



**Cavendish Fluor Partnership Management of Change Strategy
Relicensing Research Sites Restoration Limited Sites to Magnox Limited**

Project Assessment Report ONR-DFW-PAR-14-018
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EXECUTIVE SUMMARY

Title

Relicensing Research Sites Restoration Limited sites to Magnox Limited.

Permission Requested

On 28 November 2014, Magnox Limited (MXL) requested under the Nuclear Installations Act 1965 (As Amended) (NIA65) that the Office for Nuclear Regulation (ONR) grants it new Nuclear Site Licences (NSLs) for the Harwell and Winfrith sites. Currently these two sites are licensed to Research Sites Restoration Limited (RSRL).

On the same date, RSRL requested under NIA65 that ONR revokes its current NSLs (No. 99 for Harwell and No. 85 for Winfrith) concurrently with the coming into force of the new NSLs requested by MXL.

Taken together, these permissions (granting and revocation of licenses) will relicense the Harwell and Winfrith nuclear licenced sites to MXL.

Background

On 1 September 2014, the Cavendish Fluor Partnership (CFP) became the Parent Body Organisation (PBO) of both MXL and RSRL. The new PBO intends to carry out decommissioning activities across the MXL and RSRL sites using a programmatic approach. To facilitate this, the PBO wishes to bring all the sites under the control of a single licensee, MXL. Section 3(1) of NIA65 specifically prohibits the transfer of NSLs, making relicensing of the two RSRL sites to MXL necessary.

Assessment and Inspection Work Carried out by ONR in Consideration of this Request

ONR has conducted its review of this relicensing in line with its published guidance¹. Since NIA65 provides for a NSL to be granted to a named corporate body to install or operate specified nuclear installations in a defined location, ONR's published guidance notes three broad themes: the organisation, licensable activities and the site. ONR's assessment and inspection activities have been structured using these three themes. ONR's assessment and inspection activities have been targeted and proportionate, focusing on those areas where changes are taking place or which are judged to be potentially important for nuclear safety reasons. The selection of ONR assessment and inspection activities is based on these factors and a summary of the work carried out is described next.

The Organisation

This topic has been subject of significant focus for two reasons: firstly, the move from two organisations to one on relicensing; and, secondly, in anticipation of further organisational changes post relicensing as part of the PBO's Management of Change (MoC) strategy in the future. In anticipation of further organisational change post relicensing, ONR requested that common² MoC arrangements, an agreed programme for their implementation and an agreed programme for common nuclear baselines should be in place prior to relicensing. An ONR

¹ ONR, "Licensing Nuclear Installations. 4th edition: January 2015."
(<http://www.onr.org.uk/licensing-nuclear-installations.pdf>)

ONR Instruction NS-PER-IN-002 Revision 2, May 2013. "Licensing Procedure: Public Body Notification".
(<http://www.onr.org.uk/operational/assessment/ns-per-in-002.pdf>)

ONR Instruction NS-PER-IN-004 Revision 1, May 2013. "The Processing of Applications for Replacement Licences for Existing Licenced Nuclear Sites".
(<http://www.onr.org.uk/operational/assessment/ns-per-in-004.pdf>)

² For the ten existing MXL sites, the Harwell and Winfrith sites and the corporate functions.

Human & Organisational Capability Specialist Inspector (H&OCSI) has produced an Assessment Report dealing with these matters.

Licensable Activities

In terms of licensable activities, ONR has focussed on safety cases since the extant Harwell and Winfrith safety cases have been produced using a RSRL safety case production process which differs from that of MXL. However, MXL is putting in place a safety case initiative with the aim of moving towards a common process after relicensing. It is also noted that both Harwell and Winfrith are comparatively low hazard sites. Taking all these factors into account, ONR requested that MXL undertook a “due diligence” process on the RSRL safety cases. The aim of this was for MXL to satisfy itself that there are no significant issues which would prevent it from taking ownership of the RSRL safety cases at relicensing. Less significant issues identified by the process would feed into the licensee’s future safety case initiative. The ONR Harwell & Winfrith Site Inspector (H&WSI) has reviewed this due diligence work and relevant safety case related issues in the ONR issues database to establish whether the Harwell and Winfrith safety cases are adequate for relicensing to MXL.

ONR has also reviewed general Licence Condition Compliance Arrangements (LCCA) for all 36 Licence Conditions (LC) for several reasons. Firstly, ONR has raised issues relating to LCCA for the Harwell and Winfrith sites over recent years and improved robustness of arrangements for licence condition compliance is an objective in the RSRL Safety Improvement Programme. Secondly, the licensee wishes to move towards a unified management system with associated common LCCA post relicensing. ONR requested that a single RSRL management system document summarising the LCCA for the Harwell and Winfrith sites be submitted with the licence application and requested that MXL undertook a “due diligence” review of this document to identify any changes that MXL considered necessary prior to relicensing. In addition, ONR requested that MXL and RSRL work together to produce a revised document with common “compliance principles” across the 10 existing MXL sites and the Harwell and Winfrith sites. ONR requested that an updated management system document summarising the LCCA for the Harwell and Winfrith sites, incorporating any required changes from the due diligence review and from adoption of common compliance principles, be available in time to inform ONR’s relicensing decision. As part of ONR’s relicensing assessment, the H&WSI reviewed the due diligence and common compliance principles work, inspected the proposed LCCA that come into force at the same time as the new licences, inspected the arrangements for several LC at Harwell and Winfrith, and reviewed relevant LCCA related issues in the ONR issues database.

In addition to the general LCCA work noted above, specific focus has been given to LC11 “emergency arrangements”, LC35 “decommissioning” and LC36 “organisational capability”:

Emergency arrangements has been selected to ensure consistency with ONR published guidance on relicensing. The H&WSI has led on this work.

Decommissioning has been selected to ensure consistency with ONR published guidance on relicensing, since this is an important activity for the Harwell and Winfrith sites, and since MXL intends to carry out decommissioning activities across its 12 sites after this relicensing using a programmatic approach. Prior to the relicensing application, the H&WSI requested revisions to the decommissioning arrangements for the Harwell and Winfrith sites and ONR’s Magnox Limited Corporate Inspector (MXLCI) has assessed these as part of this Project Assessment Report.

Organisational capability has been selected to ensure consistency with ONR published guidance on relicensing and, as discussed earlier, in anticipation of further organisational changes post relicensing as part of the PBO’s MoC strategy going forwards. A H&OCSI has led on this work.

The Site

In relation to the site, ONR has focussed on verification of the site boundaries and maps since previous ONR inspections indicated issues relating to LC2 “marking of the site boundary” at both Harwell and Winfrith. A Site Licensing Specialist (SLS) and the H&WSI have led on this work. The H&WSI’s work included a physical inspection of both site boundaries.

Other Matters

Other activities required for relicensing such as consultation and legal aspects have been completed as required by ONR’s published guidance. They are reported in this Project Assessment Report.

Matters Arising from ONR's work

All issues identified during ONR’s relicensing assessment and inspection work that needed to be addressed prior to granting of the new licences and the revocations have now been resolved.

All issues identified during ONR’s relicensing assessment and inspection work that may be dealt with after relicensing have been recorded in ONR’s issues database with appropriate ONR issue owners and expected closure dates.

Conclusions

Conclusions are provided in terms of the key sections of this report.

The Organisation

In relation to the relicensing MoC proposal, the H&OCSI has taken into account additional information and clarifications provided by MXL during the period of the licence application assessment. ONR is satisfied overall that MXL is adequately managing the organisational changes associated with integration of the Harwell and Winfrith sites into its organisation. In particular, ONR is satisfied that:

- MXL and RSRL have carried out an adequate assessment of the change, in accordance with their LC36 compliance arrangements, which has been subject to suitable internal review and approval and aligns with expectations outlined in ONR guidance³ and the Nuclear Industry Code of Practice;
- MXL and RSRL have applied a suitable process to determine their own readiness to implement the change;
- there has been an adequate independent assessment of MXL / RSRL’s readiness to implement the change (and necessary actions have been addressed).

In relation to the arrangements for management of health and safety after relicensing, the H&OCSI has taken into account additional information and clarifications provided by MXL during the period of the licence application assessment. The H&OCSI concludes that, through its Safety and Environmental Management Prospectus (SEMP), MXL has demonstrated the adequacy of its arrangements for managing health and safety. In particular, ONR is satisfied that:

- The SEMP adequately describes the organisation post relicensing in line with ONR’s technical assessment guide⁴;

³ “Organisational Capability” NS-TAST-GD-048 Revision 4. ONR. March 2013.
(http://www.onr.org.uk/operational/tech_asst_guides/ns-tast-gd-048.pdf)

⁴ “Function and Content of a Safety Management Prospectus” NS-TAST-GD-072 Revision 2. ONR. April 2013. (http://www.onr.org.uk/operational/tech_asst_guides/ns-tast-gd-072.pdf)

- Based on sampling of the nuclear baselines at Winfrith, which are produced using arrangements that also apply at Harwell, the baselines adequately demonstrate the suitability and sufficiency of the organisation;
- There is consistent understanding and implementation of the new functional reporting lines (as described in the SEMP).

The H&OCSI also notes that:

- MXL plans further (more significant) organisational change post relicensing (including introduction of a programmatic delivery structure and rationalisation of management systems);
- MXL will, post relicensing, embark on a significant (18 month) programme of rationalisation, improvement and modularisation of its nuclear baselines.

In recognition of the above, the H&OCSI has recommended that ONR continues to monitor organisational change in MXL (in particular the change to a programme structure), which the licensee is committed to manage under its new LC36 compliance arrangements (see licensable activities discussed next). It is also recommended that ONR monitors delivery of the baseline rationalisation and improvement programme against the new arrangements. An ONR intervention has been set up to monitor these matters.

No organisational issues remain which would give rise to concerns over granting the new licences and the revocations of the existing licences.

Licensable Activities

In relation to site safety cases, the H&WSI has considered MXL's "RSRL Safety Cases Due Diligence Review" and associated information and reviewed RSRL safety case related issues in the ONR issues database. Based on this, the H&WSI concludes that the Harwell and Winfrith site safety cases are adequate for relicensing to MXL.

In relation to licence condition compliance arrangements, the H&WSI has: considered MXL's "RSRL Licence Compliance Arrangements Review" and associated information; established that when the new licences come into force common compliance principles will be in place across the 10 existing MXL sites and the Harwell and Winfrith sites; inspected the proposed relicensing LCCA at Harwell; inspected several LCCA at Harwell and Winfrith in the period October 2014 to February 2015; and reviewed relevant LCCA related issues in the ONR issues database. Based on this, the H&WSI concludes that the Harwell and Winfrith LCCAs proposed to come into force when the new licences come into force are suitable for implementation.

In relation to emergency arrangements (LC11), the H&WSI has considered: relevant parts of MXL's "RSRL Licence Compliance Arrangements Review"; emergency arrangements-related issues in the ONR issues database; the Harwell and Winfrith emergency plan Approvals; and the emergency response arrangements "Capability Mapping" exercise. Based on this, the H&WSI concludes that the Harwell and Winfrith emergency arrangements are suitable for relicensing. The existing improvement programme, supplemented by any findings from the ongoing ONR emergency response arrangements "Capability Mapping" exercise, will continue to be monitored as part of normal MXL/ONR interactions following relicensing.

In relation to decommissioning arrangements (LC35), the MXLCI has considered the Decommissioning Manual, the Integrated Waste Strategy and the Plant Decommissioning Programmes. Based on this, the MXLCI concludes that the Harwell and Winfrith decommissioning arrangements are suitable for relicensing. Although ONR is satisfied with the Harwell and Winfrith arrangements to identify, modify and close significant decommissioning milestones, MXL has not yet agreed specific significant decommissioning milestones with ONR. ONR's agreement to significant decommissioning milestones will be

implemented as part of normal MXL/ONR interactions following relicensing. This has been captured as part of an ONR post relicensing issue.

In relation to MoC arrangements, the H&OCSI is satisfied with the adequacy of the common LC36 compliance arrangements developed by MXL, which are consistent with ONR's expectations and the Nuclear Industry Code of Practice. ONR is also satisfied that there is an adequate implementation plan for the new arrangements, which provides for full implementation of the procedure, including rationalisation of nuclear baselines across MXL, including the Harwell and Winfrith sites, and associated vulnerability assessment by the end of June 2015.

No issues remain relating to licensable activities which would give rise to concerns over granting the new licences and the revocations of the existing licences.

The Site

The Site SLS has considered security of tenure, asset transfers and property transactions. The SLS and the H&WSI have verified, for both sites, the site boundary and maps. This verification included a physical inspection of site boundaries for both sites by the H&WSI.

No issues remain relating to the site which would give rise to concerns over granting the new licences and the revocations of the existing licences.

Consultation

Public body notification has been considered, but is not appropriate in these circumstances.

Statutory consultation with the Environment Agency has been completed, with no issues identified which would give rise to concerns over granting the new licences and the revocations of the existing licences.

Consultation with the Department of Energy and Climate Change and with the Nuclear Decommissioning Authority has been completed, with no issues identified which would give rise to concerns over granting the new licences and the revocations of the existing licences.

Consultation with ONR conventional health and safety, security, nuclear safeguards and transport has been completed, with no issues identified which would give rise to concerns over granting the new licences and the revocations of the existing licences.

Applicant's Readiness

The MXLCI and the H&WSI consider that there is no evidence so far that the transition to shadow working on 1 December 2014 has had a detrimental effect on the safety performance of MXL or RSRL.

Statements from the MXL and RSRL internal regulators, the MXL and RSRL Nuclear Safety Committees (NSCs), the Transition Board and the MXL and RSRL Boards confirm that MXL and RSRL are ready for new licences to come into force on 1 April 2015.

No issues remain relating to the applicant's readiness which would give rise to concerns over granting the new licences and the revocations of the existing licences, with the new licences coming into force on 1 April 2015.

Legal Aspects

The SLS has drafted new licences and revocations and these have been reviewed by Treasury Solicitor's Department and by MXL and RSRL. No issues relating to the new licences and the revocations remain.

For the new Harwell and Winfrith NSLs, Schedule 1 Part 1 "The Site" and Schedule 1 Part 2 "The Nuclear Installations" remain unchanged at relicensing.

The SLS and the H&WSI have worked with RSRL to determine which primary powers⁵ licence instruments issued under the current or earlier Harwell and Winfrith NSLs should be carried forward under paragraphs 3 and 4 of the new Harwell and Winfrith NSLs.

The SLS and the H&WSI have worked with RSRL to determine which derived powers⁶ licence instruments issued under the current or earlier Harwell and Winfrith NSLs should be included in the new MXL site licence handbooks for the Harwell and Winfrith sites.

The H&WSI has consulted with ONR specialists to establish ONR's position relating to other regulatory requirements.

No legal issues remain which would give rise to concerns over granting the new licences and the revocations of the existing licences.

Recommendations

On the basis of the requests submitted by MXL and RSRL and the findings set out in Sections 3 to 12 of this report: it is recommended that:

- a. The Magnox Limited sites Superintending Inspector signs this Project Assessment Report to confirm support for the ONR technical and regulatory arguments that justify granting MXL new NSLs for the Harwell and Winfrith sites and revoking RSRL's existing NSLs for these sites.
- b. The Magnox Limited sites Superintending Inspector signs this Project Assessment Report approving its release for publication, after redaction where appropriate.
- c. The licensing Superintending Inspector signs this Project Assessment Report to confirm support for the ONR technical and regulatory arguments that justify granting MXL new NSLs for the Harwell and Winfrith sites and revoking RSRL's existing NSLs for these sites.

It is recommended that the Chief Nuclear Inspector confirms that he or a Deputy Chief Inspector is prepared to grant Approvals under LC13(2) of the Terms of Reference of the Magnox Limited Harwell and the Magnox Limited Winfrith Nuclear Safety Committees so that these Approvals will come into effect before the new nuclear site licences for Magnox Limited Harwell and the Magnox Limited Winfrith will come into force.

It is recommended that the Chief Nuclear Inspector grants:

- a. MXL NSL number 100 in respect of the site at Winfrith.
- b. MXL NSL number 101 in respect of the site at Harwell.
- c. The revocation for NSL number 85, granted to RSRL in respect of the site at Winfrith.
- d. The revocation for NSL number 99, granted to RSRL in respect of the site at Harwell.

⁵ See Annex 1 of Licensing Nuclear Installations.

⁶ See Annex 1 of Licensing Nuclear Installations.

LIST OF ABBREVIATIONS

AR	Assessment Report
ASW	Agency Supplied Workers
C&M	Care & Maintenance
CHS	Conventional Health and Safety
CFP	Cavendish Fluor Partnership
CNI	Chief Nuclear Inspector
CNS	(ONR) Civil Nuclear Security
CSW	Contract Supplied Workers
DCI	Deputy Chief Nuclear Inspector
DECC	Department of Energy & Climate Change
DFW	(ONR) Decommissioning, Fuel and Waste (Programme)
EA13	Energy Act 2013
EHSSQ	Environment, Health, Safety, Security and Quality
EIADR	The Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations (1999; As Amended)
H&OCSI	Human & Organisational Capability Specialist Inspector
H&WSI	Harwell & Winfrith Site Inspector
HSE	Health and Safety Executive
IIS	Integrated Intervention Strategy
IRR	Ionising Radiations Regulations 1999
LC	Licence Condition
LCCA	Licence Condition Compliance Arrangements
LETP	Liquid Effluent Treatment Plant
LI	Licence Instrument
MoC	Management of Change
MoC3	The Management of Change submission associated with this relicensing
MS	Management System
MXL	Magnox Limited
MXLCI	Magnox Limited Corporate Inspector
NDA	Nuclear Decommissioning Authority
NIA65	Nuclear Installations Act 1965 (As Amended)
NICoP	Nuclear Industry Code of Practice
NSC	Nuclear Safety Committee
NSL	Nuclear Site Licence
NSSP	Nuclear Site Security Plan
ONR	Office for Nuclear Regulation

OSC	Operational Safety Case
PAR	Project Assessment Report
PBO	Parent Body Organisation
RRM	Readiness (for relicensing) Review Meeting
PSR	Periodic Safety Review
RSRL	Research Sites Restoration Limited
SAP	(ONR) Safety Assessment Principles for Nuclear Facilities
SED	Safety and Environment Detriment
SEMP	Safety and Environmental Management Prospectus
SLC	Site Licence Company
SLS	Site Licensing Specialist
TAG	(ONR) Technical Assessment Guide
TIG	(ONR) Technical Inspection Guide
ToR	(NSC) Terms of Reference
TS	(ONR) Intervention / Project Task Sheet

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Table 4:	Winfrith Licence Instruments Granted Under Earlier Winfrith NSLs Required for Operations Under Winfrith NSL 100

1 PERMISSION REQUESTED

1. On 28 November 2014, Magnox Limited (MXL) requested [1] under the Nuclear Installations Act 1965 (As Amended) (NIA65) that the Office for Nuclear Regulation (ONR) grants it new Nuclear Site Licences (NSLs) for the Harwell and Winfrith sites. Currently these two sites are licensed to Research Sites Restoration Limited (RSRL).
2. On the same date, RSRL requested [2] under NIA65 that ONR revokes its current NSLs (No. 99 for Harwell and No. 85 for Winfrith) concurrently with the coming into force of the new NSLs requested by MXL.
3. Taken together, these permissions (granting and revocation of licenses) will relicense the Harwell and Winfrith nuclear licensed sites to MXL.

2 BACKGROUND

2.1 The Need for Relicensing

4. On 1 September 2014, the Cavendish Fluor Partnership (CFP) became the Parent Body Organisation (PBO) of both MXL and RSRL. The new PBO intends to carry out decommissioning activities across the MXL and RSRL sites using a programmatic approach. To facilitate this, the PBO wishes to bring all the sites under the control of a single licensee, MXL. Section 3(1) of NIA65 specifically prohibits the transfer of NSLs, making relicensing of the two RSRL sites to MXL necessary.

2.2 Licensing Nuclear Installations

5. ONR has issued guidance that sets out the approach that is taken when considering a request for a NSL in “Licensing Nuclear Installations” [3]. Section 3 of reference [3] deals with relicensing, with paragraphs 155-158 of that section specifically dealing with the situation of relevance to this Project Assessment Report (PAR), relicensing for a change of operator.
6. ONR has issued further, more detailed instructions on relicensing in “The Processing of Applications for Replacement Licences for Existing Licenced Nuclear Sites” [4]. The relevant parts of reference [3] and reference [4] have been used during this ONR permissioning project.

3 THE MAGNOX LIMITED SITE LICENCE APPLICATION

7. Following CFP becoming the PBO for both MXL and RSRL on 1 September 2014, the ONR and the Environment Agency met with CFP, MXL and RSRL to discuss CFP’s organisational Management of Change (MoC) strategy. This relicensing is part of that overall MoC strategy [5], referred to in that document as MoC3. Once CFP’s intent relating to relicensing was known, ONR provided CFP, MXL and RSRL with guidance [6] on the evidence that would need to be provided in the dossier to accompany the requests for the new licences and the revocations. ONR’s guidance was based on the generic guidance in references [3] and [4], tailored to this specific relicensing project.
8. MXL’s request letter [1] was accompanied by a dossier comprising the documents detailed in Table 1. The dossier was consistent with ONR’s guidance as defined in reference [6].
9. Some documents detailed in Table 1 have been updated during the course of ONR’s assessment. Updated documents are detailed in Table 2.

4 ASSESSMENT AND INSPECTION WORK CARRIED OUT BY ONR IN CONSIDERATION OF THIS REQUEST

4.1 ONR's Intervention Management Process

10. ONR's business management process within the Decommissioning, Fuel and Waste (DFW) programme requires that an Intervention / Project Task Sheet (TS) is produced for a project such as this relicensing project. The TS includes:
 - a. Nomination of the project lead.
 - b. A demonstration of alignment of the project with DFW programme objectives.
 - c. A description of the background to the project.
 - d. A description of the work.
 - e. The anticipated outcomes.
 - f. Definition of milestones / key deliverables.
 - g. Resource requirements/ project team.
11. The Harwell & Winfrith Site Inspector (H&WSI) was nominated as the lead for this project. He prepared a TS for this project [7] which was endorsed by the DFW management team.
12. The key members of the project team (as defined in reference [7]) and authors of this PAR are:
 - a. Site Licensing Specialist (SLS).
 - b. the H&WSI.
 - c. MXL Corporate Inspector (MXLCI).
 - d. Human & Organisational Capability Specialist Inspector (H&OCSI).
13. The ONR process for delivering a permissioning project such as this requires preparation of a PAR for the permissioning decision by the Delegated Authority. Reference [8] "Administrative Arrangements for Delegated Authorities within the Office for Nuclear Regulation" notes that the Chief Nuclear Inspector (CNI) is the only person in practice who will carry out the functions of granting or withdrawing a NSL.

4.2 Structure of this Project Assessment Report

14. Licensing Nuclear Installations [3] paragraph 10 notes that NIA65 provides for a NSL to be granted to a named corporate body to install or operate specified nuclear installations in a defined location. For this reason, ONR's assessment has included three broad themes:
 - a. The capability, organisation and resources of the applicant corporate body: this theme is covered in Section 5 of this PAR, "The Organisation".
 - b. The nature of the prescribed activities and the relevant safety cases: this theme is covered in Section 6 of this PAR, "Licensable Activities".

- c. The nature and location of the site: this theme is covered in Section 7 of this PAR, “The Site”.
- 15. Consultation is a significant aspect of the relicensing process, some of which is statutory. This matter is covered in Section 8 of this PAR, “Consultation”.
- 16. Before relicensing, both MXL and RSRL need to be ready. This matter is covered in Section 9 of this PAR, “Applicant’s Readiness”.
- 17. Before relicensing, a number of legal aspects need to be completed, such as drafting the new NSLs and the revocations. This matter is covered in Section 10 of this PAR, “Legal Aspects”.

4.3 Selection of ONR Assessment and Inspection Activities

Overview

- 18. Licensing Nuclear Installations [3] paragraph 152 notes in relation to relicensing that “ONR will adopt a proportionate approach in line with its Enforcement policy statement. This means that assessment effort will focus particularly on those areas where changes are taking place or which are judged to be potentially important for nuclear safety reasons”.

The Organisation

- 19. This relicensing involves moving from two organisations to one. In addition, as noted in Section 3, this relicensing is part of the PBO’s overall MoC strategy. After relicensing, the PBO plans further organisational changes such as moving to a programmatic delivery structure. Given this, ONR’s assessment has focussed on “The Organisation” and the H&OCSI has produced an Assessment Report (AR) dealing with this theme [9].
- 20. Given the planned organisational changes after relicensing, ONR advised the PBO, MXL and RSRL that MoC arrangements common to the 12 sites⁷ meeting ONR’s expectations and cleared by MXL for implementation should be in place prior to licence granting. ONR also advised that a programme for implementation of these common arrangements should be in place. Finally, ONR advised that a programme for development and implementation of common nuclear baselines should be in place and adequate progress made at the point of licence granting. These matters are assessed by the H&OCSI in reference [9] and are reported in Section 6.5, since they relate to MXL’s LC36 arrangements.

Licensable Activities

- 21. In relation to “Licensable Activities”, particular focus has been given to site safety cases and Licence Condition Compliance Arrangements (LCCA), especially those under LC11 “emergency arrangements”, LC35 “decommissioning” and LC36 “organisational capability”. LC36 has been discussed already. Site safety cases, LCCA, LC11 and LC35 are discussed in turn next.
- 22. At the point of relicensing, the extant Harwell and Winfrith safety cases will have been produced using a RSRL safety case production process which differs from the MXL process. However, CFP is putting in place a safety case initiative with the aim of moving towards a common process after relicensing. It is also noted that both Harwell

⁷ Ten existing MXL sites, the Harwell and Winfrith sites and the corporate functions.

and Winfrith are comparatively low hazard sites. Taking all these factors into account, ONR requested that MXL undertakes a “due diligence” process on the RSRL safety cases and for this to be completed prior to relicensing. The aim of the due diligence process is for MXL to satisfy itself that there are no significant issues which would prevent it from taking ownership of the RSRL safety cases at relicensing. Less significant issues identified by the process would be expected to feed into CFP’s safety case initiative going forwards. The H&WSI has reviewed this due diligence work and relevant safety case related issues in the ONR issues database to establish whether the Harwell and Winfrith safety cases are adequate for relicensing to MXL. This matter is discussed in Section 6.1.

23. ONR has focussed on general LCCA for all 36 LCs for two reasons. Firstly, ONR has raised issues relating to LCCA for the Harwell and Winfrith sites over recent years and improved robustness of arrangements for licence condition compliance is an objective in the RSRL Safety Improvement Programme. Secondly, the PBO wishes to move towards a unified management system post relicensing, with associated common LCCA. ONR requested that a single RSRL management system document summarising the LCCA for the Harwell and Winfrith sites be submitted with the licence application. ONR also requested that MXL undertook a “due diligence” review of this document to identify any changes that MXL considered necessary prior to relicensing. In addition, ONR requested that MXL and RSRL work together to produce a revised document with common “compliance principles” across the 10 existing MXL sites and the Harwell and Winfrith sites. ONR requested that an updated management system document summarising the LCCA for the Harwell and Winfrith sites, incorporating any required changes from the due diligence review and from adoption of common compliance principles, be available in time to inform ONR’s relicensing decisions. As part of ONR’s relicensing assessment relating to LCCA, the H&WSI reviewed the due diligence and common compliance principles work, inspected the proposed LCCA to come into force when the new licences come into force, inspected the arrangements for several LCs at Harwell and Winfrith and reviewed relevant LCCA related issues in the ONR issues database. This matter is discussed in Section 6.2.
24. LC11 “emergency arrangements” has been selected to ensure consistency with ONR published guidance on relicensing. The H&WSI has reviewed the current position relating to LC11. This matter is discussed in Section 6.3.
25. LC35 “decommissioning” has been selected to ensure consistency with ONR published guidance on relicensing, since this is an important activity for the Harwell and Winfrith sites, and since the PBO intends to carry out decommissioning activities across the MXL and RSRL sites using a programmatic approach. Prior to the relicensing application, the H&WSI requested revisions to the decommissioning arrangements for the Harwell and Winfrith sites and the MXLCI has assessed these as part of this PAR. This matter is discussed in Section 6.4.

The Site

26. In relation to “The Site”, particular focus has been given to verification of the site boundaries and maps, as an ONR inspection at Winfrith in July 2013 [10] had assigned an Integrated Intervention Strategy (IIS) rating of 4 (below standard) to Licence Condition 2 “Marking of the Site Boundary”. In addition, ONR Issue 2602 “Improvements to Harwell Site Boundary” was in place at the start of this relicensing project. The H&WSI undertook LC2 inspections at both Harwell and Winfrith. The outcome is discussed in Section 7.4.
27. These assessments and inspections form a targeted and proportionate approach to the review of this relicensing application.

Other Activities

28. In addition to the assessment and inspection activities noted above, other activities such as consultation (Section 8 of this PAR) and reviewing Licence Instruments (LIs) (Section 10.2 of this PAR) are required by ONR's guidance (see [3] and [4]). These activities are reported in the appropriate sections of this PAR.

4.4 Standards and Criteria

29. The ONR assessment strategy included the application of a number of relevant standards and criteria. Principally these are, where appropriate, the relevant ONR Safety Assessment Principles for Nuclear Facilities (SAP) [11], ONR Technical Assessment Guides (TAG) [12] and ONR Technical Inspection Guides (TIG) [13].

5 THE ORGANISATION

5.1 Management of Organisational Change at Relicensing

Description of Organisational Change at Relicensing

30. The organisational change which MXL proposes as part of relicensing of Harwell and Winfrith is the third in a series of changes arising from the change of PBO in 2014. The first of these changes was the like-for-like replacement of PBO secondees in MXL and RSRL at the point of share transfer (1 September 2014), whilst the second was the appointment of a single Managing Director for both MXL and RSRL on 1 October 2014. For the third change (described below), MXL has chosen to minimise the extent of organisational change to that necessary to integrate the Harwell and Winfrith sites into its organisation.
31. The changes comprising MoC3 are as follows:
- The Chief Nuclear Officer / Deputy Managing Director of MXL will take on responsibility for Harwell and Winfrith.
 - The RSRL Deputy Managing Director (to be renamed the South Sites Director) will report to the MXL Chief Nuclear Officer / Deputy Managing Director.
 - Functional reporting lines will be introduced between members of the MXL Executive and members of the Harwell / Winfrith management team in the areas of:
 - Engineering;
 - Environment, health, safety, security and quality (EHSSQ);
 - Programme management (performance / reporting / strategy);
 - Human resources;
 - Finance.
 - The Harwell and Winfrith sites will fall under the governance of the MXL Board.
 - The post of Care and Maintenance (C&M) Hub Director will be re-designated as the C&M Hub Programme Manager, reporting to the Asset Management Director. A new post of Asset Management Programme Manager will be created (also reporting to the Asset Management Director).
 - A new post of Head of Regulatory Engagement will be created (reporting to the EHSSQ Director).
 - Ultimate design authority will be transferred from the Chief Nuclear Officer to the Engineering Director (but see clarification in paragraph 51 below).
32. MXL/RSRL have enacted the above changes on a trial basis, alongside their existing arrangements, as part of a 'shadow working' period which started shortly after the date of the licence application on 1 December 2014.
33. Other than LC36, there is no significant change to LC compliance arrangements at Harwell and Winfrith at the point of relicensing. Likewise, there is no change to staffing levels, lifetime plans or intelligent customer capability at relicensing.

Management of Organisational Change Proposal

34. Under its existing LC36 compliance arrangements, MXL and RSRL have prepared a proposal for the organisational changes it intends to enact at the point of relicensing (MoC3). This was submitted to ONR as part of the licence application (see Table 1).
35. The H&OCSI reviewed the MoC3 proposal as part of his assessment of MXL's licence application. He used MXL/RSRL's current LC36 arrangements and ONR's

expectations (see Section 2.2 of reference [9]) as the basis for the assessment and obtained certain additional information and clarifications [14].

36. During the course of the assessment of MoC3, the H&OCSI became aware of two other changes ongoing in MXL which did not appear to follow relevant good practice - one relating to closure of the Daresbury office, and the other relating to a reduction in Agency Supplied Workers (ASWs) and Contract Supplied Workers (CSWs) at Hunterston A. The H&OCSI is content that MXL is addressing the learning from these two cases (see reference [9] for full details).
37. Taking into account the above, and the additional information and clarifications received, the H&OCSI was satisfied overall that MXL / RSRL have undertaken an adequate assessment of the proposed changes at relicensing, in accordance with their LC36 arrangements and ONR expectations (NS-TAST-GD-048 [12]).

Review and Approval of Management of Organisational Change Proposal

38. MXL/RSRL's review of its MoC3 proposal comprised the following:
 - Peer review within RSRL and MXL;
 - Review and endorsement by RSRL's Safety Working Party;
 - Consideration and endorsement by a joint meeting of MXL/RSRL's Nuclear Safety Committees (NSCs).
39. Based on a review of the records of the above, the H&OCSI was satisfied overall that MoC3 has been subject to adequate challenge internally.

Self and Independent Assessment of Readiness to Implement Change

40. MXL's/RSRL's implementation plan for MoC3 comprises various steps to check the respective organisations readiness for relicensing, including:
 - Determination of whether necessary enabling actions have been completed (by the Transition Board);
 - An independent review of readiness by MXL's independent assurance function/RSRL's internal regulator.
41. The H&OCSI reviewed the independent assessments of MXL/RSRL's readiness for relicensing [15] and [16], and was satisfied with the scope and rigour of these assessments, which identified various recommendations and opportunities for improvement. These are being addressed by MXL/RSRL.

5.2 Arrangements for Management of Health and Safety

Safety and Environmental Management Prospectus

42. MXL has updated its Safety and Environmental Management Prospectus (SEMP) to reflect the organisation post relicensing of Harwell and Winfrith. This document was submitted to ONR as part of the licence application (Issue R) - see Table 1. The SEMP comprises the following documents:
 - Introduction to the SEMP, M-023;
 - Company manual, M-001;
 - Environment, Health and Safety Policy, POL-008;
 - Quality Policy, POL-014 / POL0016;
 - Arrangements for the Management of Environment, Health and Safety, M-019;
 - Function Manuals;
 - Site Manuals (including Site Manual for Harwell and Winfrith, M-001).

43. In accordance with NS-TAST-GD-072 [12] the SEMP addresses the company's activities, leadership, governance, organisational structure and resources, decision-making processes, management system and arrangements for organisational learning.
44. The H&OCSI has reviewed the updated SEMP against NS-TAST-GD-072 as part of an assessment of MXL's licence application and obtained additional information and clarifications [17].
45. MXL has addressed the above issues through a re-issue of its SEMP (issue R2) - see Table 2. This includes re-issue of the Harwell and Winfrith Site Manual which now lists the new functional responsibilities (between the MXL Executive and Harwell / Winfrith management team) as per the MoC3 proposal.
46. Based on the above, the H&OCSI was satisfied that the SEMP adequately describes the organisation post relicensing in line with ONR's Technical Assessment Guide (NS-TAST-GD-072).

Nuclear Baseline

47. Through an LC36 compliance inspection at Winfrith in December 2014 [18], the H&OCSI tested the adequacy of RSRL's existing nuclear baselines in justifying its organisational structure and resources. This inspection sampled the baselines for the Steam Generating Heavy Water Reactor, Dragon and Balance of Site Structures projects. Based on this sample ONR was broadly satisfied that RSRL's LC36 arrangements, which apply at both Harwell and Winfrith, and their implementation at Winfrith were broadly in line with ONR's expectations and industry good practice, with known areas for improvement being addressed.

Functional Reporting Lines

48. As part of an assessment of MXL's licence application the H&OCSI interviewed MXL/RSRL directors who have a role in the functional reporting lines which will be established between the MXL Executive and Harwell/Winfrith management team at the point of relicensing [19]. The purpose of these interviews was to test understanding of these functional links, experience of their operation during shadow working and any learning which will be taken forward.
49. The RSRL directors interviewed showed a consistent understanding of the nature of the functional reporting line (as described in the SEMP), i.e. that it concerns professional development, learning and sharing, whereas day-to-day performance management, resourcing and task allocation is retained within the line, in accordance with existing MXL/RSRL arrangements.
50. It was apparent from discussions (also from the Winfrith LC36 compliance inspection) that RSRL resource in certain key disciplines is limited and therefore would benefit from being part of a larger organisation (subject to MXL's ongoing change programme).
51. The Engineering Director confirmed that his remit as ultimate design authority does not extend to Harwell and Winfrith but is planned to do so in the future. This is consistent with MXL/RSRL's arrangements for design authority and design management, which are unchanged at relicensing.

5.3 Nuclear Safety Committee

Nuclear Safety Committee Terms of Reference

52. Licence Condition 13(1) requires a licensee to establish a NSC to consider and advise on safety matters. In addition, LC13(2) requires a licensee to submit to ONR for Approval the Terms of Reference (ToR) of any such NSC and requires the licensee not to form a NSC without such an Approval.
53. In terms of this relicensing, MXL worked with RSRL to prepare NSC ToR for the Harwell and Winfrith sites that MXL considered suitable for use if these two sites were licensed to it. MXL submitted these ToR for Approval during ONR's assessment of its licence application reported in this PAR. This has allowed ONR to prepare a separate PAR [20] for the NSC ToR Approvals for the MXL Harwell and MXL Winfrith sites in parallel with its preparation of this PAR.
54. If the CNI decides to grant the new licences, the CNI or a Deputy Chief Nuclear Inspector (DCI) will be asked to grant the NSC ToR Approvals for the MXL Harwell and MXL Winfrith sites, with these Approvals coming into effect before the new licenses come into force. This will ensure that MXL Harwell and MXL Winfrith will be able to form NSCs once the new NSLs come into force.
55. Since it would not be appropriate for the new licences to come into force without the NSC ToR Approvals having come into effect, this point has been included in Section 13 "Recommendations" of this PAR.

Arrangements for Urgent Safety Proposals

56. Licence Condition 13(11) notes that "...where it becomes necessary to obtain consideration of, or advice on, urgent safety proposals (which would normally be considered by a nuclear safety committee) the licensee may do so in accordance with appropriate arrangement made for the purpose by the licensee, considered by the relevant nuclear safety committee and approved by ONR".
57. MXL has provided [21] and ONR has commented on [22] MXL's proposed arrangement for urgent safety proposals. These will be submitted by MXL for Approval after consideration by the MXL Harwell and the MXL Winfrith NSCs. These matters have been captured as part of an ONR post relicensing issue.

6 LICENSABLE ACTIVITIES

6.1 Site Safety Cases

58. Site safety cases have been considered by the H&WSI. The H&WSI considered:
- MXL's "RSRL Safety Cases Due Diligence Review".
 - RSRL safety case related issues in the ONR issues database.

MXL's "RSRL Safety Cases Due Diligence Review"

59. Reference [23] is the MXL "RSRL Safety Cases Due Diligence Review". The outcome of this review includes the statement "Overall, no substantive issues were identified relating to RSRL nuclear safety cases that should preclude the proposed relicensing of RSRL into Magnox".
60. Reference [23] was considered by the MXL NSCs via paper for information NP/SC 5258 "Due Diligence Report on Safety Cases and Licence Condition Compliance Arrangements at RSRL" [24]. Reference [25] is the minutes of the relevant MXL NSCs meeting. These note the due diligence exercises undertaken at Harwell and Winfrith. They also note: "The findings of these due diligence exercises revealed there are no significant nuclear safety issues at Harwell and Winfrith which should preclude Magnox becoming the Site Licence Company (SLC) for Harwell and Winfrith".
61. Notwithstanding the positive outcome of MXL's "RSRL Safety Cases Due Diligence Review", it identifies 13 specific opportunities for improvement. At the Readiness (for relicensing) Review Meeting on 11 March 2015 (see Section 9), the H&WSI requested information on how these opportunities are being taken forward. In response [26], MXL noted that the opportunities are being addressed in "Magnox / RSRL PBO Key Initiative 4: Modular Safety Cases, Strategy for Improvements in Safety Case Delivery". Reference [26] notes that this strategy is in draft and that it will be shared with ONR by the end of April 2015. Early engagement on this initiative has taken place already [27].
62. The H&WSI has considered MXL's "RSRL Safety Cases Due Diligence Review", the relevant MXL NSC minutes and the clarification provided on how opportunities for improvement will be dealt with and has concluded that this work supports relicensing of the Harwell and Winfrith sites to MXL.

RSRL Safety Case Related Issues in the ONR Issues Database

63. The H&WSI has considered relevant safety case related issues in the ONR issues database. These are ONR Issue 1646 "B462 Operational Safety Case (OSC)/Periodic Safety Review (PSR)" and ONR Issue 3186 "Right First Time Safety Case Initiatives and Forward Actions". The H&WSI considers that current progress with these issues is adequate and that these issues do not need to be resolved prior to relicensing and will continue to be monitored as part of normal MXL/ONR interactions until they are closed.

Conclusion

64. In relation to site safety cases, the H&WSI has considered MXL's "RSRL Safety Cases Due Diligence Review" and associated information and reviewed RSRL safety case related issues in the ONR issues database. Based on this, the H&WSI concludes that the Harwell and Winfrith site safety cases are adequate for relicensing to MXL.

6.2 Licence Condition Compliance Arrangements (LCCA)

65. This section deals with an overview of the arrangements for all 36 LCs. The detailed consideration of selected individual LCs is provided in Section 6.3 (dealing with Licence Condition 11 (LC11) “emergency arrangements”), Section 6.4 (dealing with Licence Condition 35 (LC35) “decommissioning”) and Section 6.5 (dealing with Licence Condition 36 (LC36) “organisational capability”).
66. LCCA have been considered by the H&WSI. The H&WSI considered:
- MXL’s “RSRL Licence Compliance Arrangements Review”.
 - MXL’s/RSRL’s common compliance principles work.
 - Inspection of proposed relicensing LCCA at Harwell.
 - Inspection of LCCA at Harwell and Winfrith in the period October 2014 to February 2015.
 - LCCA related issues in the ONR issues database.

MXL’s “RSRL Licence Compliance Arrangements Review”

67. Reference [28] is the MXL “RSRL Licence Compliance Arrangements Review”. This review reports MXL’s due diligence on RSRL’s LCCA. The outcome of this review includes the statement: “There were no significant findings that would raise concern to the Magnox Board that would prevent relicensing Harwell and Winfrith into Magnox Ltd”.
68. Reference [28] was considered by the MXL NSCs via paper for information NP/SC 5258 “Due Diligence Report on Safety Cases and Licence Condition Compliance Arrangements at RSRL” [24]. This paper has been discussed already in the context of safety cases.
69. Reference [28] notes that whilst there were “no major risks identified”, a “number of minor areas for improvement were identified”. At the Readiness Review Meeting on 11 March 2015 (see Section 9), the H&WSI requested information on how these were being taken forward. In response [26], MXL noted that: “All minor observations in MXL32223 Due Diligence Report – RSRL LCC were immediately actioned by RSRL licence condition coordinators. One significant observation pertaining to unique drawing number is being addressed...”.
70. The H&WSI has considered MXL’s “RSRL Licence Compliance Arrangements Review”, the relevant MXL NSC minutes and the clarification provided on how minor areas for improvement are being dealt with and has concluded that this work supports relicensing of the Harwell and Winfrith sites to MXL.

MXL’s / RSRL’s Common Compliance Principles Work

71. Section 4 of NP/SC 5258 “Due Diligence Report on Safety Cases and Licence Condition Compliance Arrangements at RSRL” [24] is “Licence Condition Compliance Matrix”. It refers to RSRL Procedure (PRC) 0243 “Nuclear Site Licence Conditions Compliance Arrangements” [29] and notes that: “The procedure includes a set of licence condition compliance principles, currently deployed by Magnox at all sites”. As noted before, this paper has been considered by the MXL NSC [25]. PRC 0243 has also been considered by the RSRL NSC on 22 January 2015 [30].

72. The H&WSI has considered this evidence and is satisfied that MXL and RSRL have worked together to produce LCCA for the Harwell and Winfrith sites which have in place the same compliance principles as the 10 existing MXL sites.

Inspection of Proposed Relicensing LCCA at Harwell

73. The H&WSI inspected the proposed relicensing LCCA (i.e. the LCCA which would come into force at the same time as the new licences) for the Harwell and Winfrith sites at Harwell on 24 February 2015 [31]. He reviewed the head document, the compliance schedule for LC1 "Interpretation" and the compliance schedule for LC13 "Nuclear Safety Committee" (in relation to the separate PAR for NSC ToR Approvals [20] but relevant to this PAR too). Several inconsistencies were noted and two ONR issues were raised which needed to be resolved prior to relicensing. These were ONR Issue 3271 "Relicensing Nuclear Site Licence Compliance Arrangements" and ONR Issue 3273 "Relicensing LC13 Arrangements". Both these issues have now been closed. The H&WSI is therefore satisfied that the latest draft "Nuclear Site Licence Conditions Compliance Arrangements" document [29] is suitable for implementation when the new Harwell and Winfrith licences come into force.

Inspection of LCCA at Harwell and Winfrith in the period October 2014 to February 2015

74. During the period October 2014 (when the intent to relicense became clear) to February 2015, the H&WSI considered the RSRL arrangements for the following LCs during LC compliance inspections at Harwell or Winfrith: LC2 "Marking of the Site Boundary"; LC13 "Nuclear Safety Committee"; LC17 "Management Systems"; LC23 "Operating Rules"; LC24 "Operating Instructions"; LC27 "Safety Mechanisms, Devices and Circuits"; LC28 "Examination, Inspection, Maintenance and Testing"; LC34 "Leakage and Escape of Radioactive Material and Radioactive Waste"; and LC35 "Decommissioning". Where improvements relating to the LCCA for these LCs were identified, issues were raised in the ONR issues database. LCCA related issues in the ONR issues database are considered next. These include consideration of issues that at the time of writing this PAR remain open from the inspections noted above, together with any relevant open issues from earlier ONR inspections.

LCCA Related Issues in the ONR Issues Database

75. The H&WSI has considered relevant LCCA related issues in the ONR issues database. These are (the most relevant LCs are listed after the issue name):
- a. ONR Issue 2135 "Review and Revision of LC10 and LC12 Arrangements". (LC10 "Training", LC12 "Duly Authorised and Other Suitably Qualified and Experienced Persons").
 - b. ONR Issue 2137 "Provision of RSRL Corporate Periodic Safety Review". (LC15 "Periodic Review").
 - c. ONR Issue 2365 "Arrangements for Tenant Oversight and Interaction". (LC3 "Control of Property Transactions").
 - d. ONR Issue 2370 "Review and Revision of RSRL Work Control Process". (LC26 "Control and Supervision of Operations").
 - e. ONR Issue 3143 "LC27 Arrangements". (LC27 "Safety Mechanisms, Devices and Circuits").
 - f. ONR Issue 3272 "Updating Nuclear Site Licence Compliance Arrangements". (All LCs).

76. The H&WSI considered that one action associated with ONR Issue 2137 needed to be resolved prior to relicensing. This was to ensure that RSRL approved LC15 arrangements were in place prior to licence granting. This action has been completed [32].
77. In relation to the other issues, the H&WSI considers that current progress is adequate and that these issues do not need to be resolved prior to relicensing since they will remain in the ONR issues database on relicensing and will continue to be monitored as part of normal MXL/ONR interactions until they are closed.

Conclusion

78. The H&WSI has: considered MXL's "RSRL Licence Compliance Arrangements Review" and associated information; established that when the new licences come into force common compliance principles will be in place across the 10 existing MXL sites and the Harwell and Winfrith sites; inspected the proposed relicensing LCCA at Harwell; inspected several LCCA at Harwell and Winfrith in the period October 2014 to February 2015; and reviewed relevant LCCA related issues in the ONR issues database. Based on this, the H&WSI concludes that the Harwell and Winfrith LCCAs proposed when the new licences come into force are suitable for implementation.

6.3 Emergency Arrangements (LC11)

79. Emergency arrangements have been considered by the H&WSI. The H&WSI considered:
- a. Relevant parts of MXL's "RSRL Licence Compliance Arrangements Review".
 - b. Emergency arrangements related issues in the ONR issues database.
 - c. The Harwell and Winfrith emergency plan Approvals.
 - d. The emergency response arrangements: "Capability Mapping" exercise.

Relevant Parts of MXL's "RSRL Licence Compliance Arrangements Review"

80. This review [28] has already been discussed in general terms in Section 6.2 and included consideration of LC11. In relation to LC11, several known outstanding issues were noted (refresher training for emergency roles and accountability of persons on site) which are being addressed.

Emergency Arrangements Related Issues in the ONR Issues Database

81. There are no emergency arrangements related issues open in the ONR issues database. ONR Issue "Emergency Arrangements" was raised by the previous H&WSI in April 2013 and closed in October 2014. The basis of closure of this issue was: "A new and appropriately resourced emergency arrangements team has now been established at RSRL. This has resulted in a function that provides corporate overview and accountability for maintaining emergency arrangements, preparing and planning exercises at all levels within the licensee and ownership of significantly improved arrangements. An implementation programme for the new arrangements is underway and making adequate progress. Recent Level 1 exercises and interactions with the emergency arrangements team confirms improved competency within the team and robust arrangements. On this basis this issue can be closed and oversight of final implementation activities will be addressed as part of normal regulatory interactions".
82. The current H&WSI followed up progress with the LC11 improvement programme in December 2014 [33] and was satisfied that adequate progress was being made.

The Harwell and Winfrith Emergency Plan Approvals

83. The Harwell Emergency Plan was Approved by ONR on 21 March 2014 (see Table 3) whilst the Winfrith Emergency Plan was Approved by ONR on 14 April 2014 (see Table 4). These recent ONR Approvals are being carried through to the new licences (see Section 10.2 of this PAR).

The Emergency Response Arrangements “Capability Mapping” Exercise

84. ONR intends undertaking an assessment of the Harwell and Winfrith emergency response arrangements in June 2015 and to facilitate this, “Capability Maps” have been sent to RSRL [34, 35]. These identify the areas of assessment to be undertaken jointly by ONR nuclear safety and security inspectors.

Conclusion

85. In relation to emergency arrangements (LC11), the H&WSI has considered: relevant parts of MXL’s “RSRL Licence Compliance Arrangements Review”; emergency arrangements related issues in the ONR issues database; the Harwell and Winfrith emergency plan Approvals; and the emergency response arrangements “Capability Mapping” exercise. Based on this, the H&WSI concludes that the Harwell and Winfrith emergency arrangements are suitable for relicensing. The existing improvement programme, supplemented by any findings from the ongoing ONR emergency response arrangements “Capability Mapping” exercise, will continue to be monitored as part of normal MXL/ONR interactions following relicensing.

6.4 Decommissioning Arrangements (LC35)

Introduction

86. ONR instruction “The Processing of Applications for Replacement Licences for Existing Licensed Nuclear Sites” [4] requires that MXL must show that an adequate decommissioning programme exists for Harwell and Winfrith before the replacement licences for these sites are granted to MXL.
87. LC 35(1) requires that: “The licensee shall make and implement adequate arrangements for the decommissioning of any plant or process which may affect safety”. ONR expects (NS-INSP-GD-035, reference [13]) the licensee to have a clear documented strategy that demonstrates that any redundant, operational and proposed plant will be decommissioned safely at end of life. The strategy should consider options and timescales for decommissioning the facility and the end-state after completion of all decommissioning activities.
88. LC 35(2) requires that: “The licensee shall make arrangements for the production and implementation of decommissioning programmes for each plant”. ONR expects the licensee to have decommissioning programme(s) for each plant or building, which identifies and secures the necessary resources to achieve a systematic and progressive reduction in hazard to a defined end state within a justifiable timescale.
89. ONR therefore needs to be satisfied that the arrangements for decommissioning that MXL intends to implement at Harwell and Winfrith are compliant to the requirements of LC35.

Decommissioning Strategy

90. MXL have stated in the supporting dossier (Table 1, Overview) that it intends to maintain the RSRL extant decommissioning arrangements. RSRL's principal

document is MAN 0023 “Decommissioning Manual” (this is one of the full set of arrangements in reference [36]). MAN 0023 requires that separate decommissioning strategies be prepared for Harwell and Winfrith. MXL has supplied the current decommissioning strategies for these sites. Since the appointment of CFP as the PBO, MXL has commenced a review of the decommissioning strategy for all MXL and RSRL sites. Whilst there has been early engagement between MXL and ONR concerning this review, the finalised revised decommissioning strategy will not be completed in time for this relicensing. ONR will, in due course, assess the safety significant aspects of the revised decommissioning strategy before it is implemented. This matter does not therefore prejudice the granting of the new licences and the revocations of the existing licences.

91. The MXLCI has compared both sites’ decommissioning strategies against the requirement of the SAPs [11] and ONR’s decommissioning Technical Assessment Guidance (NS-TAST-GD-026, reference [12]). It is considered that both decommissioning strategies currently identify all of the facilities at Harwell and Winfrith that need to be decommissioned. MXL has also demonstrated that its arrangements (Appendix 2, Section 2.3 of SPEC 0070 “Safety Case Documents” [37]) require that any new facility that may be constructed in the future is capable of being decommissioned.
92. The strategies also identify how the decommissioning of facilities is prioritised. MXL has used the NDA’s process of Safety and Environment Detriment (SED) scores [38] to rank its facilities in terms of overall hazard.
93. The decommissioning strategies do not explicitly require definition of how all forms of waste arising from operational and decommissioning phases, including waste retrieved from legacy facilities, will be managed. Despite this, MXL has demonstrated that it has arrangements for waste management [39].
94. ONR is aware that MXL has commenced a revision of its waste management strategy for all Magnox and RSRL sites. As with the decommissioning strategy revision, this revision will not be completed in time for this relicensing. ONR will, in due course, assess the safety significant aspects of the revised waste strategy before it is implemented. This matter does not therefore prejudice the granting of the new licences and the revocations of the existing licences.
95. MXL currently intend that for Harwell all radioactive and other wastes are removed, all structures and infrastructure are decommissioned, and all the land is remediated and delicensed. Winfrith has the same objectives as Harwell but will require a period of passive management whilst residual radioactivity decays. The MXLCI considers that both strategies define acceptable end states for the respective sites.

Decommissioning Programmes

96. MXL arrangements in MAN 0023 require that decommissioning programmes are prepared for each nuclear facility throughout its lifecycle to demonstrate that it can be decommissioned safely. The required content of a plant decommissioning programme is detailed in supporting document SPEC 0076 “Plant Decommissioning Programme” [36].
97. During a recent intervention at Harwell, the H&WSI carried out an inspection against LC35 [40]. The H&WSI noted that LC35 required that ONR is notified of changes to significant decommissioning milestones but does not need to permission any such changes, however significant they may be.

98. Resulting from this inspection, the decommissioning arrangements have been amended. The MXLCI has reviewed these amended arrangements [36] and is satisfied that they now include:
- a. Arrangements to identify significant decommissioning milestones within the decommissioning programmes that will enable ONR to regulate decommissioning performance.
 - b. Arrangements for producing a safety justification to change the scope of significant decommissioning milestones and any associated significant decommissioning milestone delivery dates.
 - c. Provision of derived powers to ONR to ensure that permission from ONR is required prior to implementing any changes to significant decommissioning milestone scope and significant decommissioning milestone delivery dates.
99. Whilst the decommissioning arrangements now provide for the decommissioning milestones, MXL does not currently have any significant decommissioning milestones agreed with ONR. This matter has been added to the post licensing action plan (ONR Issue 3313, see Section 9) and will be resolved by the H&WSI.
100. The H&WSI also reviewed the Liquid Effluent Treatment Plant (LETP) Decommissioning Safety Case and established that it was consistent with the Harwell Decommissioning Strategy and that it contained the information defined in SPEC 0076.
101. The H&WSI then inspected the decommissioning works defined by the safety case and observed no issues. The H&WSI was satisfied that LETP decommissioning was preceding in line with RSRL's LC35 arrangements.
102. In anticipation of possible changes that may be made to decommissioning programmes following relicensing, the MXLCI has reviewed the decommissioning arrangements to ensure that the safety case is reviewed in order to demonstrate that facilities will remain in a safe condition in the event of deferment of decommissioning. He considers that the decommissioning and safety case arrangements do require the safety case to be reviewed should decommissioning be deferred or delayed.

Conclusions

103. In relation to decommissioning arrangements (LC35), the MXLCI has considered the Decommissioning Manual, the Integrated Waste Strategy and the Plant Decommissioning Programmes. Based on this, the MXLCI concludes that the Harwell and Winfrith decommissioning arrangements are suitable for relicensing. Although ONR is satisfied with the Harwell and Winfrith arrangements to identify, modify and close significant decommissioning milestones, MXL has not yet agreed specific significant decommissioning milestones with ONR. ONR's agreement to significant decommissioning milestones will be implemented as part of normal MXL/ ONR interactions following relicensing. This has been captured as part of an ONR post relicensing issue.

6.5 Organisational Capability (LC36)

Common LC36 Arrangements

104. In recognition of the further (more significant) organisational change which MXL is planning, ONR set an expectation that MXL develop common LC36 arrangements ready for implementation across all its sites after relicensing. MXL accepted this and

based its new arrangements on those of RSRL which better reflect the relevant Nuclear Industry Code of Practice (NICO-P) [41].

105. MXL provided ONR with an opportunity to comment on a draft of the revised procedures and addressed all comments. ONR's comments mainly concerned maintaining the strength of the review process (including independent peer review) of change proposals and nuclear baseline documents, as established in RSRL's current arrangements. The final version of MXL's procedure (MCP-036 Issue 5 / MAN 0044 Issue 2), ready for implementation after relicensing, is at [42].
106. Overall the H&OCSI is satisfied with the adequacy of the common LC36 compliance arrangements developed by MXL, which are consistent with ONR's expectations and the NICO-P. However, they have yet to be tested in practice and it is therefore recommended that ONR monitors their implementation. To do this, ONR has set up Task Sheet MAR 056 "Leadership & Management for Safety (LMfS) Resource for Future Magnox Organisational Changes" [43]. In this respect, MXL has also committed that MoC5 (introduction of a programmatic delivery structure - in development) will follow the new arrangements.

Implementation Plan for New Arrangements

107. Separately MXL has developed an implementation plan for its common LC36 arrangements [44] and [45]. This shows adoption of the new procedure across all sites by 1 June 2015. Up to that point change proposals initiated under the old arrangements will be able to continue under those arrangements.
108. The major part of MXL's implementation plan concerns review and update of the nuclear baselines across all sites. This is split into three phases of work running from November 2014 to June 2016:
 - Phase 1: Baseline rationalisation (February 2015 - June 2015);
 - Phase 2: Baseline improvement (May 2015 - January 2016);
 - Phase 3: Baseline modularisation (November 2014 - June 2016) (conceptual).
109. MXL provided ONR with the opportunity to comment on the draft implementation plan. As a result of this, MXL has included a step in Phase 1 to rationalise the new baselines against changes going through under MXL/RSRL's existing LC36 arrangements. MXL also clarified [46] that the validation and resilience reviews (part of Phase 2) will be carried out under the new arrangements.
110. Overall, the H&OCSI was satisfied with the adequacy of MXL's implementation plan for its new LC36 arrangements. This represents a significant programme of work - with uncertainty on the modularisation aspects - and it is therefore recommended that ONR monitors its timely delivery in accordance with the requirements of MCP-036 / MAN 0044. This work has been included in the scope of Task Sheet MAR 056.

7 THE SITE

7.1 Security of Tenure

111. Both sites are designated to the Nuclear Decommissioning Authority (NDA) under the Energy Act 2004. The NDA owns the freehold of Winfrith and leases Harwell from the United Kingdom Atomic Energy Authority. In practice, the NDA is the superior landlord for both sites; RSRL, the current licensee, leases both sites from the NDA.

7.2 Asset Transfers

112. The existing leases will be assigned to MXL by RSRL, with the consent of the NDA [47]. The transfers will be deemed to take effect on the date of relicensing, coinciding with the coming into force of the new site licences. This will ensure that MXL has security of tenure over both sites at the point of relicensing.

7.3 Property Transactions (as Defined by LC1)

113. Extant property transactions will be carried forward under paragraph 4 of the new licences, see Section 10.2 and the LC3 “control of property transactions” Consents in Tables 3 and 4.

7.4 Verification of the Site Boundary and Maps

114. LC16(1) requires the licensee to “submit to ONR an adequate plan of the site (hereafter referred to as the site plan) showing the location of the boundary of the licensed site and every building or site which might affect safety”. ONR Level 4 issue 2366 “Arrangements for Compliance with Licence Condition 16” was placed on RSRL corporately in May 2014 and closed in February 2015. ONR’s work in this area has therefore focussed mainly on LC2(4) which requires that the licensee “mark the boundaries of the site by fences or other appropriate means and any such fences or other means used for this purpose shall be properly maintained”.
115. The H&WSI undertook an LC2 inspection at Harwell in January 2015 [48]. This inspection considered both RSRL’s LC2 arrangements and their implementation. The implementation aspect included a physical inspection of the entire site boundary with reference to the Harwell site map provided as part of the NSL application dossier (see Table 1, Part “Appendix 2.1”). On the basis of this inspection the H&WSI closed existing ONR Issue 2602 “Improvements to Harwell Site Boundary”.
116. However, the inspection revealed seven improvement areas which needed to be resolved prior to relicensing. ONR Issue 3146 “Relicensing LC2 at Harwell” was used to monitor these improvement areas. The final improvement area required provision of a new Harwell site map for relicensing.
117. ONR Issue 3146 has now been closed and the SLS and the H&WSI have verified the following map [49] for inclusion in the new Harwell NSL:
- a. H02105405 Issue A. Site Map Licenced Site Boundary Markers Harwell Site.
118. The H&WSI undertook an LC2 inspection at Winfrith in February 2015 [50]. This inspection included a physical inspection of the entire site boundary with reference to a revised site map to that provided as part of the NSL application dossier. The H&WSI identified no issues during this inspection and assigned an IIS rating of 2 (good standard) to the LC2 inspection. The SLS and the H&WSI have verified the following map [51] for inclusion in the new Winfrith NSL:
- a. 0W20140153 Issue C. Site Map Winfrith.

8 CONSULTATION

8.1 Public Body Notification Under Section 3(4) of NIA65

119. ONR has a discretionary power, under Section 3(4) of the NIA65, to direct an applicant for an NSL to serve notice on certain public bodies. The purpose of this is to allow public bodies to make suggestions which they believe should be included in the conditions attached to the NSL. It is not intended to address issues which are the province of other regulators or government bodies, such as justification, planning, environmental protection or nuclear liability insurance. ONR's published guidance [52] sets out the circumstances in which the discretionary power should be used.
120. Harwell and Winfrith have been nuclear licensed sites since 1990. The current relicensing exercise does not involve any change to prescribed activities on either site and will have no effect on the duties or activities of any public body associated with them. Public body notification has been considered, but is not appropriate in these circumstances.

8.2 Statutory Consultation With the Environment Agency

121. The Environment Agency has confirmed that [53] "...the grant of new site licences to Magnox Limited is consistent with the Environment Agency's principles for the protection of the environment. We do not believe that it will prejudice any legal process under the Environmental Permitting Regulations 2010 (as amended)".

8.3 Consultation With Department of Energy & Climate Change and Nuclear Decommissioning Authority

122. The Department of Energy & Climate Change (DECC) and the NDA are not statutory consultees. However, DECC is responsible for assessing the adequacy of licensees' cover for third-party claims under Section 19(1) NIA65 and the NDA is the superior landlord for both sites.
123. DECC has confirmed [54]:
- "1) There are no matters concerning Magnox Ltd pertinent to ONR's consideration of Magnox Ltd's site licence application.
 - 2) Magnox Ltd has nuclear liability insurance arrangements to comply with section 19(1) of the Nuclear Installations Act 1965 for the sites at Harwell and Winfrith".
124. The NDA has confirmed [47] that it "has no objection to the relicensing of the RSRL sites of Harwell and Winfrith to Magnox Limited".

8.4 Consultation in ONR

125. The Energy Act 2013 (EA13) defines the ONR's purposes as:
- a. The nuclear safety purposes.
 - b. The nuclear site health and safety purposes.
 - c. The nuclear security purposes.
 - d. The nuclear safeguards purposes.
 - e. The transport purposes.

126. This PAR is written from the perspective of nuclear safety. Consultation in ONR has therefore been undertaken with nuclear site health and safety, nuclear security, nuclear safeguards and transport inspectors in ONR.

Nuclear Site Health and Safety

127. An ONR Conventional Health and Safety (CHS) inspector has stated that [55] "...I can confirm that the health and safety concerns noted by ONR Conventional Health and Safety Team across both Harwell and Winfrith sites since May 2013 have been, or are part-way to being adequately addressed; and therefore there is no objection from ONR CHS to their application for re-licensing".
128. ONR conventional fire safety inspectors have stated that [56], [57] "I don't believe there is anything for Harwell that needs to be considered at this stage" and "I made several observations during my last intervention at Winfrith, however these were minor deficiencies; there are no fire safety issues that will affect re-licensing".

Nuclear Security

129. An ONR Civil Nuclear Security (CNS) inspector has stated:[58] "ONR CNS reports that the RSRL Harwell and Winfrith sites are each compliant with their Nuclear Site Security Plans (NSSPs) and consequently the security requirements for each site are being maintained. Once new licences have been issued, and following any changes to the Company name, ONR CNS will require the sites to submit revised NSSPs. Until then, the existing NSSPs remain extant".

Nuclear Safeguards

130. An ONR nuclear safeguards inspector has stated that: [59] "There are no significant safeguards issues regarding RSRL compliance with our international safeguards commitments. Euratom regularly carries out Physical Inventory Verifications, which confirm that the physical holdings agree with their monthly accountancy declarations. These have all been successful for a number of years. RSRL will be required to update their Basic Technical Characteristics following any change in company details".

Transport

131. An ONR transport inspector has stated: [60] "As the nominated Transport Inspector for RSRL, I am not aware of any transport related issues that should prevent the relicensing of RSRL Harwell and RSRL Winfrith sites".

8.5 Summary of Consultation

132. Public body notification has been considered, but is not appropriate in these circumstances.
133. Statutory consultation with the Environment Agency has been completed, with no issues identified which would give rise to concerns over granting the new licences and the revocations of the existing licences.
134. Consultation with DECC and the NDA has been completed, with no issues identified which would give rise to concerns over granting the new licences and the revocations of the existing licences.
135. Consultation with ONR conventional health and safety, security, nuclear safeguards and transport has been completed, with no issues identified which would give rise to concerns over granting the new licences and the revocations of the existing licences.

9 APPLICANT'S READINESS

136. This section considers the following:
- a. Readiness (for relicensing) Review Meeting (RRM).
 - b. Developments following the RRM.
 - c. Applicants' readiness statements.
 - d. ONR summary on applicants' readiness.

Readiness (for relicensing) Review Meeting (RRM)

137. The RRM was held on 11 March 2015. Reference [61] is the Contact Report for the RRM. This Contact Report contains a table listing all the evidence discussed during the RRM, the objectives of which were:
- a. To establish the state of readiness for relicensing RSRL Harwell and RSRL Winfrith to MXL.
 - b. To agree actions that need to be completed prior to granting the new licenses (if any).
138. ONR's key conclusions from the RRM were:
- a. The MXLCI and the H&WSI consider that the reports and points of clarification support a conclusion that currently there is no evidence that the transition to shadow working on 1 December 2014 has had a detrimental effect on the safety performance of MXL or RSRL.
 - b. The H&WSI considers that the report provided supports a conclusion that the only significant changes to the RSRL management system during shadow working have arisen due to preparations for relicensing or to address identified weaknesses including those captured as ONR issues.
 - c. The MXLCI and the H&WSI consider that MXL and RSRL are on track to be ready for new licences to come into force on 1 April 2015.
139. The RRM agreed [62]: a) 19 actions/information needs to be addressed prior to relicensing; b) four actions/information needs that may be addressed following relicensing. A fifth action/information need related to significant decommissioning milestones (see Section 6.4) was added following the RRM.

Developments Following the RRM

140. The 19 pre-licensing actions/ information needs have been monitored to closure in reference [62]. The information provided has been referenced in the H&OCSI's AR, this PAR and the NSC ToR PAR [20] as appropriate and hence no ONR issues have been raised relating to these pre-licensing actions/information needs.
141. The five actions/information needs not required prior to relicensing have been captured as ONR Issue 3313 "Relicensing RSRL Sites to MXL - Post Relicensing Actions".

Applicants' Readiness Statements

MXL and RSRL Internal Regulators

142. The MXL and the RSRL internal regulators' independent assessment reports are at [15] and [16] respectively.
143. The MXL independent assessment report notes that: "Overall, it was found that there was nothing identified from this review which would suggest that MoC-3 was unsafe, caused organisational instability, needed to be terminated or re-directed".
144. The RSRL independent assessment report notes that: "The Assessment concluded that the shadow operations have worked well and RSRL have continued to comply with the management system during this time. The Functional reporting lines were tested for EHSS&Q/Assurance and found to be well established. The MoC-3 implementation plan items relevant to RSRL are complete or in progress for completion prior to Re-Licensing".
145. The MXL internal regulator raised three recommendations in relation to communications with staff on future planned organisational changes, the need for regular staff briefings emphasising the need for vigilance in times of change, and managing the wider change programme effectively.
146. The RSRL internal regulator raised two findings in relation to resource management going forwards to complete the transformation and communications, which is a common theme to the MXL independent assessment report.
147. The MXL/RSRL response to these two independent assessment reports is at [63].
148. The H&OCSI has considered these independent assessment reports and the MXL/RSRL response and is satisfied with the scope and rigour of these assessments and with the MXL/RSRL response.

MXL and RSRL NSC Statements

149. References [64] and [65] provide statements from the MXL and the RSRL NSCs respectively. These statements confirm that relevant relicensing information has been provided for NSC consideration and advice and noted. Both statements note that the Transition Board is responsible for ensuring that all other relicensing tasks are completed.

Transition Board Statement

150. An interim Transition Board statement was provided at the RRM on 11 March 2015 as part of the evidence that MXL and RSRL were on track to be ready for new licences to come into force on 1 April 2015.
151. Reference [66] is the final pre-relicensing Transition Board statement. It notes that: "As the tasks in the table above have been completed and the remaining tasks will be completed by 31/03/05, the Transition Board is content that Magnox and RSRL are on target to be ready for relicensing on 01/04/15".
152. The H&WSI noted (also at [66]) that at the time of issue of the final pre-relicensing Transition Board statement, a MoC3 shadow working action was open "Deputy Managing Director of Magnox confirmed as suitably qualified and experienced to become deputy Managing Director of RSRL (Harwell/ Winfrith)". It was confirmed on 25 March 2015 [67] that this action had been closed.

MXL and RSRL Boards Statements

153. References [68] and [69] provide statements from the MXL and the RSRL Boards respectively. These statements note that:
- a. “As all the pre-relicensing tasks in the table above have been completed and the final relicensing actions will be completed upon relicensing, confirmed as such by the Transition Board, the Magnox Ltd Board approves the relicensing of Harwell and Winfrith into Magnox Ltd”.
 - b. “As all the pre-relicensing tasks in the table above have been completed and the final relicensing actions will be completed upon relicensing, confirmed as such by the Transition Board, the RSRL Board agrees that Magnox Ltd should proceed with the relicensing of Harwell and Winfrith to Magnox Ltd”.

ONR Summary on Applicants’ Readiness

154. The MXLCI and the H&WSI consider that there is no evidence currently that the transition to shadow working on 1 December 2014 has had a detrimental effect on the safety performance of MXL or RSRL.
155. Statements from the MXL and RSRL internal regulators, the MXL and RSRL NSCs, the Transition Board and the MXL and RSRL Boards confirm that MXL and RSRL are ready for new licences to come into force on 1 April 2015.

10 LEGAL ASPECTS

10.1 The New Licences and the Licence Revocations

156. ONR has drafted new NSLs for the Harwell [70] and Winfrith [71] sites and revocations for the existing Harwell NSL [72] and the existing Winfrith NSL [73].
157. The new NSLs and the revocations have incorporated comments from Treasury Solicitor's Department [74].
158. MXL and RSRL have confirmed that they are content with the factual accuracy of the new NSLs [75].

NSL Schedule 1

159. NSL Schedule 1 Part 1 is "The Site". For both sites this remains unchanged at relicensing, although the "licensee's drawing" referenced in this part of the NSLs has changed and both site boundaries and maps (drawings) have been verified as discussed in Section 7.4 of this PAR.
160. NSL Schedule 1 Part 2 is "The Nuclear Installations". As described in Sections 5.1 and 5.2 of the NSL application "Overview" (see the second row of Table 1), NSL Schedule 1 Part 2 remains unchanged at relicensing.

10.2 Licence Instruments

161. Appendix 5.1 of the NSL application dossier (see Table 1) contained the RSRL Harwell NSL 99 register of ONR LIs whilst Appendix 5.2 of the NSL application dossier (see Table 1) contained the RSRL Winfrith NSL 85 register of ONR LIs. Using these registers of LIs, the SLS and the H&WSI worked with RSRL to establish a final agreed position [76] relating to LI carry over to the new NSLs. Extracts from reference [76] have been used to populate Table 3 and Table 4 of this PAR.

Carry Over of Primary Powers⁸ LIs

162. Paragraph 3 of the new NSLs provides the facility to carry over primary powers Approvals or Directions granted under earlier NSLs in Schedule 3 of the new NSLs. This facility has been used to carry over the Approval for the Site Emergency Plan for each site.
163. Paragraph 4 of the new NSLs provides a facility to carry over primary powers Consents, Agreements, Notifications or Specifications. This facility has been used to carry over the primary powers Consents, Agreements, Notifications or Specifications in Tables 3 and 4.

Derived Powers⁹ LIs

164. It is not possible to carry over derived powers LIs using paragraphs in the new NSLs. However, RSRL considered that a limited number of derived powers LIs were required for operations under the new NSLs. These derived powers LIs will be included in the licensee's new site licence handbooks for the Magnox Limited Harwell and Magnox Limited Winfrith sites. These derived powers LIs are considered in turn next.
165. Harwell Acknowledgement 514 granted under NSL 44 contains a statement that ONR's predecessor wishes to examine safety case documentation associated with a

⁸ See Annex 1 of Licensing Nuclear Installations.

⁹ See Annex 1 of Licensing Nuclear Installations.

Waste Encapsulation Plant at the Harwell “B462 Complex” following inactive commissioning of that plant. Inactive commissioning is currently ongoing and the H&WSI considers it appropriate to include this derived powers LI in the licensee’s new site licence handbook for the Magnox Limited Harwell site.

166. Harwell Agreement 517 granted under NSL 84 is for normal operation of the B462.27 Vault Store. This vault store remains in normal operation and the H&WSI considers it appropriate to include this derived powers LI in the licensee’s new site licence handbook for the Magnox Limited Harwell site.
167. Harwell Agreement 524 granted under NSL 84 is for routine operation of B462 Complex Retrieval Machine 2. This machine remains in normal operation and the H&WSI considers it appropriate to include this derived powers LI in the licensee’s new site licence handbook for the Magnox Limited Harwell site.
168. Winfrith Acknowledgement 513 granted under NSL 85 relates to the Steam Generating Heavy Water Reactor decommissioning project. ONR is currently permissioning activities related to this project and the H&WSI considers it appropriate to include this derived powers LI in the licensee’s new site licence handbook for the Magnox Limited Winfrith site.

10.3 Other Regulatory Requirements

The Ionising Radiations Regulations 1999

169. RSRL currently has an Ionising Radiations Regulations 1999 (IRR) exemption relating to outside workers granted to it as an employer, not as a nuclear site licensee, by the Health and Safety Executive (HSE) under IRR Regulation 37. This exemption would fall on relicensing due to the change of employer from RSRL to MXL.
170. In addition to the existing exemption, IRR Regulation 21(6)(b) would require RSRL to issue termination records to all its classified persons when they changed employer from RSRL to MXL, unless ONR was to issue an appropriate IRR exemption under Regulation 37.
171. RSRL applied for an IRR exemption relating to termination records, but RSRL did not apply for a new exemption relating to outside workers [77]. ONR Radiological Protection specialist inspectors considered RSRL’s request and advised RSRL that: [78] “We have discussed the matter internally and decided that although it may be administratively easier for RSRL and the relevant Approved Dosimetry Service we feel it is not appropriate in this circumstance. I consider that it is not required as part of the relicensing of RSRL, it provides no safety benefit to either the company, Licensee, or employee and it is also not a good use of our resources. I have consulted HSE to ensure that we are consistent with the approach applied to the non-nuclear sector. HSE have confirmed in these circumstances they would not grant exemption and would expect termination records to be provided to all classified employees as required”.

The Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999: As Amended

172. An ONR inspector responsible for The Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations (1999; as amended) (EIADR) has advised that: [79] “RSRL Winfrith and RSRL Harwell do not have Consents under EIADR as they closed down their reactors and started decommissioning before EIADR came into force.

173. However, they are still subject to regulation 13 of EIADR which requires them to apply to ONR for a determination on the need for an environmental impact assessment for any proposed changes to the decommissioning project that may have significant adverse effects on the environment. No such applications have been submitted by either site”.

11 MATTERS ARISING FROM ONR'S WORK

174. All issues identified during ONR's relicensing assessment and inspection work that needed to be addressed prior to granting of the new licences and the revocations have now been resolved.
175. All issues identified during ONR's relicensing assessment and inspection work that may be dealt with after relicensing have been recorded in ONR's issues database.

12 CONCLUSIONS

176. This report presents the findings of ONR's assessment of MXL's application for new nuclear site licenses for the Harwell and Winfrith sites and of RSRL's application for revocations of their current nuclear site licences for these sites.
177. The Site Licensing Specialist has completed his work and recommends that ONR grants MXL new NSLs for Harwell and Winfrith and grants revocations of the existing NSLs held by RSRL.
178. The Harwell & Winfrith Site Inspector has completed his work and recommends that ONR grants MXL new NSLs for Harwell and Winfrith and grants revocations of the existing NSLs held by RSRL.
179. The Magnox Limited Corporate Inspector has completed his work and recommends that ONR grants MXL new NSLs for Harwell and Winfrith and grants revocations of the existing NSLs held by RSRL.
180. The Human & Organisational Capability Specialist Inspector has completed his work and recommends that ONR grants MXL new NSLs for Harwell and Winfrith and grants revocations of the existing NSLs held by RSRL.
181. Conclusions are provided in relation to the following key areas:
- The organisation.
 - Licensable activities.
 - The site.
 - Consultation.
 - Applicant's readiness.
 - Legal aspects.

The Organisation

182. In relation to the relicensing MoC proposal, the H&OCSI has taken into account additional information and clarifications provided by MXL during the period of the licence application assessment, and is satisfied overall that MXL is adequately managing the organisational changes associated with integration of the Harwell and Winfrith sites into its organisation. In particular, ONR is satisfied that:
- MXL and RSRL have carried out an adequate assessment of the change, in accordance with their LC36 compliance arrangements, which has been subject to suitable internal review and approval;
 - MXL and RSRL have applied a suitable process to determine their own readiness to implement the change;
 - there has been an adequate independent assessment of MXL / RSRL's readiness to implement the change (and necessary actions have been addressed).

183. In relation to the arrangements for management of health and safety after relicensing, the H&OCSI has taken into account additional information and clarifications provided by MXL during the period of the licence application assessment, and concludes that, through its SEMP, MXL has demonstrated the adequacy of its arrangements for managing health and safety. In particular, ONR is satisfied that:
- The SEMP adequately describes the organisation post relicensing in line with ONR's technical assessment guide;
 - Based on sampling of the nuclear baselines at Winfrith, the baselines adequately demonstrate the suitability and sufficiency of the organisation;
 - There is consistent understanding and implementation of the new functional reporting lines (as described in the SEMP).
184. The H&OCSI also notes that:
- MXL plans further (more significant) organisational change post relicensing (including introduction of a programmatic delivery structure and rationalisation of management systems);
 - MXL will, post relicensing, embark on a significant (18 month) programme of rationalisation, improvement and modularisation of its nuclear baselines.
185. In recognition of the above, the H&OCSI has recommended that ONR continues to monitor organisational change in MXL (in particular the change to a programme structure), which the licensee is committed to manage under its new LC36 compliance arrangements (see licensable activities discussed next). He has also recommended that ONR monitors delivery of the baseline rationalisation and improvement programme against the new arrangements. An ONR Task Sheet has been put in place to monitor these matters.
186. No organisational issues remain which would give rise to concerns over granting the new licences and the revocations of the existing licences.

Licensable Activities

187. In relation to site safety cases, the H&WSI has considered MXL's "RSRL Safety Cases Due Diligence Review" and associated information and reviewed RSRL safety case related issues in the ONR issues database. Based on this, the H&WSI concludes that the Harwell and Winfrith site safety cases are adequate for relicensing to MXL.
188. In relation to LCCAs, the H&WSI has: considered MXL's "RSRL Licence Compliance Arrangements Review" and associated information; established that when the new licences come into force common compliance principles will be in place across the 10 existing MXL sites and the Harwell and Winfrith sites; inspected the proposed relicensing LCCA at Harwell; inspected several LCCAs at Harwell and Winfrith in the period October 2014 to February 2015; and reviewed relevant LCCA related issues in the ONR issues database. Based on this, the H&WSI concludes that the Harwell and Winfrith licence condition compliance arrangements proposed to come into force when the new licences come into force are suitable for implementation.
189. In relation to emergency arrangements (LC11), the H&WSI has considered: relevant parts of MXL's "RSRL Licence Compliance Arrangements Review"; emergency arrangements related issues in the ONR issues database; the Harwell and Winfrith emergency plan Approvals; and the emergency response arrangements "Capability Mapping" exercise. Based on this, the H&WSI concludes that the Harwell and Winfrith emergency arrangements are suitable for relicensing. The existing improvement programme, supplemented by any findings from the ongoing ONR emergency

response arrangements “Capability Mapping” exercise, will continue to be monitored as part of normal MXL/ONR interactions following relicensing.

190. In relation to decommissioning arrangements (LC35), the MXLCI has considered the Decommissioning Manual, the Integrated Waste Strategy and the Plant Decommissioning Programmes. Based on this, the MXLCI concludes that the Harwell and Winfrith decommissioning arrangements are suitable for relicensing. Although ONR is satisfied with the Harwell and Winfrith arrangements to identify, modify and close significant decommissioning milestones, MXL has not yet agreed specific significant decommissioning milestones with ONR. ONR’s agreement to significant decommissioning milestones will be implemented as part of normal MXL/ ONR interactions following relicensing. This has been captured as part of an ONR post relicensing issue.
191. In relation to management of change arrangements, the H&OCSI is satisfied with the adequacy of the common LC36 compliance arrangements developed by MXL, which are consistent with ONR’s expectations and the Nuclear Industry Code of Practice. He is also satisfied that there is an adequate implementation plan for the new arrangements, which provides for full implementation of the procedure, including rationalisation of nuclear baselines across MXL, including the Harwell and Winfrith sites, and associated vulnerability assessment, by the end of June 2015.
192. No issues remain relating to licensable activities which would give rise to concerns over granting the new licences and the revocations of the existing licences.

The Site

193. The SLS has considered security of tenure, asset transfers and property transactions. The SLS and the H&WSI have verified, for both sites, the site boundary and maps. This verification included a physical inspection of both site boundaries by the H&WSI.
194. No issues remain relating to the site which would give rise to concerns over granting the new licences and the revocations of the existing licences.

Consultation

195. Public body notification has been considered, but is not appropriate in these circumstances.
196. Statutory consultation with the Environment Agency has been completed, with no issues identified which would give rise to concerns over granting the new licences and the revocations of the existing licences.
197. Consultation with DECC and with the NDA has been completed, with no issues identified which would give rise to concerns over granting the new licences and the revocations of the existing licences.
198. Consultation with ONR conventional health and safety, security, nuclear safeguards and transport has been completed, with no issues identified which would give rise to concerns over granting the new licences and the revocations of the existing licences.

Applicant’s Readiness

199. The MXLCI and the H&WSI consider that currently there is no evidence that the transition to shadow working on 1 December 2014 has had a detrimental effect on the safety performance of MXL or RSRL.

200. Statements from the MXL and RSRL internal regulators, the MXL and RSRL NSCs, the Transition Board and the MXL and RSRL Boards confirm that MXL and RSRL are ready for new licences to come into force on 1 April 2015.
201. No issues remain relating to the applicant's readiness which would give rise to concerns over granting the new licences and the revocations of the existing licences, with the new licences coming into force on 1 April 2015.

Legal Aspects

202. The SLS has drafted new licenses and revocations and these have been reviewed by Treasury Solicitor's Department and by MXL and RSRL. No issues relating to the new licences and the revocations remain.
203. The SLS and the H&WSI have worked with RSRL to determine which primary powers licence instruments issued under the current or earlier Harwell and Winfrith NSLs may be carried forward under paragraphs 3 and 4 of the new Harwell and Winfrith NSLs.
204. The SLS and the H&WSI have worked with RSRL to determine which derived powers licence instruments issued under the current or earlier Harwell and Winfrith NSLs should be included in the new MXL site licence handbooks for the Harwell and Winfrith sites.
205. The H&WSI has consulted with ONR specialists to establish ONR's position relating to other regulatory requirements.
206. No legal issues remain which would give rise to concerns over granting the new licences and the revocations of the existing licences.

13 RECOMMENDATIONS

207. On the basis of the requests submitted by MXL and RSRL and the findings set out in Sections 3 to 12 of this report, it is recommended that:
- a. The Magnox Limited sites Superintending Inspector signs this Project Assessment Report to confirm support for the ONR technical and regulatory arguments that justify granting MXL new NSLs for the Harwell and Winfrith sites and revoking RSRL's existing NSLs for these sites.
 - b. The Magnox Limited sites Superintending Inspector signs this Project Assessment Report approving its release for publication, after redaction where appropriate.
 - c. The licensing Superintending Inspector signs this Project Assessment Report to confirm support for the ONR technical and regulatory arguments that justify granting MXL new NSLs for the Harwell and Winfrith sites and revoking RSRL's existing NSLs for these sites.
208. It is recommended that the Chief Nuclear Inspector confirms that he or a Deputy Chief Inspector is prepared to grant Approvals under Licence Condition 13(2) of the Terms of Reference of the Magnox Limited Harwell and the Magnox Limited Winfrith Nuclear Safety Committees so that these Approvals will come into effect before the new nuclear site licences for Magnox Limited Harwell and the Magnox Limited Winfrith will come into force.
209. It is recommended that the Chief Nuclear Inspector grants:
- a. MXL NSL number 100 in respect of the site at Winfrith.
 - b. MXL NSL number 101 in respect of the site at Harwell.
 - c. The revocation for nuclear site licence number 85, granted to RSRL in respect of the site at Winfrith.
 - d. The revocation for nuclear site licence number 99, granted to RSRL in respect of the site at Harwell.

14 REFERENCES

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- 4 ONR Instruction NS-PER-IN-004 Revision 1, May 2013. "The Processing of Applications for Replacement Licences for Existing Licenced Nuclear Sites". (<http://www.onr.org.uk/operational/assessment/ns-per-in-004.pdf>)
- 5 CFP document T1-14-TA-CFP-0003 Issue 01, August 2014. "Magnox/RSRL PBO. Cavendish Fluor Partnership Management of Change Strategy". (TRIM 2014/370095).
- 6 ONR document. "MAR052 – Relicensing of RSRL Harwell & RSRL Winfrith to Magnox Limited – Licence Application and Revocation Evidence Requested by ONR. Version 02 – 16 October 2014". (TRIM 2014/379521)
- 7 ONR Intervention / Project Task Sheet ONR-DFW-TS-15 MAR 052 Revision 0. "Relicensing of RSRL Harwell & RSRL Winfrith to Magnox Limited". (TRIM 2014/365517)
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- 12 "Decommissioning" NS-TAST-GD-026 Revision 3. ONR. May 2013.
"Organisational Capability" NS-TAST-GD-048 Revision 4. ONR. March 2013.
"Function and Content of the Nuclear Baseline" NS-TAST-GD-065 Revision 2. ONR. May 2013.
"Function and Content of a Safety Management Prospectus" NS-TAST-GD-072 Revision 2. ONR. April 2013.
(http://www.onr.org.uk/operational/tech_asst_guides/index.htm)

- 13 “LC35 Decommissioning” NS-INSP-GD-035 Revision 3. ONR. February 2013.
(http://www.onr.org.uk/operational/tech_insp_guides/index.htm)
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- 15 MXL Independent Assessment Report CF-INS-001, February 2015. “Review of the Operation of MoC-3”. (TRIM 2015/89989)
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- 18 ONR Intervention Record ONR-DFW-IR-14-184. “LC36 Compliance Inspection at Winfrith 10-11 December 2014”. (TRIM 2014/459963)
- 19 ONR Contact Record ONR-DFW-CR-14-298. “Record of Interviews With Directors of Magnox / RSRL Relating to Harwell / Winfrith Relicensing (New Functional Reporting Links)”. (TRIM 2015/88320)
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- 24 MXL Nuclear Safety Committee paper NP/SC 5258 Revision 1. “Due Diligence Report on Safety Cases and Licence Condition Compliance Arrangements at RSRL”. (TRIM 2015/90032)
- 25 Minutes of the Joint Meeting of the Magnox Limited Berkeley, Bradwell, Chapelcross, Dungeness A, Hinkley Point A, Hunterston A, Oldbury, Sizewell A, Trawsfynydd and Wylfa Nuclear Safety Committees held on 24 February 2015. (TRIM 2015/93776)
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- 38 NDA report EGR007 Rev 0, 10 February 2006. "The Nuclear Decommissioning Authority's Prioritisation Process – An Overview".
- 39 RSRL report Issue 1, March 2013. "Research Sites Restoration Ltd. Integrated Waste Strategy". (TRIM 2015/104886)
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- 41 "Nuclear Baseline and the Management of Organisational Change, A Nuclear Industry Code of Practice", Second Edition, March 2014.
http://www.nuclearinst.com/write/MediaUploads/SDF%20documents/NICOP_nuclear_baseline_and_MoC.pdf

- 42 MXL Company Management Control Procedure MCP-036 Issue 5, "Management of Organisational Change. (Also Known as MAN 0044 Issue 2 for Harwell & Winfrith)". (TRIM 2015/106857)
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- 47 NDA letter T1-14-SLCA-MXL-NDA-0233-NRR, T1-14-SLCA-RS-NDA-0149-NRR dated 7 March 2015. "Relicensing of the RSRL Sites of Harwell and Winfrith into Magnox Limited". (TRIM 2015/87824)
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- 61 ONR Contact Record ONR-DFW-CR-14-314. "Relicensing RSRL Sites to MXL – Readiness Review Meeting – Level 4. 11 March 2015". (TRIM 2015/97800)
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- 65 RSRL NSC Statement, 11 March 2015. "RSRL NSC Statement. Readiness for Relicensing". (TRIM 2015/96052)
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- 71 Site Licence No: 100. Nuclear Installations Act 1965 (As Amended). Nuclear Site Licence. Magnox Limited. Winfrith. (TRIM 2015/11138)
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Table 1
Nuclear Site Licence Application Dossier Contents

Part	Title	Licensee Reference	ONR Reference
Overview	Magnox. Application for New Site Licences for Harwell and Winfrith	MXL32223 Issue 01	TRIM 2014/439911
Appendix 1.1	Magnox. Introduction to the Safety & Environment Management Prospectus	Magnox Manual M-023 Issue R	TRIM 2014/439941
Appendix 1.2	Magnox. Company Manual	Magnox Manual M-001 Issue R	TRIM 2014/439941
Appendix 1.3	Magnox. Arrangements for the Management of Environment, Health & Safety	Magnox Manual M-019 Issue R	TRIM 2014/439941
Appendix 1.4	RSRL. Site Manual for Harwell and Winfrith Sites	RSRL MAN 0001 Issue 9	TRIM 2014/439941
Appendix 2.1	Magnox Ltd. Harwell Site Map. Nuclear Licenced Site Boundary	H02105113 Issue A	TRIM 2014/439972
Appendix 2.2	Magnox Ltd. Site Map Winfrith	OW20140153 Issue B	TRIM 2014/439972
Appendix 3.1	Magnox and RSRL. RSRL Safety Case and Licence Condition Compliance Arrangements. Due Diligence Plan	Dated 25.11.2014	TRIM 2014/439987
Appendix 3.2	Magnox and RSRL. Due Diligence Schedule.	Printed 26.11.2014	TRIM 2014/439987
Appendix 3.3	Magnox and RSRL. MoC Process Schedule.	Printed 26.11.2014	TRIM 2014/439987
Appendix 4	RSRL Extant Safety Cases Listing	SSHE/154 MXL32223 Issue 1	TRIM 2014/440003
Appendix 5.1	RSRL Harwell/Winfrith Licence Instrument Register RSRL Harwell NSL 99 Register of ONR Licence Instruments	SSHE/153 MXL32223 Issue 1	TRIM 2014/440048
Appendix 5.2	RSRL Harwell/Winfrith Licence Instrument Register RSRL Winfrith NSL 85 Register of ONR Licence Instruments	SSHE/153 MXL32223 Issue 1	TRIM 2014/440048
Appendix 5.3	PRC 0213 – Terms of Reference – RSRL Nuclear Safety Committee (RSRL Extant NSC ToR)	PRC 0213, January 2009	TRIM 2014/440048
Appendix 5.4	PRC 0213 – Terms of Reference – Harwell & Winfrith Nuclear Safety Committee (Proposed Harwell / Winfrith NSC ToR)	PRC 0213, November 2014	TRIM 2014/440048

Part	Title	Licensee Reference	ONR Reference
Appendix 6.1	CFP Organisational Strategy for Management of RSRL/Magnox Phase 3: Common Board and Executive Team Structure	Magnox: MSO/02/2014 RSRL: RSRL/MoC399 Issue 03	TRIM 2014/440087
Appendix 6.2	HAZOP Report. CFP Organisational Strategy for Management of RSRL/Magnox Phase 3: Common Board and Executive Team Structure	RSRL/MoC399/ HAZOP/001 Magnox/MSO/02/ 2014/HAZOP/ 001 Issue 1	TRIM 2014/440087
Appendix 6.3	Peer Review Report. MoC 399 - CFP Organisational Strategy for Management of RSRL/Magnox Phase 3: Common Board and Executive Team Structure	WP-14-006 Issue 3	TRIM 2014/440087
Appendix 6.4	Magnox and RSRL NSC Comments: CFP Organisational Strategy for Management of RSRL/Magnox Phase 3: Common Board and Executive Team Structure	Paper Number: Magnox: MSO/02/2014 RSRL: RSRL/MoC399 and NP/SC 5254 (Magnox NSC Paper for Endorsement)	TRIM 2014/440087
Appendix 6.5	RSRL Safety Working Party Comments. MoC 399 - CFP Organisational Strategy for Management of RSRL/Magnox Phase 3	SWP(14)P50	TRIM 2014/440087
Appendix 6.6	Minutes of the Joint Meeting of the Magnox Limited Berkeley, Bradwell, Chapelcross, Dungeness A, Hinkley Point A, Hunterston A, Oldbury, Sizewell A, Trawsfynydd and Wylfa Nuclear Safety Committees and RSRL Winfrith and Harwell Nuclear Safety Committees Held on Thursday 6 November 2014	-	TRIM 2014/440087
Appendix 6.7	RSRL Safety Working Party Minutes Wednesday 5 November 2014	SWP(14)M10	TRIM 2014/440087
Appendix 7	PRC 0243 – Nuclear Site Licence Conditions Compliance Arrangements	PRC 0243 Issue 1	TRIM 2014/440110
Appendix 8	Post Relicensing Schedule	Printed 26.11.2014	TRIM 2014/440164
Appendix 9	Correspondence with DECC	-	TRIM 2014/440192
Appendix 10	Extracts from RSRL Management System Relevant to Harwell and Winfrith Licence Condition Compliance Arrangements	-	TRIM 2014/440236

Table 2
Updated Nuclear Site Licence Application Dossier
(Documents Issued During the Course of the Licence Application Assessment)

Part	Title	Licensee Reference	ONR Reference
Appendix 1.1	Magnox. Introduction to the Safety & Environment Management Prospectus	Magnox Manual M-023 Issue R2	TRIM 2015/107183
Appendix 1.2	Magnox. Company Manual	Magnox Manual M-001 Issue R2	TRIM 2015/107186
Appendix 1.3	Magnox. Arrangements for the Management of Environment, Health & Safety	Magnox Manual M-019 Issue R2	TRIM 2015/107178
Appendix 1.4	RSRL. Site Manual for Harwell and Winfrith Sites	RSRL MAN 0001 Issue 9.1	TRIM 2015/106939
Appendix 2.1	Site Map Licenced Site Boundary Markers Harwell Site	H02105405 Issue A	TRIM 2015/111184
Appendix 2.2	Site Map Winfrith	0W20140153 Issue C	TRIM 2015/58752
Appendix 5.4	PRC 0213 – Terms of Reference – Harwell & Winfrith Nuclear Safety Committee	PRC 0213, Date: 26 February 2015, Issue 02	TRIM 2015/79409
Appendix 7	PRC 0243 – Nuclear Site Licence Conditions Compliance Arrangements	PRC 0243 Issue 2 (draft I), March 2015	TRIM 2015/95655

Table 3: Harwell Licence Instruments Granted Under Earlier Harwell NSLs Required for Operations Under Harwell NSL 101

Granted Under NSL #	LI #	LC #	Date Granted	LI Type	Description
44	514	19	10.3.2006	Acknowledgement and Notification	Acknowledgement and Notification of Harwell B462 Waste Encapsulation Plant Preliminary Safety Report
84	517	19(1)	26.11.2010	Agreement	Agreement to proceed with the normal operation of the B462.27 vault store at Harwell
84	524	22(1)	19.9.2011	Agreement	Agreement to proceed with routine operation of Retrieval Machine 2
99	507	11(3)	21.3.2014	Approval	RSRL SWP (13) P34 Harwell Site Emergency Plan (Issue 4)
44	32	3	15.8.1995	Consent	Lease and service agreement to Southern Electric plc (various electricity substation sites and underground cables across land)
44	504	3	22.2.2005	Consent	Leases to Southern Electric Power Distribution plc (electricity substation numbers 601, 602, 603, 604, 605)
44	528	3(1)	25.11.2008	Consent	Licence to Nuclear Decommissioning Authority (to occupy Building 404.13)
84	508	3(1)	9.8.2010	Consent	Sub-underlease of B528.10 Unit 2 (Accentus Medical plc)
84	511	3(1)	12.10.2010	Consent	Sub-underlease of B528.10 Unit 1 and B528.11 (Canberra UK Limited)
84	512	3(1)	12.10.2010	Consent	Sub-underlease of B528.3 (Canberra UK Limited)
84	520	3(1)	1.3.2011	Consent	Sub-underlease of building 585 (AEA Technology plc)
99	002	3(1)	22.6.2012	Consent	Lease of building 418.19 (Synergy Health Sterilisation UK Limited)
99	504	3(1)	7.6.2013	Consent	Licence to assign building 585, and to the assignor assigning the lease
44	523	25(4)	10.8.2007	Specification	Records of such radioactive material which is subject to the High-Activity Sealed Radioactive Sources and Orphan Sources Regulations 2005

Table 4: Winfrith Licence Instruments Granted Under Earlier Winfrith NSLs Required for Operations Under Winfrith NSL 100

Granted Under NSL #	LI #	LC #	Date Granted	LI Type	Description
85	513	35(1)	19.12.2012	Acknowledgement	Acknowledgment of SGHWR decommissioning safety case
85	515	11(3)	14.4.2014	Approval	Winfrith Site Emergency Plan, SE/W/EP/01 ISSUE 4
47	36	3	23.5.1997	Consent	Lease to Southern Electric plc (various electricity substation sites At Winfrith Dorset, referenced: CD 246)
47	42	3	14.9.2001	Consent	Licensee granting a licence allowing AEA Technology PLC to assign its lease of Building A56 to NUKEM Nuclear Ltd
47	510	3	17.3.2006	Consent	Licensee granting a licence allowing AEA Technology plc to assign its lease of Buildings B44 & B45 & B481 & B482 & B483 to Waste Management Technology Limited
85	506	3(1)	5.2.2010	Consent	Lease to NUVIA LIMITED (Building A544)
85	519	3(1)	14.7.2014	Consent	Lease to INUTECH Limited (B4 Complex)
47	513	25(4)	10.8.2007	Specification	Records of such radioactive material which is subject to the High-Activity Sealed Radioactive Sources and Orphan Sources Regulations 2005