering Joined-Up Government in the UK. Dimensions, Issues and Problems*. Public Administration. Vol 80 (4). Pp 639

- Mail and Guardian (13 April, 2010) *Chancellor House not selling Hitachi stake* in Mail and Guardian online. Available [online]; <http://mg.co.za/article/2010-04-13-chancellor-house-not-selling-hitachi-stake> (04/05/2013)
- Majone, G (1999) *The regulatory state and its legitimacy problems*. West European Politics 22(1): pp 1-24
- Majone, G (2006) *Agenda Setting*. Oxford Handbook on Public Policy.
- Malzbender, D (2005) *Domestic Electricity Provision in the Democratic of South Africa*. University of Pretoria. Pp 1-22
- Marquard, A (2006) *Origins and Development of South African Energy Policy*. Unpublished PhD Thesis, UCT.
- Mbendi Information Services. *Coal Mining in South Africa*. Available [online]; <http://www.mbendi.com/indy/ming/coal/af/sa/p0005.htm> (16/05/2013).
- Minister of Transport S'bu Ndebele: The Infrastructure Development Cluster media briefing, Cape Town. Available [online]; <http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=25423&tid=58231> (16/05/2013)
- National Energy Regulator of South Africa (NERSA) (2011) *Consultation paper, review of renewable energy feed-in tariffs*. South Africa
- National Energy Regulator of South Africa (NERSA) (2013.) *Profile*. Available [online]; <http://www.nersa.org.za/ContentPage.aspx?PageId=231&PageName=Profile> (18/06/2013)
- NPC Online. State Owned enterprises: challenge and opportunity. Available [online]; [http://www.npconline.co.za/\(10/06/2013\)](http://www.npconline.co.za/(10/06/2013))
- Olsen, S (2007) *Generation Primary Energy*. Confidential Memo to Jacob Maroga, Eskom CEO. Wingfield Consultancy, New Hampshire, USA
- Parliamentary Monitoring Group. Statement of the Infrastructure development Cluster (Poa) delivered by Minister of Transport S. Ndebele. March 1, 2010. Available [online]; [http://www.pmg.org.za/briefing/20100301-infrastructure-development-cluster-media-briefing.\(09/03/2013\)](http://www.pmg.org.za/briefing/20100301-infrastructure-development-cluster-media-briefing.(09/03/2013))
- Pegels, A (2010) *Renewable energy in South Africa: Potential, barriers and options for support*. Energy Policy 38. 2010.
- Perri, B, Leat, D, Seltzer, K, and Stoker, G (1999) *Governing in the Round: Strategies for Holistic Government*. London: Demos
- Pollitt, C (2003) *Joined-up Government: A Survey*. Political Studies Review.

- Pressend, M (2009) *South Africa's Electricity Crisis: Beyond the Price Debate*. Online  
 [Available] [www.sacsis.org.za](http://www.sacsis.org.za) (19/04/2013).
- Prevost, X (2009/10) *Unpublished SA coal statistics*. DME / XMP Consulting, Pretoria.
- PriceWaterhouse Coopers (2001) *Electricity Distribution Industry Restructuring Project*.  
 Department of Mineral and Energy Affairs. Available [online]; [www.dme.gov.za](http://www.dme.gov.za)
- Rhodes, R. A. W. (1996) *The New Governance: Governing without Government*. Political  
 Studies Vol 40 (4) pp 15-78
- Richards, S. (2003) *Leadership—An Exploration of Issues Relating to Leadership in the  
 Public Domain* (Northern Ireland Review of Public Administration, Belfast).
- Ross, A (2005) *The UK approach to Delivering Sustainable Development in Government: A  
 Case in Joined-up Working*. Journal of Environmental Law. Oxford University Press  
 Vol 17 (1). Pp 27
- Russel, D and Jordan, A (2007) *Joining-Up or Departmentalism? Coordinating Policy for  
 Sustainable Development in the United Kingdom*. CSERGE Working Paper EDM 07-  
 01. Pp 1-15
- SAPA. World Bank approves Eskom Loan. April 8, 2010. Available [online]:  
<http://www.fin24.com/Economy/World-Bank-approves-Eskom-loan-20100408>.  
 (18/05/2013).
- Schutz, P and Bloch, B (2006) *The “silo-virus”: diagnosing and curing departmental  
 groupthink*. Team Performance management. Vol 12. No. 1/2. pp 32
- South African Government Information (2013) *Energy*. Available [online];  
<http://www.info.gov.za/aboutsa/energy.htm> (12/05/2013).
- Thatcher, M (2011) *Regulation after delegation: Independent regulatory agencies in Europe*.  
 Journal of European Public Policy. 9:6. Pp 954-972
- The Presidency. Green Paper on National Planning Commission. South Africa. 12 August  
 2009. Available [online]:  
[http://www.thepresidency.gov.za/docs/pcsa/planning/gp\\_nsp.pdf](http://www.thepresidency.gov.za/docs/pcsa/planning/gp_nsp.pdf)
- Times Live (26 February 2012) *SA Ready To Roll Out R300bn Nuclear Stations*. Available  
 online: <http://www.timeslive.co.za/politics/2012/02/26/sa-ready-to-roll-out-r300bn-nuclear-stations>
- Tyler, E (2009) *Aligning South African Energy and Climate Change Mitigation Policy*.  
 Energy research Centre. University of Cape Town.
- Wilson, T. D. (2002) *The nonsense of ‘knowledge management’*. Information Research. Vol 8  
 (1). Pp 40

- Yelland, C (30 March, 2011) *Huge renewable nuclear build ahead for South Africa but coal is here to stay* in “Daily Maverick”. Available [online];  
<http://www.thedailymaverick.co.za/article/2011-03-30-huge-renewable-nuclear-build-ahead-for-sa-but-coal-is-here-to-stay> (12/04/2013)
- 6, P (2004) *Joined-Up Government in the Western World in Comparative Perspective: A Preliminary Literature Review and Exploration*. *Journal of Public Administration Research and Theory*. Vol. 14(1). pp 103–138.