



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

Report for period 1 April to 30 June 2017

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 Dungeness Site Stakeholder Group and are also available on the ONR website (<http://www.onr.org.uk/llc/>).

Site inspectors from ONR usually attend Dungeness Site 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, supported where appropriate by specialist inspectors, on the following dates during the quarter:

- 24-27 April
- 10-11 May
- 5-9 June
- 26-28 June

ONR's fire safety inspectors undertook an inspection on 17 May.

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) 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 Dungeness B covered the following:

- examination, maintenance, inspection and testing;
- management of operations including control and supervision;
- staff training, qualifications and experience; and
- fire safety order.

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.

In addition to our compliance inspections based on the conditions attached to the nuclear site licence, ONR inspectors also inspect operating reactors against safety related systems. Each site has a safety case that demonstrates how it operates safely. For advanced gas cooled reactors, each of approximately thirty key systems will be inspected against the claims made upon them by the safety case. The aim is to systematically inspect all the significant safety related systems within a five-year cycle (six per year). ONR believes that this will provide more robust assurances of the site's safe operation and how the safety case is being implemented.

Within this period ONR conducted one system based inspection. An inspection of the instrument air and turbine over-speed protection was carried on 24-26 April 2017, the ONR inspection team confirmed that the system was being maintained and operated in accordance with the requirements of the safety case.

During this quarter, ONR also conducted a themed inspection on control and supervision of operations and maintenance. This examined compliance against a number of licence conditions and health and safety regulations. Overall, based on the evidence sampled, inspectors judged that legal requirements were met. In all cases the level of control and supervision was commensurate with the safety significance of the task.

In May, ONR conducted an inspection to review the licensee's progress regarding corrosion under insulation and concealed systems. This visit was a follow-up of the inspection undertaken in January 2017, where ONR concluded that the station's corrosion management arrangements; and their implementation, required significant improvement. This follow-up visit in May found that the site is now starting to address and make progress against the regulatory actions raised and was encouraged to observe several areas of plant improvements underway. ONR intends to continue monitoring progress made by the station against its remediation plan.

2.2 Other work

ONR attended the site's Annual Review of Safety Meeting which included a plant walk-down. ONR was pleased to note that significant investment had been made at the station during the year. The site was informed that ONR would continue to seek timely delivery of further nuclear safety improvements that were planned. The meeting was considered to be effective and encouraged open discussion and challenge on a number of safety areas.

The site inspector held a periodic meeting with safety representatives, to support their function of representing employees and receiving information on matters affecting their health, safety and welfare at work.

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:

On 23 March 2017 it was identified that a leak on auxiliary cooling water branch pipework, which was being monitored, had worsened. Although this section of the pipework affected is no longer required, it remains connected to the new auxiliary cooling water system. During the preparations for a temporary repair, pipe thickness measurements were taken which revealed areas of the pipe had thinned to 3-4mm. Consequently an assessment was conducted to confirm the seismic integrity of the pipework. During this assessment it was discovered that a pipe support, assumed to be installed, was not present. Without this support the relatively long length of unsupported pipework may have failed at the thinned section during a seismic event. The station promptly installed pipe supports and strengthen the thinned pipework. A safety justification for continued operations was completed. The system remained operational and the integrity of the pipework does not result in a significant safety risk. ONR was satisfied with the remedial work that was carried out and no formal action was taken by ONR.

On 9th May 2017 a flask arriving at Sellafield from Dungeness B was found to have 20 of its 28 bolts only hand tight. The remaining 8 bolts passed the de-torque test. The transport of the flask was not therefore compliant with the Package Operations and Maintenance Manual and

the package Design Safety Report for the Mark 2 AGR Fuel Flask Design No 2834. No personnel were injured and there was no release of radioactive material. However the incident invalidated the Competent Authority Certificate of Approval for the fuel flask. In its normal orientation the weight of the flask lid is sufficient to provide a functional seal with the flask body which explains why the flask had passed its inter-seal pressure test. The purpose of the bolts is to ensure that, in the unlikely event of a severe accident involving, for example, a fire combined with a drop or rotation of the flask which caused the flask not to be upright, the lid would remain in place. In such circumstances it is judged that the eight correctly tightened bolts would have extended more than claimed in the safety case.

The station has investigated the circumstances leading to this event and corrective action has been taken to support recommencing of flask moves. The site inspector in conjunction with ONR's specialist transport inspector, was satisfied with the corrective actions taken by the station. ONR has written to the licensee seeking a further commitment to improve and address the root causes relating to the event.

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.

On the 30 May 2017, ONR issued LI agreement number 553, agreeing to the implementation of NP/SC 7749 safety case to optimise the inspection requirements of welds within the superheater outlet headers and reheat inlet headers on reactor 21 and 22, in accordance with arrangements made by the station under LC 22(1).

No Enforcement Notices were issued during the period.

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

5 NEWS FROM ONR

For the latest news and updates from ONR visit the [website](#) and sign up for our [ebulletin](#).

ONR Chair awarded CBE - In the Queen's Birthday Honours announced in June, Chair of the Office for Nuclear Regulation, [Nick Baldwin](#), was appointed a Commander of the Order of the British Empire for services to nuclear safety and security in Britain and to the charitable sector.

Regulatory Research Report published - ONR has published its [annual regulatory research report](#) which describes the [research activities](#) we have conducted in the past year.

The report includes case studies showing how our research strategy has helped support our regulatory approach, and helps to inform the development of best practice. It can be viewed at www.onr.org.uk/research

6 CONTACTS

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