

ARRANGEMENTS AND PROCESSES FOR THE EFFECTIVE REGULATION OF RW AND SF MANAGEMENT



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Regulatory Guides

Regulatory Guides on nuclear safety (YVL)

A: Safety management of a nuclear facility

B. Plant and system design

C: Radiation safety of a nuclear facility and environment

D: Nuclear materials and waste

E: Structures and equipment of a nuclear facility

YVL D.1 Regulatory control of nuclear safeguards

YVL D.2 Transport of nuclear materials and nuclear waste

YVL D.3 Handling and storage of nuclear fuel

YVL D.4 Predisposal management of low and intermediate level nuclear waste and decommissioning of a nuclear facility

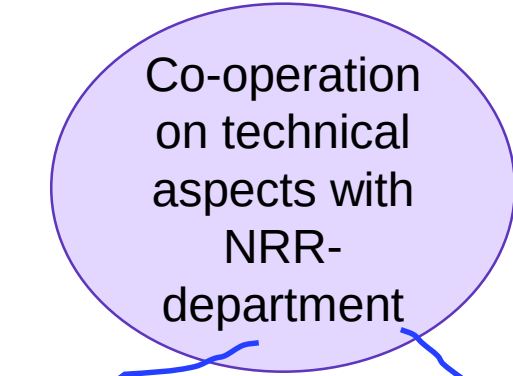
YVL D.5 Disposal of nuclear waste

YVL D.7 Release barriers of spent nuclear fuel disposal facility

Regulatory Body

- There are various possibilities to form a regulatory body organization
 - Technical experts in the organization
 - Technical Support Organization is external
 - *See next slide for an example*
- All 3S:s in the same: Safety, Security and Safeguards
- Procedures for regulatory work
 - Documentation review
 - Decision making
 - Inspections

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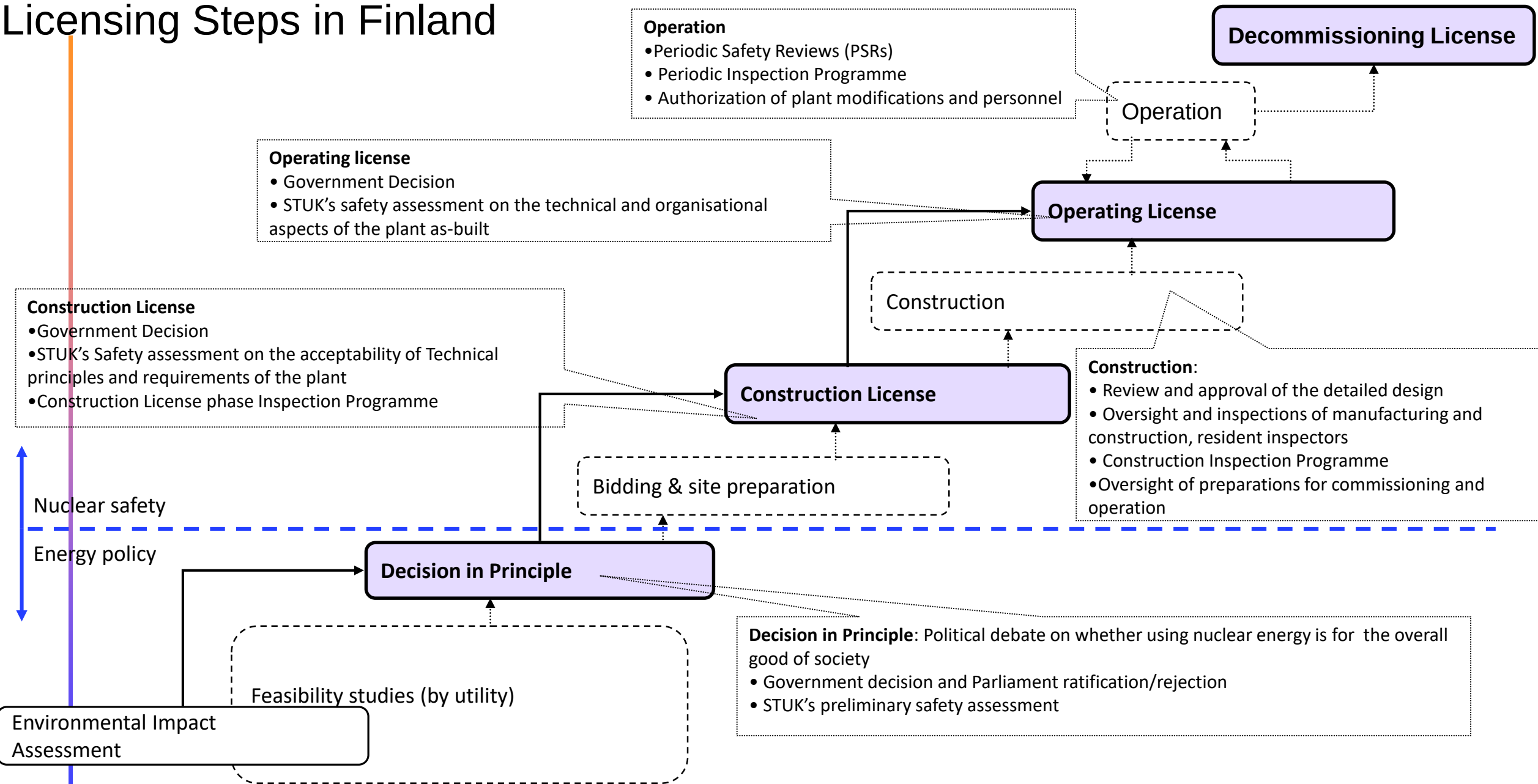


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 safety systems
 engineering
 l engineering
 oversight: man

- Responsibility
for oversight
of spent fuel
and waste

- Organization oversight: management system, safety culture

Licensing Steps in Finland



Adaptation of regulatory activities according the phases of a facility

- Siting: review of research reports
- Design and construction license phase: design documentation review
- Construction phase and commissioning:
 - on site inspections: system manufacturing, installation, commissioning, excavation
- Operational phase: review of design changes, inspection program
 - For disposal facility: onsite inspection eg. installation of EBS's and safeguards



Inspection Programmes

- Organizational but also technical procedural areas are inspected regularly in 1-3 year interval during the construction and operation
- 1-2 days inspection
- Inspection plan is provided 2 weeks before the inspection
- Findings and requirements are provided to the operator in the end of the inspection
- Finalized inspection report is provided in two weeks after the inspection

Areas of inspections for operating NPP

To be adapted to the encapsulation plant and disposal facility

<u>Annual inspections</u>	<u>Biennial inspections</u>
Management system	
Plant maintenance	Name of inspection
Radiation protection	I&C technology
	Human resources and competence
Security arrangements	Management and safety culture
Safety design	Disposal facilities
Safety functions	
Emergency response arrangements	Chemistry
Annual outage	Mechanical technology
	Interim storage of spent nuclear fuel
	Operating experience feedback
	Operation
	Fire protection
	Utilisation of the PRA
	Structures and buildings
	Electrical technology
	Power plant waste
	Nuclear safeguards

Regulatory Body and Communication

- Active communication between regulator and licensee/operator: formal and informal
 - Formal: monthly reports from the licensee to regulator
 - Regulatory decisions
- Informal communication: meetings on topical issues between regulator and licensee:
Allows an effective oversight
 - To make sure that regulatory expectations are clear to the licensee/operator
 - Regulator knows the topical issues of the licensee
 - Expert level and management level
 - Trilateral meetings: ministry, regulator and licensee
- Regular communication towards media
- During the licensing phase, every 4 months a short media report

PRESENTATION TITLE

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