

Office for Nuclear Regulation (ONR)

Site Report for Sizewell B

Report for period 1 July – 30 September 2021

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 to members for the Sizewell SSG and are also available on the ONR website (<http://www.onr.org.uk/llc/>).

Site inspectors from ONR usually attend Sizewell SSG 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 ONR.



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1 Inspections

Dates of inspection

The ONR site inspector made inspections on the following dates during the report period 1 July-30 September:

- 12-16 July
- 1-2 September

2 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 (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 2017 (IRR17) and the Management of Health and Safety at Work Regulations 1999 (MHSWR99).

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 inspections of Sizewell B covered the following:

- Examination, maintenance, inspection and testing.

During the reporting period the final inspections related to refuelling outage 17 (RO17) were carried out. Specialist inspectors from the control and instrumentation discipline visited site to ensure that appropriate maintenance of systems, structures and components was being undertaken, to an adequate standard. No issues of concern were identified during these inspections.

In addition, the site inspector and specialist inspectors from the structural integrity discipline visited site to carry out assessment and inspection of work related to the replacement of damaged thermal sleeves, as described below.

Finally, the site inspector and the head of assessment for operating reactors visited site for the outage start-up meeting. The meeting concluded that the planned work had proceeded well, but recognised that both the auxiliary cooling water system accident and the failure of a number of thermal sleeves had had a significant impact on the delivery of the outage.

The inspections described above informed our permissioning of the reactor's return to service, which was given via a consent issues under LC30 (periodic shutdown) as described later.

Members of the public, who would like further information on ONR's inspection activities during the reporting period, can view site Intervention Reports at www.onr.org.uk/intervention-records on our website www.onr.org.uk. Should you have any queries regarding our inspection activities, please email contact@onr.gov.uk.

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.

Matters and events of particular note during the period were:

- During inspection of the reactor upper internals, prior to their planned removal as part of RO17, an anomaly was identified. A cylindrical component called a 'thermal sleeve' had become detached from the reactor pressure vessel (RPV) head, and had remained in place on a control rod drive shaft on the upper internals. The thermal sleeve is designed to be an integral part of the RPV head, although it does not form part of the RPV pressure boundary - the primary job of the thermal sleeve is to protect the control rod drive mechanisms from thermal transients.

The discovery of this detached thermal sleeve prompted a programme of work by the licensee to replace that sleeve and other sleeves that might be at risk of failure in the future. This programme of work significantly extended the original programme for RO17, and the majority of ONR's inspection and assessment activity in the latter part of the outage was focussed on this issue. Demonstrating that this issue had been adequately resolved was key factor informing our decision to grant consent to restart.

4 Regulatory Activity

ONR 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 take a range of enforcement actions, to include issuing an Enforcement Notice.

One LI was issued during the period. A licence instrument was issued in August 2021 consenting to the start-up of Sizewell B following completion of refuelling outage 17.

Table 1

Licence Instruments and Enforcement Notices Issued by ONR during this period

Date	Type	Ref No	Description
20/08/2021	Consent	560	Consent to the start up of Sizewell B.

A report detailing the above regulatory decision can be found on the ONR website at <http://www.onr.org.uk/pars/>.

5 News from ONR

Below are summaries of key activities over the last three months. Further detail is available on our [website](#).

Enforcement action

- In July, we served an improvement notice on Devonport Royal Dockyard Ltd (DRDL) for shortfalls in its health and safety arrangements. The notice was served after DRDL failed to demonstrate consistent and effective arrangements to control and monitor the risks associated with working at height at its Devonport site. DRDL must comply with the requirements of the improvement notice by 31 March 2022.
- In August, we announced that Morgan Sindall Infrastructure Ltd had complied with an improvement notice served in January 2021 after workers came close to striking a live high voltage electric cable during excavation work at the Sellafield site. Since this incident occurred, Morgan Sindall has put in place measures to prevent similar occurrences, and we are satisfied that they have complied with the requirements of the improvement notice.

COVID-19: ONR Position

- We are continuing to obtain assurance that nuclear site licensees and other dutyholders are adequately resourced to continue to safely and securely carry out their activities. We remain satisfied with industry's response at this time; there has been no significant change to dutyholders' safety and security resilience.
- We have measures in place to try and prevent asymptomatic ONR staff unwittingly conveying the virus onto a regulated site. We require all staff to take a circular 1 health (C1H) antigen test in advance of them visiting a site. In addition to the C1H test, we also require them to take a lateral flow test on the morning of their planned site visit. We are keeping our COVID-19 testing guidance under regular review, in-line with the changing national context and any further developments in industry approaches to testing arrangements.

Other

- In July, our project to become the UK's domestic safeguards regulator was named the public sector's [Project of the Year at the National Project Awards](#).
- In September we invited stakeholders to submit comments on our updated reference papers for Coastal Flood Hazards and Meteorological Hazards for Nuclear Sites. Although supplementary to our normal governance process, we are doing this due to stakeholder interest in these topics and our commitment to being an open and transparent regulator.

The reference papers provide additional detail on the analysis of the external hazards for nuclear sites and have been produced by our [Expert Panel on Natural Hazards](#), a group of academic and industry technical specialists working under contract to provide us with independent expert advice. You can find out more about how to get involved and comment on these papers on our [website](#).

6 Contacts

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