# REGULATING NUCLEAR SAFETY IN GREAT BRITAIN (GB)

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#### Regulatory approach in GB – Flexible

- ▶ Office for Nuclear Regulation (ONR) safety, security, safeguards, transport & industrial.
- ▶ Regime is non-prescriptive / goal-setting duties conferred through 36 standard Licence Conditions (LC) & other law.
- ► The Safety Case (SC) underpins the granting of the Site Licence but is not formally Approved by ONR the Licence has no expiry date.
- ► Policy is to be proportionate and targeted at areas of greatest risk and hazard through sampling.

#### GB risk-informed framework

► ALARP triangle

Unacceptable Region **Basic Safety Level ALARP** or Tolerable (BSL) Region **Basic Safety Objective Broadly** 

Acceptable

Region

(BSO)

## Regulatory Process Efficiency (1)

- ► ONR engage in early dialogue with licensee to identify and resolve any emerging issues (use a database to grade [1-4] and track all issues).
- ► ONR publishes its Safety Assessment Principles (SAPs); these reflect modern safety standards.
- ► Transparency on expected timescales for regulatory decisions no public involvement in these.
- Generic Design Assessment (GDA) for new NPP minimises uncertainty for potential operators but are not a legal requirement.

#### **ONR Safety Assessment Principles**



Safety Assessment Principles for Nuclear Facilities

2014 Edition Revision 0

- Fundamental principles
- Leadership & management for safety
- Siting aspects
- Engineering principles
- Radiation protection
- Fault analysis
- Numerical targets
- Accident management and emergency preparedness
- Radioactive waste management
- Decommissioning
- Land quality management

## Regulatory Process efficiency (2)

- Use of Project Inspectors to coordinate approvals e.g. 10 yearly PSR, Category 1 modifications, reactor restarts etc.
- Comprehensive up-to-date management system with clear delegated authorities for all decisions.
- Honest self-assessment and external Peer Reviews are important "to see ourselves as others see us" [ref Robert Burns]
- In future we should take greater account of the work of other national regulators.

#### ONR Interactions with NPP operators (1)

- No resident site inspectors monthly visits by nominated site inspector (3 - 4 year rotation)
- Inspectors have many legal powers e.g. site access at any time, directing the licensee to undertake actions, taking evidence etc, etc but very seldom used.
- Inspectors mainly use discretion, judgement and power of persuasion to effect any necessary improvements.
- ► Planned/announced (~80%) inspections vs Reactive/unannounced (~20%).
- Inspection teams for safety systems & emergency ex.
- ► Annual Review of Safety with site lead team.

#### ONR Interactions with NPP operators (2)

- Licensee's safety categorisation is key for managing ONR workloads and extent of involvement.
- ▶ Reactor periodic shutdown (AGR 3 yearly, PWR 18 monthly) more inspection during the outage prior to issue of legal Consent to restart.
- ► CNI Themed inspections benchmark across different licensees' sites e.g. ageing management.
- ► Hierarchy of routine meetings between ONR and licensees' senior staff up to CNI/CEO
- ► A relationship based on mutual respect, trust and openness between licensee's personnel and ONR inspectors is vital.

#### Regulatory communications with the public

- ► Licensees establish Site Stakeholder Groups (SSG) meet periodically (2- 4 times/year) with the local populace (ONR site inspector attends and writes a quarterly report on its activities but is not an official member).
- ► FOI most documents available to the public on request; inspection and project assessment reports published on ONR website.
- ▶ 6 monthly meeting with national and local interest groups including anti-nuclear ones.
- ► ONR CNI Annual Report provides a view of safety performance across the industry

# Thanks for your attention

Any Questions?