## Ensuring a licensable organisation for New Reactor Build in the UK

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#### Route map

- Background to New Build in the UK
- What is a 'licensable organisation'?
- ONR's approach
- Experiences of licensing a new NPP
- Lessons learned

#### New Build – Background

- 2008 UK Government white paper on nuclear power
  - nuclear power should have a role to play in this country's future energy mix.
- 2008 Planning Act
  - introduces new, streamlined, process for decisions on the acceptability of major infrastructure developments including NPPs
- 2011 Nuclear National Policy Statement (NPS)
  - lists sites assessed as strategically suitable for new nuclear power stations Office for Nuclear Regulation

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# ONR Approach to licensing a new nuclear facility

Regulators must consider 3 key elements:

- reactor design 'safety case'
- Site suitability
- Organisational capability to be a nuclear licence holder





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#### **Key Challenges**

- NNB GenCo a new company:
  - Part of the EdF group but NNB GenCo had to develop capability to hold the licence - therefore;
  - Building resources, knowledge, competence, people, processes etc from zero
- ONR had not:
  - Issued a new licence for over 20 years
  - Considered a New Build project for a new licensee

### ONR's Approach

Licence applicant must have **organisational capability** to be in control of safety at point of licensing. ONR:

- Provided clarity on ONR's expectations to applicants and other stakeholders
  - Detailed statement of licensing process<sup>1</sup>
  - Requirement for a safety management prospectus as part of licence application
    - the 'Organisational safety case' to support decision on licensing
  - Suite of assessment guides on key organisational capability topics<sup>2</sup> e.g.:
    - Design authority
    - Core capability & Intelligent customer
    - Procurement
    - Organisational resourcing or "baseline"
    - Organisational Change management
    - Internal advice and challenge
- Encouraged early engagement with prospective licensee
  - Promote shared understanding of expectations
  - Draw out potential problems, including relationship issues, at early stage

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<sup>1</sup><u>http://www.hse.gov.uk/nuclear/licensing-nuclear-installations.pdf</u>

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<sup>2</sup>http://www.hse.gov.uk/nuclear/operational/tech\_asst\_guides/index.htm

#### Some Focus Areas (1)

- Leadership & governance:
  - Relationship with parent bodies
  - Board level governance
  - Establishment of nuclear safety committee
  - Development of internal regulation capability
  - Evidence of measures to foster a strong safety culture

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#### Some Focus Areas (2)

#### • Design Authority

- Development of DA capability to provide effective oversight of, & decisions on, nuclear safety
- Development of DA relationship with 'Responsible Designer' (RD)
- Intelligent Customer
  - Development of IC capability to:
    - Specify requirements
    - Supervise work
    - Review outputs

#### Some Focus Areas (3)

- Development of resources & competencies
  - Establishing a "nuclear organisational baseline"
  - Populating the baseline with adequate resources
  - Developing an adequate approach to training and competence assurance
  - Managing continuing organisational change & development
  - Working with Industry & National bodies

#### Some Focus Areas (4)

#### • Procurement

- Supply chain quality key to successful delivery of safe & reliable plant
- Key early focus area in order to support procurement of "long lead items"
  - Arrangements for effective management of supply chain
  - Intelligent customer capability in place
  - Inspection & oversight of manufacturing

#### New Build – Where are we now

- NNB applied for nuclear site licence in July 2011
  - ONR conducted rigorous assessment of organisational capability, site suitability and site-specific safety submissions
  - ONR expended 2700+ inspector days (>12 years) of assessment and inspection activity effort
- Nuclear site licence granted December 2012
  - Start of nuclear-related construction requires further regulatory permission
- ONR maintains oversight of continued organisational development

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#### Lessons Learned

- Early engagement is key
- Open and honest relationship vital to "avoid surprises"
- Good communication essential
- Anticipate resource needs early & plan both applicant and regulator
- Make regulatory expectations clear
  issue guidance early