



Relicensing Magnox Limited Winfrith

**Relicensing Magnox Limited's Winfrith Licenced Nuclear Site on granting a new
Nuclear Site Licence to Inutec Ltd**

Project Assessment Report ONR-SDFW-PAR-16-014
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EXECUTIVE SUMMARY

Relicensing Magnox Limited's Winfrith licenced nuclear site on granting a new Nuclear Site Licence to Inutec Ltd.

Permissions Requested

Magnox Limited applied to ONR on 13 October 2016 under section 5(1) of the Nuclear Installations Act (NIA) 1965 for the revocation of its current nuclear site licence and relicensing of the site to exclude the B4 and A50 plots. The application requests that the revocation and relicensing occur concurrently with the grant of the new nuclear site licence for Inutec Limited for the B4 and A50 plots.

Magnox Limited also applied to ONR on 3 January 2018 under section 5(15) of the Nuclear Installations Act 1965 for grant of a Notice of No Danger for two specific locations on its current nuclear licensed site so that these two areas would be delicensed as part of the re-licensing.

Background

Magnox Limited holds a nuclear site licence (№ 100) for the Winfrith site which includes land and facilities currently leased to Inutec Limited, known as the B4 Complex. Magnox Limited is contracted by the Nuclear Decommissioning Authority to decommission the Winfrith site and achieve an interim end-state by 2023.

Inutec Limited is undertaking licensable activities as prescribed in section 1 of the Nuclear Installations Act 1965 and Nuclear Installations Regulations 1971 regulation 3, 6(c) and intends to continue its operations indefinitely at its current location. To achieve this business objective, it is negotiating with the Nuclear Decommissioning Authority for the purchase of the freehold to the B4 plot and for additional land known as the A50 plot. Inutec Limited has also made an application to ONR for a nuclear site licence to continue its operations at Winfrith and for this to come into effect at the same time. ONR's assessment and determination of Inutec Limited's application for a nuclear site licence can be found in Project Assessment Report ONR-SDFW-PAR-16-013.

Whilst Magnox Limited has identified land that it no longer needs can be sold to Inutec Limited, ONR is not able to vary nuclear site licence № 100 to reduce the licensed site boundary as Magnox Limited would not be able to demonstrate that there is no danger from ionising radiations from anything on that part of the site as required by section 3(12)(b) of the NIA 1965. In fact, Inutec Limited requires a nuclear site licence for its operations on that part of the current Winfrith nuclear licensed site that will be licensed to it. Section 3(1)(b) of the NIA 1965 prohibits the transfer of the nuclear site licence with the land, therefore Inutec Limited has applied for a new nuclear site licence and the remainder of the land will be relicensed to Magnox Limited.

ONR has identified two locations whereby the current licensed nuclear site is defined by a right angle that protrudes into the Dorset Innovation Park (previously known as Dorset Green Technology Park) and intersects road junctions. Subsequently, Magnox Limited has requested that this land is also excluded from its nuclear site licence, since it has demonstrated no danger from ionising radiations from anything at these two specific locations. This request would be permissioned by ONR issuing a Notice of No Danger under section 5(15) of the NIA 1965 for these two specific locations.

Taken together, these permissions (revocation of Magnox Limited's extant nuclear site licence, the granting of a new nuclear site licence to Magnox Limited, the granting of a Notice of No Danger to Magnox Limited and the granting of a new nuclear site licence to Inutec

Limited) will create two licenced nuclear sites with a common site boundary and delicense two specific locations on the current licensed nuclear site.

Assessment and inspection work carried out by ONR in consideration of this request

The ONR assessment has focused on Magnox Limited's case for the granting of a replacement nuclear site licence. It has been informed by a series of interventions with Magnox Limited that took place both prior to and following Magnox Limited's relicensing submission. The ONR assessment also considered the two specific areas that will be delicensed.

ONR adopted a targeted approach and focused on those areas where changes are taking place or which are judged to be potentially important for nuclear safety reasons. This has included consideration of:

- The proposed inter-site boundary between Magnox Limited and Inutec Limited.
- Emergency arrangement interdependencies,
- Ownership of decommissioning liabilities,

The assessment focused on 3 key themes:

- The Licensee organisation
- The site
- Licensable activities

The current and previous ONR Nominated Site Safety Inspectors for Winfrith, have worked closely with an ONR licensing specialist, a Nuclear Liabilities Specialist Inspector, a Leadership and Management for Safety Specialist Inspector and a Radiation Protection Specialist Inspector to form their views on Magnox Limited's application.

Matters arising from ONR's work

All issues identified during ONR's relicensing assessment and inspection work that needed to be addressed prior to the granting of the revocation and the replacement licence and the Notice of No Danger have been resolved. No issues preventing the issue of the requested changes arose from my assessment of Magnox Limited's submission.

Conclusions

ONR has assessed Magnox Limited's application for relicensing for its undertakings on the Winfrith site against a number of relevant standards and criteria. ONR is content that Magnox Limited has met all of the requirements of the Nuclear Installations Act 1965 and ONR guidance have been met for the purposes of relicensing and delicensing.

Recommendations

On the basis of the applications submitted by Magnox Limited and ONR's assessment it is recommended that the Head of the Decommissioning, Fuel & Waste Sub-Division approves this PAR.

Coincident with ONR's Chief Nuclear Inspector granting new nuclear site licence № 102 to Inutec Limited for the B4 and A50 land plots at Winfrith, it is recommended that ONR's Chief Nuclear Inspector:

- Revokes nuclear site licence № 100 and grants nuclear site licence № 100A to Magnox Limited for its operations at Winfrith.
- Issues a Notice of No Danger under section 5(15) of the Nuclear Installations Act 1965 relating to land that protrudes into the Dorset Innovation Park.

LIST OF ABBREVIATIONS

DBEIS	Department for Business, Energy & Industrial Strategy
EA	Environment Agency
IES	Interim End State
LC	Licence Condition
LCCA	Licence Condition Compliance Arrangements
LNI	Licensing Nuclear Installations
LI	Licence Instrument
NDA	Nuclear Decommissioning Authority
NIA65	Nuclear Installations Act 1965 (As Amended)
NIR71	Nuclear Installations Regulations 1971
NSC	Nuclear Safety Committee
NSL	Nuclear Site Licence
ONR	Office for Nuclear Regulation
PAR	Project Assessment Report
PBN	Public Body Notification
RSRL	Research Sites Restoration Limited
SAP	(ONR) Safety Assessment Principles for Nuclear Facilities
SEMP	Safety and Environmental Management Prospectus
TAG	(ONR) Technical Assessment Guide
TIG	(ONR) Technical Inspection Guide
ToR	Terms of Reference

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1 INTRODUCTION

1. Magnox Limited applied to ONR on 13 October 2016 under section 5(1) of the Nuclear Installations Act 1965 (NIA65) [1] for the revocation of its current Nuclear Site Licence (NSL) and re-licensing of the site to exclude the B4 and A50 plots [2,3]. The application requests that the revocation and re-licensing occur concurrently with the grant of a new NSL for Inutec Limited for the B4 and A50 plots.
2. Magnox Limited also applied to ONR on 3 January 2018 under section 5(15) of NIA65 [4] for grant of a Notice of No Danger for two specific locations on its current nuclear licensed site so that these two areas would be delicensed as part of the re-licensing.

1.1 BACKGROUND TO THE LICENCE APPLICATION

3. Magnox Limited holds the NSL №100 for the Winfrith site which includes land and facilities currently leased to Inutec Limited, known as the B4 Complex. Magnox Limited is contracted to the Nuclear Decommissioning Authority (NDA) to decommission the Winfrith site and achieve an Interim End State by 2023.
4. Inutec Limited is also undertaking licensable activities as prescribed in section 1 of the NIA65 [1] and Nuclear Installations Regulations 1971 (NIR71) regulation 3, 6(c) [5] and intends to continue its operations indefinitely at its current location. To achieve this business objective, it is negotiating with the NDA for the purchase of the freehold to the B4 plot and for additional land known as the A50 plot. Simultaneously, Inutec Limited has made an application to the Office for Nuclear Regulation (ONR) for a nuclear site licence to continue its operations at Winfrith [6]. ONR's assessment and determination of Inutec Limited's application for a NSL can be found in Project Assessment Report (PAR) ONR-SDFW-PAR-16-013 [7].
5. Whilst Magnox Limited has identified the land that it no longer needs will be sold to Inutec Limited, ONR is not able to vary nuclear site licence № 100 to reduce the licensed site boundary as Magnox Limited would not be able to demonstrate that there is no danger from ionising radiations from anything on that part of the site as required by section 3(12)(b) of the NIA 1965. In fact, Inutec Limited requires a NSL for its operations on that part of the current Winfrith NSL that will be licensed to it as discussed in [7]. Section 3(1)(b) of this act prohibit the transfer of the nuclear site licence with the land, therefore Inutec Limited has applied for a new nuclear site licence and the remainder of the land will be relicensed to Magnox Limited.
6. ONR has identified two locations whereby the current nuclear licensed site is defined by a right angle that protrudes into the Dorset Innovation Park (previously known as Dorset Green Technology Park) and intersects road junctions [8]. Subsequently, Magnox Limited has requested that this land is also excluded from the nuclear site licence since it has demonstrated no danger from ionising radiations from anything on these two specific locations. This request would be permissioned by ONR issuing a Notice of No Danger under section 5(15) of NIA 65 for these two specific locations.
7. Taken together, these permissions (revocation of the Magnox Limited's extant NSL, the granting of a new NSL to Magnox Limited, the granting of a Notice of No Danger to Magnox Limited and the granting of a new NSL to Inutec Limited) will create two adjacent nuclear licenced sites with a common site boundary and delicense two specific locations on the current nuclear licensed site.

1.2 TARGET DATE FOR LICENCE TO COME INTO EFFECT

8. Revocation of Magnox Limited's extant NSL № 100 and granting a new NSL №100A to Magnox Limited for a smaller site is dependent Inutec Limited obtaining the freehold to the B4 and A50 land plots. This in turn requires the NDA to apply to the Secretary of

State for Business, Energy & Industrial Strategy (DBEIS) for this land to be de-designated in accordance with the Energy Act 2004 [9].

9. ONR understands that the NDA expects to this is expected to complete the de-designation process between the 4 to 8 February 2019. The revocation of the Magnox Limited's extant NSL № 100 and granting a new NSL № 100A to Magnox Limited will be aligned to completion of the freehold purchase by Inutec Limited.

2 APPLICATION ASSESSMENT PROCESS

2.1 ASSESSMENT APPROACH

10. ONR has issued guidance that sets out the approach that is taken when considering a request for a NSL in its publication "Licensing Nuclear Installations" (LNI) [10]. Section 3 of LNI deals with relicensing nuclear installations and Section 4 with delicensing. The two specific locations on the current licensed nuclear site that will be delicensed as part of this project is an example of partial delicensing via relicensing as discussed in Section 4 of LNI. ONR has issued more detailed instructions on relicensing in "The Processing of Applications for Replacement Licences for Existing Licenced Nuclear Sites" [11]. The relevant parts of this guidance have also been used.
11. In order to assess and determine Magnox Limited's application, ONR used a number of relevant standards and criteria as follows:
 - Safety Assessment Principles for Nuclear Facilities (SAP) [12],
 - ONR Technical Assessment Guides (TAG) [13],
 - ONR Technical Inspection Guides (TIG) [14].
12. The relicensing process requires ONR to assess the licence applicant's case for the grant of a replacement nuclear site licence. In doing so, ONR considered all relevant aspects of Magnox Limited's submission. However, a targeted approach in line with ONR Enforcement Policy Statement [15] was taken. As this is a relatively minor changes that only concerns Magnox Limited's site boundary, the assessment of Magnox Limited's application has focused on those aspects of its arrangements that are affected by the creation of a new licensed nuclear site.
13. The ONR assessment focused on 3 key themes:
 - The Licensee organisation.
 - The Site.
 - Licensable activities.
14. The ONR assessment effort has concentrated on the following matters:
15. Upon ONR's grant of nuclear site licences to both Magnox Limited and Inutec Limited and grant of the Notice of No Danger to Magnox Limited, Magnox Limited's nuclear licensed site will be reduced in area and a new adjacent site licensed to Inutec Limited created. As a result, then with the exception of the two specific areas to be delicensed, the combined external licensed nuclear site boundary will not change, and so particular focus has been given to:
 - The inter-site boundary between Magnox Limited and Inutec Limited.
 - Emergency arrangement interdependencies.
 - Ownership of decommissioning liabilities.
16. The Nominated Site Safety Inspectors for Winfrith have worked closely with an ONR licensing specialist, a Nuclear Liabilities Specialist Inspector and a Leadership and

Management for Safety Specialist Inspector to form their views on Magnox Limited's application.

2.2 INVOLVEMENT OF STAKEHOLDERS

17. ONR has a statutory responsibility to consult the Environment Agency (EA) before granting a NSL (section 3(2), NIA65). This licensing and partial delicensing via relicensing exercise involves: the simultaneous grant of a new licence to Inutec Limited; the re-licensing of Magnox's Winfrith Site with a reduced footprint resulting from the transfer of some land to form the Inutec site; and, the delicensing of two specific areas of the current nuclear licensed site. Because of the close connection between the two sites, only one consultation with the EA has been undertaken to cover these permissions.
18. The Environment Agency has confirmed it has no objection [16].
19. ONR has considered Public Body Notification (PBN) in regard to this licence application. The application does not involve any change to activities on the site, and there is a small reduction in the total area subject to the site licence via the delicensing of two specific areas of the current nuclear licensed site. PBN is deemed to be not appropriate in these circumstances.
20. ONR licensing specialist has liaised with the DBEIS on arrangements for Nuclear Liability Insurance. DBEIS has confirmed that Magnox Limited has nuclear liability insurance arrangements in place to comply with section 19(1) of the NIA65 [17].

3 THE ORGANISATION

21. The ONR assessment of relevant aspects of Magnox Limited's organisation is summarised in the following sections.

3.1 ORGANISATIONAL CAPABILITY

22. Magnox Limited manages organisational change through company-wide arrangements [18] which have been in place since March 2015 when the site was last re-licensed [19]. ONR has assessed these arrangements and considered them to be adequate [20].
23. Magnox Limited has recently completed a series of significant organisational changes at all of its sites, including Winfrith that were formally implemented in May 2016. ONR then carried out an inspection of the licensee's implementation of its arrangements for Harwell and Winfrith and concluded that Magnox Limited had adequately implemented its arrangements to manage organisational change [21]. Magnox Limited is currently implementing another organisational change, however this is not considered to adversely impact relicensing [8].
24. ONR considers that Magnox Limited's organisational capability is unaffected by this relicensing and considers that Magnox Limited remains a suitable applicant to be granted a replacement licence for its remaining portion of the Winfrith site.

3.2 SAFETY MANAGEMENT PROSPECTUS

25. Magnox Limited has submitted a Safety and Environmental Management Prospectus (SEMP) to support its relicensing application [Table 1]. This document describes the organisation and safety management arrangements that are in place at Winfrith. This document identifies the parts of Magnox Limited's Management System which give due priority to safety such as nuclear safety; nuclear security; safeguards; and environmental management.

26. Magnox Limited has reviewed its SEMP in the context of this relicensing application and has concluded that no changes to these documents are required as a result of this site licence application. ONR agrees with this view.
27. ONR confirmed that Magnox Limited's SEMP describes the elements expected in line with ONR guidance [13] and are adequately covered by existing arrangements, which are regularly sampled during ONR inspections. ONR considers that the submitted SEMP is adequate for relicensing purposes.

3.3 NUCLEAR BASELINE

28. Magnox Limited has identified its nuclear baseline for Winfrith in its *Application for New Site Licence* [Table 1] and has stated that during this relicensing process, there is no intent to change the nuclear baseline at the Winfrith site, although 'normal business' baseline changes may be made, as required in accordance with MCP 036 Management of Organisation Change. ONR does not consider that this relicensing requires the Winfrith nuclear baseline be revised.

3.4 NUCLEAR SAFETY COMMITTEE

29. Licence Condition (LC) 13(1) requires a licensee to establish a nuclear safety committee (NSC) to consider and advise it on safety matters. LC 13(2) requires a licensee to submit to ONR for Approval the Terms of Reference (ToR) for any such NSC. LC 13(3) says that a licensee must not change the approved NSC ToR unless ONR has approved a proposed alteration or amendment. In addition, LC 13(11) allows the licensee to obtain consideration of, or advice on, urgent safety proposals (which would normally be considered by the NSC) in accordance with appropriate arrangements that have been considered by the relevant NSC and approved by ONR. LC 13(12) only allows changes to the LC 13(11) arrangements if ONR approves proposed alterations or amendments.
30. In January 2016, The Licensee requested the ONR's Approval of new Licence Condition Compliance Arrangements (LCCA), under Licence Condition 13(3) and 13(12) [22]. ONR subsequently Approved these new LCCA [23] and issued Licence Instrument (LI) 502 [24] and LI 503 [25].
31. The licensee has confirmed in its application dossier [Table 1] that there is no need to change the Winfrith NSC ToR or urgent safety proposals as a result of Inutec Limited taking possession of the B4 and A50 plots. It has also requested that Licence Instrument 502 [24] and 503 [25] be carried forward into the new NSL №100A [Section 6.2.1].

4 THE SITE

4.1 SITE BOUNDARY

32. Subject to ONR granting NSLs to both Magnox Limited and Inutec Limited and the Notice of No Danger to Magnox Limited, two nuclear sites will be created that will have a contiguous site boundary, both remaining within the current Winfrith site boundary. ONR inspected the Winfrith nuclear site boundary [8]. This inspection considered the proposed inter-site boundary that will be formed should a nuclear site licence be granted to Inutec Limited. ONR has also compared the revised site plan supplied by Magnox Limited [Table 2] with the proposed site plan supplied by Inutec Limited [26] and has confirmed that both maps join correctly and that no orphaned land has been created.
33. The shared boundary will not be fenced and will be marked by low level signage, as already adopted by Magnox Limited on parts of the Winfrith site. These will state on

- the relevant side which site persons will be leaving/entering. ONR considers this to be adequate for licensing and relicensing purposes.
34. Magnox Limited has identified in its Application for New Site Licence [Table 1] a small number of changes that will occur as a direct result of the two NSLs to Magnox Limited and Inutec Limited coming into force. These include:
- New boundary marker posts denoting the inter-site boundary will be erected in accordance with the revised site plan [Table 2].
 - Informing all affected stakeholders of this change.
35. ONR has inspected the new inter-site boundary markers that have been installed to ensure compliance with Licence Condition 2(4) [27].
36. During its inspection, ONR identified two locations where the current extant licensed site is defined by a right angle that protrudes into the Dorset Innovation Park and intersects road junctions. The security fence line follows the curb line radius. This leaves two small areas of licensed site land unmarked on the Dorset Innovation Park. The licensee was asked to review the delicensing case that created this situation and determine if there was sufficient evidence to support delicensing this land should a nuclear site licence be granted to Inutec Limited in the future.
37. This situation arose when land that was on the Winfrith site was delicensed in 2012 [28]. Magnox Limited has confirmed that at the time of delicensing this area was monitored and no radiological contamination was identified. Since then no licensable activities have been undertaken on this land. Magnox Limited undertook a second survey in August 2017 and confirmed that the results are consistent with the survey undertaken in 2012. Additionally, Magnox Limited has requested that this land is also excluded from the licensed nuclear site area [4].
38. An ONR radiation protection specialist inspector has considered Magnox Limited's application to remove this orphaned area of land from the current nuclear site licence. They noted that this area had been subject to independent measurement, analysis and assessment by Health Protection Agency in 2012 [28] and judged that it would not be proportionate for any further independent analysis to be undertaken. They also considered that no further ONR technical assessment is warranted or proportionate from the radiological protection/delicensing perspective to remove the 'orphaned area' from within the site licence boundary.
39. The radiation protection specialist inspector concluded that sufficient evidence has been provided for the orphaned area to be excluded from the nuclear site licence [29].
40. Based on the advice provided by the radiation protection specialist, ONR recommends that a Notice of No Danger under section 5(15) of the NIA is issued to confirm that the land that protrudes into the Dorset Innovation Park can be excluded from the nuclear site licensed footprint.

4.2 ADEQUACY OF SITE SECURITY PLAN

41. Magnox Limited has confirmed that there are no planned changes to its security and safeguard arrangements, associated with this licence application. Following relicensing, the Magnox Limited Winfrith Nuclear Site Security Plan will be revised to recognise the change to the licensed nuclear site boundary, and for Inutec Limited being a nuclear site licensee for the B4 and A50 plots of the Winfrith site. Magnox Limited has also confirmed that no changes are required to the Winfrith Site Counter Terrorism Contingency Plan.

4.3 SECURITY OF TENURE

42. The Winfrith site is currently designated to the NDA under the Energy Act 2004 [9]. The NDA owns the freehold of the Winfrith site. The NDA granted a lease to the site licence company, Research Sites Restoration Limited (RSRL) on 2nd February 2009, for a period of 35 years. On 1 April 2015, a new nuclear site licence was granted to Magnox Limited for Winfrith and the lease was assigned to Magnox Limited on the same date.
43. Upon grant of a new NSL to Magnox Limited it will surrender the B4 and A50 plots back to the NDA and the NDA - Magnox Limited lease will be varied to reflect the reduction in land which is leased to Magnox Limited. In addition, Inutec Limited will surrender its sub lease. Magnox Limited has confirmed that, upon licensing, there will be no change to its security of tenure for its residual part of the Winfrith site.
44. Magnox Limited intends to decommission its site to achieve an Interim End State (IES) around 2023. The licensee's lease duration is 35 years which extends beyond the IES date. On this basis ONR considers that the requirement for security of tenure is demonstrated.

5 LICENSABLE ACTIVITIES

5.1 SITE SAFETY CASES

45. ONR assessed Magnox Limited's safety cases prior to granting the current NSL for Winfrith. At the time the ONR project inspector concluded that the site case was adequate for relicensing [19]. Magnox Limited has provided a list of its extant safety cases and schedule of plant in its application dossier [Table 1] and ONR has confirmed that there have been no significant changes to these safety cases since Winfrith was re-licensed.
46. The licensee has confirmed in its application dossier [Table 1] that its safety case arrangements are unaffected by this licence application and that it will continue to operate in accordance with its extant safety case arrangements.
47. The licensee has provided a summary of current safety cases [Table 2]. The licensee has confirmed that the B4 complex safety case will be removed from the Magnox Winfrith site's safety case portfolio and transferred to Inutec Limited upon granting of the new licence [30]. ONR considers that Magnox Limited has identified all radiologically designated areas that will exist on the licensee's revised nuclear site.
48. ONR has considered the licensee's safety case arrangements and the safety cases that will be carried forward upon relicensing. Based on this, ONR considers that the Winfrith site safety cases are suitable for relicensing.

5.2 ADEQUACY OF LICENCE CONDITION COMPLIANCE ARRANGEMENTS

49. NSL № 100, paragraph 2 states that the license is granted to the conditions contained in Schedule 2. NSL № 100, Schedule 2 contains thirty six licence conditions. The licensee has identified its Licence Condition Compliance Arrangements (LCCA) in its application dossier [Table 1].
50. ONR's inspection strategy [31] continues to be applied to Winfrith to assess the licensee's compliance to the licence conditions. Where non-compliances have been identified, an ONR Issue has been raised to monitor the licensee's corrective actions.
51. ONR has reviewed all licence condition compliance inspections that have been carried out since the grant of the current NSL in March 2015. Seven compliance inspections

have been completed which has resulted in seven ONR Issues being raised. The licensee has completed all required improvement actions and no ONR Issues relating to LCCA are open.

5.2.1 EMERGENCY ARRANGEMENTS

52. The licensee revised its site emergency plan and requested ONR's Approval as required by Licence Condition 11(3) to implement its proposed changes in May 2016. ONR subsequently Approved the revised emergency plan [32] and issued Licence Instrument 504 [33].
53. The licensee has confirmed that its existing emergency arrangements for Winfrith [Table 1] including the site's emergency plan are not affected by this licence application and that its arrangements continue to apply. It has also confirmed that post relicensing its emergency arrangements will no longer extend to Inutec Limited.
54. ONR has confirmed that the licensee's arrangements identify that should an incident occur on the Magnox Limited licensed nuclear site, the licensee would be responsible for notifying Inutec Limited, who would be expected to mobilise its emergency plan [34]. I have also confirmed that the licensee's arrangements identify what should be done if the licensee is informed of an incident on Inutec Limited's proposed licensed site.
55. The licensee has confirmed in its application dossier [Table 1] that there is no need to change the Approved site emergency plan as a result Inutec Limited taking possession of the B4 and A50 plots. It has also requested that Licence Instrument 504 [Table 3] be carried forward into the new NSL.
56. The Magnox Limited Winfrith HIRE reported assessed by ONR [35] concluded that there are no reasonably foreseeable radiation accidents on the Winfrith site that would result in a radiation emergency. Magnox Limited Winfrith does not therefore require an off-site emergency plan to comply with REPPiR2001. This will be subject to further ONR interventions following the planned updates to REPPiR in 2019.

5.2.2 DECOMMISSIONING ARRANGEMENTS

57. ONR's guidance [11] requires that the licensee must show that an adequate decommissioning programme exists for Winfrith before the replacement licences can be granted. In addition, ONR guidance [14] obliges the licensee to have a clear documented strategy that demonstrates that all plant will be decommissioned safely at end of life and to have a decommissioning programme for all facilities that identifies the necessary resources to achieve a systematic and progressive reduction in hazard to a defined end state within a justifiable timescale.
58. The licensee's arrangements for LC35 have not changed since they were assessed by ONR when Winfrith was relicensed to Magnox Limited on 1st April 2015. At that point, ONR considered the licensee's decommissioning arrangements to be adequate [19].
59. Since relicensing, Magnox Limited has been reviewing the end-state strategies for all of its sites including Winfrith. The current Winfrith end-state determination states that site decommissioning will be concluded so that the site can enter an agreed interim end-state around 2023 [36].
60. Upon grant of two NSLs to Magnox Limited and Inutec Limited, the B4 and A50 plots will transfer to Inutec Limited. The only on-going Magnox Limited decommissioning liability in associated with these plots will be those associated with the site's active liquid effluent system.

61. ONR advised that it wanted to see that all nuclear liabilities had clear ownership that was agreed by both Magnox Limited and Inutec Limited. Both parties and NDA have agreed that the conveyance for the sale of this land will define liability ownership. In addition an agreement will be put in place between Magnox Limited and Inutec Limited to allow Magnox Limited to access any of its liabilities that may reside on the B4 and A50 plots following grant of NSLs.
62. All other decommissioning liabilities and any additional liabilities discovered within the B4 and A50 areas in the future will reside with Inutec Limited.
63. In relation to LC 35 Decommissioning, ONR considered the licensee's decommissioning strategy and programme and considers that they continue to be suitable to enable a new NSL to be granted to Magnox Limited.

5.3 SAFEGUARDS

64. An ONR's Safeguards specialist [37] has been consulted and has confirmed that there are no safeguards issues outstanding for the Magnox Limited Winfrith site which need addressing prior to re-licensing [38].

6 PREPARATION OF THE LICENCE

6.1 THE NEW LICENCE

65. ONR has drafted new NSL № 100A for the Winfrith site. The licence includes wording in paragraph 3 to revoke the current NSL № 100 upon its grant. Schedule 1 Part 1 of NSL № 100A, The Site, 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 4.1 of this PAR. Schedule 1 Part 2 of NSL № 100A, The Nuclear Installations, remains unchanged at relicensing.
66. Magnox Limited has confirmed that it is content with the factual accuracy of the new NSL [39].
67. This draft has been reviewed by the Government Legal Department [40] and their advice has been incorporated into the final version of the licence.

6.2 CARRY OVER OF LICENCE INSTRUMENTS

68. Appendix 8 of the NSL application dossier (see Table 1) contained the Magnox Limited Winfrith register of ONR Licence Instruments (LI). Using this register of LIs, I have agreed with Magnox Limited which LIs should be carried over to the new NSL [41]. The LIs to carry forward are summarised in Table 3.

6.2.1 PRIMARY POWERS LICENCE INSTRUMENTS

69. Paragraph 4 of the new NSL provides the facility to carry over primary powersⁱ Approvals or Directions granted under earlier NSLs in Schedule 3 of the new NSLs. This facility has been used to carry over the following primary powers Licence Instruments (LI):
 - Approval of New NSC Terms of Reference
 - Approval of New Urgent Safety Proposals
 - Approval for the Site Emergency Plan.

ⁱ See Annex 1 of Licensing Nuclear Installations.

70. Paragraph 5 of the new NSL 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 and Specifications.

6.2.2 DERIVED POWERS LICENCE INSTRUMENTS

71. It is not possible to carry over derived powers LIs using paragraphs in the new NSL. However, Magnox Limited considered that one derived powers LI is required for operations under the new NSL. This derived powers LI will be included in the licensee's new site licence handbooks for the Magnox Limited Winfrith sites.
72. 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 ONR considers it appropriate to include this derived powers LI in the licensee's new site licence handbook for the Magnox Limited Winfrith site. Magnox Limited has confirmed that upon grant of the NSL, it will revise the Winfrith Site Licence Handbook to include licence instrument Acknowledgement 513 [41].

6.3 NOTICE OF NO DANGER

73. ONR has drafted a Notice of No Danger under section 5(15) of the NIA to confirm that the land that protrudes into the Dorset Innovation Park can be excluded from the licenced nuclear site footprint.
74. This draft has been reviewed by the Government Legal Department [42] and their advice has been incorporated into the final version of the notice.

7 MATTERS ARISING FROM ONR'S WORK

75. All issues identified during ONR's relicensing assessment and inspection work that needed to be addressed prior to the granting of the replacement licence have been resolved. No issues preventing the issue of the requested change arose from my assessment of Magnox Limited's submission.

8 CONCLUSIONS

76. ONR has assessed Magnox Limited's application for a NSL for its undertakings on the Winfrith site against a number of relevant standards and criteria [10,11,12]. ONR is content that Magnox Limited has met all of the requirements of the Nuclear Installations Act 1965 and ONR guidance have been met for the purposes of licensing.

9 RECOMMENDATIONS

77. On the basis of the application submitted by Magnox Limited and ONR's assessment it is recommended that the Head of the Decommissioning, Fuel & Waste Sub-Division approves this PAR.
78. Coincident with ONR's Chief Nuclear Inspector granting new nuclear site licence № 102 to Inutec Limited for the B4 and A50 land plots at Winfrith, it is recommended that ONR's Chief Nuclear Inspector:
- Revokes nuclear site licence № 100 and grants nuclear site licence № 100A to Magnox Limited for its operations at Winfrith.
 - Issues a Notice of No Danger under section 5(15) of the Nuclear Installations Act 1965 relating to land that protrudes into the Dorset Innovation Park.

10 REFERENCES

- 1 Nuclear Installations Act 1965 <http://www.legislation.gov.uk/ukpga/1965/57>
- 2 Magnox Limited, Letter WIN-50016Y, Nuclear Installations Act 1965 (Amended) - Magnox Limited. Application for Nuclear Site Licence for Magnox Limited Winfrith (current Nuclear Site Licence No: 100), 13 October 2013. (TRIM 2016/417445)
- 3 Magnox Limited, Letter WIN-50023Y, Nuclear Installations Act 1965 (Amended) - Magnox Limited Winfrith NSL No. 100. Request to Revoke Magnox Limited NSL No. 100. 13 October 2013. (TRIM 2016/417426).
- 4 Magnox Limited, Letter WIN-50075Y, Winfrith B45 Area Licenced Site Boundary, 3 January 2018. (TRIM 2018/4102)
- 5 The Nuclear Installations Regulations 1971
www.legislation.gov.uk/uksi/1971/381/contents/made
- 6 Inutec Limited, Letter from Inutec Limited, Submission of an Application for a Nuclear Site Licence for Tradebe Inutec Limited on the Winfrith Site, 8 April 2016. (TRIM 2016/160831).
- 7 ONR Project Assessment Report ONR-SDFW-PAR-16-013, Licensing Part of the Magnox Limited Winfrith Licensed Nuclear Site to Inutec Limited, Revision 0. (TRIM 2016/303486)
- 8 ONR Intervention Report ONR-SDFW-IR-16-188, Magnox Limited Winfrith Compliance Inspection, 27-28 February 2017. (TRIM 2017/86825)
- 9 The Energy Act 2004 www.legislation.gov.uk/ukpga/2004/20/contents
- 10 Licensing Nuclear Installations, 4th edition, January 2015. www.onr.org.uk/licensing-nuclear-installations.pdf
- 11 ONR Instruction NS-PER-IN-004 Revision 2, April 2016. "The Processing of Applications for Replacement Licences for Existing Licenced Nuclear Sites". <http://www.onr.org.uk/operational/assessment/ns-per-in-004.pdf>
- 12 "Safety Assessment Principles for Nuclear Facilities". 2014 Edition Revision 0. November 2014. <http://www.onr.org.uk/SAPS/saps2014.pdf>
- 13 Function and Content of a Safety Management Prospectus NS-TAST-GD-072 Revision 3. ONR, July 2018
http://www.onr.org.uk/operational/tech_asst_guides/index.htm
- 14 LC35 Decommissioning NS-INSP-GD-035 Revision 4. ONR. April 2016.
http://www.onr.org.uk/operational/tech_insp_guides/index.htm
- 15 Enforcement Policy Statement - ONR-ENF-POL-001 Revision 0. ONR, April 2014.
<http://www.onr.org.uk/documents/2014/enforcement-policy-statement.pdf>
- 16 Environment Agency reply to ONR Inutec licensing, 21 March 2018 (TRIM 2018/181556)
- 17 BEIS Letter, Nuclear Third Party Liability - Change to NDA Financial Security Arrangements from 1 October 2018. 10 September 2018. (TRIM 2018/372693)

- 18 Magnox Limited, Management of Organisational Change, MAN-0044 Issue 2, 23 March 2015. (TRIM 2016/245050)
- 19 ONR Project Assessment Report ONR-DFW-PAR-14-018, Relicensing Research Sites Restoration Limited Sites to Magnox Limited. 26 March 2015. (TRIM 2014/459013)
- 20 ONR Assessment Report ONR-DFW-AR-14-025, Relicensing Research Sites Restoration Limited Sites to Magnox Limited - Assessment of Organisational Capability, 20 March 2015. (TRIM 2015/176227)
- 21 ONR Intervention Report ONR-SDFW-IR-16-064, Magnox Limited Harwell Compliance Inspection, 21 July 2016. (TRIM 2016/276525)
- 22 Magnox Limited Letter MXL32290R, Nuclear Installations Act 1965 (Amended) Request for Approval of Arrangements Made Under Licence Condition 13, dated 4 January 2016. (TRIM 2016/14235)
- 23 ONR-DFW-PAR-15-027, ONR Approval for the Alteration or Amendment of Magnox Fleet Arrangements under Licence Conditions 13(3) and 13(12), dated 8 April 2016. (TRIM reference 2016/136434)
- 24 Site Licence No: 100, Licence Instrument No: 502. 8 April 2016. Nuclear Installations Act 1965 (As Amended). Approval Granted under Condition 13(3) of Schedule 2 attached to Nuclear Site Licence No: 100. Winfrith. (TRIM 2016/155635)
- 25 Site Licence No: 100, Licence Instrument No: 503. 8 April 2016. Nuclear Installations Act 1965 (As Amended). Approval Granted under Condition 13(12) of Schedule 2 attached to Nuclear Site Licence No: 100. Winfrith. (TRIM 2016/155648)
- 26 Inutec Limited, Licensed Site Boundary. Licence №102. (TRIM 2018/406441)
- 27 ONR Intervention Record ONR-SDFW-IR-18-116 - Inutec Ltd (Winfrith) Compliance Readiness Inspections of LC 2 and LC 13 - 11th October 2018 (TRIM 2018/338106)
- 28 Nuclear Site Licence №85, Variation №3, 24 August 2012. (TRIM 2012/345483)
- 29 RP review of issued WIN-50075Y: Winfrith B45 Area Licenced Site Boundary [OFFICIAL] 3rd January 2018. (TRIM 2018/33047)
- 30 E-mail from Winfrith to ONR, dated and timed 2 February 2017 at 10:30, RE: Winfrith Relicensing - Extant Safety Cases [OFFICIAL]. (TRIM 2017/46929)
- 31 ONR Magnox sites inspection planning guidance, February 2017. (TRIM 2017/102408)
- 32 ONR Project Assessment Report ONR-DFW-PAR-16-008, Approval of Revised Winfrith Site Emergency Plan, dated 19 August 2016. (TRIM 2016/227929).
- 33 Site Licence No: 100, Licence Instrument No: 504. August 2016. Nuclear Installations Act 1965 (As Amended). Approval Granted under Condition 11(3) of Schedule 2 attached to Nuclear Site Licence No: 100. Winfrith. (TRIM 2016/296957)
- 34 E-mail from Winfrith to ONR, dated and timed 3 February 2017 at 16:24, RE: Magnox Winfrith Re-licence Application - Emergency Arrangements [OFFICIAL]. (TRIM 2017/73484)

- 35 ONR-COP-PAR-15-022 Winfrith REPIR Project Assessment Report. (TRIM 2016/122769)
- 36 Magnox Limited, Winfrith Site End State Determination, Issue 1, dated November 2017. (TRIM 2018/394918)
- 37 E-mail ONR Internal, dated and timed 15 December 2016 at 13:33, Relicensing Magnox Limited Winfrith Request for Safeguards Input. (TRIM 2016/490751)
- 38 E-mail ONR Internal, dated and timed 10 January 2017 at 06:46, Relicensing Magnox Ltd Winfrith Request for Safeguards Input. (TRIM 2017/30440)
- 39 E-mail form Winfrith to ONR, dated and timed 2 January 2018 at Tue 02/01/2018 at 14:38, Winfrith licence 2016. (TRIM 2018/37305)
- 40 Government Legal Department's Comments on Nuclear Site Licence 100A. (TRIM 2018/180926)
- 41 E-mail form Winfrith to ONR, dated and timed 19 January 2017 at 15:33, Winfrith Application for New Nuclear Site Licence - Carry forward of Licence Instruments. (TRIM 2017/30428)
- 42 Government Legal Department's Comments on Notice of No Danger. (TRIM 2018/196672)

Table 1 Nuclear Site Licence Application Dossier Contents

Dossier Part	Document	Licensee Reference	ONR TRIM Reference
Overview	Application for New Site Licence Winfrith	WIN-50016Y Issue 2	2016/417458
Appendix1	South Sites Region Manual	MAN 0001 Issue 10	2016/417458
Appendix 2	Winfrith Site Map	WIN-50016Y Issue 2	2016/417458
Appendix 3	Nuclear Safety Committee Terms of Reference	WINFRITH/NSC/TOR Issue 3	2016/417458
Appendix 3	Management of the Magnox Nuclear Safety Committee and Harwell/Winfrith Safety Working Party	PRC 0213 Issue 2	2016/417458
Appendix 3	Nuclear Safety Committees	S-060 Issue 3	2016/417458
Appendix 4 Appendix 4.01 – Appendix 4.36	Nuclear Site Licence Compliance Arrangements	PRC 0243 Issue 2	2016/417458
Appendix 5	Emergency Arrangements at Winfrith	MAN 0038 Issue 2.2	2016/417458
Appendix 6	List of Extant Safety Winfrith Cases and Schedule of Plant	Extant Winfrith Safety Cases	2016/417458
Appendix 6b	Magnox Harwell/ Winfrith Building Register Review Report – August 2016 Schedule of Safety	EHS&Q/16/00283	2016/417458
Appendix 6c	Related Plants and Buildings	EHS&Q/16/00295	2016/417458
Appendix 7	Service Level Agreement between Magnox Limited and Tradebe Inutec Limited	Not Supplied	
Appendix 8	Winfrith Licence Instruments to be Carried Over from Winfrith NSL № 100	Magnox Winfrith NSL 100 - Register of ONR Licence Instruments	2016/417458
Appendix 9	Management of Change Arrangements	MCP- 036 Issue 5	2016/417458

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

Dossier Part	Document	Licensee Reference	ONR TRIM Reference
Appendix 6	List of Extant Safety Winfrith Cases and Schedule of Plant	Extant Winfrith Safety Cases Issue 3	2017/46929
Appendix 2	Winfrith Site Map	Magnox Ltd Winfrith Site Map for relicensing - 0W20160082_B_Final - August 2018	2019/573



Table 3 Licence Instruments Granted Under Earlier Winfrith NSLs required for Operations Under Winfrith NSL № 100A

Granted Under NSL №	LI №	LC №	Date Granted	LI Type	Description
100	502	LC13(3)	29/04/2016	Approval	Approval of New NSC Terms of Reference
100	503	LC13(12)	29/04/2016	Approval	Approval of New Urgent Safety Proposals
100	504	LC11(3)	23/08/2016	Approval	Winfrith Site Emergency Plan, Issue 5 Referenced WIN-EMPLAN
47	36	LC3 (1)	23/05/1997	Consent	Lease of Substations to Southern Electric Plc
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