

Exclusive Interview:

Christer Viktorsson, Director General, Federal Authority for Nuclear Regulation

As the first country in more than three decades to build its first nuclear energy plant, the UAE's nuclear power program is being closely monitored by the global industry. We speak with Christer Viktorsson, Director General of the Federal Authority for Nuclear Regulation, on their critical responsibility of ensuring the safe implementation of the country's nuclear program.

Q: Could you tell us how far has the UAE reached with its nuclear energy program?

A: After receiving licenses from the Federal Authority for Nuclear Regulation (FANR), the Emirates Nuclear Energy Corporation (ENEC) is now constructing four nuclear power reactors at Barakah in the Western Region of Abu Dhabi. ENEC has also applied for a license to operate the first two plants, and FANR is now assessing that application, a process we expect to take another year or so. Then, if FANR grants the license, ENEC anticipates that the first reactor will start producing electricity for the nation in 2017.

Q: FANR has been hosting regular public forums throughout the UAE in an effort to inform residents of the safe uses of nuclear energy. How are you finding the public attitude towards the country's nuclear power program?

A: We believe strongly in doing



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our work as transparently as possible, so we think it's important to engage the public. One way we do that is by hosting regular forums in the different Emirates, where we get large audiences.

In recent forums, Emiratis have shown great interest in the nuclear power program and they have expressed significant support for it. They have asked lots of questions about nuclear power in general, safety, security, waste management, emergency planning, and so on.

For example, we often receive questions about how the 2011 nuclear accident at Japan's Fukushima Daiichi Nuclear Power Station affected plans for the UAE's nuclear power program.

We report how we conducted a so-called 'stress test' – the same done by already-established nuclear-powered nations – and required that ENEC make some changes to reflect the lessons the world learned from that accident.

Q: The UAE's nuclear energy program has been held up by the global industry as a model for newcomers and is being closely monitored as an exemplar for the whole Middle East. Does this add pressure onto your responsibility as a nuclear regulator? And how are you dealing with being under such scrutiny?

A: It's true that as the first country in over 30 years to build its first

These reviews have always praised FANR and the UAE for making excellent progress in a short period of time – FANR just celebrated its sixth anniversary in September 2014 – and they have offered recommendations for improvements. FANR is committed to making those improvements and we have established action plans to ensure they happen effectively.

In addition to working with the IAEA, we work closely with nuclear organizations in many countries, and we have bilateral agreements with nations such as the Republic of Korea, the United States, France, and many others.

With the U.S. Nuclear Regulatory Commission (NRC), for example, we recently renewed our cooperation agreement. This cooperation is particularly important because the type of reactor being built at Barakah is derived from a U.S. design that was certified previously by the NRC, and we cooperate in many ways. For example, we have sent FANR staff members to work at NRC for short-term assignments, a program that helps FANR in the long run as we aim to provide our Emirati staff with the nuclear expertise they'll need to run FANR for decades to come.

Q: It has been widely reported that ENEC will need around 2,500 employees by 2020 to run the UAE's peaceful nuclear energy program. What is FANR's role in building the country's nuclear workforce?

A: Certainly one of the earliest challenges the UAE nuclear program faces is a lack of domestic nuclear experience. Both FANR and ENEC started their work by hiring top-flight nuclear energy veterans from around the world, but we're both working hard to recruit and develop the domestic expertise that will ensure the

nuclear energy program's long-term sustainability.

For our part, FANR is supporting programs to provide educational opportunities for Emirati students, particularly those showing promise in engineering fields. And after Emiratis join our staff, we strive to train them well and offer them a satisfying path that will keep them in the nuclear field for their career.

So far, the proportion of Emirati staff has been growing, and today Emiratis comprise about 60 percent of FANR's staff.

Q: Is there anything else you would like to add?

A: Thanks for the chance to describe our work, I hope that anyone interested in learning more about FANR or its educational and career opportunities will visit our website: www.fanr.gov.ae.

Christer Viktorsson is a nuclear physicist with more than 35 years of nuclear safety experience. After receiving a Master's Degree in physics from Abo Academy University in Finland, he worked with Sweden's nuclear regulatory agencies, including the Swedish Nuclear Safety Authority, where he served as Deputy Director General for 10 years. On the international front, Viktorsson served at the Organisation for Economic Co-operation and Development's Nuclear Energy Agency in France, and at the International Atomic Energy Agency in Austria.

In 2009, he joined FANR as Deputy Director General of Operations, and coordinated the early establishment of FANR's regulatory framework. After two years away, he re-joined FANR in June 2015 to lead the organisation as Director General.

- Heba Hashem

nuclear energy plant, the UAE is under great scrutiny. But we at FANR embrace the attention because we believe in maximum transparency and we can benefit from international support and expertise.

So we have worked closely with the International Atomic Energy Agency (IAEA) since the beginning. For example, we have invited the IAEA to conduct a number of peer-review missions, in which experts from around the world come to the UAE to examine certain aspects of our nuclear preparations. The IAEA reviews have assessed the nation's overall planning structure, its nuclear regulatory framework, and its nuclear emergency plans to see how they compare to international best practices.