



**ONR – NGO Forum
Video conference meeting
26 June 2020 (1000-1200)**

Office for Nuclear Regulation present:

Adrienne Kelbie (AK) – Chief Executive (ONR co-chair)
Mark Foy (MF) – Chief Nuclear Inspector
Mike Finnerty (MFinn) – Deputy Chief Inspector and Director, New Reactors Division
Katie Day (KD) – Policy and Communications Director
Jo deBank (JdB) – Senior Communications Manager

Environment Agency:

Alan McGoff (AM) – Nuclear New Build Lead

NGO representatives present:

Dr Jill Sutcliffe (JS) – Low Level Radiation and Health Conference (NGO co-chair)
Katy Attwater (KA) – Stop Hinkley
Sue Aubrey (SA) – Stop Hinkley
Peter Banks (PB) – Blackwater Against New Nuclear
Prof. Andy Blowers (AB) – Blackwater Against New Nuclear
Peter Burt (PBurt) – Nuclear Awareness Group
David Cullen (DC) – Nuclear Information Service
Tor Justad (TJ) – Highlands Against Nuclear Transport
Dr David Lowry (DL) – Nuclear Waste Advisory Associates
Sean Morris (SM) – Nuclear Free Local Authorities
Ian Ralls (IR) – Friends of the Earth Nuclear Network
Jo Smolden (JS) – Stop Hinkley
Mike Taylor (MT) – Together Against Sizewell C
Pete Wilkinson (PW) – Together Against Sizewell C
Chris Wilson (CW) – Together Against Sizewell C

Apologies:

Dr Ruth Balogh - West Cumbria and North Lakes Friends of the Earth

Secretariat:

Daniel Jones – ONR Communications Manager

1 WELCOME AND INTRODUCTIONS

- 1.1 Dr Jill Sutcliffe (JS) began by welcoming all attendees to the meeting and explained how the meeting would run. JS expressed thanks to the ONR staff that had joined the meeting via their personal devices, due to compatibility issues between the ONR and Zoom software. All attendees introduced themselves.

2 UPDATE FROM THE CHIEF NUCLEAR INSPECTOR

- 2.1 Mark Foy (MF) welcomed all attendees to the meeting and proceeded by providing an overview of the response of industry to the COVID-19 (coronavirus) pandemic. He explained that industry had pared back non-essential activities in the early stages of the pandemic, with sites reducing the number of workers on site, and cited the example of Sellafield which had reduced the workforce from around 10,000 to 1,500. MF explaining that at its peak, absence rates associated with COVID-19 had been around 20% across the sector, but noted this had now fallen significantly and had stabilised.
- 2.2 MF confirmed that he had written to licensees at the outset of the pandemic, and that all licensees were providing daily returns to ONR on the impact of COVID-19 on their sites, specific information provided on absence rates and resilience associated with operations, emergency arrangements, site security plans and supply chain. He confirmed that at no stage had ONR been concerned that the safety or security of any site had been compromised due to the pandemic.
- 2.3 MF advised that ONR had looked at the social distancing measures in place across regulated sites. He noted that NGOs had raised concerns about the social distancing measures in place at HPC, and confirmed that ONR had sought various assurances from the licensee regarding the measures it had in place, and that ONR had attended site and confirmed that improvements have been made. He advised that ONR were satisfied with the control measures that HPC had in place to protect against COVID-19 and that ONR would continue to monitor the situation during subsequent site visits, the next one being scheduled for early July.
- 2.4 MF proceeded to update on ONR's organisational response to the pandemic, explaining that ONR staff were mainly working at home, and were only in the office for essential business reasons. He explained that ONR's regulation at the moment is being undertaken predominately on a remote basis, and that ONR inspectors are only visiting sites for essential inspections.
- 2.5 MF updated on the enforcement action taken by ONR since the Forum last met in November 2019. He confirmed that 22 enforcement letters had been issued; two improvement notices served; and one enforcement notice issued.
- 2.6 MF updated on the situation at Hunterston B (HNB), noting the issues with graphite cracking. MF advised that ONR's assessment of the HNB Reactor 3 safety case was continuing, and explained that there were some technical matters in the safety case that needed to be resolved. He confirmed that ONR was seeking further information from EDF Energy NGL regarding these particular matters.
- 2.7 MF advised that ONR was continuing to pursue with the Safety Directors' Forum (SDF) their work on developing guidance for local liaison committees and site stakeholder groups, in response to a paper produced by Sean Morris from Nuclear Free Local Authorities in March 2017. MF explained that progress to produce a 'Good Practice Guide' had been slower than anticipated. However, MF advised that the project has been re-energised, and that the SDF chair had reaffirmed his commitment to producing a project timeline in July. He also confirmed that ONR would look to facilitate a session between NGO Forum representatives and the SDF project team. **[Post-meeting note: A meeting between the SDF project lead, ONR and NGO Forum representatives took place on 5 August 2020.]**

- 2.8 MF discussed a piece which appeared on the Vice website on 3 June 2020, titled: *'Exclusive: Climate Change Expert Predict 'Grim Future' For Nuclear Power'* which referenced ONR's External Hazards Expert Panel. MF advised that the ONR Expert Panel acted as a 'conscience' to ONR and was there to challenge and to push boundaries of ONR thinking, explaining that the panel provided independent and credible advice, and supported ONR specialists in decision making. He confirmed members were experts in their scientific fields, across the spectre of external hazards and not particularly nuclear experts as that was not necessary to provide meaningful advice.
- 2.9 In response to claims/comments made in the Vice article relating to temperature rise and the Hinkley Point C development, MF confirmed that temperature rise was taken into account in nuclear safety cases. He advised in the HPC safety case, an instantaneous high temperature of 44°C is accounted for. MF also advised that any new potential sites would need to account for an extreme temperature rise in future safety cases.
- 2.10 MF concluded by confirming that in the autumn he will publish his annual report on the performance of the industry. He also confirmed that he expects the majority of duty holders to have submitted Security Assessment Principles compliant security plans by the end of the year. He noted that, following the IRRS mission to the UK in October 2019, the IAEA mission team's report on the UK is expected to be published shortly and will be made available on the IAEA and Department for Business, Energy and Industrial Strategy websites. **Post-meeting note:** The IRRS mission report was published on 9 July 2020. Further details can be found here: (<https://www.gov.uk/government/publications/nuclear-and-radiological-safety-review-of-the-uk-framework-2019>)
- 2.11 Tor Justad (TJ) asked about a radiation leak at Dounreay and queried when the report would be published. TJ also asked for clarification on MF's comment about the expert panel acting as a 'conscience' for ONR.
- 2.12 MF advised that he was not aware of the specific timing on when a report would be published but confirmed to TJ that we would come back to him on this point. MF explained that the Expert Panel provides alternative advice and a lateral perspective on issues, intended to stimulate our thinking, similarly to the NGO Forum.

Action 20.06 – ONR to provide further details to TJ on publication of relevant report concerning radiation leak which he referenced in question to MF.

[Post meeting note (Action 20.06) – Response issued to TJ on 11 August 2020. ONR confirmed that we had received the formal follow up report to the incident notification on 5 June 2020 presenting the results of the site investigation. ONR had reviewed the outcomes from the investigation, in particular the root cause of the incident and agreed with the actions and improvement activities identified to prevent a reoccurrence. In the response issued we also advised that the volume of the spill and consequent activity released did not meet the threshold for formal notification to ONR, and we were therefore satisfied that no further formal enforcement action was warranted. ONR confirmed that the ONR site inspector would be conducting an assessment of the revised arrangements and their implementation during a future visit to site.

We noted that DSRL's formal report of the investigation into the incident was scheduled for completion by 14 Aug 2020, and suggested that TJ contact the site directly for a copy of the formal DSRL report.]

- 2.13 Katy Attwater asked how ONR and licensees were dealing with cyber security, given reported threats from China, and also asked if the Expert Panel had met since May 2019.
- 2.14 MF confirmed that in relation to cyber security, licensees were required to comply with the relevant guidance. MF advised that he did not have the dates on when the Expert Panel last met, but confirmed to KA that ONR would provide this information to her.

Action 20.07 – ONR to provide details on any meetings of the ONR Expert Panel held since May 2019.

[Post meeting note (Action 20.07) – ONR can confirm that meetings of the ONR Expert Panel took place on:

- Expert Panel on Natural Hazards – Seismic held on 13-14 November 2019.
- Expert Panel on Natural Hazards – Meteorological and Coastal Flood Hazards Sub-Panel held on 31 March 2020.
- Expert Panel on Natural Hazards – Meteorological and Coastal Flood Hazards Sub-Panel held on 4 August 2020.

* Notes from the meeting held in November 2019 and March 2020 were provided to KA on 24 July 2020.]

- 2.15 Dr David Lowry (DL) raised concerns at the way ONR has dealt with recent issues at the Hinkley Point C site. DL commented that when NGOs spoke with ONR officials on 3 April 2020, they met without having seen the documents between ONR and NNB GenCo. DL expressed concern that ONR had taken assurances from NNB GenCo, asking why ONR accepted the dubious/fake responses from NNB GenCo. DL also expressed view that ONR was not working together with other regulators, and that he had seen statements from ONR, which in his view, were demonstrably not true. DL also expressed disappointment at the minutes following the meeting between ONR/NGOs on 3 April 2020.
- 2.16 MF advised that ONR acknowledged the various NGO concerns that had been raised around HPC. He confirmed that ONR had responded by discussing with the site its response to COVID-19 and the adequacy of measures in place. MF stated that ONR subsequently used a variety of methods to gain assurances, including the use of the licensees internal regulator and sending our own inspector to site. He confirmed that the site had implemented measures to protect workers, and that the site had improved its arrangements significantly from the outset of the pandemic, addressing some issues which had been highlighted by Forum members.
- 2.17 MF explained that ONR had a mature relationship with the licensee and had sought assurances about safety on site. He stated that during the initial stages of the pandemic ONR had a duty to protect its own staff, which meant reducing visits to site. MF advised ONR had to 'strike a balance' but confirmed that inspectors had

visited the HPC site, and that he was comfortable with the steps taken by HPC. He added that this was reinforced by data related to COVID-19 cases that confirmed that there were no specific issues on the site or in the local area.

- 2.18 Mike Taylor (MT) asked how the Sizewell B reactor was able to shutdown one turbine and continue to operate safely.
- 2.19 MF advised that for a pre-defined period, limited operations with one turbine are permitted, being considered and justified in the safety case.
- 2.20 Ian Ralls (IR) in response to MF's update on the Vice website piece, asked: what scope was there for modifying a nuclear power plant in response to new evidence on climate change?
- 2.21 MF confirmed that licensees were required to cater for credible scenarios during the lifetime of the plant and this may mean implementing a variety of design changes to the plant in its lifetime. He added that where appropriate, nuclear power plants were designed and constructed so that they could be adapted at a later date, such as when considering sea level rises, similar to the situation at HPC, which had previously been discussed with NGOs.
- 2.22 Pete Wilkinson (PW) advised that Nick Scarr had produced a report on the siting of Sizewell C, which claimed that flooding would be inevitable. PW advised that the report had been dismissed by EDF Energy NGL.
- 2.23 MF confirmed that he was aware of this report and although he had not read the report personally, it had been read by specialists in his external hazards team. MF advised that any construction at SZC would have to account for potential future sea level rise. He confirmed that, if permission was given for construction to proceed, ONR would ensure that the plant was designed to ensure safety of the site throughout its lifetime of operation.
- 2.24 KA asked for an update on ONR's input into the new National Policy Statement, and also expressed concern at the lack of progress made so far with a Geological Disposal Facility (GDF).

*Please see Addendum (comment A)

- 2.25 MF confirmed that we engaged regularly with BEIS, and it remained our intention to input into the new National Policy Statement.
- 2.26 Prof. Andy Blowers (AB) asked (in relation to proposed Bradwell B development and Chinese involvement) if ONR had been made aware of changes in the shareholding of the Bradwell B holding company.
- 2.27 MF advised that he wasn't personally aware, but confirmed we would check that ONR had been notified.

Action 20.08 – ONR to check if we have received notification of any changes to the shareholding of the Bradwell B holding company.

[Post meeting note (Action 20.08) – We have sought clarification from Bradwell B and they have confirmed the following:

- There has been no change in the shareholding of Bradwell Power Holding Company Limited. Since September 2016, the ownership proportions have been, and remain, 66.5% General Nuclear International Limited and 33.5% EDF Energy Holdings Limited;
- Bradwell Power Holding Company Limited in turn owns 100% of the issued shares in Bradwell Power Generation Company Limited; and
- Bradwell Power Holding Company Limited has clarified its records with Companies House.

In addition to the above, we would like to make it clear that the Bradwell B Nuclear Power Plant could only be constructed and operated by a company holding a Nuclear Site Licence which would be granted and overseen by the ONR. We would not grant a Nuclear Site Licence to a company with a Board composition allowing undue influence from the shareholders; we would expect a licensee to be demonstrably and visibly in control over all matters of nuclear safety and security on their licensed site.]

- 2.28 AB asked if there had been a significant increase in the shareholding of the Bradwell B holding company, would ONR take this up with the Department for Business, Energy & Industrial Strategy.
- 2.29 Mike Finnerty (MFinn) advised that the Bradwell B (BRB) development was still at a very early stage. He confirmed a nuclear site license for BRB would not be submitted for some time yet. We would consider the BRB organisation as part of our site licensing process, once we received an application. However, we would advise at the earliest opportunity of any major concerns that we had regarding the potential licensable entity, which would prevent us issuing a nuclear site licence.

3 REGULATION OF NEW REACTORS – INDEPENDENCE AND INTEGRITY OF THE PROCESS

- 3.1 In reference to earlier comments from DL (2.15) AK advised that the minutes from the call held between ONR officials and NGO colleagues on 3 April 2020, were circulated to all attendees for comment before being finalised. AK confirmed that ONR was satisfied that the minutes presented an accurate record of the meeting.

*Please see Addendum (comment B)

- 3.2 MFinn began by updating attendees on construction progress at the Hinkley Point C site. He confirmed that there was an incident at the site on 10 June 2020, which involved the collapse of a silo which contained Ground Granulated Blast-furnace Slag. MF advised that the initial view is that there had been a failure of the base of the silo which resulted in the bulk material falling through the floor of the silo to the ground.
- 3.3 MFinn confirmed that NNB GenCo (site licensee) had commenced an investigation into the cause of the incident and that ONR were having regular discussions with NNB and the Health and Safety Executive. MFinn stressed that no one had been injured, the material did not present a serious health risk, and that he was satisfied

there was no nuclear safety issues. He advised that an ONR Site Inspector would be attending site in July.

- 3.4 MFinn confirmed that a nuclear site licence application from NNB Generation Company (SZC) was expected to be received within the next week to construct and operate two EPR reactors at the Sizewell C site. He added that assessment of the application was expected to take around 18 months. **Post-meeting note:** ONR confirmed on 30 June 2020 that it had received a nuclear site licence application from NNB Generation Company (SZC) to construct and operate two EPR reactors, at its proposed development in Sizewell, Suffolk.
- 3.5 MFinn advised that the UKHPR1000 was now in step 4 of the GDA process. He advised ONR had received a lot of documentation and that his team were currently working through the assessment.
- 3.6 In relation to the proposed development at the Bradwell B site, MFinn confirmed ONR was beginning to increase its level of engagement with the prospective site licence company. In relation to Small Modular Reactors (SMRs) / Advanced Modular Reactors (AMRs), MFinn advised that ONR was doing some work on this, and that we have modernised the GDA process to deal with this technology.
- 3.7 MFinn explained that the new GDA process took a 'layered' approach and talked through the different stages, explaining that at any point ONR was able to use a number of tools to ensure issues were rectified. He advised that the layered approach was a methodical, independent, rigorous and robust process for assessing reactor designs.
- 3.8 MFinn explained that ONR had worked with the Environment Agency to modernise the process, which had resulted in the number of steps in the process reducing from four to three. He confirmed that the UKHPR 1000 design would still be assessed using the previous GDA process.
- 3.9 MFinn advised that the modernised process would place greater emphasis on earlier engagement and agreement of scope / submissions throughout the process; would enhance flexibility in the assessment activities and stressed the independence and integrity of process would be retained. He confirmed that under the new process there was also the potential for additional outputs (GDA statements, as well as the Design Acceptance Confirmation and Statement of Design Acceptability as previously); and explicit opportunities for a Requesting Party to make better and more effective use of existing submissions (e.g. to other sovereign regulators).
- 3.10 MFinn updated the Forum on SMRs. He advised they were typically less than 300MW(e), and that the technology was familiar and designed for commercial use. He advised that ONR's Safety Assessment Principles and Security Assessment Principles were broadly fit for purpose to regulate SMRs and explained the importance of vendors understanding the approach to deployment of SMRs (e.g. site licensing, construction, security, organisational, capability, supply chain).
- 3.11 MFinn advised that there was a wide range of AMR technologies, including: liquid metal fast reactors, high temperature gas reactors, and molten salt reactors. He confirmed that ONR was building its capability and familiarity with this technology,

and has provided government with seven technical assessments of proposed new technologies.

- 3.12 MFinn concluded by explaining that he felt ONR's regulation of new reactors was robust, and spoke about the various factors that ONR assesses in detail, including: safety and security of design; site specific aspects e.g. flooding, seismic activity; compliance against nuclear site licence conditions; quality of construction, including supply chain; and the organisational capability of operators. He emphasised that under the modernised GDA process there would not be a diminishment in standards, and that ONR's regulation of all current and potential future new build projects would progress with the same level of depth and rigour.
- 3.13 TJ asked MFinn if he could provide a 'picture' of how he sees SMRs/AMRs developing.
- 3.14 MFinn advised that back in 2015 the government spoke about development and use of SMRs. MFinn explained that ONR had advised government on the work needed to ensure SMRs were safe. He explained that he believed the assessment of the technology would be achievable, but issues around site licensing and locations of sites would be complicated and challenging and would require rigorous assessment from ONR.
- 3.15 TJ asked who makes the strategic decisions.
- 3.16 MFinn advised that government set the policy on SMRs. He confirmed that, if asked, ONR would do a detailed assessment on any proposed technology.
- 3.17 MF added that it was down to government to make the case that it was in the national public interest to deploy new nuclear technologies.
- 3.18 David Cullen (DC) commented that organisations would be key to the deployment of SMRs. He asked if ONR felt organisations could support development of these technologies.
- 3.19 MFinn advised that any organisations wanting to develop/deploy SMRs would need to go through a steep learning curve, and that it would be interesting to see what organisations may come forward.
- 3.20 Peter Burt (PBurt) asked if ONR had a feel for a policy announcement from government on SMRs.
- 3.21 Katie Day (KD) advised that ONR had not had sight of the proposed energy white paper, and that we were unable to provide any further updates at this stage. AK added that the COVID-19 pandemic has resulted in a number of things being pushed back by government.
- 3.22 IR commented that he was amazed SMRs were being given traction, and suggested that organisations may be hoping to maintain expertise for other purposes. He suggested SMRs were not economically feasible and asked if ONR was pressing government on this.

- 3.23 AK explained that it was not ONR's role to offer government advice on costs. AK confirmed that ONR's role was about safety and security, and that it was not for ONR to offer government views on whether SMRs were economically viable.
- 3.24 DL commented that he had been informed that an ONR official at an International Atomic Energy Agency meeting in September 2019 had been acting as a 'cheerleader' for SMRs.
- 3.25 AK confirmed to DL that ONR had already answered his question previously. The individual had not been acting as cheerleader, and the feedback received on the way their comments had been perceived had been discussed with the individual concerned.
- 3.26 DL asked if the references contained in the documents submitted in relation to the UKHPR1000 would be in English or Mandarin.
- 3.27 MFinn confirmed that all information that we require must be in English.
- 3.28 DL commented that it is important that NGOs are able to see primary and secondary documents. DL asked if ONR would ensure licensees and requesting parties supply documents in English.
- 3.29 MF advised that ONR required all documents in English.
- 3.30 DL commented that he had approached China General Nuclear for documents and had been directed to ONR.
- 3.31 MF confirmed if ONR received a Freedom of Information (FOI) request for particular documents, then we would consider releasing the documents in line with FOI guidance.
- 3.32 Peter Banks (PB) commented that no licensee is yet in place for the proposed development at Bradwell B, yet lots of investigative work is taking place at the site. PB felt this was confusing and he raised concern at the sequencing of events.
- 3.33 MFinn explained that there were some misconceptions about GDA. He confirmed that ONR had spoken with the Bradwell B requesting party about the importance of building up its capability and engaging with the local community. AK added that people and organisational capability needed to be in place before a reactor could operate.
- 3.34 Alan McGoff (AM) commented that the GDA was just one part of the process, adding there were a number of other steps requiring regulatory approval before a reactor could be constructed and operated at a particular site.
- 3.35 PB noted that NGOs were aware of this, but that he didn't necessarily feel that potential licensees were aware of the other steps involved.
- 3.36 Chris Wilson (CW) asked how, without a new National Policy Statement (EN6), site based assessments can progress.
- 3.37 MFinn advised ONR was expecting to receive an application for a nuclear site licence from NNB Generation Company (SZC) to construct and operate two EPR

reactors. He advised as part of the site specific assessment, issues around potential external hazards such as flooding, would be assessed. **Post-meeting note:** ONR confirmed on 30 June 2020 that it had received a nuclear site licence application from NNB Generation Company (SZC).

- 3.38 AB commented that he felt the Bradwell B proposal was being rushed through, and asked if regulators were trying to put brakes on this hectic pace. AB expressed view that the Bradwell B site should not be considered because of climate change issues, and felt the ONR and Environment Agency should be making very clear that the risks were too high.
- 3.39 MF advised that our assessments will take as long as is necessary. While ONR was aware of the timelines at other organisations and would try and align with these, he stressed ONR would follow its own processes and take the time it needed. AM added that the EA required requesting parties to meet their expectations and also confirmed that assessments would take as long as is necessary. In relation to SZC, AM confirmed that the EA had received an application in relation to combustion permits and that a consultation on this would commence in the next week or so.
- 3.40 AK thanked Mike for his presentation and NGO colleagues for their questions.
- 3.41 AK closed by thanking all attendees for taking the time to join the video conference, for the range of questions and comments and for listening with respect. She added that she accepted the frustrations aired about policy framework and economics, but appreciated that NGO colleagues recognise these are not matters for ONR. JS also added her thanks to NGO colleagues and to ONR staff for arranging the video conference. Both co-chairs expressed wishes to all to stay safe and well.

Addendum

Comment A – KA requested that it be noted in the minutes that MF didn't respond to her concerns on the delay regarding the provision of a GDF (2.24).

ONR Response – With limited time it was not possible to address this particular question on the day, however, we are happy to provide the following response:

For planning purposes, Radioactive Waste Management which is the organisation responsible for planning and delivering geological disposal in the UK, assume that a GDF will be available to receive the first waste in the 2040s. Filling a GDF with waste and then closing it, once full, will then run into the next century.

ONR recognises that a GDF facility is still a long way off being built, and understands the implications of delays on the nuclear sector. If construction of a GDF is delayed ONR will engage with government regarding the implications and seek to influence any mitigations considered necessary.

ONR will be responsible for regulating safety and security of any GDF during its construction and operation; as well as regulating transport of radioactive waste to the facility

Comment B – In response to comments made by AK in paragraph 3.1, DL requested the following paragraph be included in the minutes:

DL would like it minuted that he dissented from AK's assertion that the minutes were accurate, as he held an hour-long private phone conversation with AK on 2 April 2020, in which he told her several things about HPC, sketching out two accident/incident scenarios arising directly from failed COVID-19 safe working practices. She had not, he stressed, subsequently conveyed these concerns to the next day's meeting with certain NGO interested parties, and gave a less than full report on the risks raised with ONR.

ONR Response – Minutes from the meeting held with NGO representatives on 3 April 2020 were shared and agreed by all participants as an accurate record of that meeting. AK does not agree with the assertions made by DL; AK did not agree with the scenarios put forward by DL in a private call held on 2 April 2020, and gave no commitment to relay such scenarios in the following day's call with NGO representatives on 3 April 2020.