



Office for Nuclear Regulation (ONR) Site Report for Trawsfynydd

Report for period 1 October 2020 – 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 for the Trawsfynydd Site Stakeholder Group (SSG) and are also available on the ONR website (<http://www.onr.org.uk/llc/>).

Site inspectors from ONR usually attend the Trawsfynydd SSG 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 inspection

ONR inspectors undertook inspections on the following dates during this report period:

- 20 - 22 October 2020;
- 8 December 2020; and
- 9 - 11 March 2021.

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);
- Regulations made under HSWA74, for example the Ionising Radiations Regulations 2017 (IRR17) and the Management of Health and Safety at Work Regulations 1999 (MHSWR99);
- Nuclear Industries Security Regulations (NISR) 2003 (as amended); and
- Regulatory Reform (Fire Safety) Order 2005.

The inspections entail monitoring 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 and security. The licensee is required to make and implement adequate arrangements under the conditions attached to the licence to ensure legal compliance. Inspections seek to judge both the adequacy of these arrangements and their implementation.

In this period, ONR carried out the following inspections at Trawsfynydd:

- LC6: Documents, records, authorities and certificates
- LC7: Incidents on the site
- LC8: Warning notices
- LC9: Instructions to persons on the site
- LC13: Nuclear safety committee
- LC19: Construction or installation of new plant
- LC20: Modification to design of plant under construction
- LC21: Commissioning
- LC22: Modification or experiment on existing plant
- Nuclear Industries Security Regulations (NISR) 2003 (as amended).

In general, ONR judged the arrangements made and implemented by the site in response to safety and security requirements to be adequate in the areas inspected. Where necessary, ONR will take formal regulatory enforcement action to ensure that appropriate remedial measures are implemented to reasonably practicable timescales.

2.2 Other work

Throughout this reporting period, including the period of national lockdown, ONR's nominated site safety inspector has held fortnightly telephone meetings with a Trawsfynydd leadership team representative to maintain situational awareness of matters related to nuclear safety,

security, safeguards, transport and conventional and health and safety, including: workforce resilience, emergency arrangements resilience, supply chain resilience, fire safety, events on the site and activities taking place on the site. No significant issues were highlighted to ONR.

ONR is keeping its engagements with Trawsfynydd under review and is alert to the need to balance completion of planned inspections with Welsh Government and local area Covid-19 rules. This includes now undertaking some interactions by conference call/Skype/Zoom/MS Teams (as appropriate) to optimise physical presence on the site.

Magnox Limited's (ML) Trawsfynydd End State Tactical Group (TESTG) provides updates to site stakeholders, including ONR, on the site's progress with decommissioning activities and planned journey to final end state. ONR attended two TESTG virtual meetings during this reporting period. These meetings discussed progress with fuel element debris (FED) retrievals, preparations for the planned ponds complex demolition, and change in strategy to a rolling programme of decommissioning.

At the July 2020 Trawsfynydd SSG, NDA announced Trawsfynydd as the lead and learn site for a change in strategy to deliver a rolling programme of decommissioning (RPD) which is intended at Trawsfynydd to achieve a final end state sooner. ONR also attended a virtual meeting during this reporting period with Magnox Limited, NDA, Environment Agency (EA) and Natural Resources Wales (NRW) to discuss development of this revised RPD strategy and how transition to its implementation will be delivered. During ONR's inspection visit to Trawsfynydd in October 2020, ONR specialist inspectors engaged with Trawsfynydd to discuss the site's ongoing safestore height reduction enabling works, compliance with the construction design and management regulations (CDM) 2015, and coordination between safestore height reduction and RPD strategy.

In preparation for the end of the UK's transition period with Euratom, ONR carried out several trial Safeguards interventions with volunteering operators. These trials offered an opportunity for both parties to become familiar with ONR inspection of safeguards under The Nuclear Safeguards (EU Exit) Regulations 2019 (NSR19), which entered into force on 1 January 2021. A trial event was carried out in November 2020 at Trawsfynydd. Due to COVID-19 restrictions this intervention was carried out remotely. ONR judged that Trawsfynydd demonstrated adequate arrangements and procedures for the correctness and completeness of its accountancy declarations.

In December 2020, ONR received Trawsfynydd's planned periodic safety review (PSR) submission. The purpose of the PSR is to consider the extent to which a nuclear facility and its supporting safety case conform to relevant good practice, reflect the actual facility condition, and can be maintained over the period to the next review; including identifying any proportionate improvements. ONR plans to complete its assessment of this PSR submission in December 2021.

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.

There was one safety related incident notified to ONR during th period:

- On 15 February 2021 a leak was detected on-site in the Trawsfynydd sewage treatment plant discharge pipe which runs to a permitted discharge point at Llyn Trawsfynydd. The discharge pipe was immediately isolated, and a repair completed on 17 February 2021. Trawsfynydd took the conservative decision to notify ONR of this leak because there is a small potential for the effluent to contain very low levels of

radioactivity. The discharge is monitored, and this leak was judged to be of negligible consequence and no risk to the site’s personnel, environment or public.

Trawsfynydd has now completed its return to normal operations. This has included reviewing the need for staff being physically located on the site and resulted in a number of staff combining working from home with working on the site.

Emergency preparedness is being maintained through a duty cover team in accordance with ONR approved emergency arrangements. These arrangements include the provision to call in additional personnel and the emergency services onto site to assist ML staff. These plans have been regularly rehearsed and observed by ONR inspectors during emergency exercises in the recent past. ML has not reported any supply chain issues that may affect the sites safe status.

4 REGULATORY ACTIVITY

ONR may issue formal documents to ensure compliance with regulatory requirements. Under nuclear site Licence Conditions (LC) ONR issues regulatory documents which either permit an activity or require some form of action to be taken. These are collectively termed ‘Licence Instruments’ (LIs). In addition, inspectors may issue Enforcement Notices to secure improvements to safety and security. No LIs or enforcement notices were issued during this reporting period.

Licence Instruments and Enforcement Notices Issued by ONR during this period

Date	Type	Ref No	Description
			None issued

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

5 NEWS FROM ONR (OCTOBER 2020 – MARCH 2021)

Below are summaries of key activities over the last six months. Further detail is available on our [website](#).

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](#).

Enforcement Action

In October 2020, we [notified](#) Sellafield Ltd that it would be prosecuted under Section 2 (1) of the Health and Safety at Work etc. Act (1974). The charge related to an incident on Friday, 24 April 2020 at the Sellafield site where an employee sustained injuries while working on high voltage electrical equipment. The incident was a conventional health and safety matter and there was no radiological risk to workers or the public. The hearing took place at Carlisle

Magistrates Court on 18 December 2020, where Sellafield Ltd were fined £320,000 and ordered to pay costs of £12,079.07 after pleading guilty to the offence.

In December 2020, we [announced](#) that The Atomic Weapons Establishment (AWE) had been fined £660,000 after pleading guilty to an offence under Section 3 of the Health and Safety at Work etc. Act (1974). AWE was also ordered to pay costs of £9,945.71 during a virtual hearing at High Wycombe Magistrates Court. It followed an electrical incident on 20 June 2019 at the AWE Aldermaston site which resulted in a contractor narrowly avoiding injury when a flash over of electricity occurred from a 415V electrical source. The incident was a conventional health and safety matter and took place in a 'non-nuclear' building, so there was no radiological risk to workers or the public.

In January 2021, 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 2021, 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 2021, 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

Regulatory Updates

In October 2020, we [announced](#) an Information Exchange Arrangement (IEA) with the Canadian Nuclear Safety Commission (CNSC). The IEA is a bilateral agreement between our two organisations which provides a framework for the sharing of information, experience, and good practice to enable both parties to learn from and train each other on technical regulatory issues. It also allows for more effective communication between the two regulators.

In November 2020, our Chief Nuclear Inspector (CNI), Mark Foy, published his [annual report](#) detailing the performance of Great Britain's nuclear industry during 2019/20. As the regulatory head at the ONR, the CNI reported he is satisfied that overall the nuclear industry has continued to meet the high standards of safety and security required to protect workers and the public. In areas where dutyholders have fallen short of these standards, the CNI is satisfied that these facilities remain safe and that ONR has intervened in a proportionate manner to ensure plans are in place to improve performance.

In November 2020, we also [announced](#) the appointment of a new member to the Chief Nuclear Inspector's Independent Advisory Panel (IAP). Chris McDonald has joined the panel, which was set up in 2016 to provide independent advice on technically complex nuclear matters by engaging with industry experts to inform our regulatory strategies and approaches. Chris has a wealth of experience in industrial strategy and manufacturing research. Chris has a degree in Chemical Engineering and has been the CEO of the Materials Processing Institute since it was founded in 2014. He has a proven record in the areas of innovation and low-carbon energy which will be of great benefit to ONR.

In December 2020, we became an [Affiliated Organisation](#) member of the Society for Radiological Protection (SRP). ONR has actively participated and supported SRP for many decades. This affiliation formally recognises ONR's involvement and contributions towards the radiological protection industry and enhances the links between the two organisations.

In December 2020, we became the [UK's nuclear safeguards regulator](#), in charge of the domestic safeguards regime and operating the UK State System of Accountancy for, and Control of, Nuclear Materials (SSAC). Nuclear safeguards are measures to verify that countries comply with their international obligations not to use nuclear materials from their civil nuclear programmes to manufacture nuclear weapons. Following the end of the transition period as laid out in the Withdrawal Agreement, ONR assumed its responsibilities at 2300 Thursday 31 December 2020. This has been a major project for ONR, setting up a new team, new systems and new processes, led by Dr Mina Golshan. Since we were initially tasked by Government to establish a domestic safeguards regime after Brexit, we have developed a team of safeguards specialists, including inspectors and nuclear material accountants, and implemented a bespoke IT system, SIMRS (Safeguards Information Reporting and Management System).

In March 2021, 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 2021, 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 2021, 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.

Corporate updates

In October 2020, we announced that Chief Executive Adrienne Kelbie had been appointed a [Commander of the Order of the British Empire](#) (CBE) in the Queen's Birthday Honours List 2020 for services to the nuclear industry and to diversity and inclusion. Adrienne said: "This honour is a tribute to the ONR team and all others who work tirelessly to create a more inclusive world and safe nuclear sector, as well as those on the long and sometimes arduous journey of leadership and self-development. "Inclusion goes hand in hand with safety, because diverse teams are essential to improve decision making – therefore it's a non-negotiable in nuclear. That's why, as Chief Executive of ONR, I've been personally committed to visibly drive the inclusion agenda and encourage others to do so too. "To be appointed a Commander of the Order of the British Empire (CBE) is an accolade for which I am enormously grateful; it strengthens my commitment to continue to inspire others to be their biggest, best, boldest selves – and change our world for the better."

In December 2020, we also announced that our Deputy Chief Inspector and Director of ONR's Sellafield, Decommissioning, Fuel and Waste Division, Dr Mina Golshan, had been awarded a [Commander of the Order of the British Empire](#) (CBE) in the New Year's Honours 2021, for 'services to nuclear regulation'. Mina said: "I am very grateful to have been awarded this honour. It reflects the work of many talented and dedicated professionals that I am lucky to work with. It also shows the significance of ONR's role in securing safe nuclear operations for the protection and benefit of the society."

Changes to ONR leadership structure

In February 2021, we provided an update about the [leadership structural changes](#) we initially announced in [December 2020](#). Under existing contractual arrangements, current Chief Executive Adrienne Kelbie CBE was always expected to step down as her extended term of office comes to an end in January 2022. Current Chief Nuclear Inspector 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 2021, 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 2021, 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 Stakeholder Engagement

In February 2021, 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.

For the latest news and updates from ONR visit the website and sign up for our [ebulletin](#).

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