



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

Report for period - 1 January to 31 March 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 of the Dungeness Site Stakeholder Group and are also available on the ONR website (<http://www.onr.org.uk/lrc/>).

Site inspectors from ONR usually attend Dungeness Site Stakeholder Group meetings where these reports are presented and will respond to any questions raised there. Any person wishing to enquire about matters covered by this report should contact ONR.

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1 INSPECTIONS

1.1 Dates of inspection

1. ONR inspectors undertook inspections at Dungeness B Power Station on the following dates during the quarter:
 - 25 January -9 February 2021
 - 8-17 February 2021
 - 23-26 March 2021

Some of the interventions that were undertaken in this period were conducted remotely due to the Covid-19 pandemic.

2 ROUTINE MATTERS

2.1 Inspections

2. 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).
3. The station's current arrangements have further facilitated more site-based inspections during this reporting period. However, due to the current COVID-19 pandemic, parts of the compliance inspections were undertaken remotely using Skype video conferencing. The licensee is still required to make and implement adequate arrangements under the licence conditions attached to the licence in order to ensure legal compliance. Inspections seek to judge both the adequacy of these arrangements and their implementation.

Compliance Inspections

4. During this reporting period, despite the COVID -19 restrictions, more onsite inspections were undertaken by ONR specialist inspectors and the ONR nominated site inspector. The station continues to manage its pandemic arrangements at station so far as is reasonably practicable, has protected its own staff and ensured that there was no degradation in nuclear safety.
5. In this period, routine inspections at Dungeness B covered the following topics:
 - Licence Condition 7 – Incidents on site
 - Licence condition 10 – Training
 - Licence Condition 17 – Management Systems
 - Licence condition 28 – Examination, Inspection, Maintenance and Testing (EIMT)

25 January -9 February 2021

LC 7 Incidents on site & LC17 Management systems

6. The purpose of this intervention was to assess Dungeness B's (DNB's) compliance with Licence Condition (LC) 7 'Incidents on site' and LC17 'Management Systems'

arrangements. The focus of the management systems aspects of this inspection was confined to Human Factors (HF) aspects of the systems relevant to the inspection (in this instance, the process of extending or suspending tests in the maintenance schedule). This intervention was carried out remotely by ONR's Human Factors (HF) inspector.

7. The inspector considered two events that were reported to ONR in 2020, these two reported events were then used to understand the licensee's compliance arrangements with the requirements of LC7. The inspector also considered the licensee's compliance with the requirements of LC17, in this instance they considered the Maintenance Schedule (MS) suspension process, specifically focusing on HF aspects of changes made as a result of the events sampled.
8. In conclusion, intervention ratings of Green were assigned against LCs 7 and 17. One Level 4 Regulatory Issue was raised against LC17 regarding the robustness of the MS suspension process, the specialist inspector will follow the station's progress in addressing this issue.

8-17 February 2021

LC17 - Management systems

9. The purpose of this intervention was to undertake a Licence Condition (LC) 17 ("Management Systems") compliance inspection in relation to Dungeness B's supply chain management and quality arrangements. The inspection was conducted both remotely via Skype and physically on site at Dungeness B.
10. This LC17 inspection examined the Quality Assurance (QA), supply chain (including goods receipt) and lifetime records arrangements. From the areas sampled, the specialist inspector judged that the licensee adequately demonstrated compliance with the requirements of LC17 and rated this inspection as 'Green, no formal action'. The inspector did note several minor QA shortfalls, which station management will investigate. The inspector has raised one a single regulatory issue in order to follow the station's progress in addressing this issue.

23-26 March 2021

Licence condition 28 – Examination, Inspection, Maintenance and Testing (EIMT)

11. The purpose of this intervention was to undertake a Licence Condition (LC) 28 Examination, Inspection, Maintenance and Testing (EIMT). The inspection was conducted both remotely via Skype and physically on site at Dungeness B.
12. The LC28 inspection was undertaken by the nominated site inspector for Dungeness B which covered the following areas
 - PMS & maintenance arrangements for the WSFS
 - A demonstration that EIMT has been completed within the stated timescales.
 - A demonstrate that EIMT has been carried out in accordance with licensee maintenance instructions.
 - Examination of a sample of reported defects and follow up actions
 - Example of the Suitably Qualified and Experienced Persons (SQEPs) who undertake maintenance work on the system (Channel Fire)
 - A sampled walkdown of WSFS system
 - Discussions with relevant station staff.

13. From his planned inspection of LC28, the station provided sufficient evidence to demonstrate that it was complying with its arrangements in the areas sampled. He did identify some very minor shortfalls which the station address during his visit. The inspection was rated Green.

System Based Inspections

14. In addition to our compliance inspections based on the conditions attached to the nuclear site licence, ONR also inspects 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 the 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. ONR considers that this will provide additional assurance that operations on the Dungeness site are safe. Each of these system 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

15. No Systems-Based Inspections were undertaken during this period. However, in the last SSG report, the nominated site inspector reported on an SBI that was undertaken on the station's Fuelling Machine (FM) & Plug Unit Maintenance Facility (PUMF). LC28, was rated as Amber (seek improvement) as it was considered that the safety case for the PUMF had not been adequately implemented at Dungeness B Power Station. Because of this rating, ONR's enforcement management model (EMM) was applied to determine the appropriate enforcement action that was necessary to bring the station back into compliance.
16. The EMM indicated an enforcement letter was a proportionate response to the shortfalls identified. Enforcement letter DNB71340R, ONR-EL-20-014 was issued on the 07/10/2020 in order to ensure the station addressed the identified shortfalls as reported in the previous quarter 3 SSG report.

2.2 Other work

Dungeness B Performance Improvement Plan (PIP)

17. ONR currently regards Dungeness B as being in 'enhanced attention' and has allocated extra resources to the station as it works to get back into safe generation of electricity, and beyond that to improve its performance further. This includes advising and supporting the station's performance improvement plan (PIP) and closely monitoring the safety performance of the station as evidenced by our interventions, operating experience and more.
18. ONR perceives that the station has made clear improvements in the overall physical condition of the plant, and has made progress with safety leadership and culture at the station. There are continuing difficulties for the station with re-establishing confidence in some of the safety cases and EDF is putting considerable effort into resolving this.

3 NON-ROUTINE MATTERS

19. Nothing to report for this period.

Return to Service Update

20. Both reactors are safely shutdown due to the ongoing repair of widespread steel corrosion across the station, cracking found in the main steam lines of the boilers and potential degradation issues associated with boiler tubes. The reactors will only be permitted to return to service when ONR is satisfied that the issues identified have been resolved.
21. Due to the prolonged shutdown of Reactor 21, the station proposed a deferral of the Reactor 21 2020 Outage, due to start in September, to January 2022. ONR has accepted an initial deferral proposal to September 2021 and has issued LI 563, Agreement to the extension of Dungeness B's operating period under LC 30(2). The licensee is expected to submit further safety documentation to justify the extension to January 2022 which will be assessed by ONR.
22. There are a number of other return to service safety issues which NGL are addressing and which ONR need to assess e.g. issues associated with Gas Baffle, Neutron Scatter Plugs, Gas By-Pass System, Plant Preservation, Station Transformers and Return to Service of Reactor 22 in 2021 following the Autumn 2018 Outage.

4 REGULATORY ACTIVITY

23. 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, see table below.

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

Date	Type	Ref No	Description

5 NEWS FROM ONR

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

Covid-19 (Coronavirus) (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 and there has been no significant change to dutyholders' safety and security resilience. As COVID-19 restrictions change, our focus is on the preparedness for the weeks and months ahead and maintaining safe and secure operations. Our latest position can be found on our [website](#).

Enforcement Action

- In January, we agreed to extend two [Improvement Notices](#) served on the Atomic Weapons Establishment (AWE), recognising the good progress made so far. The Notices, which were served in June 2019, relate to the way the company controls changes to organisational structure and resources which may affect safety.
- In January, we served an [Improvement Notice](#) on Sellafield Ltd following a number of electrical safety incidents across the site. While we are satisfied that Sellafield Ltd is currently meeting the high standards expected with regards to nuclear safety, as a regulator we require sustained improvements in the area of electrical safety.
- In February, we served an [Improvement Notice](#) on Morgan Sindall Construction and Infrastructure Ltd after workers came close to striking a live high voltage electric cable during excavation work at the Sellafield site. Nobody was harmed in the incident on 7 October 2020, and there was no impact on the public or the environment. However, the incident posed a serious risk to workers who were operating within one metre of the 11kV cable.

Regulatory Updates

- In March, we published a response on our [website](#) to a BBC report relating to Sellafield. We were naturally concerned to hear the claims, particularly any suggestion that staff have been subjected to racist abuse of any kind. As a regulator, if we had any concerns or evidence that bullying and harassment was impacting safety at the site, we would take robust action to ensure this is addressed as a matter of urgency.
- In March, we [published](#) an article about how we responded to the serious nuclear accident at the Fukushima Dai-ichi nuclear power plant in 2011 to mark the 10th anniversary.
- In March, we gave [EDF permission](#) for Reactors 3 and 4 at Hinkley Point B power station to return to service for a limited period of operation. Permission for Reactor 3 will allow it to operate to a core utilisation of 17.55 terawatt days, while permission for Reactor 4 is to operate to a core utilisation of 17.3 terawatt days, which equates to two periods of approximately six months operation for each reactor.

Stakeholder Engagement

- In February, we encouraged interested parties to take part in a [Nuclear Energy Agency \(NEA\)](#) survey about building and maintaining trust between nuclear safety regulators and the stakeholders they engage with.
- In February, we provided an update about the [leadership structural changes](#) we initially announced in December 2020. Under existing contractual arrangements, current Chief Executive Adrienne Kelbie CBE was always expected to step down as her extended term of office comes to an end in January 2022. Mark Foy will step into the new combined role on 1 June 2021, when the new leadership structure will come into full effect.
- In February, we announced that we had appointed [Donald Urquhart](#) to the newly-created role of Executive Director of Operations, which will form part of our new leadership structure. As Executive Director of Operations, Donald will be responsible for leading our regulatory work.
- In March, we announced that as part of our new leadership arrangements, we had [appointed three new deputy chief nuclear inspectors](#) (DCIs) to our regulatory and

senior leadership teams: Jane Bowie, Paul Dicks and Steve Vinton, currently all senior superintending inspectors at ONR. All three new DCIs have a strong track record of delivering regulation across the organisation and will help us maintain a focus on our Strategy 2020-25.

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