



Office for Nuclear Regulation (ONR) Site Report for Dounreay

Report for period 1 October to 31 December 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/llc/>).

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 1st October to 31st December 2019:

- 22nd to 24th October 2019
- 11th to 14th November 2019
- 2nd to 5th December 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:

Radioactive waste management: These inspections are undertaken as part of an ongoing ONR regulatory focus in this area. Overall ONR is satisfied that DSRL has adequate arrangements for minimising, so far as is reasonably practicable, the rate of production and total quantity of radioactive waste accumulated on the site at any time and for the recording of that waste. DSRL also provided clear evidence of a number of improvements they have implemented to the management of radioactive waste, in particular, how waste packages are labelled.

Maintenance: The focus of this inspection was to undertake a formal review of the evidence necessary to close out a regulatory issue raised by ONR regarding the adequacy of maintenance records following an inspection undertaken in Nov 17. DSRL provided clear evidence of a significant improvement in both the quality of the maintenance records sampled and in the safety culture within the site maintenance teams. This issue has now been closed out on the ONR Regulatory Issues Database.

Resilience: This inspection was undertaken in response to concerns raised following the site response to a loss of grid on 17 Jun 19 and the subsequent failure of the back-up diesel generator. This inspection concluded that DSRL does have adequate arrangements in place for the provision of a suitable and sufficient resilience capability that meets the nuclear, radiological and industrial safety requirement. DSRL has also procured a new diesel generator to provide an additional back up capability.

Supply Chain arrangements: This inspection focused on the corporate arrangements and the implementation of those arrangements in support of projects: This includes those being delivered by DSRL operational staff and particularly those projects being delivered by specialist decommissioning contract staff. Overall ONR is satisfied that DSRL's can demonstrate that it has adequate arrangements in place for the management of its supply chain, particularly with regards the quality assurance of products and services procured.

Training and the provision of 'Duly Authorised and other suitably qualified and experienced persons: This inspection focused on DSRL's compliance with the legislation and the arrangements that support the production and review of fire risk assessment documentation. The inspection also sought to understand how DSRL maintain fire safety in a dynamic work environment and reviewed the implementation of those arrangements in support of the decommissioning activities ongoing within the Dounreay Material Test Reactor and Dounreay Fast Reactor.

Overall ONR is satisfied that DSRL has adequate arrangements in place to meet the legislative requirement and can demonstrate the implementation of those arrangements in support of dynamic high hazard activities.

2.2 Other work

The site inspectors also undertook a number of other inspection activities not linked directly to compliance against legislation.

Permissioning activities: ONR has undertaken a number of technical reviews to support the release of the formal regulatory hold points placed in support of the projects covering the modifications necessary to address the radioactive liquors remaining from previous fuel processing activities on site and, the application of a 'Water Vapour in Nitrogen' technique to address the residual liquid metal coolant within the Dounreay and Prototype Fast Reactors. DSRL continues to provide the necessary confidence in the technical bases underpinning these activities.

The formal review of progress against regulatory issues: ONR continues to undertake formal reviews of progress against regulatory issues raised by ONR and any regulatory actions agreed between ONR and DSRL as a result of our inspections on the site: DSRL continues to make good progress against the action plans agreed to address regulatory issues raised during previous inspections on site; during this period DSRL has provided the evidence necessary for ONR to close out 4 of the 6 formal regulatory issues currently recorded our database.

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. ONR has also agreed a number of permissioning hold points within the PFR decommissioning project that will be released on the basis of DSRL's own internal regulation activities.

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.

ONR were made aware of an incident on site whereby scaffolding was impacted during crane operations. DSRL has concluded its own internal investigation which it has provided to ONR. ONR has requested further information regarding this incident.

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, to include issuing an Enforcement Notice.

ONR issued a **Specification** to DSRL [Licence Instrument No. 524], under the requirements of the Nuclear Installations Act 1965, to submit to ONR those records pertaining to high activity sealed sources (HASS) as required under new legislation following the implementation of the Basic Safety Standards Directive [Council Directive 2013/59/Euratom].

No Enforcement Notices or Formal Letters were issued during this period.

5 NEWS FROM ONR

5.1 Enforcement Action

EDF Energy has complied [with two ONR Improvement Notices](#) relating to the way it maintains auxiliary steam systems and instructs staff operating these systems. The Notices were issued in January 2019 following a serious incident at Heysham 1 power station in November 2018, when a valve failed on a steam system resulting in injury to three EDF employees. Further detail is available on [our website](#).

5.2 Regulatory updates

In October, our Chief Nuclear Inspector (CNI) Mark Foy published his view on the performance of Great Britain's nuclear industry during 2018/19. In the first [report](#) of its kind, the review provides an independent, authoritative view of safety, security and safeguards performance across the nuclear industry over the last year. The report is accessible via our website homepage www.onr.org.uk

Throughout October we hosted an [Integrated Regulatory Review Service Mission](#) that saw a team of 18 independent experts from across the globe scrutinising the regulation of nuclear and radiological safety across 15 different regulatory bodies. The final report is expected in February/March 2020.

Along with the Environment Agency and Natural Resources Wales (NRW) we have published [new Generic Design Assessment \(GDA\) guidance](#) for Requesting Parties. It reflects the changes seen in the nuclear industry in the decade since GDA was introduced, in particular the Nuclear Sector Deal and the potential for Small Modular Reactor (SMR) designs to enter GDA in the future. The new guidance also incorporates lessons learnt from previous GDAs.

Together with the Environment Agency, we have also published a [joint annual report](#) on our scrutiny of Radioactive Waste Management's (RWM) work to develop geological disposal. This report summarises our work relating to the geological disposal of radioactive waste.

We have formally concluded the [licence revocation for the Cardiff Nuclear Licensed Site](#) in Wales, thereby de-licensing the site. This follows many years of nuclear site decommissioning and work to clean up the site and is the first time ONR has de-licensed a site completely, although several sites have been de-licensed by ONR's predecessor organisation, the Nuclear Installations Inspectorate.

5.3 Stakeholder Engagement

In November, we hosted our second NGO Forum of the year and were delighted to welcome 18 NGO attendees from 14 different organisations. Agenda items included our work at Sellafeld, ageing management of reactors and our relationship with the Defence Nuclear Safety Regulator. Presentations and minutes from all our [NGO Forum meetings](#) are made available on our website. If you represent an NGO group and would like to get involved with our NGO Forum, please get in touch with our Communications team (contact@onr.gov.uk) for further details.

5.4 Corporate news

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

6 CONTACT

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