Statement to International Conference on Human Resource Development for Introducing and Expanding Nuclear Power Programmes

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HE Ambassador Hamad Al Kaabi

United Arab Emirates is going through a rapid growth in its energy needs, projected to increase to three folds by the year 2020 compared to 2007, reflecting an annual growth rate of 9% from 2007 onward. In evaluating different options to meet the projected demand, Nuclear energy emerged as a proven, environmentally promising and commercially competitive option which could make a significant contribution to the UAE's economy and future energy security.

In April 2008, UAE Government has formally endorsed its "Policy on the Evaluation and Potential Development of Peaceful Nuclear Energy". The policy defines a framework for developing the domestic nuclear energy program in form of commitments, strategies and principles. The policy is based on principles of complete operational transparency, highest standards of safety, security and non-proliferation, working directly with the IAEA and responsible nations of expertise, and lastly developing the program in way that ensures the long term sustainability.

Focusing on the later, government plans on introduction of nuclear energy has put a great emphasis from the outset on principles that will ensure the program is successful and sustainable in the long run.

Given the scope, complexity and resources involved in any commitment to nuclear energy, the UAE approach dedicates the availability of sufficient resources and attempt to achieve economies of scale and an environment that would ensure the sustainability, support for growing industry and continued safe operation.

A sustainable, materially-sized nuclear energy program could contribute substantially to the UAE's basic power needs for decades, retain the continued support of international investment partners, yield sufficient revenues to support a competent and fully-professionalized regulation and safety authority, and ensure the continual improvement of safety practices and security in accordance with best international standards.

Much progress has been done in developing the required infrastructure for such goal, characterized by the development of legislations with the recent enacting of a comprehensive nuclear law, establishment of required institutions both on government and industry sides, developing the required international framework for cooperation through government to government arrangements, and the continuous commitment to make required fund available for the program development.

a major element, and one of the challenges, to achieve the long term sustainability is the development of required human capacity for the nuclear sector in the future. UAE has adopted an integrated approach with all major stakeholders involved :

- to ensure a continuous pipeline of skilled resources are available throughout all phases of the program,
- to create a sustainable educational system to maintain ongoing flow of staff into the sector,
- and to establish a sustainable nuclear technology programs that provide nuclear expertise, training and research in the long run.

UAE approach is based on incremental and aggressive buildup of the capabilities needed for the successful deployment based on a mix of local expertise, foreign advisors, support firms and indigenous staff with a focus on long term national human capacity building. It is an approach the UAE has successfully implemented in other well established sectors in the country, such as the oil and gas industry.

These objectives are being implemented through short, medium and long term plans which are linked to the deployment of the nuclear power plants timeline in the UAE, and consistent with the vision that majority of plant employees in the future will be UAE nationals.

In order to meet these requirements, UAE entities have allied itself with both local and international partners. A Joint working group has been created to oversee the implementation of the educational plans composed of representatives from major local stakeholders.

An intergraded human resource plan was developed covering all phases starting from planning, contracting, constructions, and operations of UAE plans up to the year 2020, in both industry and government sides of the sector. The plan associates responsibilities for each major stake holder and identity a common strategy to fulfill these requirements.

The steering group has already started implementing some of its early plans by sending students to (US,Uk and France) for nuclear engineering studies while making good progress in establishing local program for nuclear engineering in Khalifa University of Science, Technology and Research (KUSTAR).

In December 2009, UAE, through Emirates Nuclear Energy Corporation, awarded a contract to a Korean consortium to build 4 nuclear power reactors in the UAE with the first being scheduled to be operational in 2017. The contract scope covers the design, construction with an anticipated future joint operation scope.

Along the contractual requirements for training UAE nationals through this contract, another

agreement on education and human resources development was concluded between specialized entities from UAE and republic of Korea. Under the agreement, UAE envisages the creation of new educational departments, exchange of university professors, researchers and students, development of academic programmes, establishment of laboratories, on-job training for students on diverse areas and the exchange of experts.

UAE entities have also been utilizing other bilateral and multilateral cooperation arrangements in developing its human capacity in various areas related to the nuclear sector. Multiple bilateral agreements and MOUs have been concluded by UAE government for nuclear cooperation to facilitate training and to support UAE plans in human capacity development.

This brings me to the important role of the IAEA in supporting new countries embarking on nuclear energy programs by providing guidance, training and technical support that will assist them in planning and implementing their human resources development for nuclear energy. The IAEA has recently reported that there are over 60 countries who indicated their interest in pursuing nuclear energy, the majority of these countries lack the basic infrastructure for such programs including the absence of required human resources.

This calls for further actions and development of cooperative approaches by means of dedicating resources, sharing experience, and through facilitation of training and transfer of knowledge for new comers,

And through continuous discussions in an open forum such as this event on ways to address the human resources development challenges.

In conclusion, I would like to emphasize the importance that nuclear energy introduction plans are based on long term sustainable strategy to ensure its successful deployment in a safe and responsible manner, and through the adoption of plans and strategies that will ensure the availability of resources and efficiency of the sector through its long life.

In the UAE, as we continue to develop our nuclear energy program , the actions outlined in the policy paper will continue to provide a framework which is robust, in line with international best practices, and which is an accurate demonstration of our commitments as a responsible member of the international community.