

“Current and Emerging Methods for Optimising Safety and Efficiency in Nuclear Decommissioning”

7th-9th February 2017, Norway

Session 3 ‘Needs and Emergency Technologies for Decommissioning’

Title:

Needs for R&D and innovations to address challenges of nuclear facility decommissioning after its normal shutdown versus advanced approaches required for Fukushima Daiichi NPS decommissioning

Taking into account several attempts to address variety of needs for R&D related to the decommissioning challenges such as:

- Characterisation and survey prior to dismantling,
- Technologies for dismantling,
- Decontamination and on-site remediation,
- Material and waste management,
- Site characterisation and environmental monitoring.

This presentation will give an update of approaches in several countries for R&D to aim at more efficient and effective decommissioning and, above all, to reduce current labour intensive needs to implement this kind of work.

The evidence of the particular needs to coordinate efforts both for ‘normal decommissioning’ and accident cases like Fukushima Daiichi will be offered by demonstrating that, for a large part, that needs might be considered as similar.

Some examples of particular interest will be given and it will be emphasized the need to adapt existing and/or new technologies from ‘non-nuclear’ areas to use them for nuclear decommissioning.

The global interest to evaluate and to coordinate R&D efforts will be demonstrated. Consequently there might be a large international interest to increase the consensus where R&D can be better directed.

The more comprehensive coordination should support improvement of the overview of future decommissioning needs to implement the decommissioning activities more effectively in terms of time and finance, not compromising safety.