



WELCOME SPEECH

DELIVERED BY

ACTING DIRECTOR GENERAL

OF THE DEPARTMENT OF ENERGY

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ON THE OCCASION OF THE

38th EXPERT GROUP Meeting

of the

Generation IV International Forum (GIF)

President Hotel and Conference Centre, Cape Town, South Africa

16 October 2017

9:00am

Thank you Programme Director

Chairperson of the Generation IV International Forum, Mr Francois Gauché

Technical Director of the Generation IV International Forum, Mr Alexander Stanculescu

Distinguished Expert Group Representatives from member countries,

Honourable Guests,

Ladies and Gentlemen,

Good Morning.

Firstly let me welcome all our international guests to South Africa, some of whom have travelled from opposite parts of the globe to converge on the southernmost tip of Africa, here in Cape Town.

South Africa is pleased to host the Expert Group Meeting of the Generation IV International Forum for the second time since the previous time in 2010.

From my observations, I can see that the Experts Group is the most critical hub of technical knowledge of the Generation IV International Forum. This means that every one of you hold one of the keys to unlocking the door to even safer and cleaner nuclear power reactors, that would have to be more economical than current Generation III designs that are commercially available. This is a mammoth task and I applaud the Expert Group for over a decade of work at:

- (i) identifying, updating research needs for the Forum and ensuring alignment of those needs with the vision of the Forum ;
- (ii) reviewing progress of collaborative projects and
- (iii) recommending the course of action to the Policy Group of this Forum.

Many are not aware that in the early 2000s you had evaluated over 130 reactor design concepts, to arrive at 6 reactor technologies being the most feasible to achieve the 8 technology goals to improve sustainability, economics, safety and reliability,

and proliferation resistance and physical protection over the current generation of nuclear reactors.

This event coincides with the granting of a positive record of decision for the Environmental Impact Assessment application made by Eskom to the Department of Environmental Affairs in pursuit of the Nuclear New Build Programme at the Duynefontein site where the Koeberg Nuclear Power Station is located.

What is even more impressive to me is that some of these systems have matured to an extent of construction and in the process of commissioning of demonstration or prototype plants over the next couple of years. More especially, I wish to congratulate the Chinese in their milestones towards completing construction of the HTR-PM prototype reactor by March 2018.

As South Africa is a developing country, the provision of affordable electricity is paramount to our success. The wonderful work being done through your Economics Modelling is a critical indicator of whether a particular technology or design will be suitable for us. Although some of the other factors such as reduction of waste and improving the utilisation of fuel are important to us as well, the determining factor for adoption will be the price of energy produced

I use the term “price of energy”, as opposed to “price of electricity” because, as you know, some Generation IV reactor technologies are suitable for more than just the production of electricity. In this very city of Cape Town, we are faced with an imminent drought and the highest level of water restrictions with disaster plans on the way. The irony is that it is alongside an infinite body of water, which we do not have the technology to harness economically. For us, this is where Generation IV hybrid reactor systems can play a pivotal role, through desalination of seawater. However, we cannot wait until then, and have already implemented solutions to use the Koeberg nuclear reactor to desalinate seawater for its own use, and further plans are underway for increasing this capacity for more general use.

I look forward to more positive developments from the Education and Training Task Force, the success of your Webinar programme developed to educate the public on advanced nuclear systems needs to be applauded and replicated by the broader nuclear industry as a whole.

Next year you will host the 2018 GIF Symposium, an open to the public event which is targeting the youth, and we as South Africa are fully supportive of such initiatives. In fact, I will take it upon myself to promote this event at the relevant platforms, as I usually engage with the youth on a regular basis. Please make use of our initiatives such as the South African Young Nuclear Professionals (SAYNPS) and Women in Nuclear South Africa (WinSA), who have links to the equivalent global bodies to assist with the promotion and key messages of the 2018 GIF Symposium.

I would encourage you to explore the avenues beyond these four walls and experience all the beauty Cape Town and its surrounds has to offer. Besides Table Mountain, we have Robben Island, where the late Father of our nation, President Nelson Mandela spent 27 years in prison.

I wish to conclude by wishing you fruitful discussions and resolutions over these two days of the Expert Group Meeting. Moreover, I also wish that this will lead to even more superb and ground breaking work going forward into the future.

I Thank You.