

Study on improvement direction for Regular Inspection of Nuclear Power Plants (Focusing on the field of Operational Technology Capability)

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Introduction

Regulatory Inspection

- Construction Stage-Pre-use inspection
- · Operation Stage- Regular inspection, quality assurance inspection

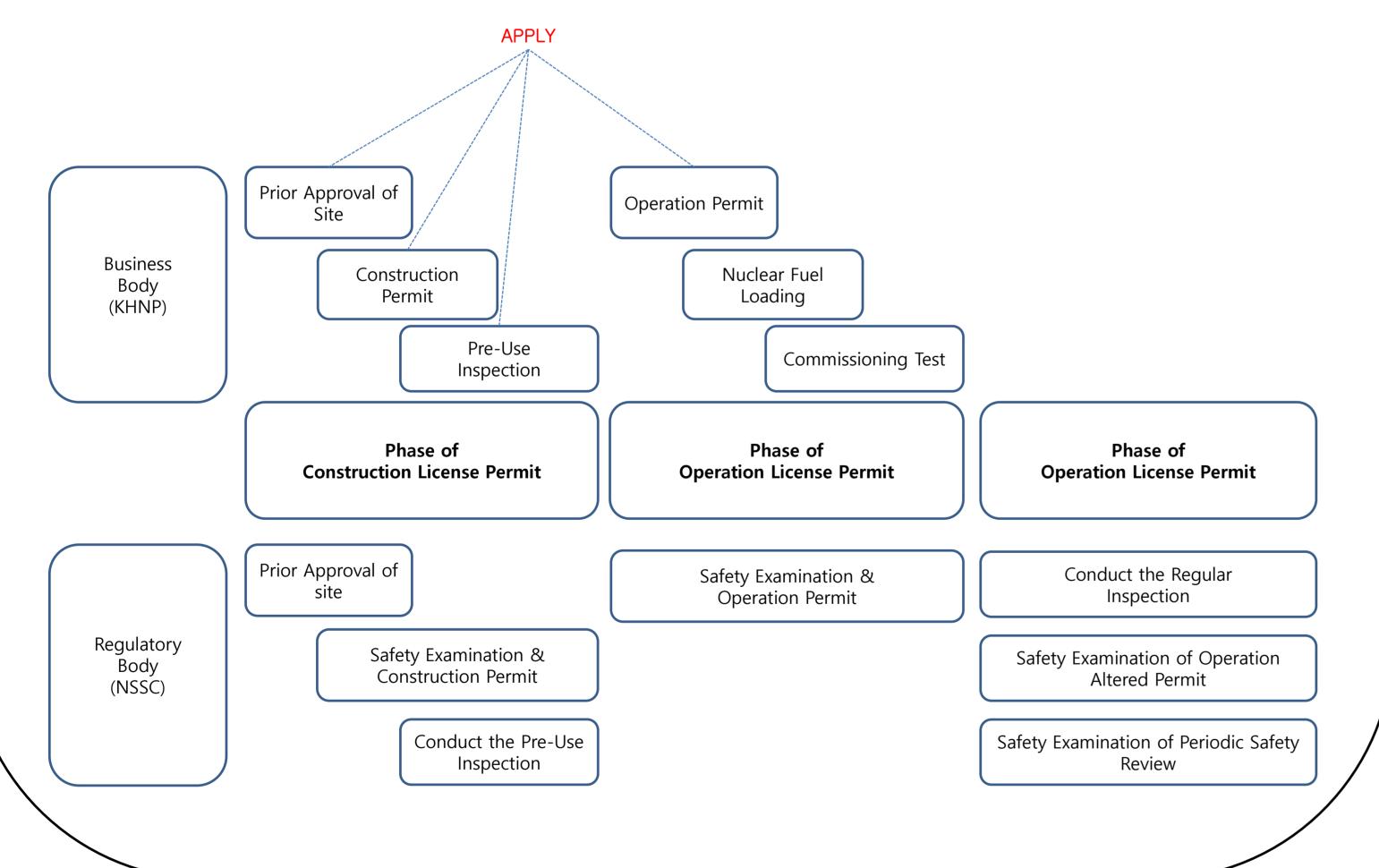
Purpose

· Introduce the regular inspections performed in the operation stage, and seeks to find the characteristics and improvements of the operational technical capability field among the current regular inspection items

Step by Step Regulation

Progress

- Business operator applies for a construction permit and performs construction
 permit examination and pre-use inspection according to the application
- After obtained a construction permit, applicant applies for an operation license for the operation of power plant
- Regulatory body performs an operation license review and pre-use inspection at this stage
- During operation, audits are conducted on various altered permits and periodic safety review, and the safety operation of the power plant is checked through regular inspection



Regular Inspection

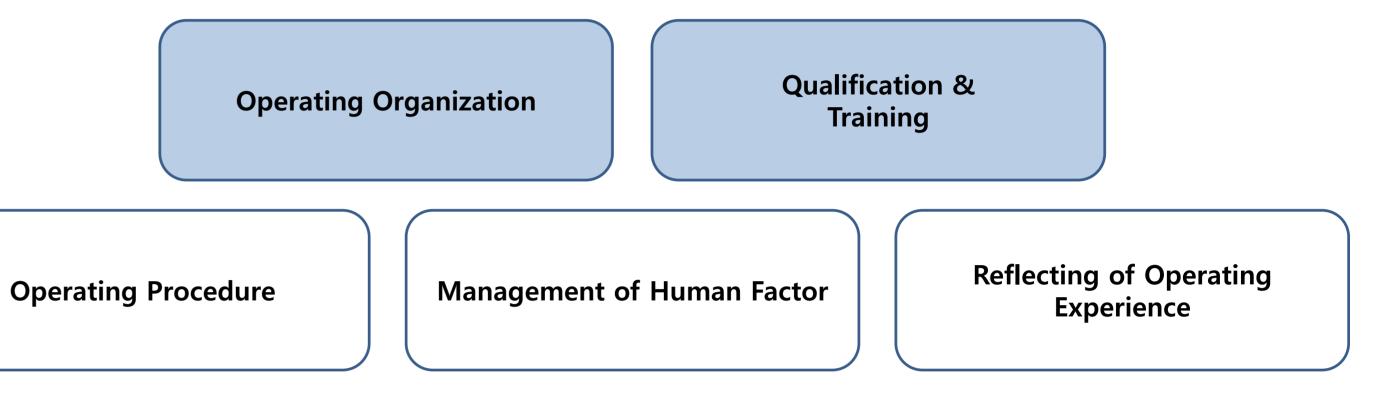
Regular Inspection System

- · Performed to check and confirm that all activities performed by the operator comply with the licensing requirements and technical standards of the Nuclear Safety Act
- · Conducted in accordance with Article 22 of the Nuclear Safety Act, Article 35 of the Enforcement Decree of the Nuclear Safety Act, and Article 19 of the Enforcement Rules of the Nuclear Safety Act

Regular Inspection

Regular Inspection System

· Article 50 (2) of the Rules on Technical Standards for Nuclear Reactor Facilities etc., the inspection in the field of operational technical capability is included in the regular inspection



Operation Technology Capability

- · Operation organization is an item that checks whether or not it satisfies Article 54 of the Rules on Technical Standards for Reactor Facilities, etc.
- This inspection is carried out at the power plant unit, and there is currently no inspection at the headquarters, which is responsible for organizing and assigning responsibilities, and managing license holders through personnel from all employees
- Qualifications and training is an item that checks whether or not Article 55 of the rules on technical standards for nuclear reactor facilities is satisfied, and the Final Safety Analysis Report and Tec-spec are based on the same chapter as the 'Operating Organization
- Most of the technical standards or requirements established by the licensee are stipulated to conduct education on a yearly basis and to evaluate qualifications, whereas the current regular inspection is carried out within 20 months after the previous regular inspection

Conclusion

- The operating organization of the regular inspection and the areas in need of inspection and improvement in qualification and training fields were examined
- Further strengthen the adequacy of the organization installed in the unit power plant by controlling the confirmation of the functions of the headquarters that manages and controls the entire organization
- For inspection in qualification and training fields, it is judged that annual examinations should be performed rather than regular inspection periods
- Annual inspections are carries out, appropriate monitoring of qualification evaluation and education and training planned and implemented by business operators can be achieved
- It is believed that legal and institutional improvements such as separating the inspection in the field of operational technology capability from the regular inspection into a separate inspection, should be accompanied