Nuclear Safety Research For Safe and Reliable Nuclear Power in Japan

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MAJOR ACTIVITIES AT FUKUSHIMA DAIICHI NPP

- Spent fuels exist still in the spent fuel pools. It is estimated that most of fuel debris exist covered with water on the floors of containment vessels.
- Major activities being promoted are;
 - Management of contaminated water;
 - Spent fuel removal from SFP;
 - Survey of the inside of PCVs as a preparation for debris removal;
 - Radioactive waste management;
 - R&Ds of the fuel debris retrieval equipment and devices, container and systems necessary to safely retrieve the fuel debris.



SAFETY AND RELIABILITY

Safety: Enhance lines of defense(LOD) for safety through R&D

Operational States		Accident Conditions			
Normal Operation	Anticipated Operating Occurrences	Design Basis Accidents	Design Extension Conditions		Conditions Practically Eliminated
			Sequences without core melting	Sequences with core melting	Large early releases
The first LOD	The second LOD	The third LOD	Strengthening of the third LOD	The strengthened fourth LOD	The fifth LOD

Reliability:

Improve the reliability, sustain the safety and extend the life as long as practicable through R&D for innovation, human resource development and knowledge management

CONCLUSION

R&D for safety, sustainability and innovation

Safety culture

Public confidence