

# **NEA/CNRA Report of the Survey on the review of New Reactor Applications**

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# Terms of reference

At its second meeting in 2008, the Working Group agreed on the development of a report based on recent regulatory experiences describing;

- 1) the licensing structures,
- 2) the number of regulatory personnel and the skill sets needed to perform reviews, assessments and construction oversight, and
- 3) types of training needed for these activities.

# WGRNR Member States

- Canada
- Czech Republic
- Finland
- France
- Hungary
- Japan
- Korea
- Poland
- Slovakia
- Slovenia
- Spain
- Switzerland
- United Arabs Emirates
- United Kingdom
- United States

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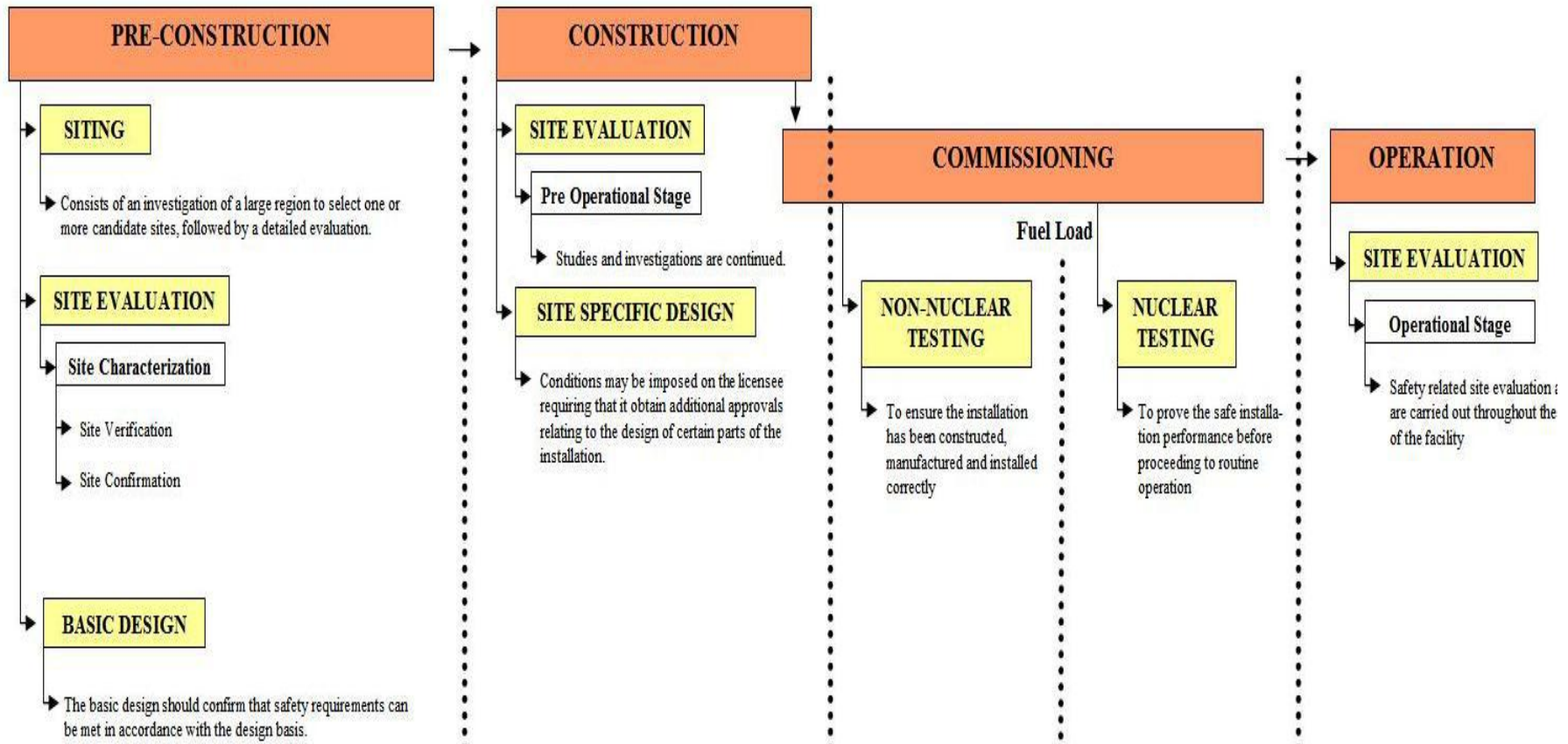
# Matters Considered in Survey

- Licensing process
- Governing authority
- Legal decision
- How each phase is implemented
- Levels of effort and skill sets
- Documents submitted
- Guidance documents
- Safety assessment
- Public participation
- Organisation/infrastructure
- Oversight
- Independent advisory committee
- Codes and standards

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# IAEA Licensing Process



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# Governing authority

- Not surprisingly this varies from State to State.
- It can be quite Complex with authority held by Government, Ministers, Local Authorities and other regulatory bodies.
- But the regulator has a role as decision maker in most countries.

# Legal Decision

- Legal decisions come in many different forms but all based on the law in that state.

# Timeframes

- Three distinct stages take place in all states;
  - Pre-construction concerned with siting and basic design
  - Construction including detailed design and site evaluation leading to a licence or Consent to construct
  - Commissioning which includes a further permission of some form.

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# Level of Effort

- Only three States were able to provide data.
- Effort could be anything from 25 to 50 years.
- Need to a highly skilled workforce and extensive use of TSOs.

# Documents

- An extensive set of documentation is produced at all stages of the licencing process.
- Most states have explicit guidance on the standard of documentation to be produced and some refer to the IAEA guides

# Safety Assessment

- Although all regulators have some oversight of the project, TSOs often provide detailed technical analysis.
- Pre-construction: here there is a significant level of commonality between regulators in scope.
- Construction: there are differences here in the level of assessment prior to construction.
- Commissioning: all States perform a review of the Safety Analysis Report.

# Public Participation

- All States have some form of public participation but all are unique.
- Some public participation is mandated by law, some by invitation.
- Often conducted by another Government department.
- In many cases an Environmental Impact Analysis is required.

# Oversight

- Although the nuclear regulator provides regulatory oversight, support is provided through;
  - TSOs
  - Other Governmental bodies.
- Most States make use of an independent advisory committee.

# Next Steps

- Two more reports are to be produced.
- The next report will present a survey of the reviews conducted during plant design.
- The third report will focus on questions relating to the construction stage.