



Office for Nuclear Regulation (ONR) Site Report for Dounreay

Report for period 1 April to 30 June 2019

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 April to 30 June 2019:

- 9 to 10 April 2019
- 14 to 16 May 2019
- 4 to 6 June 2019
- 25 to 27 June 2019

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 2017 (IRR17) 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 at Dounreay related to the following were undertaken:

1. **Organisational capability:** This inspection focused on the learning identified from the management of change associated with the voluntary early release programme (VER) and the implementation of that learning into their management arrangements and will contribute to ONR's considerations for the closure of the regulatory issue raised in response to concerns identified during the VER programme.

Overall ONR is satisfied that DSRL continues to identify the learning from the recent VER programme via its schedule of post-change reviews. We consider that DSRL's arrangements for organisational capability continue to be adequately implemented.

Decommissioning: This inspection focused on the points raised at the previous inspection in July 2018. We examined the management arrangements supporting the role and responsibilities of the new Strategic Programme Director implemented on 1 April 2019 and are satisfied that these provide an improved strategic overview and control of decommissioning projects across site. We also examined the baseline decommissioning plan and identified that the interdependencies between projects and on/off site capabilities have yet to be captured within the plan. We are satisfied however, that these matters are understood and are being managed at the project level via the programme change control process.

Ionising Radiations Regulations: This inspection focused on DSRL's progress to date in updating their arrangements against the requirements of IRR17. Based on the areas inspected, we are satisfied that DSRL's corporate arrangements demonstrate adequate

compliance against the requirements of the IRR17 and that the necessary documentation to reflect the revised IRR17 requirements has been implemented. During our plant visits we examined the local rules in those areas and found them all to have been updated to reflect the requirements of IRR17.

Emergency arrangements: We observed and assessed the adequacy of the site's annual demonstration emergency exercise [Delta 55]. We remain satisfied that DSRL has an adequate capability to respond to incidents and emergencies on site however there were a number of specific areas where there were shortfalls in performance and we have requested DSRL to provide a further demonstration of its arrangements in these areas.

Operating rules/operating instructions: This inspection focused on the identification of limits and conditions derived within their safety assessments and the implementation of those limits and conditions within the associated operating instructions for a range of high hazard activities across site. We are satisfied that DSRL has arrangements for the identification and promulgation of the limits and conditions resulting from the safety assessments undertaken in support of nuclear activities across site. Further, there is clear evidence of the implementation of those limits and conditions within their operating instructions and other supporting documentation (such as maintenance and training).

Control and supervision of operations: This inspection is part of a continuing theme of activities focused on assessing DSRL's arrangements for the control and supervision of high hazard operations. We continue to be satisfied with the significant improvements DSRL has made in this area and have observed a wide range of operations across site where there has been a consistently high standard of control and supervision of the activities taking place with a clear understanding by the supervisors and operators of the limits and conditions that apply to those activities. This is also reflected in the improvements implemented in the competency definition, development and assessment of supervisors across site.

2.2 Other work

The site inspectors also undertook a number of other activities including the following: -

Permissioning activities: The schedule of inspections on-site undertaken this period has provided the opportunity to undertake a number of formal reviews of the activities and preparations in place to support the next phase of fuel moves. DSRL continues to commit to the production of full-scale mock-ups to support the development of their operating instructions and the training of their operators and supervisors. As a consequence we have been able to identify where significant improvements have been implemented with regards to process flow, layout and consequently dose reduction as a result of the training and activities undertaken within these mock-ups. These reviews provide a significant contribution to ONR's consideration of decisions relating to giving permissions for fuel moves.

The formal review of progress against regulatory issues: The formal review of progress against regulatory issues raised by ONR and any regulatory actions agreed between ONR and DSRL as a result of our inspections and other activities on site: We consider that DSRL continues to make good progress against the action plans agreed to address regulatory issues raised during previous inspections on site aimed at making improvements to its arrangements. In addition, DSRL continues to implement improvements to their arrangements as appropriate in response to observations made during our site inspection activities.

The formal review of the DSRL's internal regulation activities: ONR continues to have good confidence in DSRL's internal regulation capability and consider that the risks identified to senior management from their activities align with ONR's observations.

Meeting with the Site Safety Representatives: The site inspectors also 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 two incidents notified to ONR this period:

- Radiological contamination of an individual's hand and shoe on 7 June 2019. The levels of contamination detected were very low and did not reach the threshold for formal notification to ONR as a radiological event. However this was raised retrospectively following the media interest resulting from the DSSG public meeting held on 26 June. ONR is satisfied that the site responded appropriately to the incident and is awaiting the outcome of the Site's investigation.
- Lightning strike and loss of grid followed by the failure of back-up power supplies on 17 June 2019. This led to a consequential loss of power to radiological monitoring and controlled area ventilation systems for a period of approximately 1 hour. ONR considers that the site has adequate contingency arrangements for such instances and is satisfied that these were implemented effectively. ONR is awaiting the outcome of the Site's investigation, which is in progress.

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 take a range of enforcement actions, including issuing an Enforcement Notice.

No Lis or Enforcement Notices were issued during this period.

5 NEWS FROM ONR

Enforcement Action

A summary of enforcement action is provided below. Further detail is available on [our website](#).

- On 2 April Sellafield Ltd were fined £380,000 following ONR's prosecution for safety breaches relating to equipment used for the processing of plutonium.
- ONR notified Devonport Royal Dockyard (DRDL) of its intention to prosecute following an incident involving a crane that occurred in September 2018. Proceedings are scheduled to commence at Plymouth Magistrates' Court on 23 July 2019.
- Improvement notice issued to Sellafield Ltd in April 2019 following an incident in the waste vitrification plant in February 2019 where a container was not welded shut.

Regulatory updates

In April we announced the appointment of two NGOs to the Chief Nuclear Inspector's Independent Advisory Panel (IAP) to increase diversity of views and strengthen our openness and transparency. We introduced the Chief Nuclear Inspector's IAP in 2016 to provide us with independent advice on nuclear matters.

Stakeholder Engagement

- In May we published our strategic framework for international engagement, setting out the priority objectives and criteria for international engagement up to 2025. The framework is available on our [website](#).
- We launched two public consultations in April and June, both relating to the Euratom Basic Safety Standards Directive 2013. The first is a HSE consultation being managed by ONR on a new [Approved Code of Practice](#) that will assist dutyholder compliance with the new Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPIR). The consultation closed on 5 June but was extended for local authorities until 27 June as some of the consultation took place during the pre-election period for Local Government. A final version of the ACOP will be published in autumn 2019. The second is on [updated guidance](#) to support the amendments to the Carriage of Dangerous Goods and use of Transportable Pressure Equipment Regulations (CDG). This remains open until 19 July 2019. A final version of the guidance will be published in late summer 2019.
- On 15 and 16 May we hosted the 23rd meeting of the Heads of European Radiological protection Competent Authorities (HERCA) in Liverpool. The meeting brought together the heads of radiological protection competent authorities from 22 European countries and involved over 50 experts from across Europe. HERCA is a voluntary association where the members work together to identify common issues and propose practical solutions to ensure the highest levels of radiation protection in Europe.
- On 23 May our Chief Nuclear Inspector, Mark Foy led a [webinar](#), focusing on the work we do to regulate the industry in how it manages the risks arising from external hazards. Over 25 external stakeholders including NGOs joined the webinar.
- We held our annual [Industry Conference](#) on 5 June 2019 focusing on the theme of 'Open for Innovation'. More than 100 senior representatives from industry, government, other regulators, academics and research bodies attended with speakers including Joanna Whittington, Director General, Energy and Security at BEIS and Rumina Velshi, President of the Canadian Nuclear Safety Commission.

5.1 Corporate news

- Mark McAllister joined ONR on 1 April, succeeding Nick Baldwin CBE as our new Chair. As Chair Mark will be responsible for ensuring that we deliver our mission to provide efficient and effective regulation of the nuclear industry on behalf of the public.
- In April, we published our [Corporate Plan for 2019/20](#), setting out our priorities and objectives for 2019/20. Maintaining the delivery of core regulatory functions and holding industry to account on behalf of the public remain at the heart of everything we do.
- We have been praised by the Nuclear Skills Strategy Group (NSSG), a government organisation, for ensuring we have the right capability and capacity to meet our regulatory demands. They removed the regulatory capacity risk placed on us in 2016 as recognition of our ongoing commitment to developing our staff and expanding our recruitment pipelines.
- We published our [Annual Report and Accounts](#) on 20 June highlighting our performance and key achievements in 2018/2019. We have continued to deliver our prime purpose of public safety, ensuring that dutyholders met the required standards of safety and security that society expects. We completed more than 750 inspections across 37 licensed sites, granting permission for 30 nuclear-related activities, serving nine improvement notices and instigating four prosecutions.

All our latest news is available on our website www.onr.org.uk

6 CONTACT

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

website: www.onr.org.uk
email: ONREnquiries@onr.gov.uk

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