



Office for Nuclear Regulation (ONR) Quarterly Site Report for TORNESS

Report for period 1 October – 31 December 2016

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 for the Torness Local Liaison Committee and are also available on the ONR website (<http://www.onr.org.uk/llic/>).

Site inspectors from ONR usually attend Torness Local Liaison Committee meetings 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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1 INSPECTIONS

1.1 Dates of inspection

The ONR site inspector carried out inspections on the following dates during the quarter:

- 10 to 13 October (joint inspection with EdF's independent nuclear assurance (INA) function)
- 24 to 27 October (including verification by Euratom inspection team)
- 21 to 25 November (system based inspection)
- 5 to 9 December (joint inspection with Scottish Environment Protection Agency (SEPA) and INA)
- 19 to 21 December (observation of emergency Exercise 'Oscar')

2 ROUTINE MATTERS

2.1 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 1999 (IRR99) 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 inspection activities covered the following:

- Training
- Operating rules
- Operating instructions
- Safety mechanisms, devices & circuits
- Examination, inspection, maintenance and testing
- Leakage and escape of radioactive material and radioactive waste
- System safety case judgement
- Warning notices
- Control and supervision of operations
- Accumulation of radioactive waste
- Disposal of radioactive waste
- Joint inspection with SEPA and INA
- Emergency arrangements
- Meetings with EdF's internal nuclear assurance function
- Meetings with EdF's safety representatives
- Events on the site
- Review of ONR issues database with the licensee

In addition, a separate ‘safety system’ inspection was performed by ONR specialist inspectors and the nominated site inspector to review legal compliance of the post trip sequencing equipment. We judged that the arrangements and their implementation at Torness were compliant with the nuclear site licence requirements.

2.2 Other work

The ONR site inspector supported an independent verification under Article 35 of the Euratom Treaty, which empowers European Commission (EC) appointed verifiers to access nuclear facilities in order to independently verify compliance with the requirements of the basic safety standards directive (BSSD). Torness nuclear power plant was selected as part of a sampling regime of inspections, under which member states with significant nuclear facilities should be verified approximately every four years. The last UK verification was undertaken at Sellafield in 2011. In summary, the EC verification team recognised the high level of competence displayed by the UK and Torness teams, who were able to demonstrate that they are in control of discharges and monitoring. No concerns were raised by the verification team.

On 20 December 2016, the nominated site inspector observed Torness’ peer assessed emergency exercise, which was an opportunity for ONR to observe improvements made by Torness at an interim point between the most recent and the next demonstration exercises. This exercise provided sufficient challenge to test Torness’ implementation of emergency arrangements, and ONR is satisfied that Torness is taking the necessary steps to learn from its shift exercises, to identify further improvements, and to address shortfalls identified.

3 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.

During this quarter, ONR undertook follow-up inspection activities related to previously reported electrical and control & instrumentation events. ONR has set out its regulatory expectations and is satisfied that Torness is taking the necessary steps for the satisfactory close out of these issues.

On 22 November, Torness reactor 1 shut down automatically, owing to an increase in seaweed levels and severe weather conditions. All of the reactor’s safety shutdown systems operated satisfactorily. ONR is satisfied that Torness is fully aware that, on occasions, certain weather conditions in the Forth Estuary can lead to increased seaweed volumes which can enter the station’s cooling water intake system. ONR has previously examined the station’s graded response to such events, and has judged these to be suitably precautionary. Station personnel are trained to respond to worsening situations, and in accordance with the station’s arrangements, the reactor output is reduced or, if necessary, the reactor is shut down manually. In addition, the plant’s safety systems monitor conditions and take the unit off line automatically, should conditions exceed prescribed parameters. ONR is satisfied that the cooling to the reactor was maintained at all times, with no nuclear safety or environmental impacts being experienced as a result of the automatic shutdown. One of the station’s seaweed drum screens suffered damage during this event, and was taken off line for repairs. The remaining drum screens and reactor 2 were unaffected by this event and remained in operation throughout.

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.

No licence instruments or enforcement notices were issued during this quarter.

5 NEWS FROM ONR

On 1 November 2016, ONR held its Industry Conference in London, which brought together senior leaders from across the nuclear sector. We were pleased to welcome Baroness Neville-Rolfe DBE CMG, Minister of State at the Department for Business, Energy and Industrial Strategy (BEIS) to this year's conference who delivered the [keynote speech](#). A special edition of [Regulation Matters](#) has been published following the conference, which provides a summary of how the day unfolded.

As part of our commitment to engage regularly with all our stakeholder groups, we were pleased to welcome 17 representatives from a number of organisations to our ONR / NGO forum on 30 November in London. The event provided an opportunity for NGO representatives to meet with a number of senior ONR leaders, including our Chief Executive and Chief Nuclear Inspector, to discuss a number of priority issues.

Insight into ONR's work as an independent regulator of the nuclear industry can be found in ONR's Regulation Matters. The online publication (<http://www.onr.org.uk/regulation-matters.htm>) reports on the key themes and developments in each of ONR's regulatory programmes and provides an update about the ongoing changes at ONR. <http://www.onr.org.uk/index.htm>. For the latest news and updates from ONR visit the website and sign up for our ebulletin (<http://www.onr.org.uk/ebulletin/index.htm>).

6 CONTACTS

Office for Nuclear Regulation
Redgrave Court
Merton Road
Bootle
Merseyside
L20 7HS
website: www.onr.org.uk
email: ONREnquiries@onr.gsi.gov.uk

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