



**Opening Address by the Minister of Energy, Ms Dipuo Peters, MP, at the Nuclear  
Africa 2013 Conference and Exhibition,  
18 March 2013, Accolades Conference Centre, Midrand**

Deputy President, HE Kgalema Motlanthe

Dr Kelvin Kemm, CEO Stratek Consulting

Mr Phumzile Tselane, CEO Necsä SOC

Dr Rob Adam, President Nuclear Industry Association of South Africa

Mr Thabo Tshelane, Acting CEO National Nuclear Regulator

Other Chief Executive Officer's present

Managing Directors

Distinguished Guests

Ladies and Gentlemen

Good Morning, Sanibonani, Goeie More

I am truly honoured, to be addressing you all today. Although you represent only a small portion of the nuclear industry, I understand that the impact of your deliberations over these days will be BIG. So big, that everyone in this country will benefit. They will benefit from Nuclear Power - affordable, clean, safe, and reliable base-load electricity.

Nuclear, coals, gas, wind, solar are all complementary. They all have their role to play, and to be realistic, we understand that any long term energy mix will require us to use all these resources.

We are fortunate to be blessed with large reserves of Uranium in South Africa, and in our region. As with most natural resources, studies at international agencies are predicting that even by 2050, Africa will be exporting more than 90% of its mined uranium resources to be beneficiated and exploited by powerhouses in Europe and the East.

A fundamental question we should be asking is the following, should we continue to accept the exploitation of natural resources of Africa? We now have an opportunity to turn this around. As South Africa, we have a head start. We have advanced nuclear technology; all we wish to do is expand it. This will help us increase our beneficiation of uranium. We are more than willing to work with our neighbours in Africa to do the same in years to come.

With regards to Nuclear, the path to where we are today has not been an easy one. During the tragic Fukushima nuclear accident, South Africa was finalising its electricity plan called the Integrated Resource Plan (IRP) 2010-2030. The IRP energy mix eventually included 9 600 MW of nuclear power to be added to the grid by 2030.

After the Fukushima accident, the country through the National Nuclear Regulator (NNR) needed to find assurance in terms of safety of existing installations and the NNR issued the directive to NECSA and Eskom to perform safety re-assessments of the SAFARI-1 research reactor and Koeberg nuclear power station. This was performed in-line with what's known as a stress test, a term coined by the Europeans just after the Fukushima accident.

The NNR announced that the country's nuclear installations test results came out positive with minor recommendations for improvements on the safety of the nuclear installations. Safety of nuclear facilities is paramount to the safety of the workers, environment and residents. Therefore, since the Fukushima accident all nuclear installations safety assessments will be closely monitored by the regulators.

Since then, Government has approved the establishment of the National Nuclear Energy Executive Coordination Committee (NNEECC) under the leadership of the Deputy President, HE Kgalema Motlanthe, who will speak more about this in his address later on.

As part of the implementation of the IRP, the Department of Energy (DoE) identified the International Atomic Energy Agency (IAEA) Integrated Nuclear Infrastructure Review (INIR) document as a tool that can benefit the country by evaluating readiness addition of the 9.6 GW into the grid. The country followed the guidelines from the IAEA and formed the INIR team locally and completed a self-evaluation report.

February 2013 marked the end of another milestone in the South African nuclear industry where the IAEA ended their Peer Review Mission of South Africa's Nuclear Infrastructure. This included all 19 Infrastructural Issues – from Political Will to Procurement – which is the last one. The IAEA INIR Missions have never visited a country with an existing nuclear programme and this classifies South Africa as the first country to undergo such an evaluation, while having an existing nuclear programme. To use the INIR approach which was especially designed to be used by new comer countries.

During this same period we hosted the Director General of the IAEA Mr Yukiya Amano, and he had an opportunity to interact with key nuclear industry stakeholders and visited our nuclear installations. This was a memorable occasion for our nuclear industry.

Ladies and Gentlemen

I am going back to tell you the importance of Nuclear Power in our Energy Mix going forward. Nuclear Power provides what we call base-load electricity. This refers to power plants that can produce a controllable and predictable output. For that we cannot depend on weather permitting resources such as wind and solar. That leaves us with Biomass, Gas, Coal, Oil and Nuclear. In addition, we want to reduce CO2 emissions. The most effective from all of these is Nuclear – ZERO CO2 during production of power. That is why we have NO Choice but to include nuclear in our energy mix! The IRP model revealed that and we do not believe that this will change much.

Some are saying that the costs of nuclear used in the IRP are not updated. During that time of public participation we acknowledged this and increased the base cost by 40% using benchmarks of other international cost studies. Since then we all know that costs of Nuclear Power have gone up, so this must be taken into account.

What some of these anti-nuclear's are not saying is that the costs of renewables have also gone up. Supply and Demand – increased demand for renewable energy has come at a premium as suppliers are unable to keep up. So I am sure that even if we review the IRP, things will balance out in the end. Hence we are sticking with our decision to pursue nuclear power as agreed to by the Nuclear Energy Policy of 2008, Integrated Resource Plan 2010-2030 and the decisions of the National Nuclear Energy Executive Coordination Committee.

Other reasons for pursuing nuclear power are included in the remarks by the Deputy President.

Most recently in my visit to the Kouga and Saartjie Baartman communities in the Eastern Cape I was surprised by two things:

- The General unawareness and lack of involvement by people of the large number of energy infrastructure projects planned for their region.
- The lies that people are being told to increase the anti-nuclear voice in the area.

After my briefings there, people came up to me to thank me for telling them what nuclear power is all about. It is for the first time that most of them heard that the Eastern Cape will become an Energy Hub of South Africa.

I have to ask you as the nuclear industry to please focus on this area. This is where Eskom is planning to build the first new nuclear power plants, at Thyspunt. Let us bring those communities on-board and demystify nuclear. We can do this as follows:

- Organise more nuclear events in the region – conferences, workshops, discussions.
- Engage with the communities in the area – education and demystification campaigns.

- Assist and join the Department on their outreach events in the area.
- Publish nuclear articles and opinion editorials in the local newspapers of that area.
- Arrange interviews with the local radio stations and talk about nuclear to the people.
- Conduct surveys of industrial manufacturing and construction capacity in the area – not only in Gauteng.
- Bring students from there to be trained at some of our nuclear training facilities here in Gauteng and the North West.

I would like to see a nuclear training and manufacturing centre set up in that region, like what we see in some countries. A harbour is a key plus point for nuclear manufacturing as you all know, and with the location of the first plant targeted for that area, the synergy will be a WIN WIN. When we talk about a new refinery – it becomes an even bigger win. The skills from nuclear manufacturing can be used in that industry as well – sustainable jobs right on their doorstep.

As the NNEECC is still busy focusing on the Localisation strategy, ie. bringing nuclear to our country, we are also going to move one step further...from Localisation to Coastalisation...that means we have to move nuclear to the coast!

Ladies and Gentlemen

With those messages I wish to conclude by thanking Dr Kemm for organising the wonderful event at the optimum time and to all of you for making your time available to be here these few days. I wish you all the best for your deliberations and trust you will have a productive conference going forward.

Thank you.