



Keynote Address By

Ambassador Thembisile Majola, MP

**at the Women in Nuclear South Africa Conference held at
Eskom Academy of Learning in Midrand, South Africa on**

23 August, 2018

Programme Director and Chairperson of WiNSA, **Ms Nomathemba Radebe,**

Dr Gabriele Voigt, WiN-Global President

Ms Sandisiwe Ncemane, President of NiASA

Dr Namane Magau, Chairperson of NTP Radioisotopes chairperson

Ms Phuti Mahanyele, Chairperson of Sigma Capital

Mr Gaopalelwe Santswere, Chairperson of South African Young Nuclear Professions as well as the African Young Nuclear professionals

Mr Phumzile Tshelane, CEO: Necsa

Mr Dave Nicholls, Chief Nuclear Officer: Eskom

Senior Officials from Government Department and SOC

WiNSA members

Honoured Guests

Good Morning,

It is indeed a singular pleasure and honour to be here today, with you, on this special occasion of the Women in Nuclear South Africa (WiNSA) Conference held during the Women's Month. This year is also significant as it marks the Centenary year celebrations of two of our icons; Tata Nelson Mandela under the theme: "Be the Legacy", who was our first democratically elected President of South Africa, and became a global symbol for people fighting for freedom, for justice, for equality and their basic human rights; as well as Mama Albertina Sisulu who dedicated her life to the service of her people, under the theme: "A Woman of Fortitude". She suffered greatly for her commitment and conviction that all people are equal, that women's rights are human rights and that the struggle for liberation cannot be separated from the struggle for dignity, for equal opportunity and from the right to freely elect your government. As a nurse by training, she was in the forefront of nurturing, or giving counsel and of protecting our people against the inhuman, the brutal system of apartheid on a daily basis. She was served with countless banning orders, harassed and locked-up countless times and endured the pain of her own children being jailed, mercilessly tortured and forced into exile while her husband and lifetime partner was banished to Robben Island with the other Rivonial Trialists. The theme of this event **"Acknowledgment of Women's Contribution in the Nuclear Industry, whilst Celebrating Mme Albertina Nontsikelelo Sisulu Centenary"** is fitting and aligned with the Government programme to celebrate her life, her legacy. Mama Albertina – a true heroine, a leader of our liberation struggle, represents strength and courage for women in South Africa. On 9 August 1956 she marched with 20 000 women to the then Union Buildings to make their voices heard against the apartheid government's decision to enforce and extend the law of carrying a pass, to women. Having witnessed the devastating and dehumanising impact of this law on their menfolk Mama Albertina, and women from across the political and racial spectrum were resolute that they would not accept this, as they believed in advancement of women and equality.

Government has called on all South Africans to play their part in recognizing and emulating the values of President Nelson Mandela as well as Mama Albertina Sisulu, who dedicated her life to fight for the emancipation of women and the liberation of South Africa. It is important for all of us to understand and appreciate our history and struggle, so as to ensure that we protect and defend the gains of freedom, so our young men and women can be empowered to nurture and consolidate our democracy, advance our economic emancipation and entrench the ethos of uBuntu. We need to also find creative solutions and support mechanisms as we battle the alarming epidemic of violence against women. Our young ones, both boys and girls, are viewed as extensions of their Mothers, aunties, Grannies and are therefore also violently attacked and abused. The Women's Total Shutdown March was a clear response to this attack on all of us. Women's and Children's Rights, are Human Rights!

The nuclear industry has a role to play globally and in South Africa. The role of nuclear has been aptly summarised by the Joint Statement of the Nuclear Industry Summit held in 2014 which noted that, "Nuclear technology and materials provide a vital contribution to modern society, as do the radioactive sources used in industry, medicine, agriculture, research and other fields". Nuclear power currently provides 12% of the world's electricity and has one of the smallest carbon footprints of any major energy source. Tens of millions of patients are treated with nuclear medicine each year and 90% of these support clinical diagnoses; there are over a 100 different nuclear imaging procedures in use at the thousands of medical centres that use nuclear medicine for the benefit of human health. This role of nuclear is little known in our communities and in society at large.

As WiNSA, it is important that you become the nuclear ambassadors of this country and the African continent in general. There is a great need, as a

collective, to educate our people so that they can understand and appreciate that:

- Nuclear technology is vital for more than just providing reliable, low-carbon energy as well as having life-saving medical applications; improves manufacturing, mining, transport and agriculture; and helps us discover more about the planet we live on and how we can sustainably live in it.
- The sector has mechanism and ways to maintaining the security of facilities and radioactive materials fundamental to all well-managed operations in the nuclear industry.
- Nuclear industry is safe and that it works closely with governments and regulators at the national and international level to ensure the public is protected. In South Africa National Nuclear Regulator (NNR) and National Radioactive Waste Disposal Institute (NRWDI) are the responsible institutions in this regard.

The Nuclear Energy Policy states that competent personnel are critical to the success of the nuclear programme. Only suitably qualified, skilled persons should be utilised in activities covered in that policy. Consistent with achieving technical excellence, there shall be commitment to workforce diversity in order to increase the representation of women, previously disadvantaged communities and where appropriate people with disabilities.

Women and Youth participation should be prioritised. I challenge WiNSA to look into a suitable mechanism that can ensure prioritisation of women in this sector, we do need positive discrimination.

Programme Director,

It is indeed inspiring to see the collaboration between WiNSA, SAYNPS and NiASA, working together to bring over 300 experts and professionals from various parts of the nuclear Industry value chain as well as related business sectors, to this conference. More collaboration with other women organisations is required and desirable.

At the same time, I would like to congratulate Ms Sandisiwe Ncemane on her appointment as Nuclear Industry Association of South Africa (NiASA) President. This is an important development that will encourage more women to assume and/or aspire to positions of leadership. It is really inspirational to the girl-child, as the Learners from Grades 9-12 who participate in our annual Learners Focus Week Programme, that is most ably organised and managed by Elizabeth Marabwa, hailing mainly from disadvantaged rural or township schools, who have declared that the sky is not the limit, it is merely the beginning. Clearly, our hosting of the SKA has broken these barriers and made the seemingly impossible - possible! Why should the access to and contribution to the nuclear industry be any different?

Programme Director, I am aware that the organisation has been facing a number of challenges. WiNSA Chairperson, there is an urgent need to strengthen the WiNSA Chapters, and I am made to believe there are 7 Chapters thus far, the newest Members being Department of Energy and NRWDI. Participation of WiNSA in energy activities needs to be improved; WiNSA has to take on the role of being the voice of women in the nuclear sector, while the Department of Energy which has recently established a Chapter, must implement WiNSA activities similarly to other chapters.

A vibrant Nuclear Industry is still one of the most viable options for South Africa to stimulate the economy in the coming years. Therefore, it remains crucial that a factual public awareness campaign gains greater momentum.

- South Africa is amongst the top three largest producers of Nuclear Radioisotopes globally from the SAFARI-1 research reactor. As such, NTP is a significant contributor to the global Nuclear Medicine capacity.
- For over 30 years, Koeberg Nuclear Power Station hosts the only operational Nuclear Power Reactors on the African continent, with a capacity of 1800 MW baseload power to stabilise the Western Cape grid at one of the lowest costs of production.
- The National Radioactive Waste Disposal Institute (NRWDI) is operating the low-level waste management facilities at Vaalputs in the Northern Cape, as it journeys towards safe management and disposal of all South African radioactive wastes.

An area that WiNSA can play a meaningful role is in nuclear stakeholder involvement and awareness, As this is an essential and critical part of any nuclear power programme. When stakeholders are engaged, they can make their views known, work together to ensure those views are addressed and considered, and understand the basis for decisions. It is still important to proactively educate the public and all stakeholders about the benefits and safety of the use of nuclear energy or technology. Nuclear technology applications offer benefits to society, primarily in the areas of electricity production and medical, agricultural, geological, and industrial applications.

The World Nuclear Association recently described the impact of nuclear technology on our daily lives as follows:

“From the moment we get up in the morning, until we go to sleep, we benefit unknowingly from many ingenious applications of radioisotopes and radiation. The water we wash with (origin, supply assurance), the textiles we wear (manufacture control gauging), the breakfast we eat (improved grains, water analysis), our transport to work (tire rubber polymerization, thickness gauges for checking steels and coating on vehicles), the bridges we cross (neutron radiography), the paper we use (gauging, mixing during production processes), the drugs we take (analysis) not to mention medical tests (radioimmunoassay, perhaps radiopharmaceuticals), or the environment which radioisotope techniques help to keep clean, are all examples that we sometimes take for granted.”

This is an interesting story that WiNSA can tell to the South Africans so that you change public perceptions, which inform the public attitude to nuclear, create a more positive popular view of the strategic role of nuclear, and enhance confidence in the sector.

I am pleased about the Nuclear Technology School of Specialisation, which was recently launched by the Gauteng MEC for Education, Mr Panyaza Lesufi in partnership with the South African Nuclear Energy Corporation (Necsa). This will lead to creating a pipeline of skills and knowledge in nuclear technology. During the departmental awareness programme, the learners have expressed interest in energy related careers. It is time to prepare the next generation on nuclear scientists, engineers, physicists and policy developers.

I would like to also speak to a matter that does not seem to be high on the agenda or a priority. Research and Development in the sector is very critical, but it seems that it is very difficult to secure funding for research, leading to a loss of opportunity in terms of IP and innovation. There is no way we can continue to be part of thought leaders and innovators in the sector, at a global level, without cutting edge R&D, value add and innovation. We cannot be satisfied with being clients, but must also be known for value addition.

The nuclear and energy sector is well known for gender gap in leadership. I call on the nuclear organisations to support the development and inclusion of women in decision-making. Gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world. Providing women with equal access to decent work and representation in economic decision-making processes will fuel sustainable economies and benefit societies and humanity at large.

A study conducted by TR Kenney of Regent University on women in leadership in the Nuclear Power Industry has shown that gender disparity in nuclear power is more pronounced when compared to other industries, but is representative of the gender gap in engineering and science-based industries where men are still more prevalent. In general, the nuclear industry is not open to women. There is, therefore, a need to increase efforts that addresses under representation of women at different levels in the organisations and achieve gender transformation in the sector. There must be an increased effort to establish a pool from women at junior and middle management level and develop them towards the required 50/50%. There is also a need for funding of development programmes for efficient implementation. I urge nuclear industry institutions and Government represented here including the Department of Energy to ensure that women are

capacitated and afforded opportunities for leadership positions in your organisations in order to achieve this initiative.

I am told that preparations to select a new leadership of WiNSA are underway. I wish you all the best in nominating the most suitable candidates, who will serve WiNSA and support the Government in its initiative of women empowerment, and ensure their participation in the broader economy of the country. I also urge WiNSA to develop Women in Nuclear Database. This will provide immediate statistics on where the women are in this industry. The database should be linked to the Women in Energy database.

In conclusion, I wish WiNSA and its Chapters success and that together as a collective will continue to instil public confidence in the application of nuclear technology, and provide awareness on the extensive benefits that it brings. WiNSA members and their associated organisations need to commit to enhance public and stakeholder confidence through high standards of transparency, integrity, ethical behaviour and social responsibility as an industry. I would like to also state that I pledge that the Department of Energy, and I, will also be available to provide support wherever possible. I am convinced that together with all the dynamic women and formations here represented, we can make a meaningful difference and a positive impact.

I wish you all a progressive conference.

MALIBONGWE!

I thank you