



Office for Nuclear Regulation (ONR) Quarterly Site Report for Sizewell B

Report for period 1 April - 30 June 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 for the Sizewell sites stakeholder group and are available on the ONR website (<http://www.onr.org.uk/lrc/>).

Site inspectors from ONR usually attend Sizewell sites stakeholder group 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 made inspections on the following dates during the quarter:

20 – 23 April
1 – 4 June
22 – 23 June

ONR specialist inspectors made inspections on the following dates during the quarter:

1 – 2 June

2 ROUTINE MATTERS

2.1 Inspections at Sizewell B

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) and the Management of Health and Safety at Work Regulations 1999 (MHSWR99).
- the Regulatory Reform (Fire Safety) Order 2005
- the Nuclear Industries Security Regulations 2003

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, the following routine licence condition compliance inspections were undertaken:

Licence condition 7: Incidents on the site

Licence condition 10: Training

The LC 7 compliance inspection found the licensee to have comprehensive processes in place for the notification, recording, investigation and reporting of incidents occurring on the site. The inspection also confirmed that the licensee's continuous improvement programme also made use of external learning and self-assessment in line with expected international good practice. Overall, the inspection found the licence condition arrangements to be 'adequate' with no regulatory issues being raised.

The LC 10 compliance inspection found that the licensee operates an internationally accredited training programme for training of workers with responsibility for any safety related operations. Furthermore, the licensee also has additional off-site training facilities which is considered to demonstrate good practice in this area. Overall, the inspection found the licence condition arrangements to be 'adequate' with no regulatory issues being raised.

In this period, an ONR specialist inspector undertook an inspection to assess compliance with regulation 8 Ionising Radiations Regulations 1999 (IRR99) and the arrangements for restricting workers exposure to ionising radiation.

The inspection found that the licensee is complying with IRR99 regulation 8 to restrict operational exposure So Far As Is Reasonably Practicable (SFAIRP), and that in some areas examples of good practice were found. The overall rating of 'good' was given with no regulatory issues being raised.

In addition to our program of site licence compliance inspections, we are now inspecting operating reactors based on safety related systems. Each site has a safety case, which identifies the important aspects of operation and management required for maintaining safety. For Sizewell B, the key systems important to nuclear safety will be inspected against the requirements of the safety case. We plan to inspect all the safety significant systems over a five-year period. ONR considers that this will provide additional assurance that operations on the site are safe. Each of these inspections considers the relevant licence conditions below:

Licence condition 10: Training

Licence condition 23: Operating rules

Licence condition 24: Operating instructions

Licence condition 27: Safety mechanisms

Licence condition 28: Examination, inspection, maintenance and testing

Licence condition 34: Leakage and escape of radioactive material and radioactive waste

During the reporting period, the following systems were inspected:

- Auxiliary shutdown room, main control room and alarm system
- Reserve ultimate heat sink

The Main Control Room (MCR) provides the principal interface between the operating staff and the plant systems necessary for achieving safe and effective operation of the station. The Auxiliary Shutdown Room (ASR) is the control point to be used in any event of damage to the MCR which prevents control from the MCR. The Alarm Systems provide operator alerts of abnormal operating conditions at many locations around the station including the MCR, ASR and local to plant. These systems were found to meet the requirements of the safety case and are being adequately maintained and operated. No significant regulatory issues were identified by ONR against these systems. A number of observations of low nuclear safety significance were made during the inspections. These have been captured for corrective action under the licensee's arrangements and will be monitored for progress by ONR on a routine basis.

The Reserve Ultimate Heat Sink (RUHS) provides an alternative backup means of heat rejection for the Component Cooling Water System (CCWS) which cools safety classified equipment. The RUHS provides a separate and diverse heat removal route following faults involving the loss of the CCWS heat exchangers or the Essential Service Water System (ESWS). The RUHS consists of the main RUHS (which replaces the CCW heat exchanger when this heat rejection route is not available) and the auxiliary RUHS (which is a closed-loop cooling system with pumps and air-cooled heat exchangers). The inspection found the compliance arrangements to be 'adequate' with the exception of the maintenance arrangements. The maintenance arrangements were rated as being 'below standard' in recognition of the need to improve the current material condition of the RUHS support structure. Notwithstanding this inspection finding, this condition has already been identified by ONR's assessment of

the periodic safety review 2 and is being addressed by a programme of improvements starting this year. ONR is satisfied that the condition of the structure does not currently threaten the adequate operation of the RUHS system and is monitoring the implementation of the remedial works.

Further details of ONR's intervention records can be found at <http://www.onr.org.uk/intervention-records>.

2.2 Other work

The ONR site inspector attended the Sizewell site stakeholders group meeting during this period.

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. There were no such matters or events of significance to report during this period.

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 issue Enforcement Notices to secure improvements to safety.

During this period, ONR approved the deletion of the requirements for redundant carbon dioxide (CO₂) monitoring at the SZB site, since this follows the removal of the bulk CO₂ storage tank hazard from the adjacent decommissioned Sizewell A site. Further details of the assessment supporting ONR's decision can be found at <http://www.onr.org.uk/pars/2015/sizewell-b-14-029.pdf>.

- The following LIs and Enforcement Notices have been issued during the period:

Table 1
Licence Instruments and Enforcement Notices Issued by ONR during this period

Date	Type	Ref No	Description
08/May/15	Approval	LI 547	Amendment to technical specification for removal of reference to redundant CO ₂ monitoring

Reports detailing the above regulatory decisions can be found on the ONR website at www.hse.gov.uk/nuclear/pars.

5 NEWS FROM ONR

ONR published its [Annual Report and Accounts for 2014/15](#) on 29 June. The report details key developments during our first year as a public corporation including:

- progress against ONR's Annual Plan 2014/15, including the Chief Nuclear Inspector's annual statement on the safety and security performance of the nuclear industry
- details of management arrangements and how our resources have been utilised
- a summary of our governance arrangements
- the financial statements for 2014/15
- remuneration of non-executive and executive members of the ONR Board
- the Certificate of the Comptroller and Auditor General to the Houses of Parliament, containing an unqualified audit opinion

Insight into ONR's work as an independent regulator of the nuclear industry can be found in ONR's Quarterly News. The online publication (<http://www.onr.org.uk/onr-quarterly-report.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. <http://www.onr.org.uk/index.htm>. For the latest news and updates from ONR visit the website and sign up for our ebulletin (<http://www.onr.org.uk/ebulletin/index.htm>).

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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