Reply to RICC: F6.2/33
Direct Dial: [redacted] S40

Email: [redacted] S40
RICC Ref: ONR 103-016
ONR Ref: ALD 71024R

Aldermaston • Reading
Berkshire • RG7 4PR
Tel 0118 981 4111

Office for Nuclear Regulation
Building 4N.2
Redgrave Court
Merton Road
BOOTLE
Merseyside
L20 7HS

15 December 2014

For the attention of [redacted] ONR Inspector – Nuclear Safety S40

Subject: Submission of the AWE plc Written Representation on LI511 in lieu of Attending an Interview under the Police and Criminal Evidence Act

Dear [redacted] S40

Further to our recent letter, ONR 103-015 dated 9th December, I enclose Written Representations on behalf of AWE plc which we submit in lieu of attendance at an interview under caution.

The Written Representations are structured to respond to the three areas identified in your original interview request (ALD 71019, dated 23rd October 2014) and are supported by a pack of key documentary evidence.

If you have any questions arising from the Written Representations and documentary evidence pack please contact our General Counsel, [redacted] S40

Yours sincerely,

[redacted] S40

AWE plc.

cc: [redacted] (ONR) S40
(ONR)
(ONR)
(AWE)
(AWE)
(AWE)
(AWE)
(AWE)
(AWE)
(AWE)
(AWE)
(AWE)

Enc: Written Representations on behalf of AWE plc in lieu of attendance at an interview under caution, MER 450-000675, 15th December 2014.

Key Documents List supporting the AWE plc Written Representations regarding the ONR investigation of Licence Instrument 511, MER 450-000674, 15th December 2015.

Key Documentary Evidence Pack referenced from the main Written Representations and indexed by the Key Documents List above.

UK UNCLASSIFIED

WRITTEN REPRESENTATIONS ON BEHALF AWE PLC

Introduction

We refer to the letter from the Office of Nuclear Regulation ("ONR") dated 23 October 2014 (Ref 1) inviting AWE plc to send a representative of the company to attend an interview under caution which would cover the following areas:

- The circumstances and regulatory commitments which led to Licence Instrument 511 being placed on AWE plc in March 2007.
- The circumstances and decisions taken by AWE plc leading up to AWE plc declaring formally to ONR on 30 August 2011 that Licence Instrument 511 would not be met.
- The circumstances and decisions taken by AWE plc during the period August 2011 to February 2014, when the deadline for Licence Instrument 511 expired.

These areas cover a period of many years and, as a result, there is understandably no single individual within the company who would be able to assist with all of the questions that ONR might wish to ask. The company therefore takes the view that it can more usefully assist the investigation by providing a written response.

This document is prepared on behalf of AWE plc in response to the letter from ONR dated 23 October 2014. The purpose of this document is to set out AWE plc's position in relation to each of the three areas identified above and to seek to persuade ONR not to prosecute AWE plc in respect of the expiry of Licence Instrument 511 without the requirements having been met.

For the avoidance of doubt, this document stands as the company's formal response in lieu of attendance at an interview under caution.

In this document, we will address each of the three areas identified above in turn before setting out our representations in relation to the decision whether or not to prosecute. This document is accompanied by an indexed bundle of supporting documents which are referred to in this document.

Before addressing the first area, it may be helpful to clarify some matters of background and terminology.

The areas covered in this document extend to periods of time many years before ONR became the regulator of the nuclear industry. In the interests of simplicity, in this document we will refer to both ONR, and the organisations that regulated the industry before it, as "the nuclear regulator".

The Atomic Weapons Establishment ("the Establishment") of the Ministry of Defence ("MOD") is the organisation that maintains the nuclear weapons technology and the warhead materiel of the United Kingdom nuclear deterrent. In 1993, the management and operation of the Establishment was for the first time contractorised on a Government Owned Contractor Operated arrangement under a management and operation contract ("M&O contract"). When

the Establishment was contractorised the MOD established a registered company, AWE plc. The purpose of this company was to employ all the employees at the Establishment and hold the supply contracts and the statutory licences and permits required for the operation of the Establishment. The first contract was awarded by the MOD to Hunting-BRAE Ltd. In 1999, companies were invited to bid for the opportunity to replace Hunting-BRAE Ltd as the contractor. The outcome of this process was that AWE Management Limited was awarded an M&O contract which became effective on 1 April 2000. AWE Management Limited and Hunting-BRAE Ltd are completely separate companies with no connection between them. The contract between the MOD and AWE Management Limited was entered into on 1 December 1999 and now covers the period 2000 - 2025. Under the contract, the MOD pays AWE Management Limited the costs of managing and operating the Establishment together with a performance based fee. AWE Management Limited is a joint venture commercial company. At the time that the contract was awarded, AWE Management Limited was owned in equal shares by British Nuclear Fuels Ltd ("BNFL") (Government owned), Lockheed Martin and Serco. BNFL became British Nuclear Group ("BNG") on 1 April 2005 at the point when its civilian liabilities transferred to the Nuclear Decommissioning Agency ("NDA") which was formed on the same day. BNG's share in AWE Management Limited was acquired by Jacobs in December 2008.

On 29 March 2000, the nuclear regulator, with effect from 1 April 2000, revoked Hunting-BRAE Ltd's Nuclear Site Licence (No. 64) and granted AWE plc Nuclear Site Licence No. 77 (Ref 2).

As part of the M&O contract arrangement, AWE Management Limited was required to take the transfer, from the MOD, of all the voting shares of AWE plc and to utilise AWE plc in the performance of the M&O contract. AWE plc is currently a wholly owned subsidiary of AWE Management Limited. The Secretary of State for Defence holds a Special Rights non-voting share in AWE plc. The rights attached to this share give the Secretary of State certain rights to take over the company in the event of the termination of the M&O contract. At the end or on termination of the M&O contract there are provisions for the return of the ownership of AWE plc to the MOD.

The operational sites of the Establishment are owned by the MOD together with all buildings, equipment and assets utilised in the Establishment's operations.

Thus all nuclear waste accumulated and stored on site was owned by the MOD before the contract with AWE Management Limited commenced in 2000; is owned by the MOD throughout the duration of that contract; and will continue to be owned by the MOD when that contract expires in 2025. Unlike a normal nuclear site licence holder, AWE plc's responsibilities under the Nuclear Installations Act 1965 will cease at the point in time when it ceases to occupy the site - see the Atomic Weapons Establishment Act 1991 Schedule 1 paragraph 6(2) (Ref 3).

The circumstances and regulatory commitments which led to Licence Instrument 511 being placed on AWE plc in March 2007

Intermediate level waste ("ILW") has been being generated at the Establishment since the 1950s. For many years, the Establishment disposed of drums of ILW by encapsulation and dumping them at sea in common with much of the nuclear industry at the time. However, in 1983, a moratorium on disposal at sea came into force. From 1983 to the present day there has been no means of disposing of the vast majority of solid ILW within the UK, the only exception being ILW which it has been possible to recategorise and dispose of as Low Level Waste ("LLW"). Since 1983, all solid ILW generated by the Establishment has been accumulated on site and stored on site in purpose designed drums with a nominal volume of 205 litres ("drums") or other approved transport / storage package.

At the time that the Establishment was first contractorised by the MOD in 1993, it had accumulated [redacted] drums (see schedule at Annex A), all of which were stored on site and all of which were owned by the MOD. Some of those drums had been generated and stored on site since before the 1983 moratorium on sea disposal. S26

Throughout the period of the first M&O contract, Hunting-BRAE Ltd continued to accumulate drums of ILW, all of which were stored on site. Hunting-BRAE Ltd did not recategorise and dispose of any ILW as LLW during that 7 year period.

In July 1999, the nuclear regulator issued Hunting-BRAE Ltd with Licence Instrument 31 (Ref 4) (under subparagraph (5) of Licence Condition 32), Licence Instrument 32 (Ref 5) (under subparagraph (4) of Licence Condition 32) and Licence Instrument 33 (Ref 6) (under subparagraph (5) of Licence Condition 32). These Licence Instruments related to water treatment sludges categorised as ILW and accumulated in tanks as a result of the moratorium on sea disposal. In due course AWE plc complied with each of these Licence Instruments within the timeframe set out in them.

In November 1999, the nuclear regulator issued Hunting-BRAE Ltd with Licence Instrument 41 (Ref 7) (under subparagraph (4) of Licence Condition 32). This Licence Instrument related specifically to the accumulation and storage of ILW generated in the Establishment's [redacted] facilities. If it had not been superseded (see LI 25) this Licence Instrument would ultimately have adversely impacted the Establishment's ability to deliver its core mission to the MOD because of the challenging time and technical requirements imposed. S26

On 23 March 2000, the nuclear regulator issued Hunting-BRAE Ltd with Licence Instruments 48 (Ref 8) and 49 (Ref 9) under subparagraph (4) of Licence Condition 32. The date of these Licence Instruments is noteworthy in that it was less than 2 weeks before Hunting-BRAE Ltd's Nuclear Site Licence was revoked. Thus they were issued at a time after the M&O contract between the MOD and AWE Management Limited had been agreed but before AWE plc had been granted a Nuclear Site Licence.

Licence Instrument 48 specified that Hunting-BRAE Ltd ensure that: "at least 130 ILW legacy drums accumulated in [certain on site storage facilities] on 1 January 2000 have been

inspected and either sentenced as low level waste for disposal or those that are found to be ILW reduced in volume and then packaged in Nirex standard containers (or an equivalent standard) and placed in a suitable store for radioactive waste material at the Aldermaston site by 31 December 2005."

Licence Instrument 49 specified that Hunting-BRAE Ltd ensure that: "at least 670 ILW legacy drums accumulated in [certain on site storage facilities] on 1 January 2000 have been inspected and reduced in volume and then packaged in Nirex standard containers (or an equivalent standard) and placed in a suitable store for radioactive waste material at the Aldermaston site by 31 December 2006."

AWE plc's Nuclear Site Licence came into force on 1 April 2000. All existing Licence Instruments, including Licence Instruments 48 and 49 (which had been issued 9 days earlier) and Licence Instruments 31, 32, 33 and 41, were transferred to AWE plc.

LI 49 required AWE plc to reduce in volume and repackage 670 drums of ILW by 31 December 2006, although it did not specify the method of reduction in volume. By reason of the timeframe set out above, AWE Management Limited as the contract holder responsible for funding AWE plc's operations did not, as far as we are aware, have any opportunity to make any representations to the nuclear regulator about the feasibility of the 31 December 2006 deadline. Nor was it able to have regard to this requirement when bidding for the M&O contract because that contract was finalised and agreed before LI 49 was issued.

As at 1 April 2000, the Establishment had accumulated [redacted] drums (see schedule at Annex A), all of which were stored on site. S26

In May 2000, the nuclear regulator published a report entitled "Relicensing of the Atomic Weapons Establishment to AWE plc" (Ref 10). The report stated amongst other things:

> "The MOD provided an assurance that as regards the funding level for decommissioning and waste management, the management contractor is committed to meeting all identified decommissioning and waste management requirements known at the point of bidding. To the extent that regulatory requirements imposed on AWE plc increase the commitment associated with decommissioning and waste management beyond that contemplated in the Contract, the associated additional costs would fall to MOD."

This was the common understanding of AWE plc, the nuclear regulator and the MOD in May 2000. For the reasons set out above, LI 48 and LI 49 did not constitute "identified decommissioning and waste management requirements known at the point of bidding".

As stated above, LI 49 did not specify the method of reduction in volume. As at 1 April 2000, possible methods would in theory have included:

- High force compaction of existing whole drums and encapsulation of them in new containers ("supercompaction");

- Emptying existing drums, sorting the contents and repackaging the reduced ILW contents in new containers in combination with techniques including decontamination, shredding, low force compaction and thermal treatment ("segregation").

[redacted] S43

On 23 October 2003, AWE plc wrote (Ref 11) to the nuclear regulator on the issue of the management of ILW at the Establishment. In relation to LI 49, the letter noted that an option study had been completed and presented to the nuclear regulator in December 2002. The study had recommended segregation as the preferred process. AWE plc had continued to develop the treatment proposals following on from the options study but had significant concerns over the unspecified throughput and lack of detailed characterisation of feed. The letter went on to set out AWE plc's proposed way forward to support the intent of LI 49 based on current operational experience and the development of the option study to date. The proposed way forward included improved waste characterisation, waste minimisation at source and a number of preliminary studies on potential treatment processes.

On 26 November 2003, the nuclear regulator issued Licence Instrument 25 (Ref 12). It should be noted that LI 25 expressly stated that it superseded LI 41 notwithstanding the fact that it was made under Licence Condition 29 rather than Licence Condition 32 and addressed different issues. The deadline for compliance with Licence Instrument 25 was 31 December 2006. On 4 December 2006, the nuclear regulator wrote (Ref 13) to AWE plc confirming that the requirements of LI 25 had been met.

[redacted] S43

For a range of reasons, including the safety of employees, AWE plc accordingly formed the view that supercompaction would be preferable to segregation. As a result, AWE plc began work on an alternative plan whereby it would purchase a supercompactor and re-kit an existing building on site as a supercompaction facility.

On 28 December 2005, the nuclear regulator wrote to AWE plc (Ref 15) confirming that the requirements of LI 48 had been met. LI 48 had offered two options - recategorisation and disposal as LLW or reduction in volume and repackaging. AWE plc had adopted the first option and complied with it by recategorising and disposing of over 130 drums as LLW.

On 16 February 2006, AWE plc wrote to the nuclear regulator (Ref 16) stating that the preferred treatment option was now a central compaction process and that the project plan would now be updated and the forward work plan agreed. The fact that AWE plc would not be able to comply with the 31 December 2006 deadline for processing 670 drums was already known to the nuclear regulator by this time.

On 27 February 2006, the nuclear regulator wrote to AWE plc (Ref 17) noting that the specification in LI 49 was based on the expectation that an ILW treatment and conditioning plant would be ready to start active commissioning in 2005. The nuclear regulator's letter stated amongst other things:

> "Clearly, AWE will be unable to meet this requirement.
> In order for NII to **supersede** this Licence Instrument, we are seeking, by November 30th 2006:
> a) an agreed product specification for the ILW treatment plant
> b) an agreed programme of future work to include the construction and active commissioning of an ILW treatment plant.
> On the basis that your current preferred option of supercompaction is selected, please note that it remains NII's expectation that the treatment plant should include single stage conditioning (grouting) to a safe passive form. Any treatment option that does not include this element will need very robust justification and will be subject to NII assessment prior to any decision to supersede LI 49.
> NII looks forward to continued dialogue on this issue." (emphasis added)

On 6 April 2006, AWE plc wrote (Ref 18) to the nuclear regulator confirming the position with regards to LI 49.

On 19 December 2006, AWE plc wrote (Ref 19) to the nuclear regulator about LI 511. Enclosed with that letter was a Solid Intermediate Level Waste Conditioning Proposal, reference DMP/ILW/LL19999859 Issue 1.

The proposal expressly stated that the proposed Solid Intermediate Level Waste Treatment Facility would be located in an existing building at the Establishment (paragraph 1.2). It also expressly stated that it was based on a Preliminary Safety Report ("PSR") (Ref 20) and that the next stage in the staged safety approval process would be the Pre-Construction Safety Report ("PCSR"). Paragraph 4 made the point that the risk assessment was that used in the PSR rather than a PCSR. Paragraph 4.6.2 made the point that a preliminary statement on Criticality Safety had been produced in support of the PSR but that a full Criticality Safety Assessment would be required at the PCSR stage.

At this time the project was, therefore, at the early concept stage and the concept required validation before it could be pursued further.

The nuclear regulator's project assessment (Report No. 08/2007 - for the avoidance of doubt, this document was not provided to AWE plc until Autumn 2014) (Ref 21) following consideration of the proposal stated that: "This programme appears to be readily achievable."

We do not know the details of the internal processes followed by the nuclear regulator before it formed this opinion and prepared this report. However, we assume that they would have been rigorous and detailed. We also assume that, if the nuclear regulator had not considered the programme to be "readily achievable", it would not have issued Licence Instrument 511 in the prescriptive form that it did.

On 9 March 2007, the nuclear regulator issued Licence Instrument 511 (Ref 22) under subparagraph (4) of Licence Condition 32. The wording of the LI 511 Specification is important and we therefore set it out in full in this document.

> "The Health and Safety Executive, for the purposes of Licence Condition 32(4) of Schedule 2 attached to Nuclear Site Licence No. 77, hereby specifies that at least 1000 nominal 205 litre Intermediate Level Waste feed drums are reduced in volume and encapsulated by 20th February 2014 as described in:
> AWE Aldermaston
> ILW Conditioning Proposal for Solid Intermediate Level Waste Project
> Issue No: 1
> Reference: DMP/ILW/LL19999859
> Issue Date: 12/12/2006
> and accompanying letter referenced NII 2562R and dated 19 December 2006.
> This specification **supersedes** Licence Instrument No. 49 issued under Nuclear Site Licence No: 64." (emphasis added)

We draw attention to five points in relation to the wording of LI 511.

(1) It was not a routine Licence Instrument. This raises the question whether either the Treasury Solicitor's Department or the HSE Solicitor should have provided legal advice in respect of it before it was issued and whether either of them did.
(2) It went further than LI 49 in that it specified the method of reduction in volume (supercompaction on site) whereas LI 49 had required reduction in volume and repackaging but had left it to the licence holder to select where and how to achieve this.
(3) It was highly prescriptive in nature. We illustrate this point by comparing LI 511 with what we believe to be the equivalent, but much less prescriptively worded, Licence Instrument (LI 326) issued to Sellafield. LI 326 provides that: "(b) By 1 August 2020 at least 90% of the total volume of all Plutonium Contaminated Material originating from operations prior to 1 August 2000 and which has been accumulated as radioactive waste shall be stored in a safe passive form."
(4) It expressly incorporated into the Licence Instrument AWE plc's proposal dated 12 December 2006 and covering letter dated 19 December 2006.
(5) There was no suggestion that the issuing of LI 511 represented enforcement action in respect of the non-compliance with LI 49's 31 December 2006 deadline, rather LI 511 expressly stated that it superseded LI 49.

The circumstances and decisions taken by AWE plc leading up to AWE plc declaring formally to ONR on 30 August 2011 that LI 511 would not be met

As stated above, the next stage in the staged safety approval process was the preparation of a PCSR. In summary, work done in relation to this process identified that some of the assumptions within the PSR which had underpinned the proposal could not be substantiated. More detail is provided below but, in short, the safety of the plan to re-kit an existing building (see paragraph 1.2 of the proposal) could not be substantiated to the requisite standard. As events unfolded, it became clear that the only means of meeting the requisite standard of safety would have been to construct a new building to house the supercompactor facility.

In March 2008, it was agreed (Ref 23) that the project should go forward to the MOD Facilities Review Board. This was a necessary step because the project would in due course need to be funded by the MOD. On 29 April 2008, the project Gate approval was presented at the MOD Facilities Review Board (Ref 24). The presentation asked the MOD Facilities Review Board for approval of £17m at Main Gate to complete the implementation phase for the installation of a Solid ILW Treatment Plant. As a result, detailed designs were prepared and procurement initiated for certain long lead items. In particular, procurement was initiated for a supercompactor and ancillary equipment and in due course a supercompactor was purchased.

On 26 July 2010, AWE plc wrote (Ref 25) to the nuclear regulator providing a consolidated response in relation to a range of safety related queries that had been raised by the nuclear regulator. It can be seen from that letter that there was a wide range of unresolved safety issues at that time including seismic qualification, criticality shielding and containment, which needed to be resolved in order to establish the viability of the re-kit project.

Seismic qualification proved to be an insurmountable safety issue. On 16 September 2010, a Project RLI meeting was held (Ref 26). The view taken at the meeting was that the PSR had been underpinned by an unfounded assumption that the degree of seismic qualification required for the installation was low and that the level of seismic resistance of the existing building earmarked for re-kitting would be sufficient.

On 18 October 2010, AWE plc updated the MOD Facilities Review Board (Ref 27) in relation to these issues. At an AWE plc Executive Review Meeting on 24 November 2010 (Ref 28), the decision was taken to close the project to re-kit an existing building. The purchase of the supercompactor would be completed and a study would be undertaken to assess alternative options.

The decision to close the project to re-kit an existing building made it inevitable that AWE plc would not be able to comply with LI 511's February 2014 deadline. The underlying cause of this was, of course, that the assumptions that underpinned the PSR were in hindsight overly optimistic and that it would never have been possible to re-kit an existing building on site in such a way as to satisfy all of the relevant safety requirements.

On 11 April 2011, AWE plc updated the MOD Facilities Review Board (Ref 29) on the close out of the project to re-kit an existing building and the work being done on a replacement project to construct a new building to house the supercompaction facility ("the new build project"). [redacted] S43

On 13 May 2011 (Ref 30), AWE plc's Director Environment Safety and Health visited the nuclear regulator at its offices in Bootle to explain that the February 2014 deadline in LI 511 was no longer achievable. This was also reflected in the minutes of the Level 1 RIM held on 18 May 2011 (Ref 31). We suggest that this information would not have come as a surprise to the nuclear regulator given the level of communication between AWE plc and it prior to this date in relation to the difficulties in substantiating the re-kit project (see for example the letter dated 26 July 2010 referred to above).

After May 2011, AWE plc sought to develop an overarching strategy for dealing with Higher Activity Waste ("HAW") addressing all waste forms and the requirement for long term storage. In June 2011, a presentation was made to AWE plc's Executive Meeting on the totality of the HAW issues. At the request of AWE plc's Executive, an HAW Programme Board was established to oversee the HAW programme (Ref 32).

AWE plc also sought to persuade the nuclear regulator to renegotiate the terms of Licence Instrument 511. As a matter of law, the nuclear regulator had the power to amend, vary, replace or supersede Licence Instrument 511 at any time. At this time, AWE plc was, of course, aware that the nuclear regulator had expressly superseded LI 41 when it issued LI 25 (under a different Licence Condition) and had expressly superseded LI 49 when it issued LI 511. On neither of these occasions did the nuclear regulator state that the second Licence Instrument superseding the first one constituted enforcement action.

On 30 August 2011, AWE plc wrote (Ref 33) formally to the nuclear regulator notifying it that AWE plc would not be able to comply with LI 511 by the February 2014 deadline.

On 17 October 2011, following a process of dialogue and engagement, [redacted] S43 in managing radioactive liabilities on a case by case basis, where there is a strong business case for doing so".

<u>The circumstances and decisions taken by AWE plc during the period August 2011 to February 2014, when the deadline for LI 511 expired</u>

On 9 September 2011, the MOD Facilities Review Board concluded that no further expenditure was to be incurred on developing options until it had endorsed a strategy save that routine expenditure on waste disposal would continue (Ref 35). By this date, the capital cost of the new build project had been estimated at approximately £78m, which was approximately £50m more than the estimated cost of the re-kit project previously sanctioned

by AWE plc and the MOD. The supercompactor and ancillary equipment which had already been purchased were sold to the NDA for use at Dounreay.

On 11 May 2012, the nuclear regulator wrote to AWE plc (Ref 36). The letter set out the nuclear regulator's understanding of AWE plc's commitments. It stated: "These commitments are intended to put in place measures to demonstrate adequate progress to meet the intent of LI 511." It went on to set out three "milestones" to assist with the tracking of progress. The timeframe for the three milestones was 30 June 2012, 30 June 2013 and 31 December 2013.

In the period since 11 May 2012, AWE plc has focussed on (i) achieving the three milestones on time (ii) progressing its HAW programme and (iii) attempting to identify the best option for achieving the reduction in volume and repackaging of drums of ILW for approval and funding by the MOD. There is clearly significant overlap between these three aims.

In broad terms, two credible options for achieving the reduction in volume and repackaging of drums of ILW were identified during this period. The first was, as described above, to construct a new building at the Establishment to house a supercompactor facility. The second was to [redacted] S43 for storage on site.

The second option has a number of potential advantages, which of course fall to be weighed against the potential disadvantages. [redacted] S43 building a supercompaction facility at the Establishment. Our understanding is that the MOD, as owner of the Establishment, does not, for reasons of national security, wish the site to become a waste processing facility for external organisations. The site is currently excluded from Safeguards inspections by the International Atomic Energy Authority ("IAEA") for reasons of national security. However, if it became a waste processing facility for external organisations, this would render it liable for inspection by the IAEA under International Safeguard requirements. Thus, if a supercompaction facility were built at the Establishment, the MOD would not allow it to be used to process third party civilian waste streams. This means that if a supercompaction facility were built at the Establishment it would not, over its lifetime, run to anything close to full capacity. This is a relevant consideration for the MOD when deciding whether building a supercompaction facility at the Establishment would represent the best use of public money.

The first milestone was for AWE plc to produce an initial plan by 31 June 2012. AWE plc provided the nuclear regulator with an Initial High Level Plan dated 27 June 2012 (Ref 37). The Plan identified the two options referred to above. Plan A was in effect [redacted] S43 Plan B was in effect building a supercompaction facility at the Establishment.

The Plan also set out some of the progress made in delivering the wider HAW programme and some ongoing work. The Plan made the point that approximately 1,300 original legacy

ILW drums dating from before 1 January 2000 had been both reclassified as LLW and disposed of to the Low Level Waste Repository. The Plan contended that the progress to date represented at least the equivalent of the reduction in risk that would be achieved by the supercompaction and encapsulation of 1,000 drums.

On 29 August 2012, the HAW Programme team met [redacted] S43 to discuss Plan A (Ref 38). The option under consideration involved [redacted] up to 5,000 of the Establishment's higher activity drums. If this could be achieved without undue interference with [redacted] S43 there would be substantial advantages not only for the Establishment but also more widely as 5,000 higher activity drums would be compacted and encapsulated some years earlier than would be feasible under Plan B.

On 31 August 2012, AWE plc published a "Credible Options" paper (Ref 39) within the [redacted] reflecting the potential [redacted] treatment option. S43

On 26 November 2012, AWE plc ran a briefing workshop for MOD on the whole-life implications of the HAW programme (Ref 40). There was agreement to undertake Joint Investment Appraisal. The initial AWE plc/MOD Investment Appraisal workshop took place on 15 January 2013 (Ref 41).

On 29 November 2012, the nuclear regulator [redacted] (Ref 42) setting out the circumstances in which it would give full consideration to a request [redacted] to process a defined number of the Establishment's drums [redacted] S43 S43 S43

In April 2013, AWE plc published an "Initial Gate B Preferred Option Position Statement" (Ref 43).

The deadline for the second milestone was 31 June 2013. AWE plc provided the nuclear regulator with a Forward Plan dated 27 June 2013 (Ref 44). The covering letter stated that the Forward Plan would be further refined through the ongoing Joint Investment appraisal process with the MOD.

The nuclear regulator did not formally respond to the letter and Forward Plan but, at the Level 4 HAW RIM on 10 September 2013 (Ref 45), it accepted that the second milestone (described as the second "deliverable") had been met and this was recorded in the minutes, which were subsequently circulated, reviewed and agreed at the Level 4 HAW RIM on 15 October 2013 (Ref 46).

In October 2013, an AWE plc/MOD Joint Investment Appraisal took place and resulted in a formal Investment Appraisal report endorsed by the HAW Programme Board.

The deadline for the third milestone was 31 December 2013. On 18 December 2013, AWE plc provided the nuclear regulator with Forward Plan Version 1.5 (Ref 47). The explanatory notes set out the main elements of the HAW Programme and summarised AWE plc's delivery against the three milestones set out in the nuclear regulator's letter dated 11 May 2012.

The AWE plc HAW Strategy (Ref 48) was updated in December 2013 to reflect Forward Plan Version 1.5.

In January 2014, AWE plc published an Interim Update (Gate B Preferred Option) Paper (Ref 49).

On 27 February 2014, AWE plc formally notified the nuclear regulator (Ref 50 & Ref 51) that Licence Instrument 511 had not been met by the deadline of 20 February 2014. The letter made the point that: "there is no significant short to medium term effect on nuclear safety and there has not been any degradation of 'defence-in-depth' as a result of the Licence Instrument expiry."

On 24 March 2014, the HAW Programme presented an Initial Business Case to AWE plc's Sites and Functions Sanctioning Board. The Board agreed to fund a suite of feasibility studies and planning activities to enable Investment Appraisal 2 to be reached by May 2016 (Ref 52). One of the feasibility studies would be undertaken [redacted] S43 for agreement by the [redacted] to feed into the planned second investment appraisal.

Representations

This section is divided into the following subsections:

(1) The nature and purpose of Licence Condition 32;
(2) Relevant achievements by AWE plc since 1 April 2000;
(3) Application of the Enforcement Management Model ("EMM") - the enforcement conclusion;
(4) Public interest considerations.

The nature and purpose of Licence Condition 32

We suggest that it is important to bear in mind that neither section 4(10) of the Nuclear Installations Act 1965 nor the previous section 4(6) made contravention of a Licence Instrument a criminal offence. The offence created by those sections concerns the contravention of a Licence Condition.

It is generally recognised that nuclear licence conditions are essentially non-prescriptive in nature. By this we mean that they have a purpose behind them, require the licence holder to work towards satisfying that purpose, but leave it to the licence holder to decide the method of doing so.

Thus Stephen Tromans QC writes in Nuclear Law: "The regime of nuclear site licensing is essentially non-prescriptive. The licence conditions set goals but do not specify the means of achieving them." (2nd edition, page 95)

The nuclear regulator has previously published a document entitled "Nuclear Site Licence Conditions" setting out the full text of each of the 36 standard licence conditions together with explanatory text. The explanatory text for licence condition 32 was as follows:

> "The purpose of this Condition is to ensure that the licensee has adequate arrangements to ensure that the production and accumulation of radioactive waste on the site is minimised. The Condition also gives HSE the power to ensure that radioactive waste is stored under suitable conditions, and that adequate records are kept to enable HSE to monitor the management of radioactive waste on nuclear licensed sites."

Subparagraph (1) of Licence Condition 32 is consistent with this purpose and with the essentially non-prescriptive nature of licence conditions. Subparagraph (4) of Licence Condition 32 grants the nuclear regulator power to issue Specifications but is expressed to be without prejudice to subparagraph (1).

Licence condition 32 is, of course, not the only licence condition which addresses the issue of radioactive waste. It should be seen as part of a package which also includes Licence Conditions 33, 34 and 35.

Relevant achievements by AWE plc since 1 April 2000

The focus of this subsection is achievements that relate to the purpose behind Licence Condition 32. However, because Licence Condition 32 forms part of a package which also includes Licence Conditions 33, 34 and 35, achievements that relate to the purposes of those Licence Conditions are also included.

Licence Condition 35 relates to decommissioning. Since AWE plc became the licence holder in 2000, it has completed seven nuclear decommissioning projects through to demolition. This should be regarded as a considerable achievement. In addition, three substantial decommissioning projects are currently underway. It is our contention that AWE plc is in compliance with Licence Condition 35 and, as far as we are aware, the nuclear regulator shares this view.

Licence Condition 33 relates to the disposal of radioactive waste. As discussed below, since 1 April 2000, AWE plc has successfully disposed of substantial quantities of LLW, including waste that was believed to be ILW at the time that AWE plc became licence holder but which it has been able to recategorise as LLW. It is our contention that AWE plc is in compliance with Licence Condition 33 and, as far as we are aware, the nuclear regulator shares this view. ILW cannot, of course, be disposed of because there is currently no Geological Disposal

Facility within the UK. Thus all inherited and generated ILW has to be stored on site at the Establishment.

Licence Condition 34 relates to the prevention of the leakage and escape of radioactive waste stored on site at the Establishment. It is our contention that AWE plc is in compliance with Licence Condition 34 and, as far as we are aware, the nuclear regulator shares this view.

Licence Condition 32 relates to the accumulation of radioactive waste. We consider that it may be helpful for us to summarise the key relevant achievements by AWE plc in relation to this Licence Condition since it became the licence holder.

(1) AWE plc successfully complied with Licence Instruments 31, 32, 33, 25 and 48.
(2) A new storage building has been constructed and commissioned.
(3) Old storage buildings have been closed.
(4) In 2003/04 there was a successful programme to overpack the oldest drums held in converted laboratory buildings. They were then stored in a purpose designed store.
(5) Implementation of optimised storage for drummed HAW through the use of metal post pallets. This has resulted in an improvement in the ability to retrieve specific drums and ensures that no load is imposed on the drums during storage.
(6) A radiography plant and suite was constructed and commissioned.
(7) A programme of non-intrusive x-raying of drums and measurement of the content of fissile material was undertaken.
(8) Drums have been inspected and characterised. Over 99% of the drums now have a modern standard assay and real time radiograph as part of the formal waste record.
(9) Over 3,800 drums and other packages have been recategorised as LLW and disposed of to the Low Level Waste Repository.
(10) There has been a significant reduction in the rate of production and accumulation of drums. In December 2006, the estimated future rate of generation of S26 drums was [redacted] per year. As a result of improved decommissioning practices and improved waste assay techniques, the predicted future rate of generation has reduced S26 to [redacted] drums per year.
(11) The HAW programme was established in September 2011 and is being progressed.
(12 [redacted] S43
(13) Work has been done on direct encapsulation capability, which is now in detailed design. This capability could potentially be used to encapsulate the small number of drums with higher levels of higher fissile content.

In summary, it is our contention that AWE plc has complied with and remains in compliance with subparagraph (1) of Licence Condition 32. Given that AWE plc complied with Licence

Instruments 32 and 48 in the required timeframe, we also suggest that there has been partial compliance with subparagraph (4) of Licence Condition 32 as both of those Licence Instruments were made under that subparagraph.

Application of the EMM - the enforcement conclusion

We are pleased to note that the EMM1 form ("the EMM1") sent to AWE plc under cover of a letter dated 5 September 2014 (Ref 53) stated that there was no actual harm and no risk gap. We respectfully agree. However, there are a number of areas in which we suggest that the EMM1 erred and in respect of which we now invite you to reach a different conclusion. There are three such areas that relate to the enforcement conclusion. They are: the authority of the appropriate standard; how well the standards are complied with; and whether AWE plc has a history of relevant enforcement action being taken against it. We have no doubt that you will readily appreciate that if a different view had been taken in respect of any one of those three areas, the EMM1 would not have identified prosecution as the appropriate enforcement conclusion.

Standard

The EMM1 took the view that the standard should be characterised as "Established". We are not sure what was considered to be the relevant standard and, in particular, whether it was the Licence Condition or Licence Instrument 511. If it was the Licence Condition we would respectfully agree. However, if, as we consider probable, it was Licence Instrument 511, we suggest that the appropriate category would be "Interpretative". Our analysis, which we invite you to agree with, is that Licence Instrument 511 is not a routine Licence Instrument and, as far as we are aware, is a bespoke Licence Instrument which has not been issued to any other organisation which falls under the nuclear regulator's jurisdiction. In the circumstances, we suggest that Licence Instrument 511 does not fall within the definition of an "Established" standard which is:

> "Codes of Practice and other standards linked to legislation, e.g. CEN standards, providing specific standards of health, safety and welfare. Also published or commonly known standards of performance interpreted by HSE, HSE's technical Support Groups (SG) or other specialists, industry or other organisations, as levels of performance needed to meet a general or qualified duty under health and safety law."

Compliance

We cannot be sure why the EMM1 took the view that the level of compliance should be categorised as "Absent" rather than "Inadequate" or "Minor" or against what standard AWE plc's level of compliance was being measured. We can only assume that the reasoning was

that the failure to reduce in volume and encapsulate one or more drums meant that there had been a total failure to comply with Licence Instrument 511. For the reasons set out above, if the standard against which compliance was measured was solely Licence Instrument 511 we would suggest that that standard was "Interpretative" rather than "Established".

In order to develop our representations on the level of compliance, it is necessary at this point to make some observations about how the failure to comply with Licence Instrument 511 falls to be analysed conceptually within the framework of the EMM.

A fundamental premise of the EMM is that if the Standard against which the level of compliance is judged is not reached, the range of ways in which the dutyholder can fall short form a spectrum to which the categories "Absent", "Inadequate" or "Minor" can be applied. This means that in respect of the Standard in question, it must always be possible to fall short in a manner best described as "Inadequate" or "Minor". If the Standard in question is completely black or white with no shades of grey such that failure to comply is automatically deemed "Absent" the whole EMM exercise would, we suggest, be flawed. Indeed the definition of "Absent" is so strongly worded that we venture to suggest that one would only expect it to apply rarely.

We are concerned that the completion of the EMM1 may have been affected by this potential conceptual flaw in the EMM. Whilst Licence Conditions are essentially non-prescriptive and LI 49 did not specify the method of reduction in volume (or whether it had to be on site), LI 511 was completely prescriptive. At the time that it was issued there was no supercompaction facility on site at the Establishment. In order for AWE plc to supercompact and encapsulate a single one of the 1,000 drums required by LI 511 it was necessary first for AWE plc to construct and commission a supercompactor facility at the Establishment by February 2014. Once constructed, the actual supercompaction and encapsulation of drums would be a comparatively straightforward process.

We do not know for certain what reasoning was behind the completion of the EMM1. However, if it were to the effect that supercompacting and encapsulating nearly 1,000 drums would be "Minor" and supercompacting and encapsulating some drums but far fewer than 1,000 drums would be "Inadequate", we suggest that such reasoning would be flawed. This is because it would in effect leave no real scope for the concepts of "Inadequate" and "Minor" to operate.

Equally if the reasoning behind the completion of the EMM1 were to the effect that being part way through constructing a supercompaction facility would be "Minor" and having obtained planning permission but not commenced construction would be "Inadequate", we suggest that such reasoning would be also flawed. The reference to "planning consent" in the nuclear regulator's letter dated 11 May 2012 (Ref 36) and to the lack of "any tangible progress towards meeting the requirements of LI 511" in the Investigation Report that accompanied the EMM1 suggest that such reasoning may have been adopted . However, such an approach would, we suggest, wholly ignore the contractual and financial realities which, as explained above, meant that the substantial capital expenditure involved in constructing a

supercompaction facility always needed to be funded by the MOD. As stated above, the MOD Facilities Review Board concluded in September 2011 (Ref 35) that there should be no further expenditure on developing options until it had endorsed a strategy. This was, of course, over two years before LI 511 expired. Thereafter AWE plc has worked on developing a strategy with the MOD [redacted] Given that S43 background, the idea that AWE plc should nevertheless have incurred the substantial expense of obtaining planning consent and asked the MOD to provide public funds for that purpose is, we suggest, flawed.

In the light of the problems identified above in attempting to judge AWE plc's level of compliance within the EMM against the highly prescriptive nature of LI 511, we suggest that the better approach, and indeed the correct approach, is to judge it against Licence Condition 32 and its underlying purpose.

We suggest that, approached in this way, AWE plc's level of non-compliance is best categorised as "Minor". We rely on, without repeating them, the list of relevant achievements set out above and make the following more general points.

AWE plc successfully complied with Licence Instruments 31, 32, 33, 25 and 48.

LI 48 and LI 49 were issued to Hunting-BRAE Ltd on the same day under subparagraph (4) of Licence Condition 32. They should accordingly be viewed as a package rather than in isolation from each other.

Had LI 49 and LI 511 permitted drums to be inspected and sentenced as LLW for disposal, as LI 48 did, AWE plc would have fully complied with Licence Condition 32. The reason there has not been full compliance relates to the additional prescriptive element of LI 49 and thereafter LI 511.

However, the overall outcome has been better than that required by strict compliance with LI 49 and LI 511. Supercompaction and encapsulation on site of 1,000 drums would have achieved compliance with LI 511 notwithstanding the fact that the drums would have remained on site and the number of drums containing ILW would not have been reduced. In contrast, AWE plc has achieved the disposal and compaction off site of well over 1,000 of the drums of ILW to which LI 511 applied when it was issued in March 2007. It has achieved this through its programme of inspection and recategorisation which has enabled over 3,800 drums (including over [redacted] that pre-date March 2007 - see schedule at Annex A) to be S26 recategorised as LLW and disposed of accordingly.

We repeat the point that AWE plc complied with Licence Instruments 32 and 48 in the required timeframe. In the circumstances, we suggest that it would not be right to categorise AWE plc's compliance with subparagraph (4) of Licence Condition 32 as "Absent".

We also repeat the point that AWE plc has, since 11 May 2012, been working towards delivering the three milestones set out in the nuclear regulator's letter of that date. Given that the nuclear regulator has accepted that the second milestone has been met, we suggest that it

would not be right to categorise AWE plc's compliance with the intent of LI 511, or the Licence Instrument itself, as "Absent".

Previous enforcement action

The EMM1 took the view that there was a history of previous relevant enforcement action. We are not sure what action was thought to constitute previous relevant enforcement action. However, if it was the fact that the nuclear regulator issued Licence Instrument 511 in March 2007, we strongly suggest that this cannot now be relied upon as previous relevant enforcement action when it was not so characterised at the time. As set out above, LI 511 expressly stated that it superseded LI 49 and contained no suggestion that it constituted a form of enforcement action.

The superseding of one Licence Instrument by another does not of itself constitute enforcement action. The superseding of LI 41 by LI 25 illustrates this point. The regulatory framework for the nuclear industry grants the nuclear regulator very wide powers to issue new Licence Instruments and vary or revoke existing ones at any time as it thinks fit. Clearly, the exercise of such powers is not inherently the taking of enforcement action. If in a specific instance an enforcement decision were taken to issue a Licence Instrument, we suggest that that would need expressly to be communicated to the licence holder at the time that the Licence Instrument was issued.

Public interest considerations

We recognise that applying the EMM to the facts of this case is not straightforward. Nevertheless, for the reasons set out above, we suggest that the EMM, when applied correctly, does not result in an enforcement conclusion of prosecution.

However, the EMM itself recognises that it is at best only a tool to reaching an enforcement decision. This is well explained in the current version (Operational version 3.2) of the EMM issued by the HSE in paragraphs 6, 7, 8, 12 and 15 of the Summary. Paragraph 7 states:

> "The EMM is a straightforward linear model and so cannot truly capture all the nuances and complexities of discretionary decision making in all circumstances. While the EMM provides a framework for driving consistency, it is crucial that inspectors' discretion is not fettered by artificially constraining all decisions to the EMM."

Paragraph 6.10 of the ONR Guide to the use of the EMM in ONR states:

> "Table 5.2 in OC 130/11 should be used when considering enforcement action ... for those legal duties which in themselves do not directly result in control of risk ... Table 5.2 does not include a column indicating an initial enforcement expectation of

> prosecution. This is because it is not usually appropriate to prosecute in relation to compliance and administrative arrangements that do not in themselves give rise to risks unless there are relevant duty holder/strategic factors ..."

Thus ordinarily there would not be a prosecution in a case in which, as here, the EMM1 identifies no actual harm and no risk gap. Further, the Investigation Report which accompanied the EMM1 expressly stated that: "The legacy drums do not currently present a risk in their current form or storage arrangement".

The reason why prosecution was identified as the enforcement conclusion by the EMM1 was that categories "Established", "Absent" and "previous relevant enforcement action" were used. We have set out above our arguments in relation to those categories. We invite you to agree with those arguments but, at the very least, to acknowledge that the correct categorisation is plainly debatable and that it is therefore particularly important to bear all relevant considerations in mind when reaching the enforcement decision.

We suggest that the combined effect of the following additional considerations, not all of which are obviously catered for within the "straightforward linear model" that is the EMM, is that prosecution of AWE plc would not be in the public interest.

First, AWE plc has at all times kept the nuclear regulator well informed about progress in relation to Licence Instruments 49 and 511 and acted in good faith in its dealings with the nuclear regulator.

Secondly, AWE plc takes its responsibilities for handling radioactive waste seriously. It has good systems in place and a good record in this area as evidenced by the successful compliance with Licence Instruments 31, 32, 33, 25 and 48.

Thirdly, it is important to remember that the Establishment and all the waste accumulated and stored there is owned by the MOD. AWE plc has to operate within parameters set by the MOD. One such parameter is the fact that, for reasons of national security, the MOD does not wish the Establishment to become a waste processing facility for external organisations and would not permit the site to be used to process third party civilian waste streams.

Fourthly, the arrangements between AWE plc and the MOD have at all times been such that AWE plc's ability to comply with LI 49 and LI 511 has been dependent on the MOD providing the necessary funding from the public purse. The capital and through life costs are not insubstantial and it is unsurprising that the MOD has sought to scrutinise proposals to ensure that any expenditure of public funds can be justified. Given that the MOD is, of course, itself an organ of the State, we suggest that a prosecution of AWE plc would in the circumstances be unfair.

Fifthly, we suggest that, in considering the public interest factors expressly identified in the EMM, the EMM1 erred in stating that prosecution would result in the benchmark being achieved. We do not know for sure what the "benchmark" was thought to be. However, if it were thought to be LI 511, we suggest that it would be an inaccurate oversimplification of a

complex situation to conclude that prosecution would result in compliance with LI 511. We say this because:

(i) as stated above, AWE plc would be dependent on the MOD to provide the funds to construct a new building to house a supercompactor facility;

(ii) no final decision has been taken on whether it is preferable to build such a facility or to use [redacted] and this decision is dependent on a range of factors which are outside AWE plc's control including the need for the MOD to justify the consequent use of public money, national security considerations, and the attitude of other organisations including [redacted] S43 S43

(iii) if the decision were taken to build a facility at the Establishment, it would inevitably be many years before compliance with LI 511 were achieved.

Sixthly, we suggest that the EMM1 erred in taking the view that prosecution coincided with the public interest. The EMM definition of action coinciding with the public interest refers to the concept of targeting resources on risk. However, the EMM1 acknowledged that there was no risk and we suggest that, given the complex situation identified above, one cannot say with any confidence that prosecution would meet public expectations of the nuclear regulator.

Seventhly, we suggest that the EMM1 erred in taking the view that the functional impact of prosecution was acceptable. The EMM definition states that risk is the overriding concern and also refers to the net benefit to employees and others. However, the EMM1 acknowledged that there was no risk and we question whether any net benefit to employees or others can be identified.

Eighthly, we suggest that the EMM1 erred in taking the view that the effect of prosecution on other dutyholders would be positive. Given the bespoke and prescriptive nature of Licence Instrument 511, we suggest that one cannot say with any confidence that the effect of prosecution on other dutyholders would be positive.

Ninthly, we suggest that the Investigation Report which accompanied the EMM1 erred in the comparison that it made between AWE plc and Sellafield. The report stated that similar specifications had been issued to Sellafield and that in the case of "similar specifications at other licences ... some tangible progress had been made or alternative strategies had been proposed". Implicit in the report is the view that there would be no inconsistency between a prosecution of AWE plc and the fact that no similar prosecution has been brought against other licence holders. We suggest that when considering the enforcement principles of "proportionality", "targeting" and "consistency" it is important to recognise that LI 511 is much more prescriptive than Sellafield's LI 326 and that, if AWE plc were being measured against the standard of LI 326, it would be impossible to take the view that AWE plc's compliance with it were "Absent" and that it had made "no tangible progress towards meeting the requirements".

Tenthly, with the benefit of hindsight, it is clear that the only way in which LI 511 could be complied with was to construct a new building to house a supercompactor facility. Again with the benefit of hindsight, we would suggest that it would be rare for a new build nuclear facility to progress from concept design to commissioning and handover in under 7 years. However, that is what LI 511 in fact required although, we suggest, neither AWE plc nor the nuclear regulator appreciated that at the time that it was issued. In hindsight, the PSR contained overly optimistic assumptions and did not identify the safety considerations which were identified during the Acceptance Review Process and resulted in both AWE plc and the nuclear regulator coming to the view that the re-kit project was not feasible. We do make the point that the staged safety approval process adopted by AWE plc represents good practice. The PCSR, which the Acceptance Review Process was a pre-cursor to, is intended to be more detailed than the PSR and to identify any flawed assumptions in the PSR, as it did in this case. In accordance with good practice, these overly optimistic assumptions were subsequently identified by the Acceptance Review Process and the project "failed safe". In reality, a prosecution of AWE plc would be a prosecution for preparing a PSR which contained overly optimistic assumptions notwithstanding the fact that these assumptions were endorsed at the time by the nuclear regulator. We suggest that, in the circumstances, such a prosecution would be unfair.

Conclusion

For the reasons set out above, we suggest that the EMM, when applied correctly, does not result in an enforcement conclusion of prosecution. Further, we have identified ten other relevant considerations the combined effect of which is, we suggest, that prosecution of AWE plc would not be in the public interest.

AWE plc wishes to continue to assist ONR in its investigation and, therefore, if any further information is required, AWE plc will endeavour to assist. Any requests for further information should be sent to AWE plc's General Counsel, [redacted] who will co-ordinate any response. S40

15 December 2014

Annex A: Intermediate Level Waste Accumulation Schedule

Waste Packages	1st Apr 1993	1st April 2000	31st Dec 2006	31st Dec 2013	Current ILW Stock 1st Dec 2014
[redacted]					

S26

[1] Decay Storage: This is appropriate where relatively short lived radionuclides are present at levels that will allow disposal in a lower category within a reasonable time. For ILW reducing to LLW this is considered to be within the interim storage period of 40 to 100 years. For LLW reducing to VLLW or Exempt, this considered on a case by case basis.

Key Documents List Supporting the AWE plc. Written Statement regarding the ONR Investigation of Licence Instrument 511

Ref	Title	Reference	Date	Comment
1.	Police and Criminal Evidence Act: Investigation about Licence Instrument 511, a Specification made under licence condition 32(4).	ALD71019	23rd October 2014	Full
2.	Nuclear Site Licence, AWE plc, Atomic Weapons Establishment Aldermaston	Site Licence No. 77	29th March 2000	Full
3.	The Atomic Weapons Establishment Act 1991 Amendment Order 1997	1996 No. 1396	1st July 1997	Full
S26 4.	LI31: Storage Of Radioactive Waste Sludges Generated In The [redacted] Old Effluent Treatment Facility	ALD70360N	13th July 1999	Full
5.	LI32: Accumulation Of Radioactive Waste In The Sludge Storage Tanks	ALD70361N	13th July 1999	Full
S26 6.	LI33: Accumulation Of Radioactive Waste In The [redacted] Sludge Storage Tanks	ALD70362N	13th July 1999	Full
7.	LI41: Treatment Of Any Intermediate Level Radioactive	ALD70406N	26th November 1999	Full
8.	LI48: Specification of type and form of Intermediate Level Waste accumulated or stored on the site	ALD70440N	23rd March 2000	Full
9.	LI49: Specification of type and form of Intermediate Level Waste accumulated or stored on the site.	ALD70440N,	23rd March 2000	Full
10.	HSE: Relicensing of the Atomic Weapons Establishment to AWE plc	n/a	May 2000	Reference
11.	Intermediate Level Waste Management At AWE	NII 1985R	23rd October 2003	Full
12.	LI25: Characterisation of Intermediate Level Waste (ILW)	ALD 70601N	26th November 2003	Full
13.	LI25: Close-Out Of Licence Instrument No. 25- Specification Under Licence Condition 29(1)	ALD 70745N	4th December 2006	Full
14.	Nirex Report: The viability of a phased geological repository concept for the long-term management of the UK's radioactive waste	Report No. N/122	November 2005	Extract
15.	NII Licence Instrument No 48: Specification of Type And Form of Intermediate Level Waste Accumulated or Stored On The Site	ALD 70712N	28th December 2005	Full
16.	Issue of Director Infrastructure (DI) Report - Intermediate Level Waste Project	NII 2394N	16th February 2006	Full
17.	LI49 Progress With ILW Treatment Plant	ALD 70718N	27th February 2006	Full
18.	AWE LI49 Position Report	NII 2415N	6th April 2006	Full
19.	AWE Offer Letter to ONR on Supercompactor Process	NII 2562R	19th Dec 2006	Full
20.	Solid ILW Treatment Facility - Preliminary Safety Report	MER-190-003758	30th January 2007	Full

21.	Project Assessment Report Treatment of ILW, AWE Site, Superseding LI49 Specification	Report No. 08/2007	9th March 2007	Full	
22.	LI511: Specification of Type And Form of Intermediate Level Radioactive Waste Accumulated or Stored on The Site	ALD 70752N	9th March 2007	Full	
23.	Minutes DISB/DI: EBLI01, Solid ILW Project	EDMS1/801338D6/B/SP001	4th March 2008	Full	
24.	MOD Facilities Review Board (Presentation Only)	n/a	29th April 2008	Full	
25.	Solid ILW Treatment Plant	NII 517-018	26th July 2010	Full	
26.	AWE Solid ILW Project Review Learn and Improve Meeting	MER-190-005787	16th September 2010	Full	
27.	MOD: Minutes of the 20th meeting of the Facilities Review Board	DE&S/SWPT/PS0/555/31	18th October 2010	Extract	
28.	Minutes of AWE Executive Review Meeting	n/a	24th November 2010	Extract	
29.	MOD: Minutes of the 21st meeting of the Facilities Review Board	DE&S/SWPT/PS0 /555	11th April 2011	Extract	
30.	Update to ONR from AWE regarding issues associated with the NSILWTF Project	n/a	13th May 2011	Full	
31.	Minutes of Level 1 Regulatory Interface Meeting	ONR 060-001N	18th May 2011	Full	
32.	Minutes of AWE Executive Review Meeting	n/a	23rd June 2011	Extract	
33.	Licence Instrument Number 511 (Not meeting LI511)	ONR 157-020N	30th Aug 2011	Full	
34.	[redacted]			Full	S43
35.	MOD: Minutes of the 22nd meeting of the Facilities Review Board	e-mail	9th September 2011	Full	
36.	Licence Condition 32 (4): Accumulation of Intermediate Level Waste	ALD70936R, TRIM 2012/196863	11 May 2012	Full	
37.	AWE Higher Activity Waste, Initial Plan Response to ONR 209-131N	ONR 209-159R	27th June 2012	Full	
38.	[redacted]			Full	S43
39.	AWE Higher Activity Waste Management Credible Options (Gate A)	MER-450-000369	31st August 2012	Full	
40.	Key Points and Decisions: MoD / AWE Workshop on the HAW Programme	MER-450-000411	26th November 2012	Full	
41.	HAW Programme: AWE / MOD Joint Investment Appraisal Workshop	MER450-000430	15th January 2013	Full	
42.	[redacted]			Full	S43

43.	AWE Higher Activity Waste Programme Initial Gate B - (Preferred Option) Position Statement	MER-450-000449	26th April 2013	Full
44.	AWE Higher Activity Waste Programme, Forward Plan. Response to ALD 70936R - Second Deliverable	ONR 209-131R	27th June 2013	Full
45.	Level 4 – Higher Activity Waste RIM, 12th Meeting 10th September 2013	ONR 209-231N	18th September 2013	Full
46.	Level 4 – Higher Activity Waste RIM, 13th Meeting 15th October 2013	ONR 209-236N	21st October 2013	Full
47.	AWE Higher Activity Waste Programme, Forward Plan Response to ONR 209-131R (ALD 70936R)- Final Deliverable	ONR 209-241R	18th December 2013	Full
48.	AWE Higher Activity Waste Strategy 2013	EDMS3/801E7960/B/EP0900	December 2013	Full
49.	[redacted]			Full S43
50.	LI511: ONR Incident Notification Form	ONR116-083N AE1-28I4Q4	27th February 2014	Full
51.	AWE Higher Activity Waste Programme - Licence Instrument No: 511 notification	ONR 103-006R	26th February 2014	Full
52.	Minutes of the Record of Sites and Function Board (SFSB) Meeting	EDMS3/801EEE6E/PSO/004	24th March 2014	Extract
53.	ONR Preliminary Investigation into the Expiry of LI511	ALD 71015N	5th September 2014	Full