

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

Report for period 1 July to 30 September 2020

#### 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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Site Report for Hinkley Point B – [Reporting Period 1 July – 30 September) CM9 Reference – 2020/303047

## 1 INSPECTIONS

#### 1.1 Dates of inspection

- 1. The ONR site inspector made inspections on the following dates during the report period:
  - 14-16 July 2020 (LC28 remote)
  - 21-22 July 2020 (LC28 remote)
  - 4 August 2020 (Joint visit with EA)
  - 18 August 2020
  - 28 September 2020 (LC11 remote)
  - 30 September 2020 (ARoS remote)
- 2. In addition, ONR specialist inspectors undertook inspections on the following dates during the quarter:
  - 14-16 July 2020 (LC28 remote)
  - 21-22 July 2020 (LC28 remote)
  - 28 September 2020 (LC11 remote)

## 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 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:

#### LC28: Examination, Maintenance, Inspection and Testing

- 6. This Inspection was carried out against Licence Condition 28 (Examination, Maintenance, Inspection and Testing). The purpose of this licence condition is to ensure that equipment important to nuclear safety is properly maintained and tested by suitably qualified and experienced people.
- 7. This was the first remote inspection carried out at Hinkley Point B. The approach involved the licensee providing all the requested documentation in advance, followed by a skype conference with the relevant individuals to ask any questions. In this case this was followed up by a visit to site by the site inspector to verify some outstanding issues. The

approach has proved effective and some of the learning from this will be applied to future inspections.

- 8. The inspection focussed on how the equipment important to nuclear safety and its maintenance regime is identified from the safety case. We concluded that, from our sample, the equipment identified, and the maintenance regime was appropriate, however we raised a formal issue on the visibility of the link between the safety case and the identification of the equipment and maintenance regime.
- 9. We concluded that the licensee had implemented adequate arrangements for LC28 for the areas inspected and therefore an IIS rating of green was appropriate.

#### LC11: Examination, Maintenance, Inspection and Testing

10. This Inspection was started during this period, but will be completed and reported on in the next SSG report.

## System Based Inspections (SBI)

- 11. 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
- 12. In this period no system based inspections (SBI) were carried out.

## 2.2 Other work

- 13. Because of the ongoing coronavirus pandemic risks during the reporting period visits to site remain significantly reduced, except where an activity cannot reasonably be completed remotely. The site inspector continued to work remotely to monitor the performance of the site by:
  - a. Maintaining the increased dialogue with site management and the licensee's independent nuclear safety assurance function to develop a consistent picture of the measures put in place to manage the safety of both the workforce and the plant.
  - b. Observing the meetings and working groups the licensee established to assess the coronavirus pandemic and manage the response, including the site pandemic working team meeting (which maintained and overview of the site's response) and maintenance requirements review group (which managed the

impact of potential or actual staff and supply chain shortfalls on safety-significant maintenance activities).

- c. Monitoring the minimum staffing levels required to deliver an adequate response in the event of an accident or emergency on the site.
- 14. Consequently, the site inspector considers that the site has managed its response to the pandemic during the period in a manner that, so far as is reasonably practicable, protected its own staff and ensured that there was no degradation in nuclear safety.
- 15. The site held its annual review of safety with ONR on the 30th September. It was ONR's opinion that the review was an honest appraisal of the site's health and safety performance over the last 12 months. The site has continued to manage health and safety positively and proactively, despite the difficulties that have arisen from Covid-19. There were some areas for improvement, but these were minor, and no formal actions were requested by ONR from the meeting.

## 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 September EDF reported that they had consigned radioactive waste with incorrect transport labelling and incorrect recording of the amount of radioactive material being transported. It is ONR's opinion that this constitutes a breach of European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) requirements. The licensee has carried out an investigation and ONR are content that they have identified the causes and are taking appropriate action to address them. It is ONR's opinion that it would not be proportionate to take formal enforcement.

## 4 **REGULATORY ACTIVITY**

18. 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. One Licence Instrument was issued during this period.

## 4.1 Hinkley Point B Emergency Plan

19. REPPIR19 has prompted the requirement for the review and amendment of the on-site, and off-site emergency plans. Following the Hinkley Point B review and subsequent updates to the emergency plan, the station sought ONR's approval of the Hinkley Point B station Emergency Plan in April 2020 under LC11 arrangements. ONR provided a response in June to the request, highlighting that the description of the Detailed Emergency Planning Zone (DEPZ) in the revised submission has been omitted. Hinkley Point B have now addressed this and re-submitted an On-Site Emergency Plan. ONR issued a licence instrument to approve the plan on the 6<sup>th</sup> August 2020.

 Table 1

 Licence Instruments and Enforcement Notices Issued by ONR during this period

Date	Туре	Ref No	Description	
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6/8/2020	Approval	563	Approval of Hinkley Point B Emergency Plan
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Reports detailing regulatory decisions can be found on the ONR website at <u>http://www.onr.org.uk/pars/</u>.

#### 5 NEWS FROM ONR

## 5.1 Covid-19 (Coronavirus) (ONR position)

- ONR is continuing to obtain assurance that nuclear site licensees and other dutyholders are adequately resourced to continue to safely and securely carry out their activities.
- 6. 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 in the face of any further escalation in COVID-19 transmission.
- 8. ONR staff continue to work at home, primarily. We are increasing our on-site regulatory work in accordance with public health advice. We'll also continue to inspect, assess and permission remotely where necessary to protect staff, workers on site, and the public around sites.

## 5.2 Enforcement Action

- In July we publicised the serving of an <u>Improvement Notice on Rolls-Royce</u> <u>Submarines Ltd (RRSL)</u> for procedural safety breaches at its Derby site. The notice was served after shortfalls were identified against the safety case requirements at a nuclear fuel production facility on the site.
- 10. In September we announced that an <u>Improvement Notice had been served on EDF</u> <u>Energy Nuclear Generation Ltd (EDF NGL)</u> for shortfalls in safety procedures at its Heysham 2 Power Station in Lancashire. The notice was served after some of the equipment which is used to measure reactor power was incorrectly configured during the reactor's restart process following a planned outage in April 2020.
- 11. In September we announced that an <u>Improvement Notice had also been served on</u> <u>Devonport Royal Dockyard Ltd</u> for shortfalls in maintenance procedures at its Plymouth site. The notice was served after Devonport Royal Dockyard failed to

carry out scheduled maintenance tests on an effluent extraction system which is used to support maintenance and repair activities within the licensed site.

12. In September we publicised our intention to prosecute AWE plc under Section 3 of the Health and Safety at Work etc. Act (1974). The charge relates to an incident on 20 June, 2019, at the AWE Aldermaston site which resulted in a contractor narrowly avoiding injury when a flash over of electricity occurred from a 415V electrical source. The incident was a conventional health and safety matter and took place in a 'non-nuclear' building, so there was no radiological risk to workers or the public.

## 5.3 Regulatory updates

- 13. In July the Government published its response to the International Atomic Energy Agency's final report on the <u>Integrated Regulatory Review Service (IRRS) mission</u> to the UK. The IRRS mission took place between 14 – 25 October 2019 was hosted by ONR, and saw a team of 18 independent experts from across the globe scrutinising the regulation of nuclear and radiological safety.
- 14. In August we provided EDF NGL with permission for <u>Reactor 3 at its Hunterston B</u> site to return to service for a limited period of operation (16.425 Terawatt days, approximately six months' operation). In September was also gave <u>permission for Reactor 4 at the same site</u> to return to service for a limited period of operation (16.25 terawatt days, which is approximately six months operation). The decision to permission the restart of these reactors was given after extensive and detailed assessments of the respective safety cases by specialist ONR inspectors.

# 5.4 Corporate updates

- 15. In July we published our new 2020-25 Strategy, which sets out our direction and priorities for the next five years. It builds on our strengths and continues to focus on protecting society, and addressing the changing demands we will face as the UK's nuclear regulator.
- 16. In late September we published our <u>Annual Report and Accounts</u> highlighting our performance and key achievements for 2019/20.
- 17. The report notes that we continued to deliver our mission of protecting society by securing safe nuclear operations and that the majority of dutyholders have continued to meet the high standards of safety and security required. Where dutyholders have fallen short of such standards, we are satisfied that their facilities

remain safe and that our regulatory focus has had a positive impact on their performance.

- 18. During the year, we completed more than 800 compliance inspections across 36 licensed sites during 2019/20, granting permission for 30 nuclear-related activities, serving three improvement notices and instigating one prosecution.
- 19. ONR Chair Mark McAllister said: "I am pleased to report that we have again delivered our mission and achieved our 2020 vision. As we look ahead, I have every confidence in our senior leadership team to see through the strategic improvement projects already underway that will enhance the organisation's information and knowledge management system, and successfully deliver the aspirations of our new strategy."
- 20. In September we announced that <u>Jean Llewellyn OBE</u> had been appointed to the ONR Board as the new Security Non-Executive member. Jean will take up her appointment on 1 October 2020 for a three year term and will Chair ONR's Security Committee.
- 21.

## 5.5 Enforcement Action

- 6 IN JULY WE PUBLICISED THE SERVING OF AN <u>IMPROVEMENT NOTICE ON</u> <u>ROLLS-ROYCE SUBMARINES LTD (RRSL)</u> FOR PROCEDURAL SAFETY BREACHES AT ITS DERBY SITE. THE NOTICE WAS SERVED AFTER SHORTFALLS WERE IDENTIFIED AGAINST THE SAFETY CASE REQUIREMENTS AT A NUCLEAR FUEL PRODUCTION FACILITY ON THE SITE.
- 7 IN SEPTEMBER WE ANNOUNCED THAT AN <u>IMPROVEMENT NOTICE HAD BEEN</u> <u>SERVED ON EDF ENERGY NUCLEAR GENERATION LTD (EDF NGL)</u> FOR SHORTFALLS IN SAFETY PROCEDURES AT ITS HEYSHAM 2 POWER STATION IN LANCASHIRE. THE NOTICE WAS SERVED AFTER SOME OF THE EQUIPMENT WHICH IS USED TO MEASURE REACTOR POWER WAS INCORRECTLY CONFIGURED DURING THE REACTOR'S RESTART PROCESS FOLLOWING A PLANNED OUTAGE IN APRIL 2020.
- 8 IN SEPTEMBER WE ANNOUNCED THAT AN <u>IMPROVEMENT NOTICE HAD ALSO</u> <u>BEEN SERVED ON DEVONPORT ROYAL DOCKYARD LTD</u> FOR SHORTFALLS IN MAINTENANCE PROCEDURES AT ITS PLYMOUTH SITE. THE NOTICE WAS SERVED AFTER DEVONPORT ROYAL DOCKYARD FAILED TO CARRY OUT SCHEDULED MAINTENANCE TESTS ON AN EFFLUENT EXTRACTION SYSTEM WHICH IS USED TO SUPPORT MAINTENANCE AND REPAIR ACTIVITIES WITHIN THE LICENSED SITE.
- 9 IN SEPTEMBER WE PUBLICISED OUR INTENTION <u>TO PROSECUTE AWE PLC</u> <u>UNDER SECTION 3 OF THE HEALTH AND SAFETY AT WORK ETC. ACT</u> (1974). THE CHARGE RELATES TO AN INCIDENT ON 20 JUNE, 2019, AT THE

AWE ALDERMASTON SITE WHICH RESULTED IN A CONTRACTOR NARROWLY AVOIDING INJURY WHEN A FLASH OVER OF ELECTRICITY OCCURRED FROM A 415V ELECTRICAL SOURCE. THE INCIDENT WAS A CONVENTIONAL HEALTH AND SAFETY MATTER AND TOOK PLACE IN A 'NON-NUCLEAR' BUILDING, SO THERE WAS NO RADIOLOGICAL RISK TO WORKERS OR THE PUBLIC.

- 10 REGULATORY UPDATES
- 11 IN JULY THE GOVERNMENT PUBLISHED ITS RESPONSE TO THE INTERNATIONAL ATOMIC ENERGY AGENCY'S FINAL REPORT ON THE INTEGRATED REGULATORY REVIEW SERVICE (IRRS) MISSION TO THE UK. THE IRRS MISSION TOOK PLACE BETWEEN 14 – 25 OCTOBER 2019 WAS HOSTED BY ONR, AND SAW A TEAM OF 18 INDEPENDENT EXPERTS FROM ACROSS THE GLOBE SCRUTINISING THE REGULATION OF NUCLEAR AND RADIOLOGICAL SAFETY.
- 12 IN AUGUST WE PROVIDED EDF NGL WITH PERMISSION FOR <u>REACTOR 3 AT</u> <u>ITS HUNTERSTON B SITE TO RETURN TO SERVICE</u> FOR A LIMITED PERIOD OF OPERATION (16.425 TERAWATT DAYS, APPROXIMATELY SIX MONTHS' OPERATION). IN SEPTEMBER WAS ALSO GAVE <u>PERMISSION FOR REACTOR 4</u> <u>AT THE SAME SITE</u> TO RETURN TO SERVICE FOR A LIMITED PERIOD OF OPERATION (16.25 TERAWATT DAYS, WHICH IS APPROXIMATELY SIX MONTHS OPERATION). THE DECISION TO PERMISSION THE RESTART OF THESE REACTORS WAS GIVEN AFTER EXTENSIVE AND DETAILED ASSESSMENTS OF THE RESPECTIVE SAFETY CASES BY SPECIALIST ONR INSPECTORS.
- 13 CORPORATE UPDATES
- 14 IN JULY WE PUBLISHED OUR NEW <u>2020-25 STRATEGY</u>, WHICH SETS OUT OUR DIRECTION AND PRIORITIES FOR THE NEXT FIVE YEARS. IT BUILDS ON OUR STRENGTHS AND CONTINUES TO FOCUS ON PROTECTING SOCIETY, AND ADDRESSING THE CHANGING DEMANDS WE WILL FACE AS THE UK'S NUCLEAR REGULATOR.
- 15 IN LATE SEPTEMBER WE PUBLISHED OUR <u>ANNUAL REPORT AND</u> <u>ACCOUNTS</u> HIGHLIGHTING OUR PERFORMANCE AND KEY ACHIEVEMENTS FOR 2019/20.
- 16
- 17 THE REPORT NOTES THAT WE CONTINUED TO DELIVER OUR MISSION OF PROTECTING SOCIETY BY SECURING SAFE NUCLEAR OPERATIONS AND THAT THE MAJORITY OF DUTYHOLDERS HAVE CONTINUED TO MEET THE HIGH STANDARDS OF SAFETY AND SECURITY REQUIRED. WHERE DUTYHOLDERS HAVE FALLEN SHORT OF SUCH STANDARDS, WE ARE SATISFIED THAT THEIR FACILITIES REMAIN SAFE AND THAT OUR REGULATORY FOCUS HAS HAD A POSITIVE IMPACT ON THEIR PERFORMANCE.
- 18 DURING THE YEAR, WE COMPLETED MORE THAN 800 COMPLIANCE INSPECTIONS ACROSS 36 LICENSED SITES DURING 2019/20, GRANTING PERMISSION FOR 30 NUCLEAR-RELATED ACTIVITIES, SERVING THREE IMPROVEMENT NOTICES AND INSTIGATING ONE PROSECUTION.
- 19 ONR CHAIR MARK MCALLISTER SAID: "I AM PLEASED TO REPORT THAT WE HAVE AGAIN DELIVERED OUR MISSION AND ACHIEVED OUR 2020 VISION. AS WE LOOK AHEAD, I HAVE EVERY CONFIDENCE IN OUR SENIOR LEADERSHIP

TEAM TO SEE THROUGH THE STRATEGIC IMPROVEMENT PROJECTS ALREADY UNDERWAY THAT WILL ENHANCE THE ORGANISATION'S INFORMATION AND KNOWLEDGE MANAGEMENT SYSTEM, AND SUCCESSFULLY DELIVER THE ASPIRATIONS OF OUR NEW STRATEGY."

20 IN SEPTEMBER WE ANNOUNCED THAT <u>JEAN LLEWELLYN OBE</u> HAD BEEN APPOINTED TO THE ONR BOARD AS THE NEW SECURITY NON-EXECUTIVE MEMBER. JEAN WILL TAKE UP HER APPOINTMENT ON 1 OCTOBER 2020 FOR A THREE YEAR TERM AND WILL CHAIR ONR'S SECURITY COMMITTEE.

## 21 CONTACTS

Office for Nuclear Regulation Redgrave Court Merton Road Bootle Merseyside L20 7HS

website: <u>www.onr.org.uk</u> email: <u>Contact@onr.gov.uk</u>

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