Fukushima Ministerial Conference on Nuclear Safety

Working Session 2 – Keynote address on

Overview of Strengthened IAEA Safety Standards

André-Claude LACOSTE on behalf of the Chairperson of the Commission on Safety Standards



- The Commission on Safety Standards (CSS) is a standing body of senior government officials holding national responsibilities for establishing standards and other regulatory documents relevant to nuclear, radiation, transport and waste safety.
- The CSS has a special overview role with regard to the Agency's safety standards and provides advice to the Director General on the overall programme on regulatory aspects of safety.
- Former Chair 2005-2011 André-Claude Lacoste
- Current Chair as of January 2012: Dana Drábová

- The IAEA Action Plan on Nuclear Safety GOV/2011/59-GC(55)/14 requests
 - The Commission on Safety Standards and the IAEA Secretariat to review, and revise as necessary using the existing process in a more efficient manner, the relevant IAEA Safety Standards in a prioritized sequence.
- Systematic review plan established mid 2011
 - Scope, prioritization, topical approach and process for the review
- Priority given to the IAEA Safety Requirements that are applicable to nuclear power plants and to the storage of spent nuclear fuel

- Progress report summarizing the first results submitted to the Safety Standards Committees in December 2011
- Analysis based on the first reports available
 - Report from the Government of Japan to the June Ministerial Conference
 - Report from the Government of Japan to the September 2011 IAEA
 General Conference
 - IAEA Fact finding mission
 - Letter from INSAG

First results:

- No gaps or deficiencies in the 450 overarching requirements.
- A small number of areas in which the requirements could be reinforced, through the addition of new requirements and the modification of a few existing requirements.
- Most of the proposed additions are not new issues as they are already covered in Safety Guides which provide recommendations on the measures necessary to meet safety requirements.

Example of such additions

- Consideration of additional provisions to cope with situations involving the loss, over an extended period of time, of off-site power or the ultimate heat sink;
- Consideration of properly identified potential external hazards, including those that could affect the availability of regional infrastructure in extreme external events;
- The need to ensure that information on essential safety parameters remains available in severe accident conditions.

- New elements considered for the second phase of the review of the IAEA Safety Standards:
 - New reports available from Japan and other national and regional reports
 - Safety re-assessment (sometimes called 'stress tests')
 - Results of the International Experts Meetings
 - Outcome of the second Extra-Ordinary Meeting of Contracting Parties to the Convention on Nuclear Safety
- CSS approval in October 2012 of the outline plan for the consequent revision, though addenda, of five Safety Requirements publications: the General Safety Requirements on Governmental, Legal and Regulatory Framework for Safety, and on Safety Assessment for Facilities and Activities, and the Specific Safety Requirements publications on Site Evaluation for Nuclear Installations, on Design of Nuclear Power Plants and on Commissioning and Operation of Nuclear Power Plants.

Main conclusion:

- No significant areas of weakness
- Comprehensiveness and adequacy of the current Safety Requirements
- Fitness for purpose of the safety standards: the great majority of the lessons identified from several reports were already addressed in the Safety Requirements
- Opportunity to enhance the clarity of the requirements by making a small number of amendments and thus to facilitate their implementation

- Main conclusion (Cont'd):
 - the CSS reiterated that:
 - The IAEA safety standards (Fundamentals, Requirements and Guides) are the global reference for achieving a harmonized high level of safety worldwide in the uses of nuclear energy and radiation sources
 - However, safety standards can only fulfil this purpose effectively if
 - Consistently applied in practice.
- Therefore, greater attention has to be paid by and in all Member States to the wholesale application and use of the IAEA safety standards.