39th Nuclear Safety Standards Committee
39th Waste Safety Standards Committee

Joint Session

30 June – 2 July 2015

Agenda item 5.3

International Conference on Operational Safety - Insights for Operational Safety Standards,

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Conference summary

• **Place and time:** IAEA, Vienna, 23-26 June 2015

• **Objectives:** To review state-of-the art in operational safety and generate new ideas to facilitate safety improvements worldwide

• **Participants:** More than 200 participants from 50 countries; NPP, utilities, corporate organizations, regulators, TSOs

• **Structure:** 6 sessions with presentations, panel discussions and poster session.
  • International Operational Safety Peer Reviews
  • Corporate Management of Safety
  • Post-Fukushima Operational Safety Improvements
  • Operating Experience
  • Leadership and Safety Culture
  • Long Term Operation
Main Conclusions from the conference

• International Peer Reviews are a powerful tool for safety improvement. Regulatory Inspections, OSART and WANO peer reviews are essential elements of the global nuclear safety governance. Both IAEA and WANO have taken actions to strengthen their services to help prevent plant accidents.

• Independent safety oversight was developed and implemented for many plants as result from the international peer reviews

• Ensuring actual implementation of the Operational Experience Feedback could be further improved, mechanisms for exchanging data on the implementation shall be sought

• Systemic approach to safety and practical applications of safety culture improvements were reported throughout the industry and regulators

• LTO – life beyond 60 - different approach in the MSs; No show
• stoppers have been identified based on R&D to date
Conclusions on Peer Reviews

• An IAEA/WANO working mechanism to communicate and coordinate different international peer review services shall be established to ensure an effective way of performance of peer reviews and to allow plants to optimize the use of their resources.

• The IAEA and WANO, in cooperation with the nuclear power plant operating countries are encouraged to develop a long term planning for OSART and WANO missions to minimise duplications and ensure that resources are used to the best interests of all stakeholders.

• Increased number of international peer reviews. WANO has made significant and commendable efforts to enlarge and strengthen its peer review programme and to “design-informed” its assessment methodology.

• OSART missions as planned by IAEA Action plan for safety are not yet completed by all MSs. IAEA recent developments to review and update the OSART methodology after Fukushima accident are acknowledged and shall be followed by revision of the IAEA Operational Safety Guides.
Revision of IAEA SS on operational safety

- Most of the Operational safety standards were developed in 2000-2005 and need review as per the CSS requirements

- This review will have to take into consideration:
  - the experience gained with the application of safety standards/ eg. from MS experience and from OSART missions
  - the revisions implemented in some of the other safety standards and, in particular, the amendment of the IAEA Safety Requirements undertaken after the Fukushima Daiichi accident; and
  - State-of-the-art in operational safety, eg consider improvements which have been implemented at many NPPs worldwide.
Revision of IAEA SS on operational safety

Technical Meeting to Review the IAEA Safety Guides on Nuclear Power Plant Operational Safety, 16–20 November 2015

• **NS-G-2.1**: Fire Safety in the Operation of Nuclear Power Plants
• **NS-G-2.2**: Operational Limits and Conditions and Operating Procedures for Nuclear Power Plants
• **NS-G-2.3**: Modifications to Nuclear Power Plants
• **NS-G-2.4**: The Operating Organization for Nuclear Power Plants
• **NS-G-2.5**: Core Management and Fuel Handling for Nuclear Power Plants
• **NS-G-2.6**: Maintenance, Surveillance and In-service Inspection in Nuclear Power Plants
• **NS-G-2.7**: Radiation Protection and Radioactive Waste Management in the Operation of Nuclear Power Plants
• **NS-G-2.8**: Recruitment, Qualification and Training of Personnel for Nuclear Power Plants
• **NS-G-2.14**: Conduct of Operations at Nuclear Power Plants
Revision of IAEA SS on operational safety

- The TM shall identify the major gaps and/or needs for revision

- Review and revision as necessary “in block” of all guides that have not been recently reviewed. (Trail use of the new revision tools developed by the IAEA)

- Addressing in consistent manner issues related to RB, Safety Assessment, Configuration Control, Spent Fuel Pools, Radiation Protection, Radiation Waste, Decommissioning, Safety Culture, etc.

- Members of NUSSC, RASSC & WASSC are welcome to support the TM in November