INTEGRATED REGULATORY REVIEW SERVICE (IRRS) MEXICO

Mission date: 26 November to 5 December 2007

Regulatory Body: CNSNS Headquarters, Mexico City, Mexico

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Purpose of the IRRS Mission

- The purpose of the IRRS was to facilitate regulatory improvements in Mexico, through the evaluation of the effectiveness of Mexico's regulatory authority, its regulatory framework and its regulatory activities.

Scope requested by CNSNS for this IRRS mission included:

- Nuclear installations (nuclear power plant and research reactor).
- Radiation protection in industrial practices and research
- Radiation protection in medical practices (excluding diagnostic)
- Transport of radioactive material
- Emergency preparedness
- Control of public exposure
- Radioactive waste management
- Remediation of contaminated sites
- Decommissioning
- Safety and security of Radioactive Sources

Previous IAEA Missions

- 2000 IRRT
- 2004 INServ
- 2005 RaSSIA
- 2007 IRRS

The Mission

- Conformed by 10 International Experts plus, 4 IAEA's Staff
- Leader: Ms.Marta Zirakova,
- Deputy Leader: Lucian Biro,
  - Experts from 8 countries
  - Modules Requested: I to VIII

Scope of Mexico's IRRS

Legislative and Governmental Responsibilities (Module I)
Responsibilities and Functions of the Regulatory Body (Module II)
Organization of the Regulatory Body (Module III)
Authorization (Module IV)
Review and Assessment (Module V)
Inspection and Enforcement (Module VI)
Development of Regulations and Guides (Module VII)
Management System of Regulatory Body (Module VIII)

Mexican Perspective of IRRS Missions

- Experts:
  - Selection of Experts provides to the requesting country an objective result of the Mission.
  - Experts are recruited not only to find weaknesses of the Regulatory Body but also to share experiences, and to offer different points of view,
  - Team of Experts should have experiences in how to conduct this kind of missions and a clear objective of the mission
  - Leader of the team is an important issue

Mexican Perspective of IRRS Missions (cont)

- Results:
  - Very good list of weaknesses and pending points in the different process to achieve nuclear and radiological safety. Deep and professional work.
  - Some of the issues are very far to be solved by the regulatory body itself; recent missions were able to put apart points addressed to the different stakeholders (Government, regulatory body, legislative works, etc.)

Mexican Perspective of IRRS Missions (cont)

- Results:
  - To many missions do not mean that pending issues be solved.
  - Time between missions need to allow that important issues be solved before to start another.
  - Following missions needs to be planed in accordance with the importance of the “findings”
  - Different government levels needs to be sensibilized about the importance of the mission, the results and also the compromises assumed by the country.

Mexican Perspective of IRRS Missions (cont)

- Results:
  - Previous work before starting of the mission, not only with the regulatory body, but at different levels into the government.
  - Different missions with similar results could weak the importance of the IAEA's assistance Missions

Mission's Conclusions (Example)

- The process of regulation development is complex and requires a long consultation, receiving comments from the main stakeholders, i.e. Ministries of Energy, Labour, Health, Environmental, Interior, Economy, Communications and Transport, plus Academic and Professional bodies involved in the nuclear industry and the National Standards Body. Each Department in the Ministry needs to endorse the draft to allow its issue to the Legal Council of the President of the Mexican Republic for a further legal review and final approval of the President of Mexican Republic.

Mission's Conclusions (Cont)

- At the Governmental level there is no established national policy on radioactive waste management and no corresponding strategies. There is no a clear allocation of responsibilities for the overall management of radioactive waste at the national level. There are neither sufficient resources, including the human resources, nor there is adequate infrastructure in place for the management of radioactive waste.

Mission's Conclusions (Cont)

- Currently there are no low-level or high-level waste disposal sites identified by CNSNS in Mexico. However the existing facility was once operated as a low level radioactive waste disposal facility, before being reclassified as an interim storage facility. This reclassification was necessary because it was determined that it did not meet design and sitting safety criteria.
- Laguna Verde (CLV) nuclear power plant continues to generate radioactive waste and the waste storage facilities on site are projected to be full within the next two years.
- Continued delays in the sitting and licensing of a disposal facility put an undue burden on LV NPP, the non nuclear existing facility, non-nuclear waste generators and future generations.

Mission's Conclusions (Cont)

- There is no national strategy for decommissioning of nuclear and non-nuclear facilities. Decommissioning is addressed in a broad concept in some of the present CNSNS regulations and are not in compliance with IAEA Safety Standards. There are still insufficient resources, including the human resources to address the decommissioning issue.

Mission's Conclusions (Cont)

- The existing regulation on radiological protection is not totally consistent with the requirements established by the 'International Basic Safety Standards for Protection against Ionising Radiation and for the Safety of Radiation Sources' (Safety Series No. 115, 1996) concerning the public exposure.
- There is a national system in place that is technically capable of making evaluations for controlling the presence of significant amounts of radioactive substances in materials going for recycling. However the standards used to determine release options are not consistent with IAEA RS-G-1.7.

Mission's Conclusions (Cont)

- There are neither specific national regulations nor standards covering the following environmental monitoring topics:
  - pre-operational investigations
  - environmental monitoring programs during and after operation
  - requirements for facilities operators to report any significant increase in environmental radiation fields or contamination.
  - addressing technical requirements for monitoring
  - establishing the standard content and periodicity of reports
  - requiring the summarization of monitoring results
  - environmental reporting requirements.
  - establishing the need for verification of the adequacy of the assumptions made for prior assessment of radiological consequences of exposures to the public associated with authorized registrants' and licensees' practices

Mission's Conclusions (Cont)

- There is neither a national strategy for the identification of potential contaminated areas by past practices or chronic exposure nor a necessary regulatory framework for the planning and implementation of remedial actions.
- There are no regulations on transport of radioactive material.
- CNSNS has no procedures to deal with transport of radioactive material matters.
- CNSNS has not enough trained persons in transport of radioactive material.
- There are no requirements regarding persons performing transport of radioactive material.

Mission's Conclusions (Cont)

- CNSNS has taken significant steps to increase the awareness of scrap metal dealers regarding the hazards and detection of radioactive sources. Further efforts in this regard, including ensuring the proper functioning of detectors, would aid in minimizing risks to the public.
- Although CNSNS has initiated some activities with respect to the security of radioactive sources, it lacks the necessary regulatory framework to implement a comprehensive program to address security.

ACTION PLAN BY CNSNS

- Take into account recommendations of the IAEA documents, due to many aspects of the Mexican regulations are not according to the IAEA safety guides.
- To complete all procedures, guides, etc. to make the work more standardized (specifically evaluation procedures)
- Try to cover the whole aspects of the legislation, for instance; transport, remediation, decommissioning and radioactive waste management are not duly legislated, and currently not developed.

- Thanks very much for your attention