

LLWR Site Inspection

Presented to LLWR Site Stakeholder Group

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Topics



- Background
- Health & Safety Legislation
- Nuclear regulatory regime
- Inspection at LLWR 2010 – 2011
- Inspection at LLWR 2011 – 2012
- Conclusions

Health and Safety Executive (HSE)



- Day to day responsibility for enforcing health and safety legislation, with aim of ensuring duty holders are controlling risks,
- Investigates accidents,
- Operates permissioning regime for particular hazards e.g. explosives, offshore oil, nuclear
- Commissions research.

Scope of NII's responsibilities

- Nuclear Power Stations
- Nuclear Fuel Reprocessing Plants
- Radioactive Waste Management Facilities
- Nuclear Fuel Fabrication Facilities
- Uranium Enrichment Plants
- Research Reactors
- Radioisotope Production Facilities
- Atomic Weapons Production Facilities
- Nuclear Submarine Refuelling Dockyards

UK Legislation

- Health and Safety at Work (HSW) Act (1974)
 - employers responsible
 - safety of employees and public
 - non-prescriptive, goal setting
- Nuclear Installations Act (NIA) 1965 as amended
- Ionising Radiation Regulations 1999
 - dose limits for workers - ICRP
- Other relevant statutory provisions

Nuclear Installations Act



- In addition to the HSW Act, the NIA requires that certain nuclear activities require a licence before they can be carried out.
- Act sets up licensing system. The basic principle of the licensing process is that the safety of an activity should be demonstrated before the activity is undertaken.
- Licences are issued by HSE to individual sites.
- HSE can attach conditions to the site licence in the interest of safety.
- Compliance with licence conditions is mandatory.

Nuclear Installations Act, contd.



- No site may be used for installing or operating any nuclear reactor or prescribed installation unless a nuclear site licence has been granted by the HSE
- NII is that part of HSE responsible for administering the licence function
- Form and structure of licence same for all nuclear installations
- 36 conditions attached to the licence
- NII has power to revoke or vary any of conditions



Licensees Must

- Be corporate bodies
- Demonstrate the safety of their operations through an appropriate safety case
- Set their own design criteria
- Demonstrate legal compliance
- Have resources for decommissioning

Licence Conditions

- Site licence conditions (36 in total) set safety targets or goals but do not prescribe how these are to be achieved.
- It is the responsibility of the licensee to show how they meet these goals.
- The licence requires the licensee to make arrangements – hence it is non-prescriptive.
- Everyone working on a nuclear site must comply with the requirements of the nuclear site licence.



Licence Conditions

1. Interpretation
2. Marking of the Site Boundary
3. Restriction on Dealing with the Site
4. Restrictions on Nuclear Matter on the Site
5. Consignment of Nuclear Matter
6. Documents, Records, Authorities and Certificates
7. Incidents on the Site
8. Warning Notices
9. Instructions to Persons on the Site
10. Training
11. Emergency Arrangements
12. Duly Authorised and Other Suitably Qualified and Experienced Persons
13. Nuclear Safety Committee
14. Safety Documentation
15. Periodic Review
16. Site Plans, Designs and Specifications
17. Quality Assurance
18. Radiological Protection
19. Construction or Installation of New Plant
20. Modification to Design of Plant Under Construction
21. Commissioning
22. Modification or Experiment on Existing Plant
23. Operating Rules
24. Operating Instructions
25. Operational Records
26. Control and Supervision of Operations
27. Safety Mechanisms, Devices and Circuits
28. Examination, Inspection Maintenance and Testing
29. Duty to Carry Out Tests, Inspections and Examinations
30. Periodic Shutdown
31. Shutdown of Specified Operations
32. Accumulation of Radioactive Waste
33. Disposal of Radioactive Waste
34. Leakage and Escape of Radioactive Material and Radioactive Waste
35. Decommissioning
36. Control of Organisational Change

Format of Licence Conditions

- Goal Setting:
 - Require the licensee "to make and implement adequate arrangements" to achieve a stated objective.
 - Provide the means to ensure achievement of the stated requirement of that licence condition
 - Provide an identifiable means of demonstrating compliance



Inspection Planning – LLWR

- Identify “Cornerstone” Licence Conditions
- Identify other areas of relevant H&S legislation
- Proportionate and Targeted Inspection
- Focused Interventions
- Quarterly Inspections
- Joint Inspections with other Regulators
- Joint Inspections with LLWR Independent Inspectors
- Site Stakeholder Groups
- Safety Representatives



Inspections for 2010 - 2011

- Training, Suitably Qualified & Experienced Persons, Duly Authorised persons
- Emergency Arrangements (Deferred)
- PCM Decommissioning (Ongoing Project)
- Contaminated Land (Ongoing Project)
- Examination, Inspection, Monitoring and Testing
- Ionising Radiations Regulations
- Examination, Maintenance, Inspection and Testing



Inspections for 2011 - 2012

- Incidents on the Site
- Emergency Arrangements
- Nuclear Safety Committee
- Quality Assurance
- Modification on Existing Plant
- Control and Supervision of Operations
- Control of Organisational Change

Conclusions

- Compliance with Acts; Regulations relating to nuclear safety and Licence Conditions is mandatory.
- NII ensure legal compliance and permission hazardous activities.
- LLWR is a Low Hazard Site but of strategic importance to UK decommissioning.
- Proportionate and targeted inspection plans developed.
- Seek to establish confidence to enable regulatory “light touch”.