CLOSING SESSION OF THE

SAFETY ASSESSMENT ADVISORY PROGRAM MISSION TO JORDAN AND THE PRESENTATION OF THE IRRS MISSION REPORT

DDG Opening Remarks

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Mr. Denis Flory

Deputy Director General

Head of the Department of Nuclear Safety and Security



INTERNATIONAL ATOMIC ENERGY AGENCY

REMARKS FOR THE HIGH LEVEL MEETING SESSION AT 12.00

Dr. Toukan, honoured guests, ladies and gentlemen, good afternoon and thank you for inviting me to take part in this high level gathering of officials and managers who, by attending this meeting, are investing in Jordan's nuclear safety and security at a very important moment. Jordan has decided not only to build a new nuclear research reactor which I understand is being implemented at this time, but also to undertake one of the most highly complex nuclear projects existing today: the construction and operation of a nuclear power plant. These two challenges weigh heavily on the minds of all here present, and require expertise in a broad spectrum of technical and management areas – most important of which is nuclear safety and security.

As Deputy Director General of the IAEA and Head of the Department of Nuclear Safety and Security I congratulate you on your ambitious decision, at the same time, I want also to stress the challenges ahead as you build the safety and security infrastructure that is needed to support safe and secure operation of nuclear facilities. I assure you that my Department stands ready to assist you with this development.

MINISTER BRIEFING SESSION - 14:00

Your Excellency Minister Hamed, honoured guests, ladies and gentlemen, good afternoon.

This is already my third trip to Jordan in my capacity of IAEA Deputy Director General. The first was in September 2010, just my third week in office, in the frame of the Regulatory Cooperation Forum. My second was just last June, for the closing meeting of the IRRS, when I could directly judge for myself the commitment of EMRC to strengthen nuclear and radiation safety. And today I would like to thank you for the opportunity to join you during the conclusion of the Safety Assessment Advisory Programme and present the results of the June IRRS mission to Jordan.

I am very pleased to see that so many of the Jordanian nuclear power programme decision-makers and stakeholders are present with us at this first phase of the IAEA Safety Assessment Advisory Programme – and there is a wide range of interested parties in such a vast project. I say first phase because this is only the beginning of the cooperation between the Kingdom of Jordan and the IAEA - there is much more in-depth work in nuclear safety and security to be achieved, and we will be continuing our support to Jordan for many years to come.

SAFETY ASSESSMENT

Today we at the IAEA would like to thank the European Union for supporting safety assessment activities in Jordan through its extra budgetary contribution. In 2012, the Jordanian Nuclear Regulatory Commission requested assistance through the Regulatory Cooperation Forum (RCF) for developing its safety assessment capabilities in preparation for a nuclear power programme. Funding was offered by the EC through the IAEA to implement important training in safety assessment to the regulatory body. This support has recently also been extended to the Jordanian Atomic Energy Commission and technical staff involved in preparatory activities for the nuclear power programme.

I would like to point out, that by hosting the present **IAEA Safety Assessment Advisory Programme (SAAP),** the Jordanian Government is taking a direct step into the realm of advanced nuclear safety in preparation for nuclear power.

The performance of safety assessment - the determination if a vendor's safety case is in compliance with national regulatory requirements and addresses international safety standards - is a complex task requiring long term training and a high level of technical judgement.

This knowledge is essential for all stakeholders including nuclear power operators, regulatory authorities, and organizations offering technical support to both.

By evaluating your existing national competence in safety assessment and risk analysis and designing an education and training programme to building capacity and competence in this vital area, you are ensuring that the technical means of measuring safety are in the hands of your own national experts.

They will be delving into the more complex technical issues which are the basis for determining if your power programme is achieving required levels of safety as set out in the IAEA Safety Requirements for Design Safety and Safety Assessment.

By evaluating your national competency in this vital technical domain through the Safety Assessment Advisory Programme, all nuclear power programme stakeholders, and in particular the Jordanian Atomic Energy Commission (JAEC) and the Energy and Minerals Regulatory Commission (EMRC), will gain valuable insight into how to perform important nuclear safety technical evaluations. Both organizations have collaborated to accomplish this first step of the Safety Assessment Advisory Programme in Jordan.

I would like to thank the Jordanian nuclear power stakeholders for undertaking the SAAP in a timely manner in preparing for the implementation of the Jordanian nuclear power programme.

My colleague Tony Ulses will explain the next step of this programme later on, and I strongly recommend that you move ahead with this more in-depth phase.

NUCLEAR SECURITY

In a similar context, I am delighted to inform of other IAEA upcoming activities for the Hashemite Kingdom of Jordan. The Department of Nuclear Safety and Security is currently preparing for two important missions to take place in Amman this month during the week from 16 to 20 November 2014.

The first is a **review meeting for the Integrated Nuclear Security Support Plan (INSSP)**. The INSSP aims at consolidating the nuclear security needs into an integrated document that includes the necessary enhancements to the state's nuclear security infrastructure. Thus, an updated INSSP of Jordan will outline a series of steps for improving nuclear security in areas such as legislative and regulatory framework, security of radioactive sources as well as supporting capacity building and human resources of the country.

The second is a **preparatory meeting for peer review of nuclear security infrastructure.** The meeting aims at holding discussions between the IAEA and the Jordanian authorities and national stakeholders for the forthcoming peer review mission for Jordan's overall nuclear security infrastructure in early 2015. It is anticipated that this peer review mission will examine high level

nuclear security infrastructure issues pertaining to all activities: nuclear and other radioactive material, associated facilities and activities as well as materials out of regulatory control.

IRRS MISSION REPORT

Now let me focus on the recent International Regulatory Review Service which took place in June 2014.

An Integrated Regulatory Review Service mission to Jordan was conduct in June 2014. This peer review was conducted by a team of 12 prominent safety specialists from 11 nations under the expert guidance of Mr. John Loy, Deputy Director General Operations of the regulatory body of UAE and Mr. Nikolai Vlahov from the regulatory body of Bulgaria who is with us today and will in a few moments summarize the mission's findings.

There were two observers from Japan and Malaysia.

Jordan's invitation to host the mission demonstrated dedication to improve radiation and nuclear safety, and to learn from international experience.

The IRRS is one of the flagships of the IAEA Peer Review services, focused on the regulatory body. Its prominent status has even increased since the Fukushima Daiichi accident, and its role has been recognised through the IAEA Action Plan on Nuclear Safety, unanimously endorsed in September 2011 by our Member States.

It specifically states:

"Each Member State with nuclear power plants to voluntarily host, on a regular basis, an IAEA IRRS mission to assess its national regulatory framework. In addition, a follow-up mission to be conducted within three years of the main IRRS mission."

In addition, one of the very clear conclusions of the third international conference on Effective Regulatory Systems, organized in Ottawa in April last year is that:

"Peer reviews must clearly include national action plans and follow-up mission to complete the process."

In short, hosting an IRRS mission demonstrates the commitment to a package including the initial self-assessment, followed by the mission itself, resulting in the development of an action plan to address the recommendations, and ending by the follow-up mission to review the progress made.

I want to stress that hosting an IRRS mission is voluntary, but also that it brings benefits to the host State, through the identification of a path to progress, it benefits the international experts and their organisations through identification of good practices during the mission, and finally it benefits the global safety worldwide through strengthening the reference basis of the IAEA Safety Standards at the core of the mission.

The purpose of the IRRS mission was to:

- Review the existing Jordanian regulatory framework for nuclear and radiation safety;
- Review the safety infrastructure for the nuclear power programme;
- Share experiences and learn from each other through discussions;
- Increase international networking of the regulatory staff.

It was a full scope mission including all facilities regulated by the EMRC. All core modules of the IRRS were included:

- Responsibilities and functions of the government;
- The global nuclear safety regime;
- Responsibilities and functions of EMRC;
- The management system of EMRC;
- The regulatory activities of EMRC;
- Emergency preparedness and response.

Additional areas included:

- Occupational radiation protection;
- Patient protection;
- Transport;
- Tailored module for countries embarking on a nuclear power programme.

The IRRS methods used in conducting the review, included:

- Review of Self-Assessment report and Advanced Reference Materials;
- Discussion with counterparts from EMRC;
- Policy issue discussions;
- Meetings with Ministries, JAEC;
- On-site observations.

I would like to congratulate the EMRC staff for the good preparation for the mission, and for providing full cooperation in all discussions with the technical experts, which resulted in a mission

that provided valuable insights that EMRC can use in pursuing its drive for regulatory excellence. I am convinced that other countries will also benefit from the findings and conclusions identified during this review.

Thank you for your attention.

I will now turn to Mr Vlahov, the deputy team leader of the IRRS, to summarize the results of the Mission.