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| ONR Site Report  EDF - NGL – Hartlepool Power Station |



ONR Site Report

EDF - NGL - Hartlepool Power Station

Report for period: 1 January – 31 March 2023

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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 Hartlepool Local Community Liaison Committee and are also available on the ONR website (<http://www.onr.org.uk/llc/>).

Site inspectors from ONR usually attend Hartlepool Local Community Liaison Committee 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 1 January to 31 March 2023:

* 17 - 18 January
* 28 February - 1March
* 28 - 30 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 Hartlepool power station covered the following:

* staff training, qualifications and experience;
* incidents on the site;
* organisational changes;
* conventional (non-nuclear) health and safety.

**LC36**

On 17 January 2023, ONR conducted an inspection regarding the preparations for end of generation organisational change. The inspection covered the following topics:

* The station’s preparations for end of generation organisational change;
* Current nuclear baseline and recent organisational changes;
* Lessons learned from Hunterston B and Hinkley Point B; and
* Next steps – defuelling Management of Change justification.

Overall ONR inspectors were satisfied that Hartlepool is following a sound process in engaging staff and preparing for the organisational changes which will take place during defuelling.

**Systems Based Inspection - Buildings, Structures and Infrastructure**

**Buildings, Structures and Infrastructure - System Based Inspection:**

A team of specialist inspectors and the Hartlepool nominated site inspector conducted an SBI of the buildings, structures and infrastructure system to judge the system performance against its safety function.

From the areas sampled during this inspection, we judged that overall the Buildings, Structures and Infrastructure system met the requirements of the safety case.

* **LC 10 (Training)** – We examined the training records for a sample of the personnel involved in the inspection of the system. We found that essential training was generally within date, with two minor anomalies. We judged that compliance with LC 10 met ONR’s expectations and hence assigned an inspection rating of Green.
* **LC 23 (Operating Rules) and LC 24 (Operating Instructions**) – Based on the evidence sampled we concluded that suitable limits and conditions had been derived from the safety case, and are implemented through the technical specifications (operating rules) and station operating instructions. We found that the sampled operating instructions clearly identified appropriate operator actions to be taken following receipt of warnings of significant high winds, following high wind or seismic events. An Observation was raised in relation to a station operating instruction, which required updating. We judged that compliance with LC 23 and LC 24 was consistent with ONR’s expectations and hence assigned an inspection rating of Green to both LCs.
* **LC 27 (Safety Mechanisms, Devices and Circuits)** – We sampled devices identified in the station’s maintenance schedule against safety case requirements.  We confirmed that the seismic monitoring equipment was functional and available. We also confirmed that the non-return flap valves in the Turbine Hall flood barrier were available and met the requirements of the associated technical specification. The potential for identified corrosion to challenge the deployment of a particular dam-board was noted and recorded as an LC 28 issue. We therefore considered that compliance with LC 27 met ONR’s expectations and hence assigned an inspection rating of Green.
* **LC 28 (Examination, Inspection, Maintenance and Testing)** – We sampled LC 28 arrangements and noted some shortfalls with respect to their alignment and the implementation of identified responsibilities. A series of shortfalls were noted regarding the management and rectification of safety related defects. An Observation was raised in relation to dam-board maintenance and whether observed corrosion could prevent removal of boards from their stored position. Overall, significant shortfalls with LC 28 compliance were judged to exist when compared with appropriate benchmarks and relevant good practice and an inspection rating of Amber was assigned.

A single ONR Regulatory Issue has been raised to capture the actions identified in this SBI.  Satisfactory close-out of the issue will be monitored by the ONR civil engineering specialist and nominated site inspector as part of routine regulatory business.

Following the SBI of the buildings, structures and infrastructure system we judged that compliance with LC 10, 23, 24 and 27 met the expected standards and were rated as Green, with a regulatory issue raised to address shortfalls identified with respect to LC 28 compliance, which was rated Amber. Overall, we judged that the system met the requirements of the safety case.

There were no findings from this inspection that could significantly undermine nuclear safety. At present, no additional regulatory action is needed over and above the planned interventions of Hartlepool as set out in the integrated intervention strategy, which will continue as planned.

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

During the period the site inspector held routine meetings with station staff to monitor the performance of the site by:

* Reviewing the current plant status and all open regulatory issues associated with Hartlepool power station with the Technical and Safety Support Manager (TSSM).
* Meeting on a weekly basis with the site-based Independent Nuclear Assurance (INA) team to ensure the internal regulator function remains effective and verifying information provided by the station.
* Engaging with site safety representatives to support their function of representing employees and receiving information on matters affecting their health, safety and welfare at work.
* During this reporting period the site inspector undertook a number of intelligence gathering activities and plant visits including engagement with members of the site’s senior leadership team.

# 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:

**Operation outside technical specifications – Reactor Power:**

The following event was notified in the previous Hartlepool quarterly report having occurred in December 2022. It is reported here again due to the INES rating being uprated from a provisional INES ‘0’ (below scale) to an INES ‘1’ (anomaly) post completion of the station’s internal investigation.

During Reactor 1 start-up, following an off-load refuelling outage, when raising load it was identified that reactor thermal power had been increased to a level above that which was allowable for the control rod position at the time. Following the identification of the error in the reactor power the Central Control Room took immediate action to reduce thermal power to below the maximum allowable limit. This incident did not present a risk to the public.

ONR will conduct routine inspections during 2023 to follow up on the actions identified within the station investigation to ensure that they have been responded to appropriately.

**Fire on a Gas Turbine Oil Tank:**

On 11th January 2023, a fire occurred on one of the gas turbine oil tanks while the tank was being emptied. It was identified during the subsequent investigation that the immersion heaters fitted within the tank were not isolated during the draining of the tank which led to the initiation of the fire. Actions have been raised to amend station documentation to ensure the immersion heaters are isolated during future draining activities. The fire was localised to the tank and was quickly extinguished by onsite personnel. A site incident was declared, and the site Emergency Control Centre was established to account for all persons onsite via a full site muster. Local fire services attended site to assess the facility prior to the station performing clean-up operations of the localised area. The ONR site inspector conducted an inspection of the area during a subsequent visit and was content that there was no requirement for further regulatory follow up regarding the 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.

* No LIs, Enforcement Notices or Enforcement letters were issued during this period.

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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