

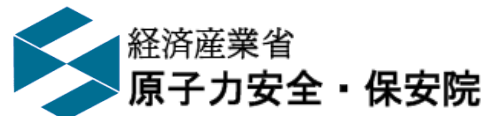
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W13 Regulatory Applications of International Operating Experience

Feedback of Operational Experience to the Nuclear Safety Regulation of Japan

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1. Current Status of Nuclear Power in Japan

(1) Commercial nuclear power plants

- Planning stage: 12 reactors
(16,652MW)
- Construction stage: 2 reactors
(2,756 MW)
- Operational: 54 reactors
(48,847 MW)
- Under decommissioning 3 reactors

1. Current Status of Nuclear Power in Japan

(2) Recent regulatory topics

- License application for Kaminoseki NPP unit 1 (Chugoku Electric Co.)
- Commissioning of Tomari NPP unit 3 (Hokkaido Electric Co.)
- Restart of Kashiwazaki-Kariwa NPP units 6 and 7 (Tokyo Electric Co.) affected by the Chūetsu Offshore Earthquake
- Aging management and assessment for over 40 years of operation of Tsuruga NPP unit 1 (Japan Atomic Power Co.)

2. Operational Experience Feedback

- (1) Measures taken by the regulator
 - a. Review of licensees' operational experience feedback
 - (i) For any unfitness including incidents or malfunctions;
 - Making a regulatory requirement for improvement of licensees' operational safety activity
 - NISA checks the appropriateness of licensees' actual activities through the Operational Safety Inspection
 - NISA requests reporting, conducts on-the-spot inspections and directs feedback

2. Operational Experience Feedback

(ii) Review on the reported events

- Appropriateness check of cause analysis, prevention and feedback measures
- Hearing expert opinions on the event report of the licensee
- Direction to the licensee

[Reference]

23 events (0.4 events/reactor) reported to NISA by the licensees in FY 2008

(INES rating 1: 3, rating 0: 19, below scale: 1)

2. Operational Experience Feedback

b. Collecting, assessing and using safety information

– Objectives

- To consider operational experience feedback into regulation

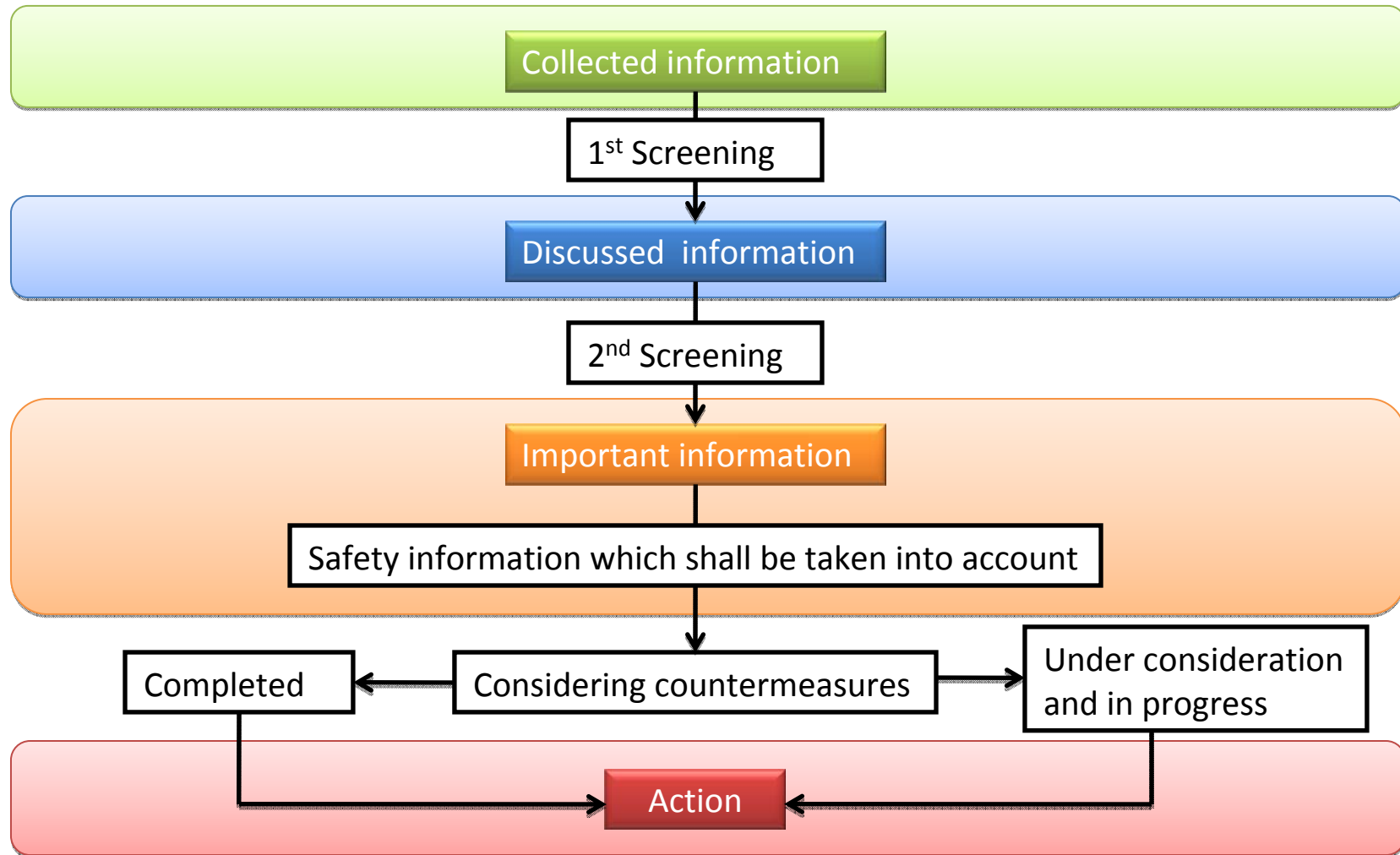
– Applicable Safety Information

- Incident information from overseas and domestic nuclear installations
- Regulatory information of overseas regulators

– Procedure for consideration

- 1st screening: Identify the information that is potentially relevant to NISA regulation
- 2nd screening: Identify the information which possibly requires countermeasures in NISA regulation

2. Operational Experience Feedback Flow of information processing



Numbers indicating in this figure show information processed

2. Operational Experience Feedback

Progress Control Sheet

No.

YYYY/MM/DD

Title		
Background		
Current status and issue		
Action status	Urgency/Importance	
	<ol style="list-style-type: none"> 1. Direction of Reporting 2. Regulatory Measure 3. Amendment of Regulation 4. Safety research 5. Other 	
Proposed actions for implementation		
The person in charge of the information		

2. Operational Experience Feedback

Practical actions and their number

Action
Regulatory measure
Amendment of regulation
Implementing safety research
Others

2. Operational Experience Feedback

Example of feedback to regulatory measures

Title of safety information	classification
Potential affect on recirculation of PWR emergency sump	Regulatory measure / Safety research / Amendment of regulation
Potential clogging of intake strainer of BWR emergency core cooling	Regulatory measure
Habitability of control room	Regulatory measure / Amendment of regulation
External flooding	Regulatory measure
Fire protection of light water reactor	Amendment of regulation
Potential criticality caused by human error in refueling procedure	Other
Countermeasures for hurricanes	Regulatory measure
Long-term integrity on cables considering LOCA	Regulatory measure

2. Operational Experience Feedback

(2) Measures taken by the industry

- To collect, disclose and share the information on the operation of nuclear facilities
- To issue recommendation/notification documents for supporting self operational safety activities taken by the licensees
- To promote activities for prevention of incidents and improvement of safety

3. Challenges facing the regulator

- Enhancing the use of operational experience feedback
 - Ensuring scientific and objective decision making
 - Using the achievements of safety research and risk information
 - Disseminating the progress of operational experience feedback
- Facilitating communication with the industry
 - Enhancing the collecting and analysis mechanism of
 - similar cases and events in domestic facilities
 - incidents information below the reporting level

3. Challenges facing the regulator

- Facilitating the feedback of international operational experiences
 - international collaboration in the field of safety research based on the outcomes of operational experience feedback