

Note on a meeting between the Office of Nuclear Regulation (ONR) and invited Non-governmental Organisations (NGOs) at the Grand Connaught Rooms, London, on the 23rd May 2012

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Attendees

NGOs

Barrie Botley – Kent Against Radioactive Environment
David Lowry - Nuclear Waste Advisory Associates
Jo Brown - Parents Concerned about Hinkley
John Busby - Advisor to stop Hinkley
Michael Taylor - Communities Against Nuclear Expansion (CANE)
Peter Burt - Nuclear Information Service
Phil Davies - SPRU/University of Sussex, also NWA
Andrew Blowers - Chairman of Blackwater Against New Nuclear (Banng)
Reg Illingworth - Shepperdine Against Nuclear Development
Sean Morris - Nuclear Free Local Authorities
Val Mainwood - Bradwell for Renewable energy
Tim Street - Nuclear Information Service
Jill Sutcliffe - Low Level Radiation Conferences
Angela Paine - Stroud Green Party
Max Rosseter - Greenpeace UK
Neil Crumpton – Friends of the Earth

ONR personnel

Mike Weightman – HM Chief Inspector and Executive Head of ONR
Derek Lacey - Director of Regulatory Policy, Strategy and Assurance Group
Charles Temple – Head of ONR Emergency Preparedness and Response and Radiological Protection
Jane Bowie – Personal Technical Assistant to Dr Mike Weightman
Marie Railton – Communications Team ONR

Pete Wilkinson – Wilkinson Environmental Consulting (note taker and facilitating)

Environment Agency

Alan McGoff – Environment Agency
Martin Murray – Environment Agency

Welcome and objectives

The meeting began on time at 1100 and participants were welcomed by the Chairman and thanked for taking the time and interest to attend the meeting, some travelling long distances to be here. The Chairman reminded participants that the genesis of these meetings was a desire expressed by ONR to know how it could meet expectations of its widely expressed

desire to pursue a policy of openness and transparency, issues identified as being pertinent to new nuclear build, the ONR's performance and matters attendant on the work of the ONR. The Chairman outlined the papers available, including action points from the previous meeting in November.

General Issues

The ground rules for the meeting are to be proposed, discussed and agreed via e-mail. For adoption at the next meeting.

Mike Weightman (MW) to consider travel and subsistence (T&S) payments for attendees, via consultation with DECC and in light of civil service rules.

Request for more frequent meetings and consideration of location, to encourage wider attendance. Mike Weightman to take forward, subsequent to his T&S discussions.

The issue of knowledge transfer was raised again, and the potential for NERC to assist.

ONR are to review the actions arising from the last meeting and provide a status update.

Fukushima

Mike Weightman advised that the ONR report on the implementation status of his Fukushima Report recommendations is scheduled for October 2012.

Mike Weightman requested that the NGOs consult DECC directly with regard to government reaction and opinion on his Fukushima Final Report.

There was a general discussion on dose uptake at Fukushima, particularly relating to site temporary workers and young members of the public. Mike Weightman noted that the Japanese are being encouraged to develop a follow-up health screening process. It was further noted that IAEA and national regulators are seeking dose records of temporary workers at Fukushima, and Mike Weightman agreed to identify the international work being undertaken in this area, and to report back to the next meeting.

There was a general discussion around insurance implications post-Fukushima, with Mike Weightman noting that there are issues regarding insurance implications internationally, and reminding the group that this is a DECC area of responsibility.

A question was posed regarding how ONR are updating local communities with regard to the European Stress Test and MW Fukushima Final Report. MW informed the meeting that information will be published on the ONR website subject to security classification and that NGOs would be advised when it was posted.

It was noted that a report from Greenpeace has been issued to ONR. ONR undertook to provide a view on the report at the next meeting.

Security

David Lowry's questions on security¹ were discussed, and Mike Weightman undertook to provide written answers for the next meeting.

There was a general discussion around security and emergency planning with regard to REPPIR arrangements, the exercising of potential security events and cyber terrorism.

¹ See appendix 1

There was a further discussion centred on the security implications of a multinational workforce for new nuclear build in the UK. It was noted that the NGO forum had requested a workforce plan from EDF for their new nuclear build programme.

Mike Weightman gave a verbal overview of how ONR manage security issues. This was amplified by Charles Temple (CT) who also added that ONR guidance is due to be published imminently regarding security and emergency planning issues. CT further highlighted that lessons from Fukushima are being build into the national nuclear event exercise programmes.

Security issues were taken in the breakout session – reported later.

IAEA Fundamental Principle 7 and ONR Equivalence.

It was noted that there had been several rounds of correspondence on this matter, with various reports available. The forum noted that there are further NGO questions raised in response to ONR's report. Mike Weightman undertook to provide a response.

Openness and Transparency (O&T)

There was a general comment that the forum would like more information on ONR's decision making process.

Derek Lacey (DL) commented that ONR publishes project assessment reports (PARs) now, and that O&T is an aspect of the Changing ONR programme.

Breakout sessions – Key Points

(The flip charts produced by the break out groups have been typed up as produced during the event, and are appended to these notes. These issues will be revisited at the next ONR/NGO meeting for review and further debate.)

Technical

The following issues were raised and discussed:

- . The level of energy required to ensure adequate feed pump operation
- . The level and security of stand-by generation post station black-out for new nuclear build, in light of Fukushima;
- . Level of confidence in the natural circulation safety cases for the AP1000 and UK EPR;
- . Water supply issues at the current and proposed Sizewell plants;
 1. The need for tube plugging
 2. New pipeline requirements to ensure adequate water supply
 3. The possibility of a desalination plant to meet the water needs of SZC
 4. Spent fuel pond water replacement needs

The design of sea defences against the maximum credible event, recognising local temperature rises of upto 2 degrees C likely to be caused by SZC operation;

Health effects of low level radiation around sites. The forum agreed that the Health Protection Agency (HPA) should either be invited to attend the next meeting, or a separate meeting should be convened with HPA and other expert groups, to specifically discuss the issue;

The role of the Environment Agency in the protection of wildlife around sites;

The role of generation III and generation IV reactor designs in combatting climate change;
The issue of current reactor life extension, with MW noting that this is regulated via the periodic safety review (PSR) process.

Openness and Transparency

ONR's and the forum's views of O&T was discussed. MW provided various examples of how ONR is improving in this area, including the formation of Technical Advisory Panels. ONR took action to provide a note on our legal powers, and an outline of roles and responsibilities.

It was noted within the forum that there is a conflict between security and O&T, and Mike Weightman referred the group to the document "[finding the balance](#)".

The forum noted that it would be useful to have some basic information relating to security based emergency exercises, and ONR took an action to investigate what information could be made available.

A discussion was held around O&T relating to new nuclear build, with comments made relating to the lack of a public inquiry and hence public scrutiny of the safety cases.

A discussion was held relating to the monitoring of discharges, and the appropriateness of a licensee being responsible for reporting. The EA explained their role in monitoring and verifying data, noting that they support the philosophy of the licensee maintaining responsibility, rather than the 'sealed sample' approach adopted internationally. The EA further explained licensee reporting requirements and their investigating role relating to abnormal discharges.

A question was raised relating to the availability of discharge data, particularly from the EA public register. MW offered to place all information presented at Site Stakeholder Group meetings in the ONR website, to capture the EA information.

Security

There was significant debate and discussion relating to security related emergency exercises, emergency planning and financial issues.

The forum questioned the issue of community engagement relating to security with ONR noting that this was a discussion which had to be conducted via DECC.

There was a general discussion around security vetting of international contractors for new nuclear build.

Closing

During his closing remarks Mike Weightman asked the forum to debate the following questions prior to the next meeting:

What level of confidence do NGOs have in ONR in terms of protecting people and society from the hazards of the nuclear industry and why?

What level of confidence do NGOs have that ONR is securing the technical robustness of new nuclear power plants and why?

- How open and transparent do NGOs consider ONR to be?

A member of the forum requested that emergency planning be included on the agenda for the next meeting, including the relationship with land use planning.

The next meeting was proposed for October 2012, to coincide with the publication of the ONR 'stress test implementation report'

Appendix 1

David Lowry Nuclear Waste Advisory Associates/ONR Security Q&A

Introduction

Prior to the Non Government Organisation (NGO) forum meeting in November 2011, David Lowry from Lowry Nuclear Waste Advisory Associates submitted the following questions below to ONR on Security concerns. At the time ONR were not in a position to provide the answers, but are now pleased to provide the following responses

1. Security Concerns

“We've agreed that nuclear terrorism is one of the most urgent and serious threats to global security.”

Remarks By President Obama At Opening Plenary Session Of The Nuclear Security Summit
27 March 2012, Seoul, Republic of Korea

David Lowry question

If the nuclear new build programme goes ahead, it could create situation whereby several different activities are taking place at licensed nuclear sites, requiring personnel to cross the security threshold each day. The most complex situation could be a Sizewell, where simultaneously Sizewell A could be under decommissioning, Sizewell B continuing generation and Sizewell C under construction. How will ONR provide reassurance that all contractors, probably several thousand, and their sub-contractors who are permitted on site, will be robustly vetted? Are the current vetting arrangements sufficiently resourced to ensure parallel decommissioning and new build programmes can be operated?

ONR response

This situation is covered through a comprehensive programme of ensuring all employees including contractors have the appropriate security clearances depending on the level of access they require on site, whether that is a de-commissioning A site, operational B site or a construction C site. It is the site licensee who is responsible for ensuring all staff [employees and contractors] are in possession of the appropriate security clearances.

2. David Lowry question

In the United States the security resilience of some sensitive nuclear facilities is tested by conducting simulations and mock force-on-force exercises, often using military forces as adversaries. US law requires that nuclear facilities be able to defend against theft of nuclear materials or radiological sabotage by a few terrorists using surprise and readily available weapons and explosives, as well as against the theft of nuclear secrets. The mock attackers have managed to reach nuclear plant control rooms in some exercises.

To date, the UK has not conducted similar exercises. Has ONR considered doing so, and if not, can ONR explain what lies behind this decision?

ONR response

The UK has made significant progress with its counter terrorist exercising programme, which has taken account of the up-skilling of the CNC into a properly resourced and trained armed response capability. At this stage, 'we' are utilizing adversarial forces from among the trained CNC AFO

[authorized firearms officers] and it is our intent to develop these exercises further to increase their challenge and to ensure that sites security, safety and emergency preparedness are fully aligned to cater for such an event.

3. David Lowry question

Can ONR describe how it tests the robustness of the 'Nuclear Industries Malicious Capabilities (Planning) Assumptions' (NIMCA)?

ONR response

ONR performance measures the NIMCA through sites identifying their vital areas and ONR approving [or otherwise] their findings and putting in place the security arrangements to mitigate against the postulated threats in the NIMCA. Site security reflects the categorisation of the nuclear material held on the site and the security measures, through defence in depth and a graduated response, mitigate the impact of such an attack.

4. David Lowry question

What International Physical Protection Advisory Service (IPPAS) missions have been conducted by the International Atomic Energy Agency to UK nuclear installations; and what was the outcome?

ONR response

The UK hosted an IPPAS Mission to Sellafield in Oct 2011. UK was the first P5 country to host an IPPAS Mission and the IAEA has still to submit its formal report of the Mission's findings. However, unofficially we understand that the Mission has responded favourably to the UK's security arrangements, its processes and procedures for maintaining security at Sellafield.

5. David Lowry question

What corrective measures have been applied by ONR to ensure improved protection for sensitive nuclear information? Has there been any breach of the Security Policy Framework since its institution? If so, can ONR provide details?

ONR response

CNS is constantly reviewing, with industry, its processes & procedures to protect SNI. There have been no breaches of the SPF although there has been an occasional lapse by industry concerning routine document security, which ONR (CNS) has regulated against.

6. David Lowry question

What consideration has been given to the impact of deliberate sabotage of safety provisions covering nuclear installations in the wake of the damage caused by the natural catastrophe at Fukushima? Was this considered as part of the Stress Tests?

ONR response

This is why it is essential that there is joined up regulation through the ONR covering the safety, security disciplines – programme working, joint interventions.

7. David Lowry question

What actions ONR expects to take to implement the elements of the final communiqué of the Seoul Nuclear Security summit in March which directly affects the UK?

ONR response

The UK is in the process of finalising its plans to consolidate Category I Nuclear Material into purpose built stores at Sellafield.

8. David Lowry question

What review has been conducted by ONR on the pressures on resources to implement security oversight of the expected increase in the transports of nuclear materials and radiologically contaminated wastes as the decommissioning programme develops?

ONR response

ONR has taken full account of the Weightman Review of Safety following the Fukushima tragedy and, as regards improving security oversight the ONR has recruited an independent member with responsibility for security onto the ONR Board. In addition, ONR (CNS) has recruited an additional 11 security inspectors.

Dr David Lowry, Environmental policy and research consultant and member of Nuclear Waste Advisory Associates, Stoneleigh 17 May 2012

Appendix 2

Salient Issues and questions arising from the Novembers 2012 meeting and the way forward

NB These issues will be carried forward until the forum decides they are answered and can be removed from the list.

General issues

1. Pete Wilkinson should remain as chairperson for the foreseeable future.
2. The next meeting should take place within six months but perhaps as early as February 2012.
3. The scope of the final Fukushima report should have been wider, used to impact domestic policy and perhaps prompt a public inquiry.
4. While there is a lot of information on the IAEA and Japanese websites about the events in Japan and its aftermath, its transfer to the UK is poor.
5. The GDA process has to respond to the events in Japan.
6. ONR will provide regular updates to NGO participants and try to make the periods between updates on recommendations and their implementation shorter.
7. It would be useful for NGOs to be informed about how the final report was received by HMG.
8. What is the level of remediation at the Fukushima site to deal with what must be the 10s of millions of tonnes of cubic metres of soil?
9. What are the insurance implications and the liability issues arising from the Japanese disaster with particular reference to exposure of the young to relatively high levels of radiation?
10. The health effects of radiation are subject to misinformation and rational explanation. There is no suggestion that monitoring has been 'proper'. Much of the advice on this came from ONR.
11. The HPA should be more active on radiation issues. Decommissioned MX stations are not sealed and two AGRs are on the verge of 'core collapse'.
12. ONR to keep all informed of how operators are implementing the recommendations from the final report.
13. The next meeting should be planned for within the next six months but possibly as early as February to maintain momentum.
14. One participant expressed the view that the previous style of minute-taking – i.e. abandoning Chatham House rules – was preferable as it allowed the carrying of more evidential weight and discrimination between NGO views.

Technical Issues – GDA/Stress Tests

15. Is the simulation work on the issue of high pressure coolant feed sufficient to guarantee that the loss of coolant accident and the possibility of a resulting hydrogen explosion can be overcome?
16. The GDA process is expected to provide an interim certificate of authorisation to the EPR design by the end of 2013.
17. Greenpeace will send to ONR critiques of the EPR and AP1000 from their own research together with comments from the French regulator.
18. Is there sufficient power available to provide stand-by systems for the provision of emergency cooling water and to shut down the reactor safely?
19. Any change in design (that EdF may be contemplating) would require that a new GDA process took place.
20. ONR should invigilate the GDA process to ensure its results are robust and not subject to speculation about the adequacy of the process.
21. Andy Blowers, Phil Davies and John Busby would liaise with ONR on the issue of transgenerational equity as highlighted by Phil Davies' paper on the translation of the relevant IAEA principle into its own SAPs and the issue should be taken forward to the next meeting as one of substantive concern.

Openness and transparency

22. Pete Wilkinson's paper (demonstrations of independence) should be adopted by the meeting as practical ways in which ONR could enhance and improve its O and T performance.
23. ONR to provide clarification on the management of the Hinkley A facility with reference to authorisations and discharge limits.
24. The ONR's programme to seek greater provision of information and visibility of the regulatory process will be made clearer to participants as the programme is constructed.
25. The ONR is seeking to appoint a security expert to the board.
26. The requirement for openness and transparency should be captured in enabling legislation during ONR's transition process.
27. ONR should liaise with the EA and HPA to join up the thread of responsibilities to ensure the health of communities.
28. ONR should take greater cognoscence of local knowledge and the role local people could take in providing local knowledge and advice.
29. ONR will email a weblink through which details which are material to its work in accident situations to the group.

30. SSG management and structure should be reviewed: ONR is examining ways to improve information transfer with SSGs and nuclear communities.
31. ONR would consider how the security issue can be widened and more carefully examined in terms of community and stakeholder engagement.
32. NERC should be approached to fund a 'knowledge transfer' project to ensure commonality of language used in discussing nuclear matters with affected communities.
33. MW agreed to explain this issue of the stress tests and how they relate to organisational fragmentation and continuity in a short paper.
34. An appropriate expert from the EA would be invited to the next meeting.

Fukushima final report and stress tests

35. ONR to appoint someone to review the Greenpeace 'comparative analysis' relating to stress tests.
 36. It was agreed to find out the volumes of water required for cooling the new reactors either through the GDA process or perhaps the Environment Agency.
 37. The adequacy of the periodic safety review to offer alternatives for spent fuel management in the event of inundation was questioned due to the imprecision of predictions about climate change.
 38. Flooding is an issue which appears to be the responsibility of both ONR and the EA but no-one appears to be taking the lead.
 39. ONR recommends a spent fuel management strategy review, bearing in mind dry store construction.
 40. In respect of the Fukushima report, NGOs want answers, better communication of the issues and an assurance that these matters are passed on to the appropriate agencies.
 41. ONR should give due emphasis to the issue of DEPZs and emergency planning and evacuation.
 42. A reconsideration of planning controls around licensed sites in underway.
 43. ONR should recruit more social expertise as these issues impinge on their work in direct and indirect ways.
- ONR to discuss with PCAH her concerns about Hinkley A and regulatory matters impact health outside the meeting forum.