

Office for Nuclear Regulation (ONR) Site Report for Hinkley Point B Power Station

Report for period 1 April to 30 June 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 Site Stakeholder Group and are also available on the ONR website (http://www.onr.org.uk/llc/).

Site inspectors from ONR usually attend 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. The ONR site inspector made inspections on the following dates during the report period:
 - 14 to 17 June 2021 (LC2 and 16)
- 2. In addition, ONR specialist inspectors undertook inspections on the following dates during the quarter:
 - None

2 ROUTINE MATTERS

2.1 Inspections

- 3. 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).
- 4. 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.
- 5. In this period, routine inspections of Hinkley Point B covered the following:

LC2: Marking of the Site Boundary

- 6. The aim of this inspection was to confirm that the site boundary is marked in accordance with the schedule and that visitors to the site are adequately controlled.
- 7. I walked the site boundary and the security fence and confirmed that the boundary was adequately marked, and that signage was in place. I sampled the implementation of the arrangements for allowing visitors onto site and confirming that they had left. I also sampled the process for manually updating the muster information when a pass holder leaves or enters site without using the turnstiles. I identified some minor areas for improvement that did not warrant a formal regulatory issue being raised.
- 8. I concluded that the site was broadly complaint with the requirements of LC2 sampled. I am satisfied that an IIS rating of green against LC2 is merited.

LC16: Site Plans, designs, and specifications

9. The aim of this inspection was to confirm that the dutyholder maintains site plans and a schedule of buildings and supplies ONR with an up to date copy of those plans and specifications.

- 10. I reviewed the arrangements, which were adequate, and I confirmed that the latest schedule and plan had been supplied to ONR. I sampled the plan and did not identify any discrepancies with the current site status.
- 11. I concluded that the site was broadly complaint with the requirements of LC16 sampled. I am satisfied that an IIS rating of green against LC16 is merited.

System Based Inspections (SBI)

- 12. 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. ONR believes that this will provide more robust assurances of the site's safe operation and how the safety case is being implemented. Each of these system-based 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 (if applicable): Leakage and escape of radioactive material and radioactive waste
- 13. In this period no system-based inspections (SBI) were carried out.

2.2 Other work

- 14. Although there continue to be risks from the coronavirus pandemic, during the reporting period visits to site have now returned to normal. ONR will continue to monitor the situation and adapt its approach as necessary.
- 15. During visits to site, the site inspector observes the compliance with of the site with its Covid arrangements. No significant issues or trends have been identified during the visits.

3 NON-ROUTINE MATTERS

- 16. 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.
- 17. In May EDF reported that it had identified an additional fault that had not been fully assessed within the safety case. The fault is where water enters the downstream side of the reactor safety relief valves (SRVs) and through water hammer, could challenge the integrity of the SRV bellows resulting in a hot gas release, which had not explicitly been covered in the hot gas release safety case. Further work by the dutyholder identified that there was water present in a number of the downstream legs of these valves, due to damage to the weather coverings. These weather coverings have now been repaired and EDF is going through its safety case process to ensure the fault is integrated into its Living Safety Case Document.

18. The event was rated as a level 1 on the International Nuclear Event Scale (INES) and as such it is routine for ONR to carry out preliminary enquiries. The preliminary enquiries recommended that ONR did not need to carry out a formal investigation.

4 **REGULATORY ACTIVITY**

- 19. 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.
- 20. On 13th May 2021, ONR issued Licence Instrument 565, to agree to the extension of the operating period for Hinkley Point B Site Reactor 4 from 25 May 2021 to 24 May 2022. ONR's assessments concluded that the claims arguments and evidence presented in the licensee's safety documentation were adequate and supported the claim that "nuclear safety systems will not incur any significant decrease in their reliability or functionality, and there will be no significant increase in risk as a result of the deferral of the statutory outage

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

| Date | Туре | Ref No | Description |
|------------|-----------|--------|---|
| 13/05/2021 | Agreement | 565 | AGREEMENT TO EXTENSION OF OPERATING PERIOD FOR REACTOR 4 |

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

5 NEWS FROM ONR

21. Below are summaries of key activities over the last three months. Further detail is available on our <u>website</u>.

5.1 Covid-19 (Coronavirus) (ONR position)

- 22. 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.
- 23. All licensed sites are required to determine minimum staffing levels necessary to ensure safe and secure operations and contingency arrangements in the event that these levels are not met. This condition is specifically designed to ensure that industry can adequately manage and control activities that could impact on nuclear safety and security under all foreseeable circumstances, including pandemics.
- 24. Although ONR staff continue to work primarily at home, (carrying out as much of our work as possible via videoconference, phone and email), we are carefully and progressively increasing our site footprint. We continue to assess our on-site presence in line with government guidelines and our business needs, ensuring we have a balanced portfolio of on-site inspections and interventions, that are important to support effective regulation across our purposes.
- 25. Our latest position can be found on our website.

5.2 Enforcement Action

- 26. In April, we announced that EDF <u>complied</u> with a Direction we served on 14 December 2020, under the Pressure Systems Safety Regulations (2000). This followed an inspection, at which found a number of pressure system components at Heysham 1 Power Station were overdue their scheduled examination.
- 27. In May, we agreed to <u>extend an improvement notice</u> served on EDF in September 2020, recognising the progress made so far. The notice was served after some of the equipment used to measure reactor power at Heysham 2 was incorrectly configured. We judged that Heysham 2 is able to operate safely, and that additional time to demonstrate the required improvements will not pose a risk to safety. EDF must now comply with the improvement notice by 31 July 2021.
- 28. In June, we announced that Rolls-Royce Submarines Ltd (RRSL) had <u>complied</u> with an improvement notice served on 29 May 2020. The notice was served after RRSL operators brought 21 units of fissile material into the facility which exceeding the limit defined within the safety case and set out in the Criticality Control Certificate for the facility.

5.3 Stakeholder Engagement

- 29. In April, we published an <u>article</u> introducing our newest board member, Jean Llewellyn, who joined us in October 2020, as security lead. Jean brings with her a wealth of experience, including serving as a non-executive director on the board of the World Institute for Nuclear Security since 2018 which has given her a good understating of the global security challenges facing the nuclear industry.
- 30. In May, we issued our e-bulletin '<u>ONR News</u>' to subscribers. This issue included farewell reflections from our outgoing chief executive, a leadership update, further information on our COVID -19 response, and the results of our latest stakeholder survey. You can sign up for our e-bulletin <u>here</u>
- 31. On 1 June, we <u>announced</u> the full implementation of our new leadership structure. Mark Foy is now our combined Chief Executive and Chief Nuclear Inspector. He is supported by Sarah High as Deputy Chief Executive, and Donald Urquhart as Executive Director of Operations.
- 32. In June, we published our new <u>Corporate Plan for 2021/22</u>, which sets out our key priorities to protect the public by securing safe nuclear operations.
- 33. In June, our State System of Accounting for and Control of Nuclear Material (SSAC) project - which saw ONR become the UK's national nuclear safeguards regulator from 31 December 2020, was <u>shortlisted for a national award</u> in the Project Management Institute's UK National Project Awards in the 'Project of the Year (Public Sector)' category.
- 34. Nuclear safeguards are measures to verify that countries comply with international obligations not to use nuclear materials from civil nuclear programmes for non-peaceful purposes.

6 CONTACTS

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