



MEDIA ADVISORY

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Comments on the Latest Development Regarding the Integrated Resource Plan and Nuclear Procurement Programme in the Department of Energy

**South African Academy of Engineering
November 2017**

The South African Academy of Engineering (SAAE) is a voluntary organisation comprising fellows elected by their peers on account of their eminence as engineers with proven records of significant contributions towards the engineering profession in South Africa. The SAAE recognises that a reliable and affordable energy supply is one of the key factors necessary for a vibrant economy to improve the quality of life of all of South Africa's citizens.

The SAAE is extremely concerned about the current developments in the electricity sector. On the one hand there is the lapse of proper governance and prudent financial management in Eskom that has come to light in various forums over the last few months, and on the other hand the current focus on the rapid procurement of a fleet of nuclear power stations. Electricity is indeed required to improve both the quality of life of all our citizens as well as to provide power for a growing economy, however the proposed current developments are inappropriate and are not following due-process.

The SAAE has the following concerns regarding the current lapses of due-processes in the Department of Energy as well as in the Department of Public Enterprises:

- The Integrated Resource Plan (IRP) has not been updated since 2011 when the IRP 2010 was adopted. During the past 6 years there have been rapid and significant changes in the energy landscape with new technologies emerging and varying (falling) prices. Therefore it is essential that the IRP should be regularly updated to ensure that South Africa's power plan remains aligned with the most recent technological and pricing trends, while also taking account of the medium term need to supply sufficient electricity and to replace the aging fleet of thermal power stations.
- The IRP should also clearly indicate trends in the reliabilities of the various potential sources of electricity supply and their price trajectories, including the factors that influence the price trajectories such as, in the case of coal, the level of negative environmental consequences and the amenability and cost of mitigation as well as the procurement costs of the various grades of coal.

- Earlier this year a number of organisations including SAAE and the Government's own scientific council, the CSIR, raised concerns about a number of aspects of the draft IRP document.
- The President appointed three different Ministers of Energy in a span of two years to head one of the most important ministries of Government.
- At the same time the Minister of Public Enterprises appointed four new chief executives of Eskom in one year!

There are a number of factors that have not been considered and that will strongly influence the supply of power over the next few years:

- First is the fact that there will be an oversupply of electricity until at least 2022, so that all additional capacity installed during the next five years will essentially be redundant, with inevitable adverse economic impacts.
- Second is the impact on the coal price, and thus on the price of energy, that results from Eskom's policy of purchasing low-quality coal from small miners at high prices and medium quality coal from large, efficient miners at low prices. A major knock-on effect of this is underinvestment in large mines, and a consequent failure to develop essential new reserves, so that the risk of coal shortages by 2020 is high.
- The current prices of electricity from nuclear power stations are known to be higher than from many other sources.

Therefore, the Executive Committee of the SAAE requests that in the interest of South Africa:

- The Department of Energy should cease to run the current ad hoc processes but rather engage with relevant research groups and industry associations in a well-planned, facilitated and documented process to discuss and agree on the best available input parameters for the modelling of alternative scenarios for the IRP so as to ensure that there is consensus on the assumptions. This could be achieved by establishing a technical forum where the various research groups and industry associations meet to discuss these issues. A new IRP can only be adopted after proper consultation in an open and transparent process.
- The Department of Public Enterprises, as the controlling shareholder of Eskom, should be tasked to resolve the leadership and governance issues at Eskom as a matter of urgency. These issues pose a significant risk for the country on a number of fronts and need to be resolved as a matter of utmost urgency.
- No procurement of new electricity generation capacity, including nuclear power, should be legislated, determined or procured until there is national consensus on the new IRP.
- The hastily planned and convened "Energy Indaba" to be held on 7 & 8 December 2017 should be postponed to January 2018 to allow for proper planning, including the release of a draft IRP by the Department of Energy to allow meaningful participation by all relevant stakeholders.

The Executive Committee of the SAAE wishes to stress the importance of the national IRP and requests that the process of adopting a new IRP be conducted through an open and transparent process using credible up-to-date information. The Executive Committee of the SAAE also wishes to register its opinion that currently it is not in the best interest of South

Africa, and especially not in the interest of the poorest of the poor, for the Government to embark immediately on a nuclear power procurement programme.

END

South African Academy of Engineering (SAAE)

The South African Academy of Engineering (SAAE) was established on 1 March 1995 as an autonomous entity operating under its own Constitution along the lines of Academies of Engineering in other countries. In 2008 SAAE applied for membership of CAETS (the Council of Academies of Engineering and Technological Sciences) and in 2009 it became a member of CAETS.

The aims and objectives of the Academy are to promote excellence in the science and application of engineering for the benefit of all members of the public in South Africa, and for that purpose to promote the application of engineering in South Africa to improve the quality of life of its people.

The Academy comprises 197 eminent engineers of all disciplines and related professionals with proven ability and achievement. It is able to harness their wealth of knowledge and experience which, with the interdisciplinary character of the membership, provides a unique resource for independent, evidence-based advice

For more information: www.saae.co.za

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