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| ONR Site Report  Torness Power Station |



ONR Site Report

Torness Power Station

Report for period: 1 October – 31 December 2022

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Approved by: Superintending Inspector

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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 Torness site stakeholder group and are also available on the ONR website (<http://www.onr.org.uk/llc/>).

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

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# Inspections

## Date(s) of Inspection

The ONR site inspector made inspections on the following dates during the report period 01 October – 31 December 2022:

11 - 12 October

16 November

13 – 14 December

# Routine Matters

## 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 etc 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 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.

In this period, routine inspections of Torness power station covered the following:

* Marking of the site boundary;
* Incidents on the site;
* Warning notices;
* Site plans, designs and specifications;
* Operating rules;
* Operating instructions;
* Control and supervision of operations;

Overall the findings from the compliance inspections were good. Further information and clarification is being sought through an ONR regulatory issue for the LC7 incidents on site inspection. ONR have requested further information on the adequacy of incident effectiveness reviews and the implementation of improvements to ensure the risk to workers has been reduced as low as reasonably practicable.

There were no findings from the inspections that could significantly undermine nuclear safety.

During the period ONR attended the Torness emergency planning consultative committee meeting where a review of site safety, environmental and radiological performance is presented to stakeholders which includes forward plans for enhancements.

During the period ONR observed a Torness internal shift exercise, focusing on the training and enhancements to further improve performance for emergency response on station.

Members of the public, who would like further information on ONR’s inspection activities during the reporting period, can view site Intervention Reports at [www.onr.org.uk/intervention-records](http://www.onr.org.uk./intervention-records) on our website [www.onr.org.uk](http://www.onr.org.uk).

Should you have any queries regarding our inspection activities, please email [contact@onr.gov.uk](mailto:contact@onr.gov.uk).

## Other Work

Torness R1 was restarted on 29th November 2022 following an offload depressurised refuelling campaign.

Torness nuclear safety group contacted their technical office on 22nd December 2022 in response to the coolant activity in R1 rising above the expected background levels. The level of activity at this time was well below the first action level required by the Generic Failed Fuel Safety Case but had reached the standard threshold at which failed fuel is declared at TOR. Therefore, the decision was taken to formally declare R1 as containing failed fuel, and the station entered the relevant Technical Specification for operation with failed fuel.

Torness will commence fuel channel surveys to locate the fuel failure in January 2023. In line with Torness arrangements, an event recovery organisation will be established at Torness to prepare for the recovery of any failed fuel identified during the next reactor 1 offload depressurised refuel campaign, currently scheduled for late January 2023.

# 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.

Matters and events of particular note during the period were:

**Incident response team manning level shortfall – 17 October 2022**

Two short notice coincident absences due to sickness at the start of shift resulted in incident response team (IRT) being below minimum numbers by one. The planned staffing was emergency plan plus one.

**Incident response team manning level shortfall – 16 – 18 December 2022**

Three nightshifts over one weekend reported two short notice coincident absences due to sickness, with one remaining operator not being A1 fit, resulted in incident response team being below minimum numbers by one.

**Incident response team manning level shortfall – 27 December 2022**

On nightshift, a short notice absence due to sickness was reported with the remaining surplus operator not being Incident Response Team (IRT) trained. This resulted in the IRT being below minimum numbers by one.

In response to the emergency response team manning level shortfalls, Torness are undertaking an internal investigation to identify the causes and implement any remedial actions to prevent any future recurrence.

**Reactor 1 Potential failed fuel – 22 December 2022**

Following the start-up of Reactor 1 from the scheduled Off Load Refuelling in November 2022, it was observed that the Xenon-133 levels from the Gaseous Activity Monitoring system did not follow the expected trend line towards normal operating levels. The rate of increase in Xenon-133 level in the reactor gas was greater than expected although at the time of the observation the absolute value of the Xenon-133 activity was below that of normal operating levels. Initial judgement made that there was the potential for failed fuel present in Reactor 1.

# 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’ (LIs) but can take other forms. In addition, inspectors may take a range of enforcement actions, to include issuing an Enforcement Notice.

* The following LIs, Enforcement Notices and Enforcement letters have been issued during the period:

On 31 August 2022 an incident occurred during emergency equipment training where 3 shift operators sustained injuries which including sprains, bruising and a bone fracture. Following further information gathering from site inspector, two improvement notices were issued, one to EDF/NGL Torness and the other to AWG training Ltd who are an external training provider conducting the emergency equipment training at Torness.

The Improvement Notices were issued for not conducting a suitable and sufficient assessment of the risks to the health and safety of employees, and persons not in their employment associated with “fire appliance” emergency firefighting equipment used for training purposes, contravening The Management of Health and Safety at Work Regulations 1999 Regulation 3(1).

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

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Type | Ref. No. | Description |
| 08/11/2022 | Improvement Notice | ONR-IN-22-008 TOR71450R | EDF Energy Nuclear Generation Ltd, while carrying out training at Torness Power Station, did not conduct a suitable and sufficient assessment of the risks to the health and safety of employees, and persons not in their employment associated with “fire appliance” emergency firefighting equipment used for training purposes. |
| 08/11/2022 | Improvement Notice | ONR-IN-22-009 TOR71451R | AWG Training Ltd, while carrying out training at Torness Power Station, did not conduct a suitable and sufficient assessment of the risks to the health and safety of employees, and persons not in their employment associated with “fire appliance” emergency firefighting equipment used for training purposes. |
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Reports detailing the above regulatory decisions can be found on the ONR website at <http://www.onr.org.uk/pars/>.

# News from ONR

For the latest news and information from ONR, please read and subscribe to our regular email newsletter ‘ONR News’ at [www.onr.org.uk/onrnews](http://www.onr.org.uk/onrnews).

# Contacts

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