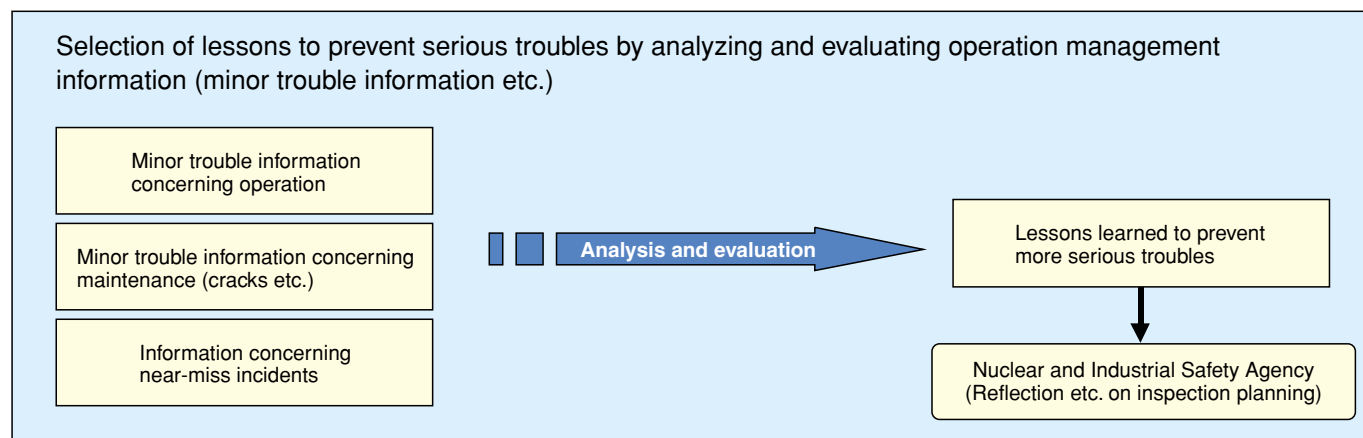
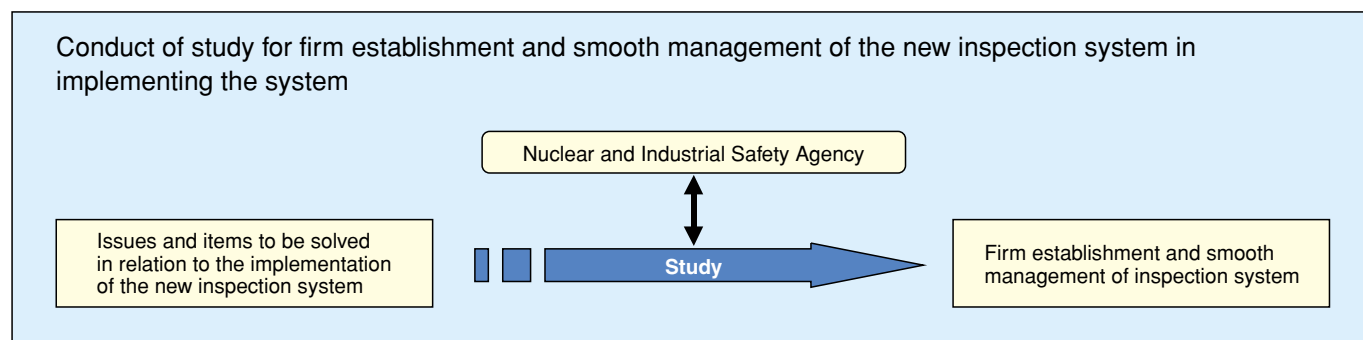
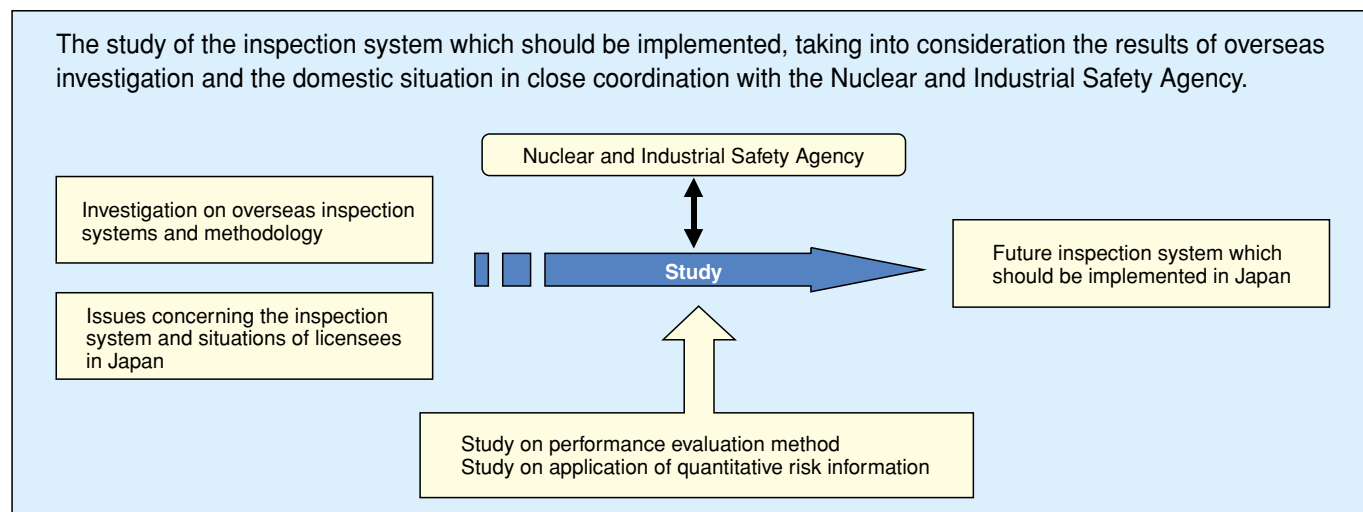


Study on Inspections for Nuclear Power Stations (1) (Objectives and Contents of the Project)

Objectives of the Project

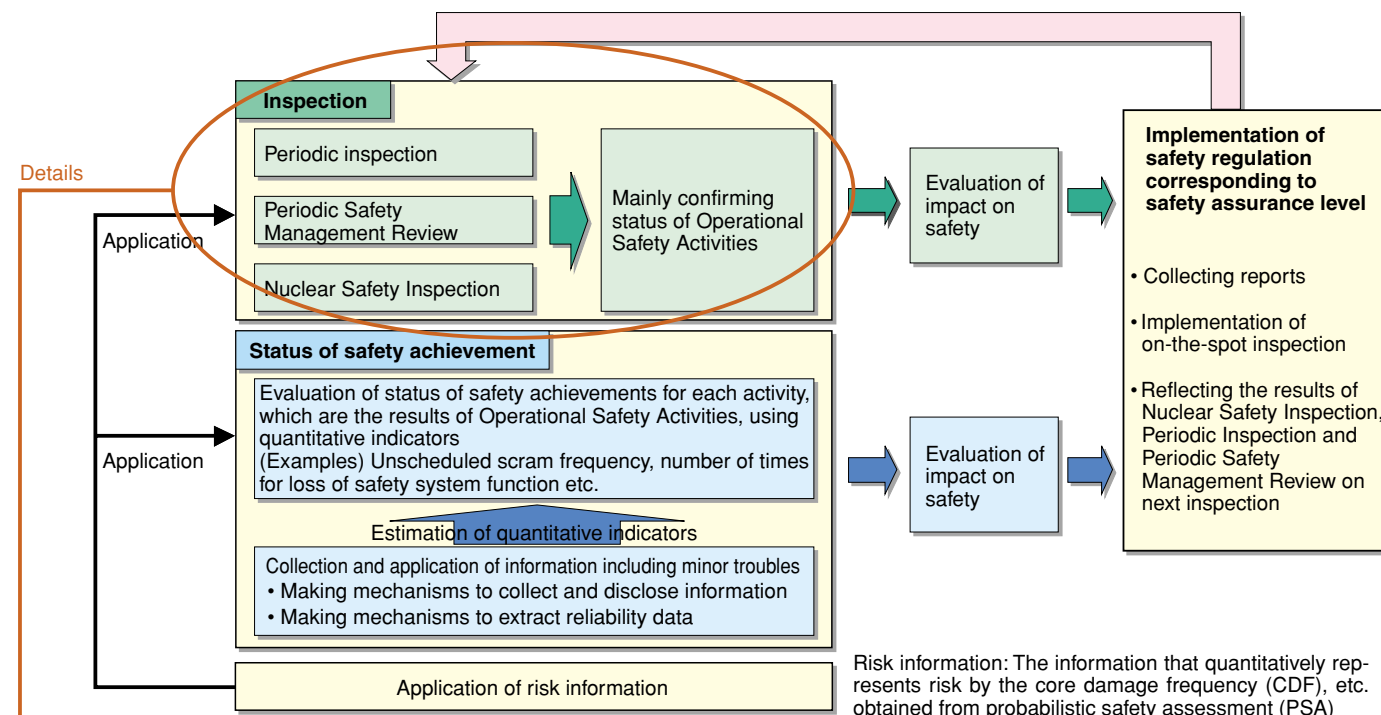
“The Subcommittee on Appropriateness of Inspection on Policy” (One of advisory groups for Nuclear and Industrial Safety Agency) has set forth the following policies; to establish systems that encourage licensees enhance operational safety activities and to further ensure safety of nuclear facilities; to carry out inspections, based on the risk evaluation and the plant performance evaluation for nuclear facilities and to improve effectiveness of the Government inspections; to help extensively licensees’ operations management and the Government inspections through widely collecting and analyzing certain operations information (minor troubles, etc. not required to report by law). The objectives of this project are to conduct necessary studies for the establishment of the inspection system framework according to these policies.

Contents of the Project



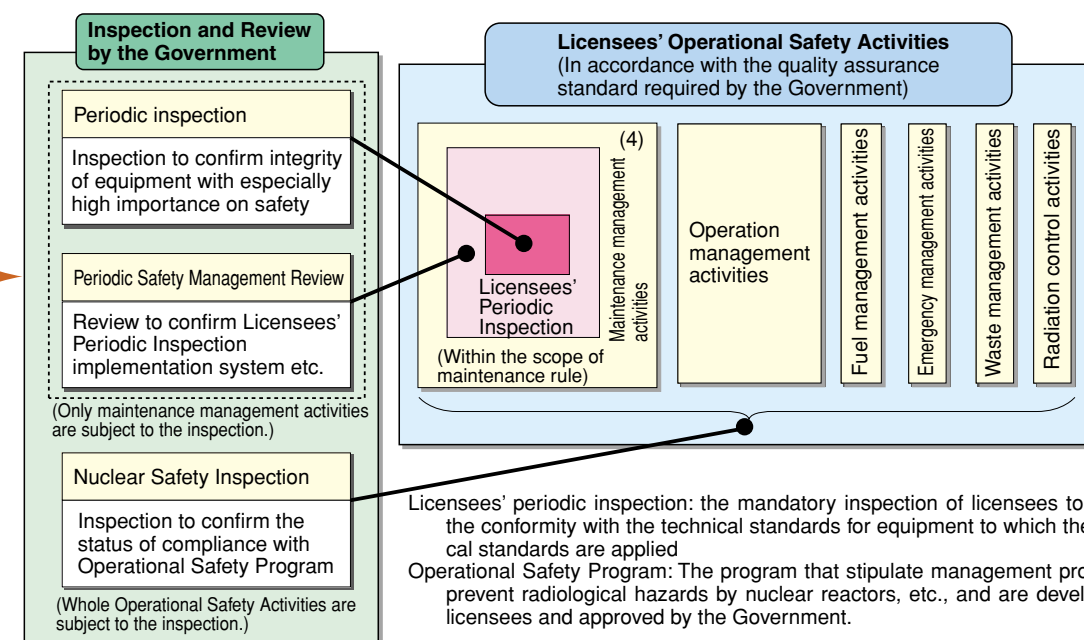
Framework for Future Inspection System (examples of feedback of the outcomes up to now)

Study on inspection system framework where contents of inspection are determined according to evaluation results of the plant performance level of the safety assurance for each nuclear reactor. Licensees’ improvement efforts can be expected.



Framework of Future Inspection System

The inspection system with emphasis on “inspections that confirm not only integrity of facilities, but also the process for establishment of facilities and licensees’ overall Operational Safety Activities using also an inspection method without prenotification” rather than “inspections that mainly confirm integrity of predetermined facilities through predetermined procedures” Improvement of effectiveness of inspections can be expected.



Within the enforcement of October 2003

Licensees’ periodic inspection: the mandatory inspection of licensees to confirm the conformity with the technical standards for equipment to which the technical standards are applied
Operational Safety Program: The program that stipulate management program to prevent radiological hazards by nuclear reactors, etc., and are developed by licensees and approved by the Government.

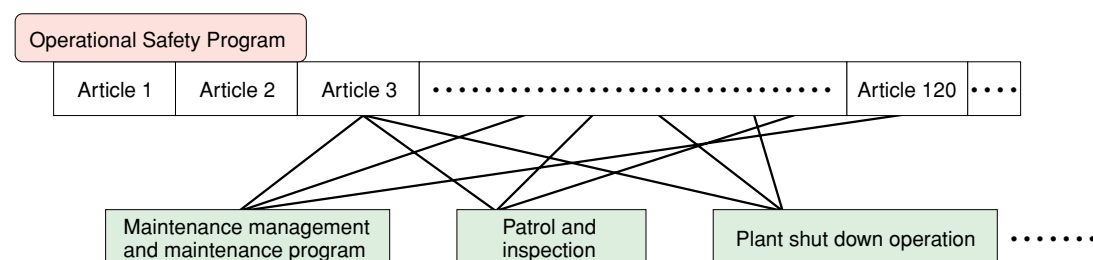
Study on Inspections for Nuclear Power Stations (2) (Outcomes in 2003 fiscal year)

Study on Establishment of the New Inspection System

At present, the inspection system is under transitional state from “predetermined fixed point inspection” to “inspection with emphasis on confirming process of operational safety management activities (process-oriented inspection)”. The study necessary for successful transition to the new system was conducted.

- Fixing relations between Operational Safety Activity process and provisions of Operational Safety Program
- Case studies for developing criteria for process-oriented inspection
- Overseas investigation for radiation control etc. as reference for free access (assurance of free access to the required subject of inspection, regardless of time and place or process-oriented inspection)

Fixing relations between operational safety activity process and provisions of Operational Safety Program



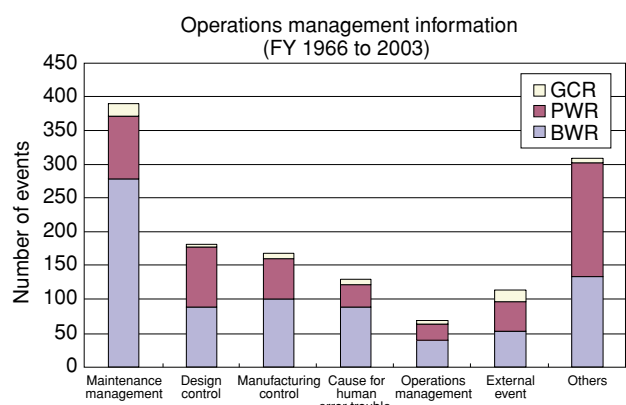
Analysis and Study of Operations Management Information

Analysis and Study of Minor Troubles

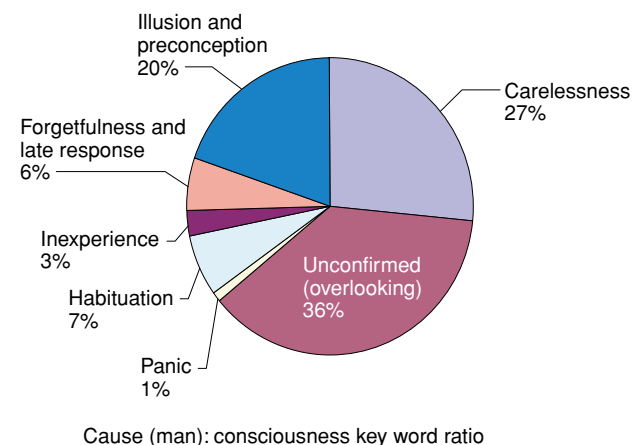
It is important for industry, government and academic sectors to share information on minor events not resulting in troubles and information that indicates signs of troubles, etc., and to prevent more serious troubles beforehand. In order to achieve this objective, it is essential to establish data collection mechanisms and database and develop analysis methodologies. In this program, methodologies, etc. for data analysis and evaluation were studied and evaluated by using minor event data.

Analysis and Study of Near-miss events

Methodologies to analyze lessons learned (mainly near-miss events) to prevent serious troubles and provide necessary information were evaluated and studied. In addition, the data were analyzed from the point of view of the safety management department.



An examples of minor trouble analysis



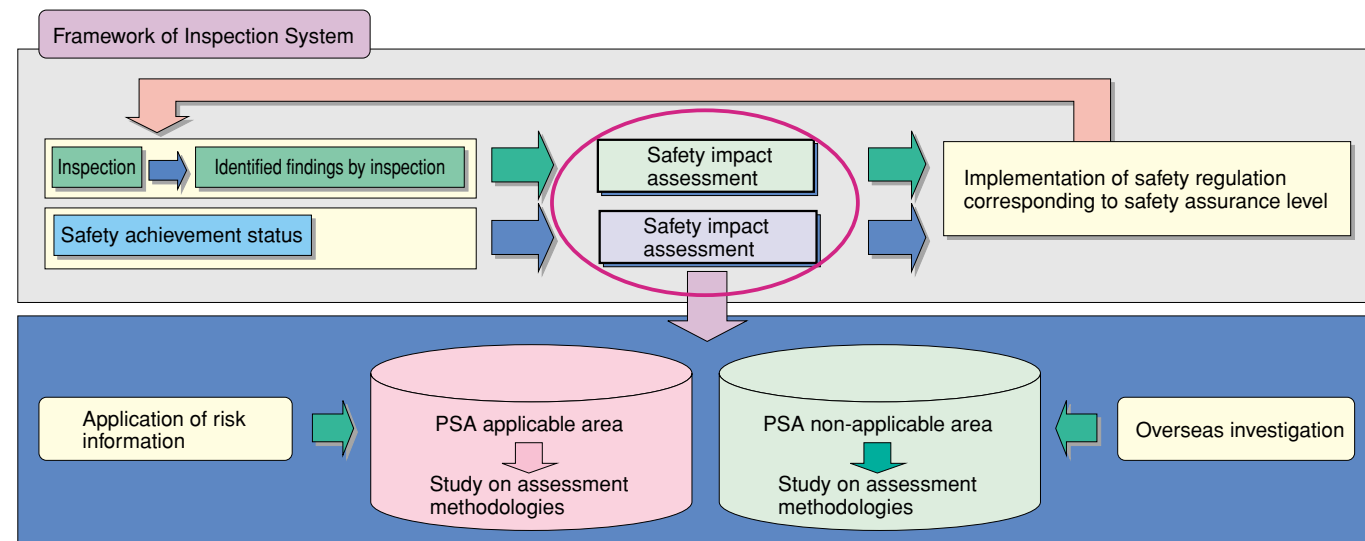
An example of analysis for near-miss incidents

Study on the Inspection System to be implemented

Study on the Performance Oriented Inspection System

In order to realize inspection corresponding to safety assurance status for each nuclear reactor, performance evaluation methodologies were studied.

- Study on assessment methodologies in Japan for the area where PSA is applicable, using examples of U.S.A. for references
- Selection of issues studying examples of U.S.A. for the area where PSA is not applicable



Study on Optimization for Inspection Items and Inspection Methodologies

The application methods to reexamination and optimization of inspection items, and judgment criteria for sampling for inspection etc. using results of classification of importance by quantitative risk information were studied.

