



# Office for Nuclear Regulation (ONR) Quarterly Site Report for Dounreay

Report for period 01 January – 31 March 2016

## 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 quarterly 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 and will respond to any questions raised there. Any person wishing to inquire about matters covered by this report should contact ONR.

## TABLE OF CONTENTS

1	INSPECTIONS .....	3
2	ROUTINE MATTERS.....	3
3	NON-ROUTINE MATTERS.....	5
4	REGULATORY ACTIVITY .....	5
5	NEWS FROM ONR.....	5
6	CONTACTS.....	6

## 1 INSPECTIONS

### 1.1 Dates of inspection

The ONR site inspector and other inspectors made inspections on the following dates during the quarter:

12 to 14 January 2016  
18 to 22 January 2016  
22 to 25 February 2016  
14 to 16 March 2016

## 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:

Emergency arrangements;  
Construction of new plant;  
Commissioning;  
Accumulation of radioactive waste;  
Operational capability;  
Containment of radioactive material.

#### Emergency Arrangements

The inspection was to determine progress on the completion of actions arising from June's Delta 51 level 1 emergency exercise and planning for the Delta 52 combined level 1 and level 2 exercise. Progress was evident and some Delta 51 actions had been augmented by follow-on activities, for example a radio user group had been set up to promote radio good practice across site for all activities. Some actions such as umpiring and sim-cell capability will carry forward to Delta 52 to demonstrate effective action closure.

#### Construction of new plant

The site inspector inspected the licensee's arrangements for compliance with licence condition (LC) 19 (construction of new plant) and LC 20 (modification to plant under construction) across the Dounreay site. The licensee's engineering manual, MAN 0004, sets out the high-

level process for all stages of the engineering lifecycle, including construction. The process refers out to other documents in the licensee's management system and is, in the inspector's opinion, clear and logical. Non-conformances requiring modifications to be raised follow the site's existing modifications process, and are categorised in the same way as modifications to existing plant. Overall the inspector considered that DSRL meets ONR's expectations as set out in its guidance.

### **Commissioning**

LC 21 (commissioning) requires the licensee to make and implement adequate arrangements for the commissioning of any plant or process which may affect safety. The inspector was satisfied that DSRL has a robust system for capturing commissioning requirements and recording their completion to demonstrate that safety claims are satisfied. Work is carried out using the site's usual works control process, and variations are made using the site's usual modifications process. The use of these common processes promotes confidence that the commissioning activities are carried out safely.

### **Accumulation of radioactive waste**

LC 32 (accumulation of radioactive waste) requires the licensee to minimise so far as is reasonably practicable the production and total quantity of radioactive waste held on site. The inspector's visit to the Waste Receipt, Assay and Compaction Facility confirmed that progress had been made to reduce the accumulation of low level waste on site. The super-compactor was operational and a two shift system had been introduced to reduce the backlog of waste arisings resulting from the failure of the previous super-compactor. She also confirmed that the outcome of inspections and maintenance on the crane within the contact handleable intermediate level waste store proved it fit for future use to receive waste drums in store. She concluded that there was an adequate standard of compliance against LC 32.

### **Operational capability**

LC 36 (organisational capability) requires the licensee to provide and maintain adequate resources to ensure the safe operation of the site. The inspector discussed the revised Nuclear Baseline with the licensee. It had completed due process and been provided to ONR for information. A number of actions had been raised to address vulnerabilities identified throughout the baseline. These included monitoring the safety case improvement programme put in place to reduce safety case extensions, succession planning, staff demographics and knowledge management. She considered that the baseline review appeared to provide a sound foundation for improvement to organisational capability. She also sampled the draft Management of Change to support re-organisation of the Fuels Directorate and noted that the peer review process appeared robust. Her inspection concluded that there was an adequate standard of compliance with LC 36.

### **Containment of radioactive material**

The site inspector and a specialist inspector undertook a systems based inspection against the requirements of LC 23 (operating rules), LC 24 (operating instructions), LC 10 (training), LC 27 (safety mechanisms, devices and circuits), LC 28 (examination, inspection, maintenance and testing) and LC 34 (leakage and escape) to establish that radioactive material was being contained in accordance with the requirements of the relevant safety cases. The facilities sampled were the Prototype Fast Reactor (PFR) Irradiated Fuel Cave (IFC) and the Shaft and Silo.

The inspectors judged that the containment of radioactive material within the Shaft and Silo and the IFC within the PFR is consistent with the safety case requirements. The key equipment that verifies this is available and appropriately maintained, those responsible for operations are suitably trained and that appropriate written instructions are available

## 2.2 Other work

ONR has continued to engage with DSRL on its safety improvement programme.

## 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.

**Table 1**

### Licence Instruments and Enforcement Notices Issued by ONR during this period

Date	Type	Ref No	Description

Reports detailing regulatory decisions can be found on the ONR website at <http://www.onr.org.uk/pars/>.

## 5 NEWS FROM ONR

### CHIEF NUCLEAR INSPECTOR APPOINTMENT

ONR announced the appointment of Dr Richard Savage as its new Chief Nuclear Inspector (CNI) to lead our regulatory activity. Richard is a Chartered Engineer with an extensive background in nuclear safety and regulation. He served as Head of the Defence Nuclear Safety Regulator, Ministry of Defence, before being appointed to ONR as a Deputy Chief Nuclear Inspector in 2013. He was Acting CNI since Dr Andy Hall's retirement in November 2015.

### ONR STRATEGIC PLAN 2016-2020

In March, ONR published its Strategic Plan covering 2016-2020. The plan sets out the factors that will influence our work and the assumptions we have made about regulating the nuclear sector in the next few years, as well as how we deliver the commitments we have made to the public, ministers and government, licensees, dutyholders and our staff. The plan was laid in Parliament on 22 March and can be viewed on the ONR website.

## REGULATION MATTERS MAGAZINE

Insight into ONR's work as an independent regulator of the nuclear industry can be found in Regulation Matters. This quarterly online publication (<http://www.onr.org.uk/regulation-matters.htm>) reports on the key themes and developments in each of ONR's regulatory programmes and provides an update about the ongoing changes at ONR. For the latest news and updates from ONR you can also visit the website and sign up for our e-bulletin (<http://www.onr.org.uk/index.htm>).

## 6 CONTACTS

Office for Nuclear Regulation  
Redgrave Court  
Merton Road  
Bootle  
Merseyside  
L20 7HS

website: [www.onr.org.uk](http://www.onr.org.uk)

email: [ONREnquiries@onr.gsi.gov.uk](mailto:ONREnquiries@onr.gsi.gov.uk)

This document is issued by the Office for Nuclear Regulation (ONR). For further information