Office for Nuclear Regulation (ONR)

Site Report for

Hartlepool Power Station

Report for period 1 January – 31 March 2021

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 of 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 enquire about matters covered by this report should contact ONR.

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1 INSPECTIONS

1.1 Dates of Intervention

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

- 26-27th January (onsite)
- 23-24th February (onsite)
- 23-24th March (onsite)

Some site interactions 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 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 (EDF Energy Nuclear Generation Ltd, 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, routine inspections of Hartlepool Power Station covered the following:

- January – LC11 – Emergency Arrangements
- February – LC9 – Instructions to persons on site
- March – LC22 – Modification or experiment on existing plant

LC11 – Emergency Arrangements: This inspection was conducted on site by the HRA site inspector and the ONR Operating Reactors LC11 lead dialling in remotely. The aim of the inspection was to use a selected subset of the Emergency Preparedness and Response Capability Map questions as a tool to assess the licensees' compliance with LC11 regulatory requirements. This inspection focused on section one (foundations) of the capability map which assesses that the duty holder has the underlying abilities to deliver adequate emergency planning and response. The inspection identified that:

- The station maintains configuration control for all resources (personnel, facilities, and equipment) identified as being necessary to support the emergency arrangements.
- The station ensures that the emergency arrangements remain sound and practicable. Key issues and learning are identified and used to help ensure emergency arrangements remain fit-for-purpose and issues are tracked to timely completion.
- The station has adapted to the impact of Covid-19 and continues to provide adequate training for defined emergency preparedness and response roles.
- The stations emergency arrangements have been updated to implement the requirements of REPPIR-19.

Based on the sample of evidence inspected it was considered that the EDF NGL's arrangements at HRA meet the regulatory expectations for LC 11.

LC9 – Instructions to persons on site: The purpose of this intervention was to evaluate the adequacy of implementation of the arrangements under LC9. The inspection consisted of a review of the site processes and sampling of evidence to demonstrate that these processes were being adequately followed. From the sample selected it was considered that the arrangements for compliance with LC9 are adequate and engagements with site staff demonstrated a sound understanding of them. No significant shortfalls in delivery of the arrangements were identified.

LC22 Modifications or experiment on existing plant: The purpose of this intervention was to evaluate the adequacy of the arrangements under LC22**.** During this inspection the arrangements were reviewed with the duty holder and a select sample of open Engineering Changes (ECs) were discussed with the relevant site lead for each EC. Generally, the processes for demonstrating compliance with LC22 were considered adequate and there was sufficient evidence that they were being followed. One area was identified as requiring further explanation which was in regard to the management of temporary ECs. These are generally time limited modifications that will be reverted back to the original state after a period of time or in some instances made into a permanent EC. During the inspection it was identified that HRA have a number of temporary ECs that are over 5 years old, with one being over 17 years old. This is not considered best practice and a Level 4 Regulatory Issue was raised that requires HRA to explain how each of their open temporary ECs will be closed out appropriately. This will be followed up during future site interventions.

During all site engagements all outstanding ONR regulatory issues and recent site events are reviewed with the station management.

2.2 System Based Inspections (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.

No SBIs were carried out during the period covered by this report at Hartlepool Power Station.

2.3 Other Matters

During the period the site inspector worked remotely to monitor the performance of the site by:

- Reviewing the open regulatory issues associated with Hartlepool with the Technical and Safety Support Manager (TSSM). Generally, progress is being made on the majority of issues; some delays are evident with lower priority issues, but at present there are no significant concern.
- Meeting with the TSSM during twice-weekly meetings to discuss the station's response to, and the impact of, the coronavirus pandemic.
- Meeting on a weekly basis with the site-based Independent Nuclear Assurance team to ensure the internal regulator function remains effective and verifying information provided by the station.
- Increasing the number of meetings attended, including senior leadership team morning meetings (where the station's priorities are set), maintenance requirements review group meetings (where the impact of potential or actual staff shortfalls on safety-significant maintenance are managed) and operational focus meetings (where the day-to-day threats to safety and operation are discussed).

As a result of the above remote interactions, 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.

2021 Statutory Outage (Reactor 1): In March 2021 ONR Agreed to the deferral of the HRA Reactor 1 statutory outage from 14 March to no later than 4 October 2021. LC 30(1) states that for the purpose of enabling examination, inspection maintenance and testing of any plant or process, the licensee shall, when necessary, ensure that any such plant or process is shutdown in accordance with the requirements of the plant maintenance schedule. The licensee's arrangements require that periodic shutdowns are carried out every three years on each reactor at HRA. The previous start-up consent for Reactor 1 was granted on 14 March 2018.

LC 30(2) gives ONR the authority to Agree to an extension of a plant's operating period based on an adequate safety justification from the licensee.

EDF provided an Engineering Change (EC) to ONR and stated that "the current statutory outage plan for the fleet has been reviewed to take into account the industrial and nuclear safety threat associated with the current COVID-19 pandemic, resulting in the deferral of a number of statutory outages planned in 2020. This has impacted outage planning for 2021, creating overlaps between outages and thus increasing risks associated with resource availability, which could challenge the ability to deliver outages safely and to the required quality standards. A fleet wide review of 2021 outage placement has thus been carried out with the decision made to optimise the placement of the HRA Reactor 1 2021 statutory outage by deferring the outage."

ONR will assess the progress with the Reactor 1 statutory outage as normal and EDF will require the Consent of ONR before they may restart the reactor post the statutory outage.

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. Should you have any queries regarding our inspection activities, please email contact@onr.gov.uk.

3 NON-ROUTINE MATTERS

3.1 Events

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:

- INF1 2021/197 – Use of Dump Condenser. On 28th March Operational Alert was entered due to concerns over feed water stocks. The temperatures in the Reserve Feedwater Tanks (RFTs) were raising toward temperature limits as closed loop cooling could not be deployed via the Main Condenser or the Dump Condenser. The Main Condenser was unavailable as the Turbine could not be maintained on barring and the Dump Condenser was unavailable for normal operations pending an internal inspection under PSSR. As per a Technical Advice Note, the Dump Condenser could be authorised for use for water stock / nuclear safety issues with additional industrial safety control measures in place. An Operational Decision Making (ODM) meeting was held followed by an Operational Safety Review Committee (OSRC) which recommended deployment of the Dump Condenser. This was subsequently authorised by the duty Shift Manager and duty Emergency Controller under Operational Alert.

Appropriate measures were put in place to protect site staff during this period. There was no risk to the public or nuclear safety. ONR will continue to engage with the site regarding the ongoing repair to the Dump Condenser, which is expected to be complete during May 2021.

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 take a range of enforcement actions, to include issuing an Enforcement Notice.

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

Date	Type	Ref No	Description
9 Mar 2021	Agreement	LI 573	Agreement to the deferment of the Reactor 1 statutory outage form 14 March 2021 to no later than 4 October 2021.

5 NEWS FROM ONR

Below are summaries of key activities over the last three months. Further detail is available on our website.

5.1.1 Covid-19 (Coronavirus) (ONR position)

- We are continuing to obtain assurance that nuclear site licensees and other dutyholders are adequately resourced to continue to safely and securely carry out their activities. We remain satisfied with industry's response at this time and there has been no significant change to dutyholders' safety and security resilience. As COVID-19 restrictions change, our focus is on the preparedness for the weeks and months ahead and maintaining safe and secure operations. Our latest position can be found on our website.

5.1.2 Enforcement Action

- In January, we agreed to extend two Improvement Notices served on the Atomic Weapons Establishment (AWE), recognising the good progress made so far. The Notices, which were served in June 2019, relate to the way the company controls changes to organisational structure and resources which may affect safety.
- In January, we served an Improvement Notice on Sellafield Ltd following a number of electrical safety incidents across the site. While we are satisfied that Sellafield Ltd is currently meeting the high standards expected with regards to nuclear safety, as a regulator we require sustained improvements in the area of electrical safety.
- In February, we served an Improvement Notice on Morgan Sindall Construction and Infrastructure Ltd after workers came close to striking a live high voltage electric cable during excavation work at the Sellafield site. Nobody was harmed in the incident on 7 October 2020, and there was no impact on the public or the environment. However, the incident posed a serious risk to workers who were operating within one metre of the 11kV cable.

5.2 Regulatory Updates

- In March, we published a response on our website to a BBC report relating to Sellafield. We were naturally concerned to hear the claims, particularly any suggestion

that staff have been subjected to racist abuse of any kind. As a regulator, if we had any concerns or evidence that bullying and harassment was impacting safety at the site, we would take robust action to ensure this is addressed as a matter of urgency.

- In March, we published an article about how we responded to the serious nuclear accident at the Fukushima Dai-ichi nuclear power plant in 2011 to mark the 10th anniversary.
- In March, we gave EDF permission for Reactors 3 and 4 at Hinkley Point B power station to return to service for a limited period of operation. Permission for Reactor 3 will allow it to operate to a core utilisation of 17.55 terawatt days, while permission for Reactor 4 is to operate to a core utilisation of 17.3 terawatt days, which equates to two periods of approximately six months operation for each reactor.

5.3 Stakeholder Engagement

- In February, we encouraged interested parties to take part in a Nuclear Energy Agency (NEA) survey about building and maintaining trust between nuclear safety regulators and the stakeholders they engage with.
- In February, we provided an update about the leadership structural changes we initially announced in December 2020. Under existing contractual arrangements, current Chief Executive Adriènne Kelbie CBE was always expected to step down as her extended term of office comes to an end in January 2022. Mark Foy will step into the new combined role on 1 June 2021, when the new leadership structure will come into full effect.
- In February, we announced that we had appointed Donald Urquhart to the newly-created role of Executive Director of Operations, which will form part of our new leadership structure. As Executive Director of Operations, Donald will be responsible for leading our regulatory work.
- In March, we announced that as part of our new leadership arrangements, we had appointed three new deputy chief nuclear inspectors (DCIs) to our regulatory and senior leadership teams: Jane Bowie, Paul Dicks and Steve Vinton, currently all senior superintending inspectors at ONR. All three new DCIs have a strong track record of delivering regulation across the organisation, and will help us maintain a focus on our Strategy 2020-25.

6 CONTACTS

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Published 04/21