

Office for Nuclear Regulation (ONR) Site Report for HINKLEY POINT C

Report for period 1 October 2018 – 31 December 2018

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 published on the ONR website (<http://www.onr.org.uk/lhc/>).

TABLE OF CONTENTS

1	INSPECTIONS.....	3
2	ROUTINE MATTERS.....	3
3	NON-ROUTINE MATTERS.....	5
4	REGULATORY ACTIVITY.....	5
5	NEWS FROM ONR.....	6
	CONTACTS.....	8

1 INSPECTIONS

The ONR nominated site inspector and/or other ONR specialist inspectors including ONR warranted Health and Safety Executive Construction Division inspectors made inspections on the following dates during the quarter at the HPC construction site:

- 27 September 2018
- 2 - 4 October 2018
- 10 – 11 October 2018
- 15 – 16 October 2018
- 23 October 2018
- 14 – 15 November 2018
- 3 - 5 December 2018
- 11 December 2018
- 19 – 20 December 2018

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 2017 (IRR17) 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

ONR has implemented a programme of intervention to:

- secure ONR's regulation of the construction and installation of two UK EPR™ reactor units by NNB GenCo (HPC) Ltd.;
- ensure that NNB GenCo (HPC) Ltd. is complying with its legal responsibilities;
- conduct theme focused interventions and cross-theme team inspections aimed at gathering evidence to form a judgement on the on-going development of NNB GenCo (HPC) Ltd.'s competence and capability and the effectiveness of its management arrangements for the controlling procurement, design and manufacture;
- to inform ONR's judgement on the adequacy of NNB GenCo (HPC) Ltd.'s site construction related compliance arrangements to support ONR's permissioning decisions.

In this period, routine site inspections at the Hinkley Point C construction site covering the following Licence Conditions (LCs) were performed:

- LC06 – Documents, records, authorities and certificates
- LC11 – Emergency arrangements
- LC17 – Management systems
- LC19 – Construction or installation of new plant (4 inspections)

As NNB GenCo (HPC) Ltd.'s construction activity increases at the HPC site, ONR's site interventions will include increasing focus on NNB's ability to adequately control construction and installation at the HPC site in accordance with NNB GenCo (HPC) Ltd.'s justified design.

With the exception of those LCs specifically identified below, ONR judged that NNB GenCo (HPC) had adequately implemented its licence compliance arrangements with only minor areas for improvement being identified. Where judged appropriate ONR has raised associated low level regulatory issues to ensure appropriate regulatory oversight of the identified improvements.

For the following LCs ONR identified that improvements were required and consequently they were awarded an AMBER (seek improvement) rating:

LC06 – Concrete samples and associated records - ONR examined the adequacy of NNB's records relating to concrete samples and found that whilst appropriate records were being produced by its contractors NNB had not fully specified the records it required to populate its lifetime quality records. ONR has raised an associated regulatory issue to ensure appropriate regulatory oversight of the required improvements.

LC19 – NNB Request For Information (RFI) Process (Technical Queries) – ONR noted that whilst NNB had a number of improvements in progress which should improve the clarity and consistency of the RFI process these had not yet been fully implemented. ONR has raised an associated regulatory issue to ensure appropriate regulatory oversight of NNB's improvements.

LC19 - Implementation of Technical Management and Acceptance (TMA) Site Assurance of Construction Surveillance Activities Programme – ONR concluded that NNB has not yet adequately implemented its TMA assurance programme of site surveillance activities. ONR notes that whilst it is positive that NNB GenCo now has a plan in place to address this issue and a number of other identified improvements, continued focus will be required to ensure that these improvements are secured in a timely fashion. ONR raised an associated regulatory issue to ensure appropriate regulatory oversight of the required improvements.

ONR continues its engagement with the project via regular site visits and meetings at NNB GenCo (HPC)'s office locations across the following themes:

- Design and Safety Case
- Organisational Capability
- Conventional Health and safety and fire safety
- Security

These inspections are providing ONR with valuable intelligence on the progress NNB GenCo (HPC) is making to continue developing its competence and capability to manage the design, procurement and construction of Hinkley Point C.

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.

In November 2018 a conventional safety incident occurred in which a worker fell approximately 3.6m whilst ascending an access ladder, sustaining fractures to his leg. The worker was carrying a hand tool and lost his grip when trying to manoeuvre through a safety gate at the top of the ladder. The carrying of hand tools on ladders is in non-compliance with NNB’s safety requirements. ONR warranted HSE Construction Division specialist inspectors followed up this event and determined that no formal enforcement action was appropriate. ONR expects that NNB ensures that it implements the relevant learning from its own investigation to help ensure that such an event does not reoccur.

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’ , but can take other forms. In addition, inspectors may issue Enforcement Notices to secure improvements to safety.

During the reporting period ONR concluded its permissioning of the Hinkley Point C nuclear island, resulting in ONR issuing its Consent to NNB GenCo (HPC) commencing construction of the unit 1 nuclear island. The Project Assessment Report recording ONR’s assessment can be found at the link below.

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

Date	Type	Ref No	Description
08 November 2018	CONSENT	LI518	Consent issued under Licence Condition 19(4) to the commencement of unit 1 nuclear island concrete

REPORTS DETAILING REGULATORY DECISIONS TAKEN AT HINKLEY POINT C CAN BE FOUND ON THE ONR WEBSITE AT [HTTP://WWW.ONR.ORG.UK/PARS](http://www.onr.org.uk/pars)

5 NEWS FROM ONR

October:

- We welcomed the [publication](#) of the key review of operational safety performance at Torness nuclear power station, published by the International Atomic Energy Agency and the UK government. The report highlights eight areas of good practice at Torness and offers proposals for further improvements, which we fully support.
- Following our decision to prosecute, EDF Energy Nuclear Generation Ltd and Doosan Babcock Ltd pleaded guilty to offences at Hinkley Point B under the Health & Safety at Work etc. Act 1974, section 3(1) and the Work at Height Regulations 2005, Regulation 4(1) respectively. The incident was a conventional health and safety matter, with no radiological risk to workers or the public. [A sentencing date](#) has been set for 1 February 2019 at Taunton Crown Court.

**On 1 February 2019 EDF Energy were fined £200,000 and Doosan Babcock £150,000. The companies were also ordered to each pay half of the prosecution costs of £36,353.84. The full press statement is available on our website.*

November:

- Following a rigorous procurement process, we appointed six nuclear supply chain organisations to our new [Technical Support Framework \(TSF\)](#). The new TSF, which came in to effect on 1 November 2018, has been established to provide a renewed and modernised framework for procuring technical support. We use this technical support to obtain, for example, expert technical assessments, access to specialist software or modelling, or access to niche skill sets that we do not retain in-house.
- The revised Nuclear Safety Directive introduced a European system of Topical Peer Review in 2017 and every six years thereafter. We played a leading role in the preparations for the first European 'Topical Peer Review' on Ageing Management of Nuclear Power Plants and welcome the publication of the [first peer review report](#) by the European Nuclear Safety Regulator Group. We are pleased that a number of our experts made a valuable contribution to the exercise alongside 16 European countries as well as Norway, Switzerland and Ukraine. The UK report was authored jointly between ourselves, EDF Nuclear Generation Ltd and EDF-NNB GenCo.
- [The Atomic Weapons Establishment \(AWE\) was fined £1 million](#) after admitting offences under Section 2 (1) of the Health and Safety at Work etc. Act (1974). The incident, which occurred on 27 June 2017 was a conventional health and safety matter and there was no radiological risk to

workers or the public. The prosecution was the result of our investigation into the incident.

- In conjunction with the Environment Agency, we announced the completion of our [initial high level scrutiny](#) of the UK HPR1000 reactor design.
- We provided NNB Genco (HPC) Ltd (NNB GenCo) with [consent](#) to commence the unit 1 Nuclear Island concrete pour at Hinkley Point C (HPC). We also hosted our third webinar to explain our permissioning role for the Nuclear Island concrete pour at HPC and to provide information on our work to ensure that the new nuclear power station is built to the standards expected in the UK. Amongst others, a number of Site Stakeholder Group members joined the webinar and we received excellent feedback. We are planning further webinars on various topics in 2019. If you would like to find out more, please contact the ONR Communications team at contact@onr.gov.uk
- After 16 years of decommissioning work, Bradwell became the first of the Magnox nuclear power stations to receive our permission to enter into a period of “care and maintenance”.
- The nuclear safeguards regulations which will enable ONR to set up the domestic safeguards regime following Euratom withdrawal, were laid in Parliament. The Government published the details, [alongside its response and the feedback to consultation on the draft regulations on its website](#).

December:

- [Court proceedings continued](#) in our [prosecution of Sellafield Ltd](#) for offences under Section 2 (1) of the Health and Safety at Work etc Act (1974).
- Reactor 3 at Hunterston B remains offline after being shut down following a routine inspection into cracks in its graphite core, in March 2018. [Cracking of the graphite bricks in Advanced Gas-cooled Reactors](#) such as Hunterston B is expected as the reactors age. However, the number of cracks found during the inspection of Reactor 3 has led to the licensee, EDF Nuclear Generation Limited, carrying out further inspections of the core. Reactor 4 at Hunterston B was taken offline in October for an inspection of its graphite core. EDF Energy has submitted a safety case for Reactor 4 and is preparing one for Reactor 3. We will assess both safety cases to determine whether the reactors are safe to return to service. Neither reactor may restart without our consent, which we will give only if it is safe to do so.
- The Government published a [Written Ministerial Statement](#) on implementing Geological Disposal, announcing the publication of its [Working With Communities](#) policy and the launch of a consent-based process to find a site to host a Geological Disposal Facility (GDF). While we have no formal role in identifying the site for a GDF, any future facility will need to meet the high standards of safety and security required of a licensed nuclear site.

All our latest news is available on our website www.onr.org.uk

CONTACTS

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

website: www.onr.org.uk

email: contact@onr.gov.uk

This document is issued by the Office for Nuclear Regulation (ONR). For further information about ONR, or to report inconsistencies or inaccuracies in this publication please visit <http://www.onr.org.uk/feedback.htm>.

© Office for Nuclear Regulation, 2019

If you wish to reuse this information visit www.onr.org.uk/copyright for details.

Published 02/19

For published documents, the electronic copy on the ONR website remains the most current publicly available version and copying or printing renders this document uncontrolled.