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| ONR Site Report  Torness Power Station |



ONR Site Report

Torness Power Station

Report for period: 1 January – 31 March 2023

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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 January – 31 March 2023:

17 - 19 January

22 February

No inspections carried out in March

# 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:

* Training;
* Emergency arrangements;
* Duly authorised and othes suitably qualified and experienced persons;
* Operating rules;
* Operating instructions;
* Safety mechanisms devices and circuits;
* Examination, inspection, maintenance and testing;

Overall the findings from the compliance inspections were good. Further information and clarification is being sought through an ONR regulatory issue to review the category of use for an operator instruction for the LC24 operating instructions aspect of the Co2 SBI inspection.

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

During the period ONR attended the Torness emergency arrangements review meeting where a review of the previous year’s emergency arrangements training programme was discussed, improvement opportunities were identified and actions from previous meeting reviewed and closed out. The meeting was well attended and emergency training demonstration dates for the coming 2023/24 were announced.

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 nuclear safety group contacted their technical office on 22nd December 2022 in response to the coolant activity in reactor 1 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 Torness. Therefore, the decision was taken to formally declare reactor 1 as containing failed fuel, and the station entered the relevant Technical Specification for operation with failed fuel.

No further failed fuel was detected in a sample of subsequent channel surveys to in January 2023. Torness updated their current safety case throughout January/February 2023 to enable fuel handling under off load depressurised refuelling conditions with failed fuel, the safety case was approved on 8th February in advance of the requirement for fuel handling.

# 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 note during the period were:

**Issues following planned shutdown of Reactor 2 for ODR – January 04th 2023 -** Post-shutdown of reactor 2 for off load depressurised refuelling, three gas circulator variable frequency converter (VFC) units failed, preventing the associated gas circulators from continuing to run at reduced speed as designed.

Torness decision making was established to review findings, the outcome was to proceed with planned reactor blowdown. Further VFC testing was undertaken to establish the cause of the incident, overall confidence was gained on VFC reliability as part of the reactor 2 return to service operational safety review committee prior to reactor 2 commencing restart.

**Unterminated cable found during routine task – January 25th 2023 -** During a maintenance activity, a contract partner carrying out a pre-job risk assessment in the operations training simulator plant room identified an unterminated cable at high ceiling level.

An EDF internal investigation was undertaken, and it is believed that the cable was left in this condition after simulator building heating and ventilation modifications in 2020. Ongoing fixed wire inspections have been prioritised to the simulator building to check for extent of condition and no similar anomalies have been found. Learning briefs have been shared with contractor and station staff.

**Maintenance routine not created for reactor 1 make up shield test – January 2023 -** It was identified that a maintenance routine work order was not created for annual 'pressure hold' testing of the reactor 1 make up shield as required by the engineering change which recorded and justified maintenance changes arising from the change in refuelling mode from low power refuelling to off-load depressurised refuelling.

The required routine work order was created on the Torness management system, and the test was successfully completed on 26 January 2023.

**Technical specification non-compliance – March 08th 2023 –** A technical specification non-compliance was identified during a walkdown of plant in the southeast essential supplies building in preparation for applying an isolation. A terminated, unidentified cable was found.

Due to the time elapsed since the incident and that the working party members that have been identified have retired It is difficult to obtain detailed information on what occurred. The associated work order card was located and reviewed stating that the fire barrier breaches should be re-sealed, and a fire breach certificate was attached to the work order card. The re-sealing task was undertaken in May 2023.

**Pond equipment maintenance room access hatch open – March 12th 2023 -** During a post job de brief of a task in the pond equipment maintenance room it was identified that an access hatch had been lifted and the fuel mast exchanged without all the necessary areas cleared of skips containing irradiated fuel prior to starting.

An EDF internal investigation was undertaken and the procedure and controls for this task was updated to include the introduction and issue of keys from under managerial control to prevent a recurrence of this incident.

# 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 in November 2022, 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.

EDF/NGL Torness and AWG training Ltd adequately implemented the improvements to comply with the notices by the 27 February 2023 enabling them to be closed out.

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

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Type | Ref. No. | Description |
|  |  |  |  |
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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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