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| ONR site report  Urenco UK Ltd. (UUK) – Capenhurst Site |



ONR site report

Urenco UK Ltd. (UUK) - Capenhurst Site

**Report for period**: 1 January – 30 June 2025

**Authored by**: Nominated Site Inspector

**Approved by**: DFW Head of Safety Regulation

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Foreword

This report is issued as part of our commitment to make information about inspection and regulatory activities relating to the above site available to the public. Reports are distributed to members for the Capenhurst Site Stakeholder Group (Parish Council Meeting) and are also available on our website: [www.onr.org.uk/publications/regulatory-reports/site-specific-reports/llcssg-reports](http://www.onr.org.uk/publications/regulatory-reports/site-specific-reports/llcssg-reports).

Our site inspectors usually attend Capenhurst Site Stakeholder Group (Parish Council) meetings where these reports are presented and will respond to any questions raised there. Any person wishing to inquire about matters covered by this report should contact us via email at [contact@onr.gov.uk](mailto:contact@onr.gov.uk).

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# Inspections

## Date(s) of inspection

ONR undertook rated inspections on the following dates during the report period 1 January – 30 June 2025:

* 10 April 2025.

# Routine matters

## 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 (NIA1965) (as amended);
* the Energy Act 2013;
* the Health and Safety at Work etc Act 1974 (HSWA1974); and
* regulations made under HSWA1974, for example, the Ionising Radiations Regulations 2017 (IRR2017) and the Management of Health and Safety at Work Regulations 1999 (MHSWR1999).
* regulations made under the Energy Act 2013, for example the Nuclear Industries Security Regulations 2003 and the Nuclear Safeguards (EU Exit) Regulations 2019.

The inspections entail monitoring the 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 rated inspections of the Capenhurst site covered:

* Leadership and management for security.

## Other work

ONR attended the site’s Annual Review of Safety, Security and Safeguards on 13 May 2025. Based on regulatory intelligence and ONR’s own review of the site’s safety performance during 2024, a regulatory issue has been raised requiring Urenco UK Ltd. (UUK) to develop and implement a safety improvement strategy / plan for the Capenhurst site.

ONR has continued engagements with UUK on their strategy and plans for the development of a new facility to produce high assay low enriched uranium (HALEU) and their approach to managing an inventory of legacy material comprising one of the byproducts of uranium enrichment, called uranium hexafluoride tails (or HEX tails for short); a project known as the legacy tails separation facility (LTSF).

As part of the Chief Nuclear Inspector’s themed inspection on climate change, ONR external hazards specialist inspectors visited the site on 26 March 2025. The visit formed part of a series of targeted engagements undertaken by the inspection team with a range of licensees.

Site inspectors hold periodic meetings with safety representatives to support their function of representing employees and receiving information on matters affecting their health, safety, and welfare at work. ONR’s nominated inspector for the Capenhurst site conducted such a meeting on 10 June 2025.

Consistent with ONR’s approach to open and transparent regulation and public engagement, ONR’s nominated inspector for the Capenhurst site attended a Parish Council meeting held on 4 March 2025. The meeting is conducted at the Capenhurst site and subsumed within it, is a local liaison committee for the Capenhurst site.

ONR’s nominated inspector for the Capenhurst site, supported by ONR specialist inspectors where necessary, continued to conduct meetings to review the site’s progress delivering a number of agreed improvement activities. These include:

* Refurbishment works for the site-wide fire fighting main.
* Improvements to the site’s asset management arrangements.
* Modifications to UUK’s approach to addressing trace heating protection system faults and failures in one of its uranium enrichment facilities.
* Implementation of longer-term safety improvements to cranes and hot oil systems in one of UUK’s uranium enrichment facilities which returned to service in February 2025.
* Fire safety shortfalls at one of the site’s uranium enrichment facilities, including UUK’s future operational plans for the facility and setting ONR’s regulatory staretgy to oversee its planned return to service at the end of 2025.

ONR has also conducted several regulatory advice and guidance sessions with the Capenhurst site. The first, concerning compliance with the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER), was conducted on 4 March 2025. The second session, concerning compliance with the Pressure Systems Safety Regulations 2000 (PSSR), was conducted on 9 June 2025.

ONR has continued to engage with UUK and other dutyholders on the site about various expansion / modernisation projects, including:

* UUK’s future plans to provide commercial services to enrich uranium beyond current levels, known as the Low Enriched Uranium Plus (LEU+) Project.
* Plans for Urenco ChemPlants Ltd. (UCP), a tenant on the UUK licensed site which operates the Tails Management Facility (TMF), to expand this facility.
* Continued implementation of the One Capenhurst site-wide transformation programme, incuding progress with a new Buisness Management System.

Under the Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPIR), UUK (and other dutyholders) are required to test (exercise) their emergency response plans on a 3-yearly basis. Throughout the reporting period ONR has engaged with UUK (and other stakeholders) on planning the next demonstration exercise.

Following the issue of an Enforcement Letter in the latter half of 2024, seeking improvements in UCP’s approach to undertaking radiation risk assessments, ONR has continued to engage with UCP as they resolve the shortfalls which led to the letter being issued.

ONR also continues to engage with UCP on follow-items identified during the Competent Authority’s 5-yearly review of the Safety Report, as required under the Control of Major Accident Hazards (COMAH) Regulations 2015.

# Non-routine matters

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

Matters and events of particular note during the period were:

* On 17 January 2025 at the TMF, following maintenace on the plant the dutyholder found that some of the requirements of the plant’s safety case / operating instructions were not followed when the plant was returned to opertional service. ONR’s nominated inspector for the Capenhurst site mointored the dutyholder’s response to the event. The dutyholder undertook a root cause invstigation into the incident which ONR considered to be robust. ONR has raised a regulatory issue to track the dutyholder’s progress with addressing the corrective actions identfied in their investigation report.
* On 1 February 2025 at the TMF during normal operation of one of the kilns, a safety system designed to shut the kiln down by tripping the feed system and heaters, was actuated. ONR’s nominated inspector for the Capenhurst site mointored the dutyholder’s response to the event. The dutyholder undertook a proportionate investigation into the incident. The plant operated as designed and there was no challanege to radiological or nuclear safety.
* On 17 March 2025 during lifting operations being undertaken at a facility on the Capenhurst site operated by Urenco Nuclear Stewardhsip Ltd. (UNS), a person sustained an injury which resulted in part of their left index finger being amputated. The person received immediate medical care on the site and received further treatement in hospital. ONR is currently undertaking its own investigation into the circumstances surrounding the incident.
* On 25 February 2025 UUK discovered that new grabs on two of their cranes used to handle cylinders containing uranium hexaflouride, had been installed incorrectly. The installation fault meant that if a load were to be raised too far, the crane grab would contact the crane itself before one of the crane’s safety systems designed to protect against this event, would operate. The cranes impacted by the installation error have an additional safety measure in place which was operational, and the operator would also be expected to stop the lift. ONR’s nominated inspector for the Capenhurst site monitored UUK’s response to the event. The licensee removed the cranes from service until the installation error was rectified, and checked other relevant cranes across the site to see if they were affected. In accordance with its arrangements, UUK undertook its own investigation into the incident, which ONR was satisfied with.
* On 28 May 2025 at one of the uranium enrichment plants on the site, UUK found a vaccum pump had not been stored in accordance with the requirements of the plant’s safety case / operating instructions. The requirement is in place to manage the risk of criticality. However, failure to follow the operating instruction in this instance did not result in a risk of criticality, becaue the pump orignated from part of the plant that does not process enriched uranium, meaning a criticality cannot occur. ONR’s nominated inspector for the Capenhurst site monitored UUK’s response to the event. The incident was dealt with in accordance with UUK’s arrangements and a proportionate investigation was undertaken. ONR was satisfied with UUK’s investigation and considered the licensee is putting appropriate corrective actions in place to address the root cause.

Throughout this period ONR has continued to investigate an incident that occurred at the TMF on 5February 2024 involving a container of uranium powder. ONR considers there was no significant risk to the public as a result of the event. ONR has continued work to produce its investigation report and finalise the recommendations.

# Regulatory activity

We may issue formal documents to ensure compliance with regulatory requirements. Under nuclear site licence conditions, we issue regulatory documents, which either permit an activity or require some form of action to be taken. These are usually collectively termed licence instruments but can take other forms. In addition, inspectors may take a range of enforcement actions, to include issuing an enforcement notice.

* No licence instruments, enforcement notices or enforcement letters were issued during this period.

Under UUK’s arrangements to comply with Licence Condition 15 – Periodic Review, ONR received an updated Continued Operation Safety and Environmental Report (COSER) for one of UUK’s uranium enrichment facilities. During this reporting period ONR considered the COSER and set its regulatory strategy for continuing to maintain appropriately targeted and proportionate oversight of this facility.

# News from ONR

For the latest updates and information on our work, please subscribe to our regular email newsletter, ONR News, at [www.onr.org.uk/news/newsletter](https://www.onr.org.uk/news/newsletter/).

# Contacts

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