



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

Report for period 1 January - 31 March 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:

12 – 15 January
27 – 29 January
23 – 26 February
23 – 26 March

ONR security, project and specialist inspectors made inspections on the following dates during the quarter:

27 – 29 January
24 – 26 February
16 – 19 March

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 19: Construction or installation of new plant
Licence condition 21: Commissioning

The compliance inspections were carried out against the Dry Fuel Store (DFS) project. EDF Energy is in the process of constructing a DFS facility on the Sizewell B licensed site. Overall, the inspection found the licence condition arrangements to be adequately implemented for the management of this project. A number of minor areas for improvements were identified; however, the licensee has given its commitment to address the issues raised and the ONR project inspector will monitor progress during future inspections.

Licence condition 32: Accumulation of radioactive waste

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

The compliance inspections were carried out against the station's radioactive waste management arrangements. Radioactive waste management at site was judged to be adequate with a number of areas of good practice identified and a number of initiatives under way to further reduce the volume of radioactive waste generated on the station. The inspection identified a well-established process to detect and manage leaks at the station, with further improvements underway. Overall, the inspection found the licence condition arrangements to be adequately implemented. Where areas for improvements were identified, the licensee has given a commitment to address issues raised and the ONR nominated inspector will monitor progress during future inspections.

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:

- Essential Electrical System
- High Integrity Control System and Secondary Protection System

The Essential Electrical System consists of three main sub systems which provide a range of power supplies to safety equipment which require power to carry out safety functions. The main sub systems are alternating current (a.c.), direct current (d.c.) and uninterruptable power systems. This inspection focussed on two of the sub systems in particular being the 3.3kV a.c. and 110v d.c. essential power systems.

The High Integrity Control System provides manual/automatic control and monitoring of station equipment providing an interface with the main control room and other computer systems. The Secondary Protection System (SPS) provides a reactor safety trip function for various plant fault conditions. The SPS is separate and diverse from the primary protection system.

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.

Level 1 Emergency Exercise

During this period a team of ONR inspectors observed a level 1 demonstration exercise of the Sizewell B emergency arrangements for dealing with an accident on the site. The exercise presented a sound challenge to the sites' emergency arrangements and the postulated incident was brought under control in a reasonable timescale. ONR observed some good practice and areas for further improvement during the exercise, which were communicated in

a letter to the Station Director and will be monitored by the ONR site inspector for progress during future inspections. ONR judged the emergency exercise to be an adequate demonstration of the Sizewell B emergency arrangements (in accordance with Licence Condition 11).

Counter Terrorism Exercise

During this period a team of ONR inspectors observed a counter terrorism exercise demonstration exercise of the Sizewell B arrangements for dealing with a security incident on the site. The exercise was an adequate demonstration. It included armed response by the Civil Nuclear Constabulary, command and control affected through the site shift manager in the central control room and the emergency controller in the emergency control centre. A number of areas for further improvement were observed by the ONR inspection team which will be monitored by the ONR security inspector for progress during future inspections.

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

2.2 Other work

Periodic Safety Review (PSR)

During this period ONR completed its assessment of the licensee's ten-yearly periodic review and reassessment of the nuclear power station safety case. The periodic review constitutes a comprehensive review of safety which is required of all nuclear licenced sites. Although the PSR process includes completion of an agreed programme of further work, ONR has identified no issues of nuclear safety significance that are judged to impact continued safe operation at Sizewell B through the next period of review (up to 2025). ONR will continue to monitor and report on the progress of completing this work.

Further details of the assessment supporting ONR's decision can be found at <http://www.onr.org.uk/pars/2015/sizewell-b-14-020.pdf>.

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 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.

No LIs or Enforcement Notices have been issued during this period.

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

5 NEWS FROM ONR

Annual Plan

ONR has published its [Annual Plan for 2015/16](#), setting out its priorities, as well as providing details of the year's planned activities and key targets.

Insight into ONR's work as an independent regulator of the nuclear industry can be found on the ONR website news centre (<http://news.onr.org.uk>) and 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 ONR. 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>).

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