Briefing on the International Conference on Effective Nuclear Regulatory Systems: Sustaining Improvements Globally

Presentation to the GNSSN Steering Committee
Eric Beaupre - Safety Officer (Capacity Building)
Policy and Strategy Coordination Section
Department of Nuclear Safety and Security, IAEA
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Overview

• International Conference on Effective Nuclear Regulatory Systems
  – Sustaining Improvements Globally
• 11-15 April 2016
• Here at the VIC
  – Board Room A – M Building
Scientific Programme

• 5 topics
  1. Regulatory Lessons Learned And Actions Taken
  2. Challenges in Regulating Nuclear Installations
  3. Challenges in Regulating Radiation Sources and Radioactive Waste
  4. Strengthening International Cooperation
  5. Strengthening Regulatory Competence

• Special Panel on High Level Waste

“Strong and independent regulators, operating under a robust legal framework, are vital for ensuring a high level of nuclear safety and nuclear security.”

Yukiya Amano
Director General
International Atomic Energy Agency
IAEA
Vienna, Austria
10 years of IRRS

• Opportunity to celebrate and reflect on 10 years of IRRS missions
  – Reception
  – IRRS exhibition
  – IRRS photos shown during breaks
Statistics

- 225 participants registered
  - 214 attended
  - 88 from developing countries
- Representing 62 Member States and 8 Organizations
- 58 oral presentations and 36 posters
Summary and Conclusions

• The 5 sessions and the special panel touched upon a number of key issues with very active discussions.

• From this, the Conference President was able to derive his Summary and Conclusions for the Conference.

  – Broken down by:
    • Challenges still faced by Regulatory Bodies
    • Issues for consideration by Governments
    • Issues for consideration by Regulatory Bodies
    • Issues for future international cooperation
    • Conclusions
Challenges still faced by Regulatory Bodies

• Sustaining, and in some cases establishing, strong regulatory systems in order to maintain nuclear safety and security to maintain public trust regardless of the economic environment.

• Justifying safety improvements to existing plants, which will be required as countries implement the Vienna Declaration on Nuclear Safety.

• Emerging radiation technologies, especially in the medical field pose regulatory challenges.

• Revising IAEA Safety Guides to describe how to implement the revisions to the Safety Requirements made following the accident at the Fukushima Daiichi NPP and the Vienna Declaration on Nuclear Safety.

• Increasing participation in the various nuclear international instruments (e.g. CNS) and compliance with their obligations.
Issues for consideration by Governments

- Ensure the independence of the regulatory body from agencies which promote the nuclear and radiological sectors
- Provide the regulatory body with adequate authority, resources and competent staff
- Develop a national policy to support high-level radioactive waste management or disposition over the life of the programme
- Give equivalent consideration and priority to nuclear safety as nuclear security and safeguards
- Increase ratification of international legal instruments in support of safety and security
- Strengthen the management and control of the safety and security of radiation sources
- Strengthen cross-border harmonization for protective actions to protect the public after nuclear or radiological events
Issues for consideration by regulatory bodies

- To the extent possible, harmonize national regulatory requirements with IAEA Safety Standards
  - Embarking countries should consider adopting the IAEA Safety Standards directly
- Host peer review and advisory services missions, take actions in response to recommendations, host follow-up missions, and encourage operating organizations to also host peer reviews
- Encourage research into ageing mechanisms and effects to support the licensing of long-term operation and share results with the international community
- Develop an integrated management system to promote safety culture within the regulatory body and promote, assess, and improve safety culture within authorized parties
- Anticipate and avoid future accidents by learning from international regulatory operating experience
- Build further capacity by outreach and knowledge transfer to future nuclear professionals
- Improve transparency and communication with the public and other stakeholders to build trust
- Medical facilities, equipment and end user are likely to be regulated by several different authorities, and in some cases in different jurisdictions (e.g.: in countries with a federal system), so it is important the radiation safety regulatory bodies interact among themselves
Issues for future international cooperation

• Improve interface between nuclear safety and nuclear security
• Encourage Member States which are not Contracting Parties to the CNS or the Joint Convention to join and encourage Member States which have joined but not yet ratified to do so
  – Encourage those Member States which are contracting parties to fully comply with their obligations
• Since all IAEA Member States use radiation sources, organize a conference devoted to their regulation
  – Noting that the introduction of new medical technologies can be challenging for regulators, identify specific areas for support in this regard
• Explore the feasibility of developing a legally binding instrument covering radioactive sources
• Strengthen the IAEA peer reviews such that they challenge the host more and focus on weak points, implementation of recommendations, and follow-up
Conclusions

• Since the previous conference, many improvements have been made to nuclear regulatory systems
• Sharing experiences and lessons learned is key as we strive to sustain improvements globally
• This Summary and Conclusions proposes issues for consideration by various bodies
  – The intention is that these bodies will develop actions to respond to these issues
  – Progress on these actions will be reported on and examined at the fifth conference
• The fifth conference will be held in three years’ time; a willing Member State will be sought to host
Next Steps

• Summary and Conclusions document to be released via the conference website
  – Proceedings to be released in next 12 months

• Searching for volunteer to host next conference

• Prior to next conference
  – Survey of Member States to be conducted concerning the status of actions taken in response to the issues/actions from all 4 conferences
Thank you for your attention