



Office for Nuclear Regulation (ONR) Site Report for Dounreay

Report for period 01 October – 31 December 2017

Foreword

This report is issued as part of ONR's commitment to make information about inspection and regulatory activities relating to the above site available to the public. Reports are distributed to members for the Dounreay Stakeholder Group and are also available on the ONR website (<http://www.onr.org.uk/lrc/>).

Site inspectors from ONR usually attend Dounreay Stakeholder Group meetings where these reports are presented and will respond to any questions raised there. Any person wishing to inquire about matters covered by this report should contact ONR.

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1 INSPECTIONS

1.1 Dates of inspection

The ONR site inspectors made inspections on the following dates during the report period 1 October to 31 December 2018

- 9 to 12 October;
- 13 to 16 November;
- 11 to 14 December.

2 ROUTINE MATTERS

2.1 Inspections

Inspections are undertaken as part of the process for monitoring compliance with:

- the conditions attached by ONR to the nuclear site licence granted under the Nuclear Installations Act 1965 (NIA65) (as amended);
- the Energy Act 2013
- the Health and Safety at Work Act 1974 (HSWA74); and
- regulations made under HSWA74, for example the Ionising Radiations Regulations 1999 (IRR99) and the Management of Health and Safety at Work Regulations 1999 (MHSWR99).

The inspections entail monitoring licensee's actions on the site in relation to incidents, operations, maintenance, projects, modifications, safety case changes and any other matters that may affect safety. The licensee is required to make and implement adequate arrangements under the conditions attached to the licence in order to ensure legal compliance. Inspections seek to judge both the adequacy of these arrangements and their implementation.

In this period, routine inspections of Dounreay covered the following:

- Modifications to plant, equipment and safety cases. The site inspectors focused on the corporate arrangements for the categorisation of modifications and experiments on existing plant and the implementation of those arrangements in support of projects within the fuels directorate. The licensee was able to demonstrate that it had a process in place to ensure that modifications were categorised appropriately, by suitably qualified persons. For all the modifications sampled, the licensee was able to provide an extensive support file to underpin the categorisation and subsequent safety assessment.
- Plant construction and/or commissioning. The site inspector focused on the implementation of the corporate arrangements for commissioning in support of the Prototype Fast Reactor (PFR) raffinate project, and considered that the licensee had robust arrangements for commissioning the plant, processes and people affected by the PFR raffinate modifications.
- Emergency preparedness. The inspection focused on the corporate arrangements and the implementation of those arrangements that support the requirements defined against Topic Area 1 [PROVIDE] of the Dounreay On-Site Emergency Preparedness and Response Capability Map. The site provided a comprehensive suite of evidence that provided an adequate demonstration of the expectations set out against the various aspects covered by Topic Area 1 and demonstrated a proactive approach to the development of the future emergency response capability requirements against the changing hazard profile resulting from the site's decommissioning plan.

- Incidents on the site. The site inspector focused on the implementation of the corporate arrangements for the identification, capture, trending and implementation of lessons learned from site (and other external) events, and in particular on the arrangements in place to assess the adequacy and effectiveness of those lessons learned. Overall he considered that the licensee has adequate arrangements in place for the identification, recording, notification and reporting of incidents on the site.
- Organisational changes. The site inspector examined the documentation supporting the ongoing voluntary severance programme to ensure that adequate arrangements are in place to manage the safety impact of the changes to the licensee's resources. He judged that the licensee has a systematic process for managing the effects of the severance programme, with a safety and environment overview report providing an analysis of the cumulative impact of the organisational changes and a Transition Team being set up to provide oversight. However, in this instance the process was not initiated early enough to inform the programme of changes and is instead being used to manage its consequences. ONR has requested the licensee to develop a contingency plan to mitigate any adverse effects that may be identified.
- Quality assurance and records. The site inspector focused on the implementation of the corporate arrangements for operational records in support of site wide maintenance activities. Representatives from the senior maintenance management team demonstrated a good understanding of the licence condition requirement and provided evidence of the training provided to their new staff and contractors on those requirements. However, the maintenance records examined during the inspection did not meet the standards considered to reflect relevant good practice and a regulatory issue has been raised to monitor the licensee's resolution of this matter.
- The site inspector examined the invitation to tender for the Dounreay Materials Test Reactor (DMTR), and the strategy for tender assessment to ensure that adequate arrangements had been made in respect of matters which may affect nuclear safety. Overall he considered that the invitation to tender provided the basis for the development of arrangements that will ensure that DSRL retains overall responsibility for (and control and oversight of) the nuclear and radiological safety and security of work; contractor staff will be familiar with the nuclear safety implications of their work and interact in a coordinated manner with DSRL staff; and the work will be carried out to the required level of safety.

In addition, the site inspectors and an internal hazards specialist inspector carried out an inspection of the fire protection systems within the fuel cycle area. From the evidence examined during this inspection, they considered that the licensee had adequately implemented the fire protection arrangements claimed within the facility safety cases sampled.

Except where specifically noted above, ONR judged the arrangements made and implemented by the site in response to safety requirements to be adequate in the areas inspected. Where improvements were considered necessary, the licensee made satisfactory commitments to address the issues, and the site inspectors will monitor progress during future visits. Where necessary, ONR will take formal regulatory enforcement action to ensure that appropriate remedial measures are implemented to reasonably practicable timescales.

2.2 Other work

The site inspectors held a periodic meeting with safety representatives, to support their function of representing employees and receiving information on matters affecting their health, safety and welfare at work.

3 NON-ROUTINE MATTERS

Licensees are required to have arrangements to respond to non-routine matters and events. ONR inspectors judge the adequacy of the licensee's response, including actions taken to implement any necessary improvements.

There were no such matters or events of significance during the period.

4 REGULATORY ACTIVITY

ONR may issue formal documents to ensure compliance with regulatory requirements. Under nuclear site licence conditions, ONR issues regulatory documents, which either permit an activity or require some form of action to be taken; these are usually collectively termed 'Licence Instruments' (LIs), but can take other forms. In addition, inspectors may issue Enforcement Notices to secure improvements to safety.

No LIs or Enforcement Notices were issued during the period.

5 NEWS FROM ONR

For the latest news and updates from ONR visit the website and sign up for our ebulletin (<http://www.onr.org.uk/ebulletin/index.htm>).

5.1 New nuclear power station design approved

The UK Advanced Boiling Water Reactor (UK ABWR), designed by Hitachi-GE, is suitable for construction in the UK, the regulators confirmed following completion of an in-depth assessment of the nuclear reactor design. The Office for Nuclear Regulation (ONR), the Environment Agency and Natural Resources Wales, the regulators who undertake the Generic Design Assessment of new reactor designs, are satisfied that this reactor meets regulatory expectations on safety, security and environmental protection at this stage of the regulatory process.

ONR has issued a Design Acceptance Confirmation (DAC) and the environment agencies have issued a Statement of Design Acceptability (SoDA) to Hitachi-GE.

5.2 Step 2 of nuclear reactor assessment

We also announced in November that we are progressing to the next phase of our assessment of General Nuclear System Ltd's UK HPR1000 reactor technology. This means we will now begin the technical assessment phase. Additionally, all members of the public can give their views and find out more information about the design by going to UKHPR 1000 website at www.ukhpr1000.com

5.3 ONR response to BEIS impact assessment

The Department for Business, Energy and Industrial Strategy (BEIS) has recently published its Impact Assessment of the Nuclear Safeguards' Bill and that makes reference to ONR's regulation.

We contacted BEIS to clarify two points within the document as part of our ongoing constructive engagement with them to develop a domestic safeguards regime as part of exiting Euratom.

The first is that ONR regulates the nuclear industry, it does not provide services to it.

Secondly, the Government's policy has developed since the assessment was undertaken and the intention is to put in place a regulatory framework which is robust and as comprehensive

as Euratom. This means that we are not in a position to identify potential efficiencies in our regulatory approach at this stage.

As we support BEIS in its development of secondary legislation, we will provide advice to the Government to inform the anticipated impact assessment for nuclear safeguards regulation.

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