



Office for Nuclear Regulation (ONR) Quarterly Site Report for Urenco UK Limited Capenhurst

Report for period 1 October – 31 December 2015

Foreword

This report is issued as part of ONR's commitment to make information about inspection and regulatory activities relating to the above site available to the public. Reports are distributed quarterly to members of the Urenco UK Limited Local Liaison Committee and are available on the ONR website (<http://www.onr.org.uk/llc/>).

Site inspectors from ONR usually attend the Urenco UK Limited Local Liaison Committee meetings and will respond to any questions raised there. Any person wishing to inquire about matters covered by this report should contact ONR.

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1 INSPECTIONS

1.1 Dates of inspection

The ONR Site Inspector and other ONR Inspectors conducted interventions at Capenhurst on the following dates during the quarter:

October	1, 27 & 28
November	10, 11, 18, 24 & 25
December	1, 3, 10, 15 & 16

The ONR site inspector participated in the Emergency Planning Consultative Committee meeting, providing regulatory advice on 'off site' emergency planning matters. This meeting was held on 12 November, near to the Capenhurst site.

A site familiarisation visit for an ONR Superintending Inspector, accompanied by the nominated site inspector, was conducted on 24 November.

2 ROUTINE MATTERS

2.1 Inspections

Inspections are undertaken as part of the process for monitoring compliance with:

- the conditions attached by ONR to the nuclear site licence granted under the Nuclear Installations Act 1965 (NIA65) (as amended);
- the Energy Act 2013
- the Health and Safety at Work Act 1974 (HSWA74); and
- Regulations made under HSWA74, for example The Ionising Radiations Regulations 1999 (IRR99), The Construction (Design and Management) Regulations 2007 and The Management of Health and Safety at Work Regulations 1999 (MHSWR99).

The inspections entail monitoring licensee's actions on the site in relation to incidents, operations, maintenance, projects, modifications, safety case changes and any other matters that may affect safety. The licensee is required to make and implement adequate arrangements under the conditions attached to the licence in order to ensure legal compliance. Inspections seek to judge both the adequacy of these arrangements and their implementation.

In this period, routine inspections of the Urenco UK Limited licensed site covered the following:

Nuclear Safety Case.

Nuclear safety cases are in place for the enrichment facilities at Capenhurst. Nuclear safety cases are kept live by short term reviews, with a full periodic review by the licensee, normally every ten years. The licensee has been reviewing the nuclear safety cases for the enrichment facilities. Aspects of the licensee's methodology and modern standards for producing nuclear safety cases have been subject to extensive discussions between the licensee and ONR specialist inspectors, who provided regulatory advice. There has been some significant slippage to the licensee's periodic review of the safety cases. The licensee has proposed an acceptable revised programme for the periodic review of safety cases, which will incorporate recent developments in safety case methodology. Interim nuclear safety cases, in the form of

“justifications for continued operation” of the enrichment facilities, have been compiled by the licensee, pending the production by the licensee of comprehensive periodically reviewed COSER nuclear safety cases, It was noted that the licensee was maintaining adequate progress in promptly implementing the engineering improvements arising from the interim nuclear safety cases.

Emergency arrangements.

A meeting was held to review aspects of the licensee’s recently drafted “Capability Map” on 16 December. I concluded that the licensee had submitted an adequately comprehensive document, appropriately detailing the rationale and evidence, in response to the detailed questions from ONR, albeit with some areas for improvement readily acknowledged by the licensee.

Organisational Capability.

At a meeting requested by the licensee on 16 December to discuss a forthcoming organisational change, I provided regulatory advice on the related regulatory permissioning requirements.

Regulatory liaison meetings with the licensee and the Capenhurst Nuclear Services Limited tenant organisation.

On 16 December, a liaison meeting was held between the regulators, the licensee and the Capenhurst Nuclear Services Limited (CNS) tenant organisation. A range of nuclear safety performance metrics were reviewed and agreed to be valuable in informing the licensee’s management of nuclear safety. The licensee and CNS tenant organisation’s progress with site decommissioning projects was reported to be progressing to plan. The inspections, by specialist contractors, of the ageing “Legacy Hex Tails” cylinders, were progressing satisfactorily. Regulatory advice was provided across a range of topics, where the licensee agreed to address some minor shortfalls, exemplified by the need to further improve the periodic training of the plant based ‘auxiliary fire fighters’.

Leadership and Management for Safety.

An ONR specialist inspector for Leadership and Management for Safety conducted a site intervention on 18 November, providing regulatory advice on aspects of proposed enhancements to the safety culture, recently measured at the Urenco ChemPlants Limited (UCP) tenant organisation.

Safety Case for the Tails Management Facility, (TMF).

ONR assessment of the TMF Pre-Commencement Safety Reports has progressed, with continuing interactions between the ONR specialist inspector assessment team and the licensee, at the quarterly project review meeting on 3 December and also on 19 November, where ONR confirmed the conclusions of assessment of the nuclear safety case.

In summary, ONR has now completed its assessment of the Pre-Commencement Safety Reports (PCSRs), and has concluded that in some areas of TMF design, the licensee has demonstrated that the risks to the operator were at least tolerable. However, for a new plant like TMF, ONR would expect risks to be near the levels known in the ONR Safety Assessment Principles (SAPs) as Basic Safety Objectives. Initially, ONR judged that risks to workers had not been reduced so far as is reasonably practicable. After much further discussion, and the submission of a licensee paper on the need for workers to have access to the area around kilns while they are operating, ONR accepted the arguments on this question, subject to the implementation of the recommendations arising from the ONR assessment, prior to active commissioning. ONR will continue to influence the licensee to implement nuclear safety improvements at the TMF.

Safety Case for the Legacy Cylinder Facility (LCF).

A significant new nuclear facility, the Legacy Cylinder Facility, is planned to be constructed and operated by the CNS tenant organisation, on the licensed site. The LCF facility is currently being designed. The purpose of this facility is to decant and purify the contents of the “Legacy Hex Tails” (uranium hexafluoride) into modern transport containers. The uranium hexafluoride contents will then be transported to the TMF, for deconversion to a more stable, less hazardous, oxide powder form of uranium, U₃O₈. There is a commitment to commence the deconversion of the Legacy “Hex Tails” uranium hexafluoride by 2020 at <http://www.nda.gov.uk/publication/storage-strategy-for-nda-owned-uranium-hexafluoride-tails-2010/>.

ONR Safeguards Sub Programme.

There have been three routine safeguards inspections (Joint Euratom / IAEA) at the enrichment facilities during this quarter. Further to these, there have been also been Limited Frequency Unannounced Access (LFUA) Inspections (1 Type 1, (Joint triggered during routine inspection), 1 Type 2 (Joint called outside of Inspection), and 1 Type 3 (IAEA only called outside of routine Inspection)). Any issues that have arisen have been addressed.

ONR Radioactive Materials Transport Sub Programme.

The current certificate for transport package type USA/9196 expires at the end of February 2016. The package assessment is ongoing by ONR.

A minor event was reported in November. A type 30B transport package received from Advanced Nuclear Fuels (ANF) GmbH was found to have minor visible removable contamination. The investigation report is awaited from the consignor, ANF.

The Ionising Radiations Regulations 1999.

On 10 and 11 November, two ONR radiological protection specialist inspectors conducted a site intervention. This was part of an ONR planned intervention, to look at ‘Control of Radiation Exposure’, across all licensed sites. Aspects of the arrangements and their implementation, to control radiation exposure at a number of facilities and decommissioning projects, were inspected at both the licensee and CNS tenant organisations.

ONR formed a positive impression of the radiological safety culture across both the licensee and CNS. Both the licensee’s and the CNS safety representatives were consulted during this intervention. In response to the regulatory advice provided, ONR readily obtained commitments to address the minor shortfalls observed. It was concluded that from the evidence inspected, the intervention warranted a rating of a “good” standard.

COMAH regulation.

Capenhurst will become an ‘upper tier’ COMAH site, when the relevant quantities of designated materials are introduced in to the TMF. COMAH is regulated by the ‘joint competent authority’ of ONR and the Environment Agency. The COMAH 2015 Regulations (The Control of Major Accident Hazards Regulations 2015) were implemented on 1 June.

Conventional Industrial Safety inspections.

The ONR investigation into the live 11 kV cable strike event has been progressed during this quarter.

On 27 and 28 October, an ONR conventional fire safety specialist inspector conducted an intervention, focusing on the progress against the expected improvements in the management of fire safety across the site. Specific areas of the programme for improvement were inspected. The regulatory advice provided resulted in a clear understanding that some areas required prioritisation, in order to close out fire safety issues within an acceptable timescale. Overall, the general progress being made to implement the fire safety improvement programme was considered to be adequate.

On 1 December, an ONR conventional fire safety specialist inspector conducted an intervention on the TMF construction site. The intervention included a detailed review of the progress made since the previous inspection in August 2015. It was concluded that the TMF management, along with Jacobs' project management personnel, were maintaining an effective fire safety management impetus across the TMF site.

On 10 December, an ONR conventional fire safety specialist inspector conducted a plant inspection at the CNS facilities. Some issues from previous inspections were reviewed, to confirm that they had been adequately addressed. This intervention identified a number of areas of industry good practice, together with a number of areas for the licensee and the CNS tenant to implement some improvements. Overall, the fire safety arrangements were considered adequate.

A specialist conventional safety inspector, accompanied by a specialist electrical safety inspector, conducted an intervention on electrical safety matters on 15 December. Aspects of the licensee's control of work were inspected. ONR was content with the licensee's current methodology, with regulatory advice being provided regarding some improvements, including enhancing the maintenance of high voltage switchgear. Arrangements to strengthen the team of people managing electrical safety are being implemented, with a combination of licensee staff and specialist support from contractors.

There have been a number of minor incidents on the TMF construction site, relating to conventional health and safety, which have been promptly reported to ONR. The TMF construction site part of the licensed site is leased to the UCP tenant organisation.

General comment on the interventions in this quarter.

In general, ONR judged the arrangements made and implemented by the site in response to safety requirements to be adequate in the areas inspected. However, where improvements were considered necessary, the licensee made satisfactory commitments to address the issues, and the site inspector will monitor progress during future visits. Where necessary, ONR will take formal regulatory enforcement action to ensure that appropriate remedial measures are implemented to reasonably practicable timescales.

2.2 Other work.

Local Liaison Committee (LLC) meeting.

On 25 November, the ONR nominated site inspector participated in a meeting of the LLC, held near the site. I summarised recent ONR interventions and addressed some minor queries from the LLC members.

Meetings with the safety representatives.

Meetings are routinely held with the licensee's team of safety representatives and during plant inspections by ONR inspectors, to support their function of representing employees and receiving information on matters affecting their health, safety and welfare at work.

The work of the safety representatives continues to make a valuable contribution to the site safety culture and their engagement with inspectors is valued.

3 NON-ROUTINE MATTERS

Licensees are required to have arrangements to respond to non-routine matters and events. ONR inspectors judge the adequacy of the licensee's response, including actions taken to implement any necessary improvements.

ONR was promptly informed of relevant minor events on the licensed site during this period.

4 REGULATORY ACTIVITY

ONR inspectors may issue formal documents to ensure compliance with regulatory requirements. Under nuclear site licence conditions, ONR issues regulatory documents, which either permit an activity or require some form of action to be taken; these are usually collectively termed 'Licence Instruments' (LIs), but can take other forms. In addition, inspectors may issue Enforcement Notices to secure improvements to safety.

No enforcement notices were issued in this period.

One Licence Instrument was issued during this period, being a licence condition 19 'Acknowledgement' licence instrument, at the request of the licensee, to enable ONR to control the construction or installation of any new plant which may affect safety at the Tails Management Facility, currently being constructed on the Urenco UK Limited licensed site.

Table 1

Licence Instrument issued by ONR during this period

Date	Type	Ref No	Description
2 December 2015	Licence Condition 19 Acknowledgement	536	Acknowledgement of receipt of Pre-Commencement Safety Report for the Tails Management Facility Vaporisation Facility. (The licensee had requested a formal Acknowledgement of receipt of the Pre-Commencement Safety Report (PCSR) for the Vaporisation Facility. The effect of this acknowledgement was to grant permission for the installation of equipment in the plant).

Reports detailing regulatory decisions can be found on the ONR website at <http://www.onr.org.uk/pars/>.

5 NEWS FROM ONR

Regulation Matters magazine.

Insight into ONR's work as an independent regulator of the nuclear industry can be found in Regulation Matters. This quarterly online publication (<http://www.onr.org.uk/regulation-matters.htm>) reports on the key themes and developments in each of ONR's regulatory programmes and provides an update about the on-going changes at ONR. For the latest news and updates from ONR, you can also visit the website and sign up for our e-bulletin: <http://www.onr.org.uk/index.htm>.

Chief Executive

Adrienne Kelbie has been appointed Chief Executive of ONR and will take up the appointment on 18 January 2016. Adrienne is currently the Chief Executive of the Disclosure and Barring Service, and prior to this has had a varied career including periods as Deputy Chief Executive in a local authority and as Director of Operations responsible for national and international funding at the Big Lottery Fund.

6 CONTACTS

Office for Nuclear Regulation

Redgrave Court

Merton Road

Bootle

Merseyside

L20 7HS

Website: www.onr.org.uk

Email: ONREnquiries@onr.gsi.gov.uk

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