Office for Nuclear Regulation (ONR)
Quarterly Site Report for
Harwell

Report for period 1 January - 31 March 2015

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 of the Harwell Site Stakeholder Group and are also available on the ONR website (http://www.onr.org.uk/llc/).

Site inspectors from ONR usually attend Harwell Site Stakeholder Group meetings and will respond to any questions raised there. Any person wishing to enquire 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 ............................................................................................................. 6
6 CONTACTS ......................................................................................................................... 6
1 INSPECTIONS

1.1 Dates of inspection

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

5, 6, 7, 8 January 2015
23, 24, 25, 26 February 2015

An ONR mechanical engineering specialist inspector made an inspection on the following dates during the quarter:

6, 7, 8 January 2015 (system based inspection)

A nuclear graduate assisted the ONR site inspector on the following dates during the quarter:

23, 24, 25, 26 February 2015

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 etc. Act 1974 (HWSA74); and
- regulations made under HWSA74, 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 compliance inspections of Harwell covered the following:

- marking of the site boundary (Licence Condition (LC) 2);
- nuclear safety committee (LC13);
- management systems (LC17);

These routine compliance inspections were selected to support ONR’s work to relicense the Research Sites Restoration Limited (RSRL) Harwell and Winfrith sites to Magnox Limited (MXL). This relicensing took place during this quarter: new licences and revocations of the existing licences were granted on 30 March, to come into force on 1 April. Further information is provided in Section 4 “Regulatory Activity”.

LC2 was selected to support verification of the site boundary and map to be included in the new licence for the Harwell site.
LC13 was selected since, if ONR permissioned the relicensing, ONR Approvals of the Terms of Reference of the MXL Harwell and MXL Winfrith nuclear safety committees would need to come into effect before the new licences came into force.

LC17 was selected to enable an overview to be taken of the licence condition compliance arrangements which would come into effect if ONR permissioned the relicensing.

For LC2, two topics were considered: RSRL’s compliance arrangements and the implementation of the arrangements. The position met the intent/requirements of the safety case and the required safety standards, but several actions were noted and recorded as an improvement issue in ONR’s issues database. This issue needed to be resolved prior to relicensing and was closed during the quarter.

For LC13, the inspection was undertaken in two parts. The first part considered RSRL’s compliance arrangements and implementation of the arrangements and it was judged that the position met the intent/requirements of the safety case and the required safety standards. The second part considered the LC13 arrangements that would come into effect if ONR permissioned the relicensing, including consideration of the proposed Terms of Reference for the new nuclear safety committees. Several inconsistencies were noted and raised as an issue in ONR’s issues database to be resolved before relicensing. The issue was closed during the quarter.

For LC17, the inspection was undertaken in two parts. The first part considered RSRL’s compliance arrangements and implementation of the arrangements, and it was judged that the position met the intent/requirements of the safety case and the required safety standards. A good standard inspection rating was assigned. The second part considered the licence condition compliance arrangements that would be in place if ONR permissioned the relicensing. Several inconsistencies were noted and raised as an issue in ONR’s issues database to be resolved before relicensing. The issue was closed during the quarter.

In addition to our compliance inspections, based on the conditions attached to a licence, ONR is now undertaking system based inspections of decommissioning sites. Each site has a safety case which demonstrates how it operates safely. For the Harwell site, ONR has decided that system based inspections should focus on the most safety significant “Category 1” facilities, which for Harwell is the B462 Complex which processes solid low level and intermediate level waste. There is a requirement that over a five year period, ONR will inspect all the important safety systems for this facility. ONR believes that this will provide more robust assurances of the site’s safe operation and how the safety case is being implemented.

In the quarter, an ONR mechanical engineering specialist inspector and the Harwell site inspector undertook a system based inspection of the B462 Complex Heating, Ventilation and Air Conditioning (HVAC) system. Based on the information sampled, an overall judgement was made that the relevant safety systems and structures are able to meet the safety function requirements defined in the safety case and are adequate. For the HVAC system, the adequacy of the implementation of the LC arrangements for LC10 “training”, LC23 “operating rules”, LC24 “operating instructions”, LC27 “safety mechanisms, devices and circuits”, LC28 “examination, inspection, maintenance and testing” and LC34 “leakage and escape of radioactive material and radioactive waste” was also tested. A good standard rating was assigned to LCs 23 and 28, and an adequate standard rating to the four other LCs listed above. Several improvement actions were identified and these were recorded as a single issue in ONR’s issues database.

More information on all of these routine inspections is in the Executive Summary of ONR Intervention Records which are published on our website: http://www.onr.org.uk/intervention-records/2014/index.htm.
2.2 Other work

The site inspector held a routine review of “Harwell”, and “RSRL corporate” issues, and 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.

The site inspector also held a routine meeting with the RSRL internal regulator, to discuss insights from their compliance audits in the previous quarter, including their independent assessment to support readiness for relicensing and preparations for subsequent organisational and other changes.

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.

Matters and events of particular note during the period were:

- An incident relating to an issue with a safety related interlock in the B462 Complex. The site inspector was satisfied that the issue was discovered (and hence the incident raised) due to good RSRL challenge and that the draft RSRL investigation was thorough. The lessons learnt from this incident will be shared with MXL.

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.

Nuclear Site Licence (NSL) 99 was granted to RSRL on 23 April 2012 in respect of Harwell. On 30 March 2015, ONR granted a revocation of this NSL and granted new NSL 101 to MXL in respect of Harwell. The new NSL was to come into force on 1 April 2015 and the effect of these permissions (revocation of the existing NSL and granting of a new NSL) was to relicense the Harwell site to MXL from 1 April 2015. The LI in Table 1 below was granted under new NSL 101. This LI relates to Approval of the Terms of Reference of the MXL Harwell nuclear safety committee.

<table>
<thead>
<tr>
<th>Date</th>
<th>Type</th>
<th>Ref No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>30/3/2015</td>
<td>Approval</td>
<td>500</td>
<td>Approval under Licence Condition 13(2) to the Terms of Reference of the nuclear safety committee. The Approval was granted under NSL 101 on 30/3/2015 and came into effect on 31/3/2015.</td>
</tr>
</tbody>
</table>

Reports detailing the above regulatory decisions can be found on the ONR website at [http://www.onr.org.uk/pars/](http://www.onr.org.uk/pars/).
5 NEWS FROM ONR

Insight into ONR's work as an independent regulator of the nuclear industry can be found in ONR's Quarterly News. The online publication (http://www.onr.org.uk/onr-quarterly-report.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. http://www.onr.org.uk/index.htm. 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 ONR Annual Plan

ONR has published its Annual Plan for 2015/16, setting out its priorities, as well as providing details of the year's planned activities and key targets.

5.2 Annual Report and Accounts

ONR is in the process of producing its first Annual Report and Accounts (ARA) as a public corporation. It will be laid in Parliament in June 2015. The report presents an overview of our first year, including achievements, financial management and the annual Chief Nuclear Inspector's Statement.

6 CONTACTS

Office for Nuclear Regulation
Redgrave Court
Merton Road
Bootle
Merseyside
L20 7HS
website: www.onr.org.uk
email: ONREnquiries@onr.gsi.gov.uk

This document is issued by the Office for Nuclear Regulation (ONR). For further information about ONR, or to report inconsistencies or inaccuracies in this publication please visit http://www.onr.org.uk/feedback.htm.

© Office for Nuclear Regulation, 2015
If you wish to reuse this information visit http://www.hse.gov.uk/copyrightwww.onr.org.uk/copyright for details.
Published 05/15

For published documents, the electronic copy on the ONR website remains the most current publicly available version and copying or printing renders this document uncontrolled.