



IAEA

WM'2012

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Fukushima - IAEA Perspective on WM Issues

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IAEA Actions after Fukushima Accident

- Activation of Emergency center
- Specialized Expert missions to Japan
- Ministerial Conference in June 2011
- Action plan development and implementation
- Major achievements and future plans with emphasis on environmental remediation and spent fuel and waste management

Action plan

- Development of Action plan requested by the Declaration of the Ministerial conference
- Adopted by the Board of Governors in September 2011
- Ultimate goal is to strengthen nuclear safety worldwide
- In January 2012 a Nuclear Safety Action Plan Platform launched to improve the dissemination of information on the activities performed

Action plan

- Action plan consists of 12 major points:
 - Safety assessment of vulnerability of NPPs
 - Strengthen IAEA peer reviews
 - Emergency preparedness and response
 - Strengthen effectiveness of national regulatory bodies
 - Strengthen effectiveness of operating organizations
 - Review IAEA Safety Standards
 - Improve international legal framework
 - Facilitate development of infrastructure for newcomers
 - Capacity building
 - Ensure protection of people and environment from ionizing radiation
 - Improve communication and information sharing
 - Effectively utilize R&D

Major Achievements

- IAEA Expert Missions on
 - Safety assessment against extreme natural hazards
 - Environmental Remediation
- IAEA Safety Standards and Peer Reviews
- Successful preparation on future IEM – International Experts' Meetings

IAEA International Expert Missions on SA

- Safety assessment against extreme natural hazards:
 - May 2011: Fact-Finding Mission for preliminary assessment of safety issues related to the accident and initial lessons learned
 - January 2012: Expert mission to review Japan's approach for assessing safety at the nation's nuclear power plants

Expert mission on remediation

- October 2011: Expert Mission on remediation of large contaminated areas around Fukushima Dai-ichi Nuclear Power Station
- 12-member team, led by J. C. Lentijo (CSN – Spain)



The mission had three main objectives

- Provide assistance to Japan in the management of the remediation of large contaminated areas
- Review remediation strategies, including contamination mapping
- Share its findings with international community as lessons learned



Safety Standards and Peer Reviews

- A systematic review of the IAEA Safety Standards:
 - current focus on the Safety Requirements
 - involving the safety standards committees (WASSC, NUSSC, RASSC and TRANSSC).
- So far no major gaps have been identified in the waste safety standards but only proposals for clarifications in a few requirements
- IAEA Peer Reviews incorporates also review of severe accidents management programmes and its consistency

Future actions

- Many actions planned in each of 12 points of the Action plan
- Two important activities related to SF and RWM area:
 - International Experts Meeting (IEM) on Reactor and Spent Fuel Safety in the light of the Accident in the Fukushima Daiichi Power Plant in March 2012
 - IEM on decommissioning, clean-up and remediation of nuclear installations and contaminated lands after an accident in Q1 of 2013

IEM on Spent Fuel Safety

International Experts' Meeting on Reactor and Spent Fuel Safety in the Light of the Accident at the Fukushima Daiichi Nuclear Power Plant

Organized in connection with the implementation of the IAEA Action Plan on Nuclear Safety

IAEA Headquarters
Vienna, Austria
19–22 March 2012



www.iaea.org/meetings/CN-208

- The IEM meeting will provide a forum for discussions and exchange of information on reactor and nuclear fuel safety and performance under severe conditions

IEM on Spent Fuel Safety

- Objectives:
 - Identify and analyse reactor and spent fuel safety and performance issues
 - Consider the design, engineering and analysis of current and new systems for accident prevention and mitigation
 - Exchange information on national assessments of reactor and spent fuel safety and performance
 - Identify potential priority areas for research and development, technology development and management
- 55 extended abstracts received 22 for spent fuel topics and 33 for reactor topics

IEM on Decommissioning

- The meeting will address decommissioning, clean-up and remediation after an accident
- The main objectives:
 - to highlight the specific issues that may need to be addressed during decommissioning and remediation of facilities and lands affected by a nuclear accident,
 - assist all parties in identifying resource needs to be adequately prepared for any accident
- The planning is on-going, first consultancy to prepare for an IEM from 26 to 28 March in Vienna

IEM on Decommissioning

- A formal announcement of the IEM is planned in May during the 4th Joint Convention Review Meeting
- Meeting venue probably in Asia
- The expected participation is in the range of 100-150 people
- Form of the IEM : Invited papers will be presented by authors, but contributed papers are welcome and will be presented as posters