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CM9 Record Ref: 2022/42030

Minutes of the ONR NGO Forum held at 1000–1245 on 17 March 2022 Meeting held over Zoom

In Attendance (ONR):

Mark Foy (MF) - ONR Chief Executive/Chief Nuclear Inspector Donald Urquhart (DU) - Executive Director of Operations Katie Day (KD) - Director of Policy & Communications Rachel Grant (RG) - Head of Policy Shane Turner – Superintending Inspector,

Environment Agency:

New Build

Alan McGoff (AM) - Manager, Reactor Assessment and Radiological Monitoring Team

Safety Directors Forum:

Mark Neate – Chair SDF Elizabeth Atherton Celia Wighton

Secretariat:

Daniel Jones - Communications Manager Lydia Bower - Communications Manager

In Attendance (NGO):

Dr Jill Sutcliffe - Low Level Radiation and Health Conference (NGO co-chair)
Sue Aubrey (SA) - Stop Hinkley
Katy Attwater (KA) - Stop Hinkley
Dr Ruth Balogh (RBa) - Friends of the Earth (West Cumbria and North Lakes)
Peter Banks (PBa) - Blackwater Against
New Nuclear
Prof. Andrew Blowers (AB) - Blackwater
Against New Nuclear
Peter Burt (PB) - Nuclear Awareness Group

Paul Collins (PC) - Stop Sizewell C
Neil Crumpton (NC) - People Against Wylfa
B

David Cullen (DC) - Nuclear Information Service

Rod Donnington-Smith (RDS) - Cumbria Trust

Alison Downes (AD) - Stop Sizewell C Linda Gemmill – Bradwell B Action Network Rita Holmes (RH) - Ayrshire Radiation Monitoring Group

Allan Jeffrey (AJ) - Stop Hinkley

Tor Justad (TJ) - Highlands Against Nuclear Transport

Richard Outram (RO) - 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 (TASC)

Pete Wilkinson (PW) - Together Against

Sizewell C (TASC)

Chris Wilson (CW) - Together Against

Sizewell C (TASC)

1 WELCOME AND INTRODUCTIONS

- 1.1 Katie Day (KD) and Dr Jill Sutcliffe (JS) welcomed everyone to the meeting. KD invited Peter Burt (PB) to provide an update on the planned 'ethics' item for a future meeting. PB explained that we had originally planned to discuss the topic at this meeting, but due to insufficient time on the agenda, the chairs had agreed to defer it until another time. PB explained that NGOs were keen to discuss the paper with ONR before the next scheduled meeting of the Forum in November 2022.
- 1.2 KD advised that once ONR had sight of the paper we could then consider who might be best to attend a meeting with NGO colleagues to discuss further and would seek to organise that as soon as was reasonably practicable, ahead of the next full Forum meeting in November 2022. KD also took opportunity to welcome Richard Outram (RO) and Linda Gemmill (LG) to their first meeting of the Forum.

Action 22.01 – PB to share draft 'ethics' paper with ONR.

2 UPDATE FROM CHIEF EXECUTIVE AND CHIEF NUCLEAR INSPECTOR

- 2.1 Mark Foy (MF) commenced by providing an update on his Independent Advisory Panel. MF welcomed the appointment of JS to the panel and reiterated the value that he felt NGO colleagues bring to it.
- 2.2 MF updated on the CNI themed inspection that is looking into the management of ageing facilities, which he advised was a regulatory priority. The purpose of the CNI themed inspections, which take place from time to time, are to highlight cross-cutting and strategic areas where improvements are needed. He explained that inspections had been carried out at the Atomic Weapons Establishment at Aldermaston and Burghfield, EDF Energy's Sizewell B Power Station, Devonport Royal Dockyard, Hinkley Point A and Sellafield.
- 2.3 MF explained that the themed inspection has been carried out in three phases. Licensees were initially asked to complete a self-assessment of their arrangements which were then verified through a series of inspections. He confirmed that the conclusions and outputs of the inspection will be captured in a final inspection report, which is expected to be published. He advised that the inspections had so far highlighted some areas for improvement, noting the integration of ageing security assets; and ensuring effective funding models to deliver effective ageing management in future. Once the report is published, MF felt there would be opportunities for the industry to cooperate and collaborate on improvements to address common challenges.

MF moved to update on the Regulated Asset Base (RAB). He confirmed that ONR has been providing ongoing technical and regulatory policy advice as the government's proposal for a RAB model for nuclear develops, ensuring that safety and security remain paramount. He confirmed that ONR's regulatory

work in relation to Sizewell C (SZC) would continue.

- 2.4 MF advised that ONR was looking to pull together a Memorandum of Understanding (MoU) with OFGEM and the Environment Agencies in line with the principles in our response to government's consultation on RAB last year. Specifically, that: a) our independent regulation is unhindered in the context of RAB; b) an effective working relationship with other regulators is maintained; and c) safety and security remain paramount. He noted that ONR's vires will remain entirely independent of the economic regime and we expect the licensee as they do now to consider value for money and competing costs. He confirmed that the MoU would be published on the ONR website in due course.
- 2.5 MF confirmed that ONR had recently completed the Generic Design Assessment (GDA) of the UK HPR1000 design. He noted that the Design Acceptance Confirmation (DAC) was issued on 7 February 2022 to China General Nuclear (CGN), EDF Energy and General Nuclear International Ltd. He advised that the design has been assessed against the high levels of safety and security expected in the UK, and issuing the DAC after rigorous and detailed assessments means that ONR considers the UK HPR1000 design is suitable for deployment in the UK although it does not mean that construction of a new nuclear power station can start.
- 2.6 MF confirmed that ONR was no longer deploying any funding to this technology (UK HPR1000) or the Bradwell B development, but is keeping a watching brief.
- 2.7 MF moved to update on progress since becoming the national safeguards regulator. He commented on a number of notable achievements in the first year, including: all dutyholder reports being received on time; working closely with smaller operators to manage the transition; facilitating all planned IAEA safeguards activities in the UK; first assessments of accountancy and control plans; providing subject matter expertise support to the Department for Business, Energy and Industrial Strategy (BEIS). He confirmed that an international peer review exercise is expected to be conducted by a French team in July 2022. He advised that they will be reviewing ONR's regulatory framework, guidance and approach and will provide recommendations and highlight any areas of good practice they observe.
- 2.8 Mike Taylor (MT) asked if there was any news regarding a GDA commencing for the Rolls Royce Small Modular Reactor design.
- 2.9 MF advised that BEIS had completed their due diligence and that he had received a letter from the Minister asking that ONR commence a GDA of the design. He confirmed that he expected the GDA would commence on 1 April 2022. He noted that the GDA would be completed to the same depth and rigour as previous ones, and that the GDA was not aligned to any specific site. He advised that site specific issues would be addressed as part of any future site specific safety case.
- 2.10 When guestioned by NGOs on funding matters, MF noted that ONR had been

- paid in full by the requesting parties for the GDA of the UK HPR1000, in line with arrangements.
- 2.11 David Cullen (DC) commented on the change in the political climate since CGN got involved in the process. MF advised that it was a matter for government as to whether or not CGN were to remain involved in the project.
- 2.12 DC commented on the 'AUKUS' agreement, and asked if it was correct that Australia would be able to remove reactors from submarines without being subject to safeguards arrangements.
- 2.13 MF advised that details of the AUKUS arrangements were still being worked up. He confirmed that ONR's safeguards specialism was providing advice to government.
- 2.14 Neil Crumpton (NC) commented that it was his understanding that Westinghouse were again looking at the Wylfa site. He asked if MF had any comments on the apparent upgrades to the AP1000 design that have been made by the Chinese. He also noted his concern that under the RAB model costs may fall onto the taxpayer if ONR were to make demands of the developer.
- 2.15 MF advised that in the case of SZC the developer would like to construct the same design as that deployed at Hinkley Point C (HPC). He advised that if the development did go ahead then he expected regulatory costs would actually be lower as the design would have already have been constructed.
- 2.16 Prof. Andy Blowers (AB), in relation to Bradwell B, asked what ONR meant by the term 'a watching brief', asking if this implies that CGN are not actively pursuing the project.
- 2.17 MF clarified his earlier comment and explained that ONR had deployed its resources elsewhere. He explained that ONR is watching developments but not currently undertaking any regulatory work in relation to the proposed Bradwell B development.
- 2.18 Tor Justad (TJ) asked what is the UK's relationship with Euratom since Brexit.
- 2.19 MF advised that ONR continued to cooperate with Euratom.
- 2.20 MT commented that the HSE "tolerability of risk" document was issued several years ago. MT asked if this has been updated.
- 2.21 MF advised it had not been updated. He advised that the document was developed after looking at risk across a number of different industrial sectors, and that it continues to underpin our regulation of the nuclear industry. MF explained that ONR is currently reviewing whether or not it needs to update the 'tolerability of risk' guidance.
- 2.22 Pete Wilkinson (PW), in relation to the question from MT, asked to whom are these risks assumed to be tolerable. PW commented that if we don't know the

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risk of radiation, how can we understand that risk.

- 2.23 MF advised that the guidance had been developed after looking at risk across a number of different sectors. He confirmed that ONR guidance documents do address radiation risk exposure.
- 2.24 LG asked if the proposed Bradwell B development does proceed, would ONR envisage the Development Consent Order and Pre-Cronstruction Safety Report (PCSR) going ahead together.
- 2.25 MF advised that the PCSR is the justification that the design is safe to be constructed on the chosen site. He confirmed that the DCO and PCRS can run in parallel, but that exact timing would be a matter for the Bradwell B developers.
- 2.26 AB asked if ONR is satisfied that a waste management strategy beyond 2100 is capable of assessment. In light of the 'unknowability' of site conditions in the far future, AB asked how could ONR and the EA be satisfied that their assessment is robust or, is it dependent on adaptive management.
- 2.27 MF advised that ONR does look at predicted impacts on licensed sites. He explained that managed adaptive measures could be incorporated into a design from the outset. MF advised that ONR is reflecting on the latest information (in relation to climate change) and will ensure that this is included in justifications for continued safe operations of licensed sites.
- 2.28 AB commented that this is a fundamental point and he felt there was a lack of realism, noting that it is not possible to know what the situation will be beyond 2100. He considered there was a 'certainty' being put forward, but there is a lack of knowledge of what will happen in the future and beyond 2100. He commented that he hoped regulators would recognise this.
- 2.29 MF commented that he felt this was a valid point.

3 UPDATE FROM EXECUTIVE DIRECTOR OF OPERATIONS

- 3.1 Donald Urquhart (DU) provided an update on the work being done by ONR in relation to the Ukraine crisis. He confirmed that ONR was monitoring the potential impact on nuclear facilities and working collaboratively with other national and international regulators and bodies such as the International Atomic Energy Agency, Western European Nuclear Regulators' Association and the European Nuclear Safety Regulators Group. He noted that ONR did have specialists with knowledge of reactor designs in Ukraine, but that ONR's principal role was to provide expert advice where necessary.
- 3.2 Rita Holmes (RH) asked if ONR has a say in how RIMNET informs the public if there was to be an escalation in Ukraine and an intentional or unintentional release of radioactivity. RH commented that in her view, government couldn't be relied upon to release the true extent of risk and contamination, so felt independent monitoring is necessary. RH asked what role did ONR have to

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play.

- 3.3 DU confirmed that RIMNET was updated a number of years ago. He advised that ONR is a secondary responder, but that it does have a formal role in providing advice. He advised that he was confident government would provide the necessary information to the public.
- 3.4 DU moved to update on the current COVID-19 position across the industry. He advised that the industry had responded very effectively to the pandemic. He explained that ONR had kept a close oversight of how industry has responded, and in due course, ONR intended to assess industry preparedness for a pandemic more severe than that of COVID-19.
- 3.5 Following questions submitted in advance relating to Dungeness B, DU gave an update on the current situation at the site. He confirmed that EDF Energy had intended to operate the site for several more years, but had taken the view that they would be unable to return the reactors to service. DU explained that Dungeness B only began to develop its defuelling safety case in earnest once the decision to cease operations had been made, in contrast to HNB and HPB, where initial defuelling safety cases have been in preparation and development for six years prior to closure. DU advised that ONR expected to receive the defuelling safety case in 2023.
- 3.6 DU moved to update regulatory news from across other sites. He noted that Hunterston B had now shut down, and that Hinkley Point B was to shut down in July. He advised that the first key-way root crack had now been identified in the graphite core of Reactor 2 at Heysham 2, noting that an increased inspection regime was now in place at both Heysham 2 and Torness.
- 3.7 DU advised that ONR was paying close attention to the issue of stress corrosion cracking, which had been found in a number of reactors in the French fleet. While recognising that different components are used in the French fleet, DU advised that ONR was engaging with EDF Energy and Sizewell B regarding this matter to understand if there was any lessons for the UK.
- 3.8 DU updated on work being done at Sellafield to commence retrievals from the Pile Fuel Cladding Silo (PFCS). DU advised that a team of specialist inspectors had completed a rigorous assessment of the safety case and they are satisfied it is now safe for ONR to permission the commencement of retrievals from the facility. He explained that through ONR's regulatory oversight, we will be closely monitoring this work and will only allow it to progress if we are satisfied it is safe. In relation to the Magnox Swarf Storage Silo, he explained that ONR inspectors were currently assessing the retrievals safety case.
- 3.9 DU noted that since the Forum last met, ONR had issued an Improvement Notice to Siemens Healthcare due to a loss of a transport package (later recovered).
- 3.10 Alison Downes (AD) asked if EDF Energy was fuelling Sizewell B with fuel from

Russia.

- 3.11 MF advised that fuelling of the reactor was only done during an outage, which in the case of Sizewell B, was not expected for some time.
- 3.12 DC commented on the shelling of a reactor site in Ukraine. He asked to what extent do the standards enforced by ONR encompass during this kind of incident, and if there would be any process for ONR drawing lessons from this incident.
- 3.13 DU advised that ONR has external hazards specialists who look at the ability of reactors to withstand extreme events. MF added that while reactors were designed to withstand extreme events (such as aircraft collison), reactors were not designed to withstand the impacts of war. DU noted that a major concern was the loss of grid connectivity at the affected site.

4 UPDATE BY CHAIR OF THE SAFETY DIRECTORS' FORUM (SDF)

- 4.1 JS welcomed chair of the SDF, Mark Neate (MN) to the Forum, along with Elizabeth Atherton (EA) and Celia Wighton (CW), who had all been invited to provide an update on the Site Stakeholder Group 'Good Practice Guide' which the SDF had been working to produce.
- 4.2 MN advised that he would be shortly taking the guide back to the SDF for final review/comments, before seeking final approval by members.
- 4.3 He acknowledged that the SDF should have recognised the challenges involved in producing this guide, and recognised the difficulties posed to the Young Nuclear Professionals Forum team (YNPF) who had originally started work on the guide some time ago. He commented that there was learning for how the SDF assigned future tasks.
- 4.4 MN explained that the guide highlighted good practice but that it did not stipulate how groups should be run. He hoped this approach would ensure the 'buy in' of the different communities involved.
- 4.5 RH acknowledged the difficulties involved and commented the job was 'almost impossible'. RH advised that in her experience there was some very good examples of 'good practice' in SSGs but that some were very resistant to NGO involvement.
- 4.6 PB thanked EA and CW for the work they had done to get to this point and acknowledged the difficulties involved. PB expressed a view that it was now important to start using the guide and asked MN and ONR how it would be taken forward.
- 4.7 MN advised that he would try to ensure colleagues were cognisant of the guide. He explained that he didn't see it as contentious and would be seeking endorsement of it from the SDF.
- 4.8 DC commented that several NGOs had questioned whether the YNPF was the

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- right body to take forward this work in the first place. He advised that he was disappointed that certain sites will take different positions, and was concerned that defence sites, in particular, would continue to have closed meetings.
- 4.9 MN explained that if the guide is endorsed by the SDF then it would help to give weight to it. However, he noted that the SDF could not stipulate that every group applies all aspects of the guide.
- 4.10 MF added that it was important to recognise that this had come along way. He commented that if the SDF do support the guide then there would be tacit recognition that the different groups should be reflecting good practice.
- 4.11 Dr Ruth Balogh (RBa) commented that in her experience the nuclear industry had a poor understanding of engagement practice. RBa asked if ONR had the remit to help nuclear sites to understand the principles and practices of engagement.
- 4.12 MF explained that ONR was charged with regulating across five purposes and did not have the vires to enforce good practice across SSG/LLC meetings. However, he noted that ONR had learned to improve its engagement with stakeholders, and that ONR was trying to encourage others across the industry to do similar.
- 4.13 PW commented that in his experience SSGs were generally pro-nuclear and that there was an issue with those who were anti-nuclear. He also expressed a view that there was an issue with the quality of the information provided by industry and regulators.
- 4.14 AB expressed a view that the 'voluntary' nature may mean the guide isn't implemented across groups.
- 4.15 PB asked if ONR would take an interest and ask sites what action they are taking to implement the guide, and asked if it could be raised with senior leaders across the industry. PB asked MN if the SDF would consider a 'stocktake' in due course to look at what the take up of the guide has been amongst the different groups.
- 4.16 Alan McGough (AM) advised that the Environment Agency didn't have any vires in relation to SSG/LLC meetings, but would encourage adoption of the quide.
- 4.17 MN advised that he couldn't put forward a position with regards to compliance with the guide, but did confirm that the SDF would commit to subsequent engagement on how the guide has 'landed'.
- 4.18 JS thanked the SDF for joining the meeting. KD advised that ONR would look at how it could support its inspectors with the promulagation of the guide.
- 5 UPDATE ON TAISHAN AND SIZEWELL C SITE LICENCE APPLICATION
- 5.1 KD welcomed Shane Turner (ST) to the Forum in his capacity as Head of

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Regulation of the EPR design.

- 5.2 ST advised that understanding what had happened at the Taishan reactor site in China was a key area of focus for his team. He advised that ONR was in contact with the French, Finnish and Chinese regulators, and met with them at the end January, which the Chinese licensee also attended. ST confirmed that it had been a very open meeting and lots of information had been provided. He advised that discussions were held around the possible causes of the fuel failure, although he noted that the matter was still being investigated.
- 5.3 ST advised that ONR understood that the stress corrosion cracking of some fuel assembly grid springs was a contributing cause of the fuel failure, although the root causes were still being investigated. He confirmed that NNB Genco, the licensee of Hinkley Point C, had a similar understanding.
- 5.4 ST advised that fuel for Hinkley Point C had not yet been ordered and that there was time to address any learning to emerge from Tiashan. He confirmed that ONR would ensure that, as part of its regulatory oversight, any learning to emerge was addressed, and that ONR would scrutinise any subsequent changes to the design.
- 5.5 ST explained that the operation of the EPR design in Finland would also provide useful intelligence, although he noted the fuel assemblies in the Finnish reactor were different to those in Taishan.
- 5.6 NC asked if the Taishan unit 2 was operating at full power. ST advised that it was ONR's understanding that it was operating at full power.
- 5.7 AD asked when ONR would next meet with the other regulators regarding this matter. ST confirmed that ONR would meet again with the other regulators in the next couple of weeks.
- 5.8 Paul Collins (PC) commented that he understood the Olkiluoto reactor has a vibration damper fitted. PC asked if this was part of the design expected at HPC and SZC. ST advised that ONR was still engaging with NNB Genco on plans for HPC.
- 5.9 ST moved to update on the Sizewell C site licence. He confirmed that the licence application was received in June 2020, and that assessment work was in the later stages. He advised that ONR would be aiming to make a decision around the end of June. He noted that once the assessment had been completed, it would then be subject to an internal governance review. ST was clear that if a licence is issued, it does not mean that construction can commence.
- 5.10 KD thanked ST for the update and returned to some of the earlier questions asked.
- 5.11 RBa commented that ONR seemed to speak as though the pandemic was over, which seemed to be the government view. RBa advised that the Omicron

variant was still affecting up to 1 in 25 people in England

- 5.12 DU stressed that in relation to COVID-19, ONR was not complacent. He confirmed that in due course, ONR would look at industry resilience to future pandemics.
- 5.13 MT commented that there was substantial local concern towards the anchor design around the proposed Sizewell C site, and that he was not convinced that ONR would be able to get sufficient information following trials.
- 5.14 MF confirmed that if ONR was not satisfied in the demonstration of the anchor trials then we would not approve construction.
- 5.15 RBa noted that during the presentation by MF, there had been a lot of background noise. KD advised that ONR would note this concern and ensure arrangements were appropriate for future meetings. She apologised for the inconvenience caused.
- 5.16 NC commented that he had been made aware of an incident involving a 400kv transformer at Hinkley Point B, and asked for further information.

Action 22.02 – ONR to establish details of this incident and provide NC with an update.

- 5.17 PW let the meeting know that DL had been able to leave hospital and to move to suitable accommodation.
- 5.18 KD and JS closed the meeting by thanking everyone for attending and wished everyone well.

The meeting closed at approximately 12.35