IRRS Good Practices

Responsibilities and Functions of the Government (Module 1)

Establishment of a framework for safety

<u>Japan – Initial Mission</u>

Mission Date: January 2016

Good Practice

The prompt establishment of a legal and governmental framework supporting a new independent and transparent regulatory body with increased powers.

Observation

The legislative changes and the timeliness with which they had been implemented were recognized as positive steps underpinning and promoting nuclear safety, and were commended by the IRRS team.

Bases

- (1) GSR part 1¹ Requirement 2 states that "The government shall establish and maintain an appropriate governmental, legal and regulatory framework for safety within which responsibilities are clearly allocated".
- (2) GSR part 3 Requirement 2 states that "The government shall establish and maintain a legal and regulatory framework for protection and safety and shall establish an effectively independent regulatory body with specified responsibilities and functions".

IAEA Comments/Highlights

The legislative changes and the expediency by which the required basis for regulation of nuclear and radiation safety had been implemented to respond to the Fukushima Daiichi Accident were recognized as a highly positive step underpinning and promoting nuclear safety and were commended by the IRRS team. The introduced back-fitting rule, that required the application of the same safety requirements for new as well as for existing nuclear facilities, was one such example of positive change.

¹ IAEA GSR Part 1 was superseded by GSR Part 1 (Rev. 1) in 2016.

The major amendments subsequently introduced in the revised laws and included inter alia:

- The establishment of a new independent regulatory body Nuclear Regulatory Authority (NRA) with enhanced powers;
- The increase of the openness and transparency of regulatory activities;
- The implementation of important measures in the area of emergency preparedness, including the involvement of top-level politicians in emergency exercises;
- The integration of all regulations on power reactors into the Reactor Regulation Act;
- The enhancing of the regulatory requirements for existing and new plants, notably the strengthening of measures against natural hazards and severe accidents;
- The introduction of a back-fitting rule requesting that existing nuclear facilities shall be in compliance with the newest regulatory requirements;
- The introduction of an approval system for extension of operation periods of nuclear power plants.

Mission Date: January 2016

Good Practice

The NRA's prompt and effective incorporation of the lessons learnt from the TEPCO Fukushima Daiichi accident in the areas of natural hazards, severe accident management, emergency preparedness and back-fitting of existing facilities, into the new regulatory framework.

Observation

The legislative changes and the timeliness with which they had been implemented were recognized as positive steps underpinning and promoting nuclear safety and were commended by the IRRS team.

Bases

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IAEA Comments/Highlights

In order to incorporate lessons learnt from the TEPCO Fukushima Daiichi accident, NRA established several "Study Teams" with cooperation of the Japan Nuclear Energy Safety Organization (JNES), Japan Atomic Energy Agency (JAEA) and other academic experts. The "Study Teams" developed new regulatory requirements based on the lessons learned from that accident, the latest technical knowledge, overseas regulatory trends including the IAEA safety standards and best practices found in other international organizations.

Emphasis was given to strict evaluation of natural hazards, the need to take measures to prevent and mitigate severe accidents, back-fitting system and new requirements for continuous improvement. This revision assigns the licensee the responsibility to act proactively in installing equipment, enhancing education of personnel or taking any other necessary measures for preventing disasters, taking into account the latest knowledge on safety at nuclear facilities.