



**Speech by the Minister of Energy, Ms Dipuo Peters, MP,
on the occasion of the Youth Round-Table on Nuclear Energy
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Programme Director

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Chairperson of WinSA, Dr. Margaret Mkhosi

Chairperson of SAYNPS, Mr. Gaopalelwe Santswere

Dr. Peane Maleka from iThemba Labs

The Leadership of the South African Youth Council (SAYC) and other Youth Leaders

Dr. Banothile Makhubela and her team from the South African Black Scientists' Forum

Student Leadership and Young Professionals

Ladies and Gentlemen

Greetings to you all

This venue is full of bright and young minds that the country has. It is with great pleasure that I am looking forward to celebrate the Youth Month with you and I hope that when we leave the building I would have created a picture of hope for our beloved South Africa.

We should be discussing what opportunities exist in South Africa to curb the growing unemployment of our young people. Having this at the back of our minds, I am reminded of Moses Kotane's profound words posed to the youth in 1968. He said, and I quote:

"At this hour of destiny, your country and your people need you. The future of South Africa is your hands and it will be what you make of it"

Overarching questions, however, need to be posed to you, as the youth of this generation:

Have Moses Kotane's words any resonance to your generation of youth and its leadership?

Can our country and its people rely on you?

Is the future of South Africa in safe hands?

What will you make of it?

The Government of South Africa, as led by the ANC, has identified ways of reducing this burden of youth unemployment through investing in reliable and sustainable energy sources. We all know that we have different types of primary energy sources, Wind, Coal, Solar, Nuclear, Gas, Oil and many more, but today, I will confine myself to nuclear energy.

Let me, at the onset state that South Africa possesses sound knowledge gained from over 25 years' experience, which makes it more than competent to run a large Nuclear Power Plant. We have, over time, developed systems required to competently operate and maintain a large Nuclear Power Plant.

However, the country's nuclear history dates back as far as the mid-1940s, over 60 years ago. This makes South Africa one of the oldest nuclear countries in the whole world. We pride ourselves with a long history in the field of nuclear science.

Our only Nuclear Power Station in the country, Koeberg, is located just about 30km from where we are. It has been operating for about 26 years. We have extensive experience in radio isotopes and other nuclear applications.

The South African Government approved the Integrated Resource Plan (IRP) 2010-2030, a week after the Fukushima Daiichi Nuclear Power Station accident in Japan. We will live to tell of the impact of this accident to generations to come.

The Nuclear Framework of South Africa is based on the Nuclear Energy Policy of 2008 and all other instruments indicate the country's intent to embark on a nuclear programme, and also describe the framework upon which this should be done. Nuclear programmes require a long term political will, certainty, stability, and national commitment to ensure their success and associated benefits for the country.

In the past few weeks, on the 31 May 2013, to be precise, the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) published a document indicating that radiation leaked during the Fukushima accident is unlikely to cause any illnesses (health effects) in the future. This is the opposite of what has been said by different organisations based on what happened with the Chernobyl nuclear accident that of 1986.

In line with the Nuclear Energy Policy, in November 2011, Cabinet endorsed the establishment of the National Nuclear Energy Executive Coordination Committee (NNEECC), or as some would say NEC², under the leadership of the Deputy President, HE Kgalema Motlanthe.

The NNEECC is a Committee of Ministers, who have a direct role to play in the nuclear energy build programme. The purpose of this committee is to ensure coordination and alignment of all Government stakeholders in the nuclear energy programme. At this point it is important to understand the hierarchical order of:

- a nuclear energy programme;
- a nuclear power programme;
- a nuclear power project; and
- a nuclear power plant.

There is often a lot of confusion about this. The nuclear energy programme encompasses all the aspects of nuclear energy, including research and development that is not power related. Nuclear power programme refers to those activities directly related to nuclear power generation, including, for example fuel cycle, skills development, and R&D related to nuclear power generation.

Nuclear power project refers to the activities around the construction and operation of the nuclear power plant. I think you all know what a nuclear power plant is, due to the Koeberg Nuclear Plant that is just 30 km away from this venue.

Why are these definitions important? Or more so, what has the order got to do with anything? To be clear, the NNEECC is not going to build nuclear power plants. Neither would they issue the tenders and get directly involved in any tender process. They would make decisions relevant to define the procurement process, to ensure overall coordination, but they will not be accountable for the tender itself.

The tender is more directly part of the Nuclear Power Project, which is typically run by the utility or plant owner/operator, together with an architect engineer. This is also called for by the Nuclear Energy Policy of 2008, and still needs to be established.

Ladies and Gentlemen, the following necessitated the establishment of the NNEECC:

- In a nuclear energy programme, there are a large number of decisions of national importance mostly cross-cutting and highly integrated – for example funding and financing, industrialisation and localisation, skills development, waste disposal, reprocessing, siting, fuel cycle developments, nuclear security. It is not possible for one Ministry to decide all of these on behalf of others, without their consent or understanding.

- The NNEECC would help to ensure that Political Will is maintained for the nuclear power programme, especially during the critical initial 12 years which spans two electoral cycles. After all, Political Will is the most fundamental requirement for any nuclear programme. We have seen many countries, even our own, change direction on nuclear, just due to a change in political leadership or government. We cannot afford to let this happen again.
- The NNEECC would also help in a demystification of nuclear energy at the highest levels of Government and ensure that all views are considered as part of the decision making process. The need for demystification is as a result of the constant impetus put on us by the ruling party that citizens are exposed to only single-sided nuclear related information.
- This is likely to be South Africa's biggest procurement ever, and is an ideal opportunity to build Government's ability to work in a more integrated and consultative manner – ie. do away with the silo mentality

The industry, through Government departments, has completed the International Nuclear Infrastructure Review (INIR) document, focusing on all the 19 milestones of the IAEA, and the Peer Review was completed by the International Atomic Energy Agency (IAEA) early this year. The INIR looks into 19 areas which include Policy and Political Position, Safety, Radiation Protection, Human Resource Development, Radioactive Waste Management, Industrial Involvement, to name but a few.

At the Nuclear Security Summit held in South Korea in 2012, His Excellency, President Zuma said, and I quote,

“Nuclear energy provides not only for the expanded opportunity to generate power needed for our development. We also derive infinite value from its application to health, nutrition and agriculture. South Africa contributes to these applications through the supply of medical isotopes”.

During the Debate on the Budget Vote on the Presidency, Deputy President Motlanthe echoed and the same sentiments and said:

“the way to go for us in the long term is to become globally competitive in the use of innovative technology for the design, manufacture, and deployment of state of the art nuclear energy systems”

He took it further and stated that:

“nuclear power is ideal in this sense, because we can build large nuclear power plants at points around our southern coastline, and potentially elsewhere in the future. Nuclear power plant construction is a major undertaking, which will bring significant economic benefits to local industry.”

Our well-established regulatory health and safety standards which are of high importance to the management of all nuclear systems and facilities, address many fears that people have with regards to nuclear.

We have a wide array of measures including nuclear safety assurance, health and safety monitoring, regulation on licensing and currently working on improving the requisite skills.

The success of this Nuclear Build Programme depends on how well we can integrate our young generation with the existing and experienced work force. Youth, needs to be willing to learn and participate in this massive long term energy development and power generation programme.

The foundation of any project depends on how well the young generation acquires the required skills and knowledge, hopefully this is not the last engagement we have with you all. I am availing myself or the Department I lead (DoE), if you have engagements/debates related to energy, please let us know.

Education, training and skills development are essential ingredients in this programme. The Department of Higher Education and Training and the Department of Science and Technology are central participants in the Nuclear Build Programme. Our SETAs, FET

colleges and universities equally have a massive role to play, which includes fostering relations with institutions in other countries.

Nuclear power carries tremendous benefits for South Africa in terms of the lowest clean base load levelised cost, broader energy mix, alignment with our beneficiation strategy, industrialisation and localisation, mitigation of CO₂ emissions and leapfrogging South Africa into the knowledge economy as well as massive industrial development.

We also believe that the Youth Accord will be given expression through massive skills development and career opportunities in this programme. The youth of our country stands to benefit a lot from this. As the future of this country; seize the moment!

Thank you!