



Office for
Nuclear Regulation

Office for Nuclear Regulation (ONR) Site Report for Torness Power Station

Report for period October to 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 distributed quarterly to members of the Local Community Liaison Committee and are also available on the ONR website (<http://www.onr.org.uk/lc/>).

Site inspectors from ONR usually attend the Torness Local Community Liaison Committee meetings and will respond to any questions raised there. Any person wishing to enquire about matters covered by this report should contact ONR.

TABLE OF CONTENTS

1	INSPECTIONS	3
2	ROUTINE MATTERS.....	3
3	NON-ROUTINE MATTERS.....	5
4	REGULATORY ACTIVITY	5
5	NEWS FROM ONR.....	ERROR! BOOKMARK NOT DEFINED.
6	CONTACTS.....	7

1 INSPECTIONS

1.1 Dates of inspection

1. The ONR nominated site inspector and specialist inspectors made inspections on the following dates during the quarter:
 - 1-5 October 2018
 - 22-26 October 2018
 - 26-29 November 2018
 - 10-13 December 2018
2. In addition there were a number of inspections by specialist inspectors of the conduct of the statutory outage of Torness Reactor 2 required under LC30.

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).
 - the Fire (Scotland) Act 2005
 - the Nuclear Industries Security Regulations 2003
4. The inspections entail monitoring the licensee's (EDF Energy Nuclear Generation Ltd (EDF NGL)) 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, the following routine compliance inspections were undertaken:
 - Arrangements to ensure that operating instructions are complied with (LC24);
 - Inspection of the control of exposure to ionising radiation during the Reactor 2 outage (IRR17);
 - Control of contractors;

Operating Instructions (LC24)

6. We found generally good practice at the Station, and a considerable number of improvement initiatives underway. We identified some opportunities to further reduce errors in compliance with working procedures by the application of relevant good practice to the ergonomics of tasks. This included improving the way that procedures are written, and how well they developed in tandem with the layout and labelling of plant and process. This should be in addition to the existing emphasis on human performance practice.

Radiological protection

7. The IRR17 inspection found generally good standards of radiological protection. Advice was given concerning a small number of areas for improvement, which the site undertook to respond to. The inspection team raised one regulatory issue concerning clarification of EDF NGL's arrangements to ensure adequate staff response to fire and nuclear emergency alarms during reactor vessel entry. This is being followed up at company level to ensure that appropriate arrangements will be in place for future vessel entry programmes by EDF NGL.

Control of contractors

8. For control of contractors a number of planned work activities were sampled and we judged that in most cases the appropriate level of control and supervision was implemented commensurate with their safety significance.
9. Minor shortfalls in work activity controls and a number of areas for improvement were identified and communicated to the licensee.

2.2 Systems-based inspections

10. System-based inspections at Torness look at the key technical systems important to nuclear safety. These are inspected against the requirements of the safety case. We plan to inspect all the safety-significant systems over a five-year period. ONR considers that this will provide additional assurance that operations on the Torness 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
11. During the reporting period, there was one safety related systems inspected:

Systems-based inspection of Liquid Radioactive Waste (carried out jointly with SEPA and EDF's internal regulator).

12. This joint inspection with SEPA and ONR was led by EDF's internal nuclear assurance (INA) team. It included an examination of a range of issues related to liquid waste management. Generally good standards were found, with some minor improvement actions that the regulators were content to be managed internally by EDF.

2.3 Other work

13. The period included part of the Torness Reactor 2 2018 statutory outage period. This was the maintenance period that ONR requires all civil nuclear reactors to undergo every three years, under Licence Condition 30 (Periodic Shutdown).
14. ONR inspectors from a range of disciplines contributed to the decision for ONR to issue a formal 'Consent' to restart the reactor on November 13. Inspection and assessment activities during a power reactor outage are to establish that:

- requirements set out in the Station’s Plant Maintenance Schedule (PMS) have been complied with;
 - work has been carried out in accordance with arrangements for identified Structures, Systems and Components (SSC) to the required quality by competent persons;
 - safety issues identified during the reactor outage have been adequately addressed with suitable and sufficient justification provided to allow a regulatory judgement to be made that start-up of the Reactor is safe and will remain in this state until the next outage.
15. The Project Assessment Report that supported this decision is published on the ONR website (see below).

3 NON-ROUTINE MATTERS

16. The Torness nominated site inspector reviews incidents that meet the criteria for routine reporting to ONR under the site’s Licence Condition 7 arrangements. The site inspector samples the station’s follow up reports and corrective actions. In this period the incidents included the following:
17. During this Quarter there were two incidents at Torness that were reported to ONR:
- Reactor 2 was safely shut down after an oil leak in the turbine hall as a precaution to prevent a fire hazard.
 - Testing of a steam system discovered that a valve had been locked open for maintenance and not reinstalled as required. There was no immediate safety risk, but the Station has investigated with a view to reducing the likelihood of a repeat.
18. The ONR Site Inspector discussed both of these events on site with Station management. He was satisfied with the company’s response and investigation and no further action was required.

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 issue Enforcement Notices to secure improvements to safety.

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

Date	Type	Ref No	Description
November 13 2019	Consent	556	Consent to Start-up Reactor 2 Following Periodic Shutdown.

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

5 NEWS FROM ONR

October

20. 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.
21. 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 sentencing marks the conclusion of a prosecution brought by ONR for offences under the Health & Safety at Work etc. Act 1974, section 3(1), (in relation to EDF Energy), and the Work at Height Regulations 2005, Regulation 4(1), (for Doosan Babcock).

The full [press statement](#) is available on our website.

November

22. 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.
23. 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.
24. [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.
25. In conjunction with the Environment Agency, we announced the completion of our [initial high level scrutiny](#) of the UK HPR1000 reactor design.
26. 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

27. 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”.
28. 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

29. [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).
30. 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.
31. All our latest news is available on our website www.onr.org.uk.

6 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, 2018

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

Published 02/18

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.