



Office for  
Nuclear Regulation

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

Report for period April to June 2020

## 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.

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## 1 INSPECTIONS

### 1.1 Dates of inspection

ONR inspectors undertook interventions relevant to Torness Power Station on the following dates during the report period:

- 08-17 June 2020

All interventions in this period were conducted remotely as a result of the coronavirus pandemic.

## 2 ROUTINE MATTERS

### 2.1 Compliance 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 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.

In this period, no routine compliance inspections were undertaken.

### 2.2 System Based Inspection (SBI)

SBIs consist of a series of inspections which are intended to establish that the basic elements of a site/facility safety case, as implemented in Safety Systems and Structures (SSS) are fit for purpose and that they will fulfil their safety functional requirements. In an SBI, the adequacy of implementation of the licensee's arrangements for six Licence Conditions (LC) (10, 23, 24, 27, 28 & 34) is tested for the SSS chosen.

#### 2.2.1 Electrical engineering inspection of electrical protection systems supporting the function of gas circulators

This Systems-based inspection was conducted remotely due to the COVID 19 restrictions implemented at Torness in March 2020. ONR utilised the station independent nuclear assurance to conduct system walk downs etc. to support this remote inspection. The Systems-based inspection focused on the electrical engineering aspects of the electrical protection systems associated with combined emergency generation, and main electrical systems that support the function of the gas circulator system at Torness. The inspection team were satisfied that EDF NGL have adequately implemented their arrangements for the main electrical systems that support the function of the gas circulator main motors, and that these systems meet the requirements of the safety case.

## 2.3 Other matters

### Torness Local Liaison Committee

On 25 June, the annual Torness Local Community Liaison Committee (LCLC) was convened remotely via Zoom. The meeting was well attended and represented. The Torness Station Director provided a summary of station events over the past year, including discussions on safety performance, environmental issues and emergency planning. The focus of the discussions were around Graphite predictions, 2020 statutory outage plans and how Torness have managed with regards to the restrictions imposed during the current COVID-19 Pandemic.

### Torness Emergency Plan

REPP19 has prompted the requirement for the review and amendment of the on-site, and off-site emergency plans. Following the Torness review and subsequent updates to the emergency plan, the station sought ONR's approval of the Torness station Emergency Plan in April 2020 under LC11 arrangements. ONR provided a response in June to the request, highlighting that the description of the Detailed Emergency Planning Zone (DEPZ) in the revised submission has been omitted. ONR have requested that Torness ensure the on-site emergency plan is re-submitted containing the new DEPZ information within the final version. ONR are expecting the re-submission of the Torness emergency plan by the end of November 2020 for consistency with the off-site plan from the Local Authority.

### Exercise Demonstrations

ONR have conducted a review of the practicalities of undertaking emergency exercise demonstrations during the current COVID19 pandemic restrictions. Decisions were made to cancel a security related exercise due to take place in April 2020, re-schedule a transport exercise from October 2020 until quarter 2, 2021 and reschedule the Torness level 2 emergency exercise from 8th September 2020 to spring 2021, in line with a request from the Local Authority.

## 2.4 Other Meetings

Because the coronavirus pandemic resulted in restrictions to travel during the reporting period, and because there were no urgent or essential regulatory matters that necessitated a site intervention, the site inspector worked remotely to monitor the performance of the site by:

- Initiating increased dialogue with site management, the licensee's independent nuclear safety assurance function, and trade union safety representatives to develop a consistent picture of the measures put in place to manage the safety of both the workforce and the plant.
- Observing the meetings and working groups the licensee established to assess the coronavirus pandemic and manage the response, including the pandemic lead team meeting (which co-ordinated the site's response) and maintenance requirements review group (which managed the impact of potential or actual staff and supply chain shortfalls on safety-significant maintenance activities).
- Monitoring the minimum staffing levels required to deliver an adequate response in the event of an accident or emergency on the site.

Consequently, the site inspector considers that the site has managed its response to the pandemic during the period in a manner that, so far as is reasonably practicable, protected its own staff and ensured that there was no degradation in nuclear safety.

### 3 NON-ROUTINE MATTERS

The Torness nominated site inspector reviews incidents that meet the criteria for routine reporting to ONR under the site Licence Condition 7 arrangements. The site inspector samples the station's follow up reports and corrective actions.

Matters and events of particular note during the period were:

#### 3.1 Events

- 2020/388 - Torness reactor 2 automatically tripped due to loss of feed. This occurred following an unexpected trip of a Main Boiler Feed Pump (MBFP), during a manual changeover to the start and standby boiler feed pumps. The feed pump changeover was being undertaken following an earlier, unexpected, brief closure of the MBFP turbine governor valve. The reactor was safely shutdown and adequate post-trip cooling was established. On completion of station fault-finding and further investigation, equipment relating to this event is currently being overhauled.
- 2020/425 - Dropped item during lifting operation associated with new fuel build. During build of a new fuel assembly, the last (top) component of the new fuel stack was being lifted into place when there was a failure of the load path (hoist/grab, including an adaptor used to lift the component). The component and adaptor weighing ~30 kg became detached from the grab and fell around 1m on to the component below. No nuclear safety or personal injury resulted from this incident, however the graphite sleeve of the top reflector was damaged. Immediately following this event, the facility was quarantined and a recovery plan implemented. Due to a similar event occurring in 2018, which ONR followed up on via the INF1 process, ONR are gathering more information to further understand the details of this incident.

### 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 (LIs), but can take other forms. In addition, inspectors may issue Enforcement Notices to secure improvements to safety.

On 28<sup>th</sup> May 2020, ONR agreed to the deferral of the Torness reactor 1 statutory outage from 6<sup>th</sup> June 2020 to 26<sup>th</sup> July 2020 and issued an LI. In June 2020, the station submitted a further justification for an extension to the Torness statutory outage for reactor 1, out to March 2021. ONR are currently carrying out an assessment of the justification and will issue a decision letter in July 2020.

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

Date	Type	Ref No	Description
28/05/2020	Agreement	560	LC 30(2) Agreement to the extension of the operating period of Torness Reactor 1 from 6 June 2020 to 26 July 2020.

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

## **5 NEWS FROM ONR**

### **5.1 Covid 19**

ONR is continuing to protect society by securing safe nuclear operations during the COVID-19 (coronavirus) pandemic. Our staff continue to work from home, in line with government advice, with a limited number of our inspectors, as key workers, travelling to site as necessary to conduct urgent and essential regulatory inspections. ONR's latest position can be found on our website.

### **5.2 Enforcement Action**

ONR served an Improvement Notice on EDF Energy Nuclear Generation Ltd (EDF Energy) for contravention of the Pressure Systems Safety Regulations (2000) at Heysham 1 Power Station. The notice was served after shortfalls were discovered in the examination and inspection of the Reactor 1 pressure vessel at the Lancashire plant. EDF Energy must comply with the Improvement Notice and complete the eleven overdue examinations by 18 December 2020.

ONR has granted an extension to an Enforcement Notice served on Urenco UK Ltd, recognising the good progress made so far. The notice was issued in late December 2019, following a fire safety inspection at the Capenhurst Works in Cheshire, which revealed shortfalls in the fire alarm and detection systems at one of the site's facilities. Urenco UK Ltd must comply with the requirements of the extended notice by 30 September 2020.

### **5.3 Regulatory Updates**

ONR received an application for a nuclear site licence from NNB Generation Company (SZC) Limited, to construct and operate two EPR TM reactors, at its proposed development in Sizewell, Suffolk. We will now assess the application, partly informed by our previous assessment of the EPR TM at Hinkley Point C – including using the relevant lessons from that assessment, while focusing on aspects specifically relevant to Sizewell C.

Whilst we are satisfied that the application is sufficiently complete to proceed to assessment stage, there is still a lot of work to do – and we do not expect to reach a decision until at least the end of 2021.

## **6 CONTACTS**

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