Office for Nuclear Regulation

An agency of HSE

Notes on a meeting between NGOs and ONR, Great Connaught Rooms, London, on the 5 July 2011

Present

Mike Weightman – HM Chief Inspector and Executive Head of ONR
Kevin Allars (afternoon only to deal with GDA) – Director of New Build, ONR
Paul Brown – Director of Operations, ONR
Gary Booth – Nuclear Safety Inspector ONR
Roger Brunt –Head of Transformation Programme ONR
Sue Kelly – Acting Head of Communications ONR
Marie Railton – Communications Team ONR

John Busby – Adviser to Stop Hinkley
Professor Andy Blowers – Blackwater Against New Nuclear Group
Val Mainwood – Bradwell for Renewable Energy
Wilf Mann – Bristol Greenpeace
Mike Taylor – Communities Against Nuclear Expansion
Douglas Parr – Chief Scientist, Greenpeace UK
Jean McSorley – Senior Nuclear Consultant, Greenpeace UK
Jill Sutcliffe – Low Level Radiation and Health Conferences
Sean Morris – Nuclear Free Local Authorities
Peter Burt – Nuclear Information Service
Phil Davies – Science Policy Research Unit /University of Sussex, also NWAA
Stuart Parkinson - Scientists for Global Responsibility and Heysham Anti-nuclear Alliance
Reg Illingworth - Shepperdine Against Nuclear Development
Julie McBride - Solent Coalition Against Nuclear Ships (SCANS)
Crispin Aubrey – Stop Hinkley

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

Apologies

Louise Hutchins – Greenpeace
Neil Crumpton – Friends of the Earth
Paul Dorfman – Nuclear Consulting Group
Peter Lanyon – Shut down Sizewell Campaign
Lydia Meryll – Socialist Environment and Resources Association
Hywell Lloyd - Socialist Environment and Resources Association
Angela Paine – Stroud Green Party

Welcome and Introductions

Mike Weightman welcomed all attendees, outlined the purpose of the meeting, and asked for comments on the agenda and on the terms of reference. In respect of the latter, it was agreed that the reference to the presence of a Minister would be removed since it might duplicate the format of meetings between NGOs and DECC and in any case, ONR was keen to keep the discussions 'bilateral'.

With respect to reporting procedures, it was agreed to scrap the Chatham House rules approach and attribute comments as appropriate.

(NB This note complies with that agreement but where contributors' names were lost in the debate, some contributions are simply ascribed to 'NGOs' or 'ONR'.)

The minutes of the meeting should be as full as competencies allowed and be prepared in draft form for comment by all participants before finalising.

Mike Weightman addressed the issue of reimbursement of travel costs to unsupported stakeholders. Whilst there were no funds available for such purposes at present, he said that when ONR achieved corporation status, he would review whether there would be any financial flexibility in the new arrangements to offer support. In the meantime, the timing of any further meetings would be arranged to allow off-peak travel to reduce costs. It was agreed that a London location for the meetings was on balance the most convenient for all as travel connections were generally good.

Fukushima. The interim report and lessons learned.

Mike Weightman gave an overview of his IAEA mission to Fukushima and showed a series of slides to illustrate his talk. There followed a question and answer session around Fukushima and ONR's Interim Report:

NGOs questioned the speed with which the interim report had been produced, given that information from Japan was slow in arriving and often criticised as being incomplete. It was pointed out that at Three Mile Island, for instance, it had taken five years before all the facts had emerged.

Jill Sutcliffe asked how could the impact of the events in Japan be understood understand so soon after they occurred.

Mike Weightman suggested that improving nuclear safety would not have been best served by waiting, possibly for years, to draw initial conclusions when there are 'big lessons' to be learned now at a strategic level, including design, the effects of severe accidents, the robustness of off-site electrical systems and layout issues. ONR is keen to ensure that the industry begins to think now about these emerging issues and to learn from them.

Mike Weightman explained that the primary concern for nuclear safety, including post-accident activity, is to ensure CONTAINMENT, CONTROL and COOLING (the three 'C's).

Most importantly, it was important for the industry to ensure the availability of a simple system to provide coolant and to examine issues such as the location of switch gear which, at Fukushima, was in the basement of the building.

Peter Burt asked how will the report institutionalise long term learning – will there be another report in 5 years?

Mike Weightman suggested that the process of review might need to be institutionalised through possibly a rolling review of the impact of Fukushima. Such a recommendation will be contained in the final ONR report.

Jill Sutcliffe proposed that another two 'C's should be added to the three mentioned by Mike earlier – 'confidence (in the regulator) and [the ability to] challenge'.

Reg Illingworth/Julia McBride both sought assurances that terrorist threats were considered in the findings of the interim report.

ONR confirmed that they are. The Office of Civil Nuclear Security (now part of ONR) works with the national intelligence agencies to produce an annual 'design basis threat' against which the levels of security at civil nuclear licensed sites are set so that there is a reasonable expectation that such threats can be defeated. An important point though is that whilst we must prepare against the initiating event (i.e. tsunamis, earthquake or terrorist incident), we must equally have confidence in the robustness of the system to deal and cope with any possible consequences in terms of loss of cooling containment or control for nuclear accidents..

Reg Illingworth pointed out that the cooling towers presented prime terrorist targets and that diversity in suppliers; plant design and depth in safety and security through the availability of additional facilities were important issues to address.

ONR responded that the combining the expertise of OCNS and ONR in one body helps to minimise areas of vulnerability and that the principle is to provide defence in depth through multiple security barriers and diversity in operation.

Julia Mc Bride asked about MOD sites.

ONR replied that the MOD regulates security at MoD sites but the ONR cover safety at licensed sites.

Doug Parr expressed his view of the need to 'design out' hazards which are prone to give rise to security concerns, such as developing passively cooled reactors and ensuring that a 'shut down' in the wake of an accident reduces the need for direct intervention to control the impact. He expressed the view that society needs to be constantly aware that accidents cannot be predicted by the very nature of the event – an accident – and therefore foresight cannot be applied.

ONR agreed that there was a need during design to carry out a detailed and fundamental review of the 3C's and that the desirability of passive safety is

undeniable. It is a matter of goal setting and challenge which ONR is committed to. Safety is integral to the design process.

Jean McSorley raised issues around emergency planning and the confidence people place in the arrangements to evacuate people safely and quickly in the case of an emergency. There is a general lack of trust between all levels of the nuclear industry: members of the work force at Sellafield, for instance, have mentioned a lack of confidence in the management. In respect of emergency plans, the ONR should initiate and hold meetings with local communities to discuss how feasible it is to implement the plans. There needs to be a debate with the public to address issues of co-ordination between the public, blue light services and the workforce.

Andy Blowers made the point that he felt that the ONR interim report was essentially complacent. He added that yet another 'C' to add to those already identified should be 'coastal'. He said that low-lying sites are vulnerable to the effects of climate change over the next 100 – 150 years and we are making assumptions about societal stability over this sort of timescale. ONR should at least acknowledge these uncertainties and it is irresponsible of ONR to be neglecting next century's problem. These uncertainties and the potential consequences of those uncertainties should be spelled out to investors.

Wilf Mound agreed and argued that long term climate change impacts must be taken into account.

Reg Illingworth/Andy Blowers made the point that investors need to be very clear that plants will be required to close if problems arise in the future.

ONR responded that allowances for change in local circumstances are catered for through the 10 year periodic safety reviews, which include environmental change.

Jean McSorley responded that the periodic safety reviews are not open to public scrutiny and asked if a ten yearly review is sufficiently frequent for what are often aging plants?

ONR commented that it will talk to the public in greater detail about emergency arrangement plans. As regards the ten year timeframe for periodic safety reviews (PSRs), this was due to PSRs being fundamental in their scope and takes a long time to carry out. In addition to PSRs, another legal requirement under the site licence require reactors to shutdown every 2-3 years for intensive maintenance, a shutdown that requires a permission from ONR to restart the plant

John Busby asked if the black cloud which was visible at Fukushima immediately after the explosion at one of the reactors was evidence of a small nuclear explosion.

ONR replied that there was no evidence of a nuclear explosion. Reactors 5 and 6 showed same seismic profiles explosions at reactors 1 and 3. The present thoughts for reactor building 4 was that the cause of explosion in unit was the hydrogen release from reactors 2 into the venting system of reactor building 4.

Sean Morris commented that in respect of the on-going Fukushima review, the media played a role of downplaying the interim report which itself had a narrow remit. The need now is for NGOs and independent experts to be brought into the process to help depoliticise the process through the appointment of an independent panel. NGOs might have an input, e.g. through the appointment of Dr John Large and asked if there was political pressure to ensure the panel was exclusively made up of industry-based experts.

ONR said there was no political pressure on the panel and reminded the meeting that there was an invitation for an NGO nominated expert to join the Technical Advisory Panel (TAP) – John Large.

Jean McSorley emphasised that John Large was not a representative for NGOs.

Mike Weightman said that the ONR 'would have another go at including a nominee from the NGO and reminded people that the offer is still there. He noted the issues in favour of appointing wider representation and offered, but he again reminded the meeting about the constraints on making payments under civil service rules.

Crispin Aubrey commented that there is a need to review the emergency evacuation plans around nuclear plants and that the storage of spent nuclear fuel is a serious issue and subject to complacency in terms of the ability of the workforce to deal with extraordinary situations. He pointed out that even tsunamis are not unknown around the Hinkley site. Emergency planning at Hinkley allows for a 2 mile DEPZ but for Fukushima, the zone was 20 kms. This raises serious concerns for both current storage regimes and those for new build spent fuel storage.

ONR explained that it recognised these issues and was not complacent. This issue is reflected in a number of recommendations around this matter in the interim report. The EA has been asked to review flooding risks and the lessons learned cover planning and long term responses to a UK event and raises issues around infrastructure. The ability of the UK services to respond to an emergency, which causes major disruption and dislocation to infrastructure, is also covered.

Andy Blowers argued that the tone and spin of the report sends a message of comfort and 'complacency'. He asserted that emergency planning is not addressed by the regulators in an appropriate manner. The evacuation of large numbers of people for a possibly indefinite period must be recognised and acknowledged as a problem. Ethicists, local people, NGOs and social scientists all have a role to play in this issue and all groups should be consulted to ensure that the report is tempered to remove the complacency in the report of 'business as usual'.

Reg Illingworth pointed out that the Oldbury reactor is known to have tripped out but no-one locally knew or was informed. Who gives advice in these circumstances and does it underline the need for ethical and social scientists to have an input in the emergency evacuation plans?

Andy Blowers pointed out that Germany uses a range of experts including social scientists and ethicists. The Fukushima report should not be seen as a legitimisation function.

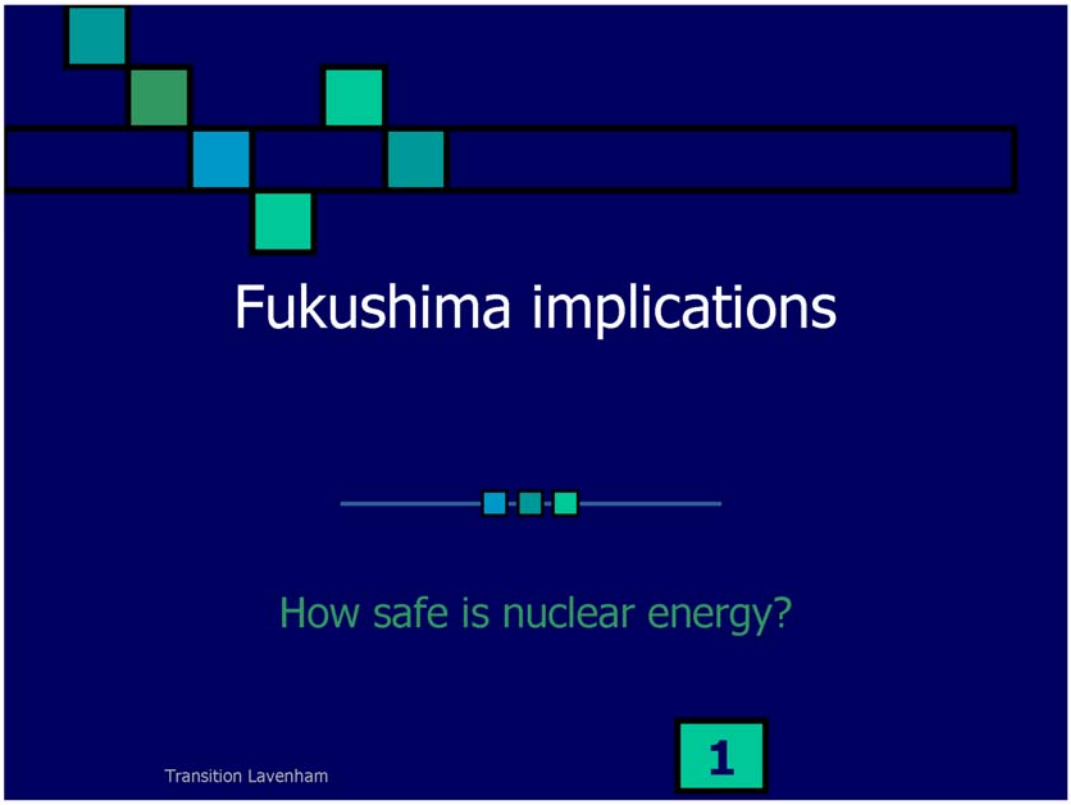
Jill Sutcliffe commented on the need to learn from what the Japanese did well such as the evacuation.

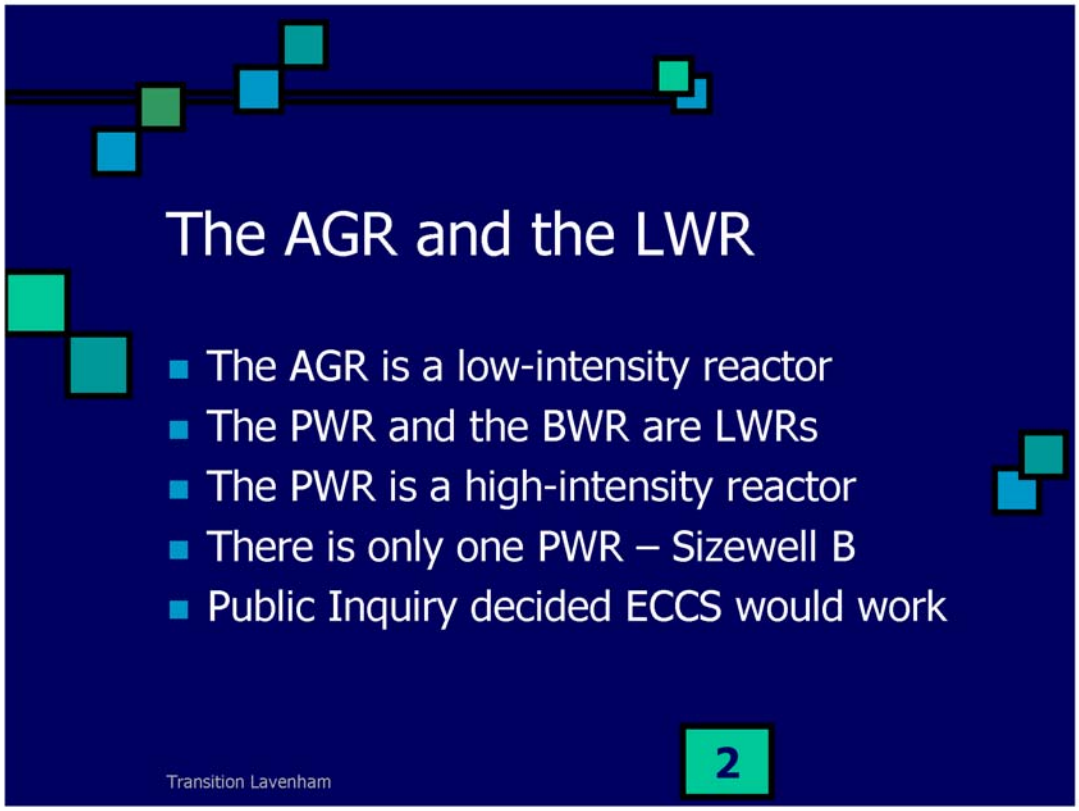
ONR acknowledged the need to understand cultural differences and agreed that there is a need for government to review how cultural aspects and planning worked well.

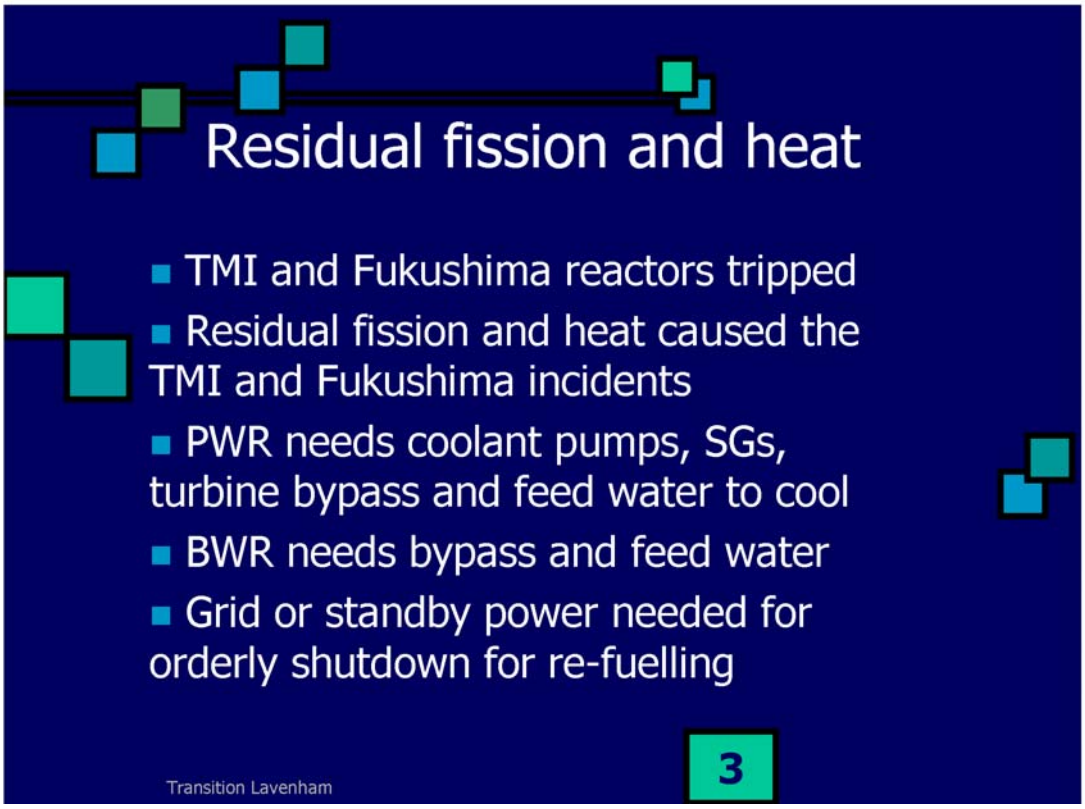
Peter Burt asked about the evacuation plans for MoD sites and **ONR** agreed to ask DNSR for details of defence related sites to be put in the public domain.

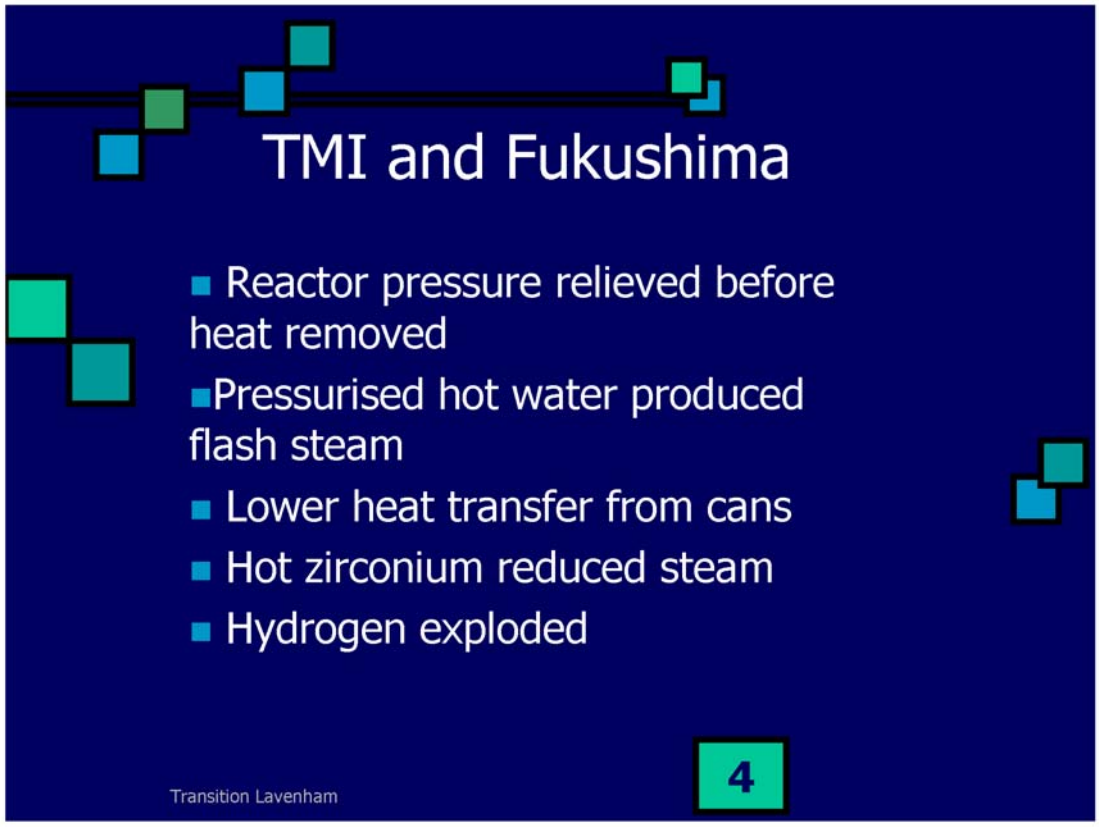
<u>John Busby's presentation and response</u>.

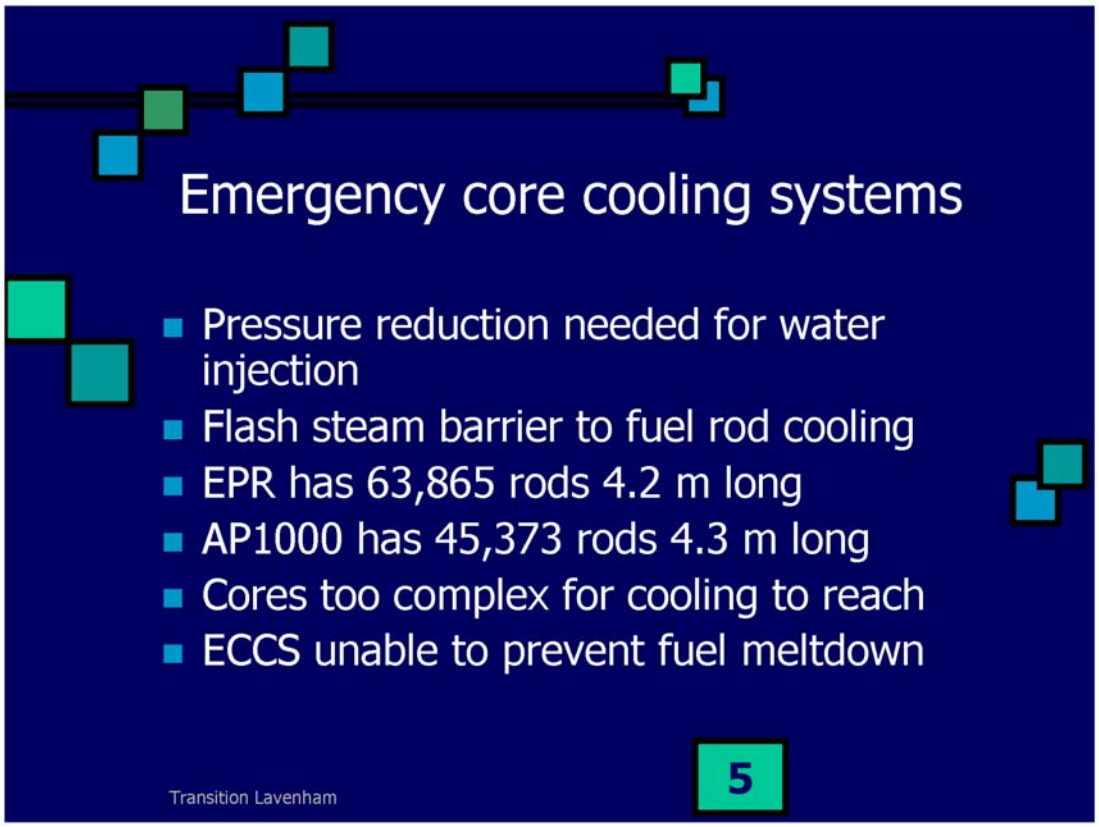
John Busby presented slides on the consequences of Fukushima:

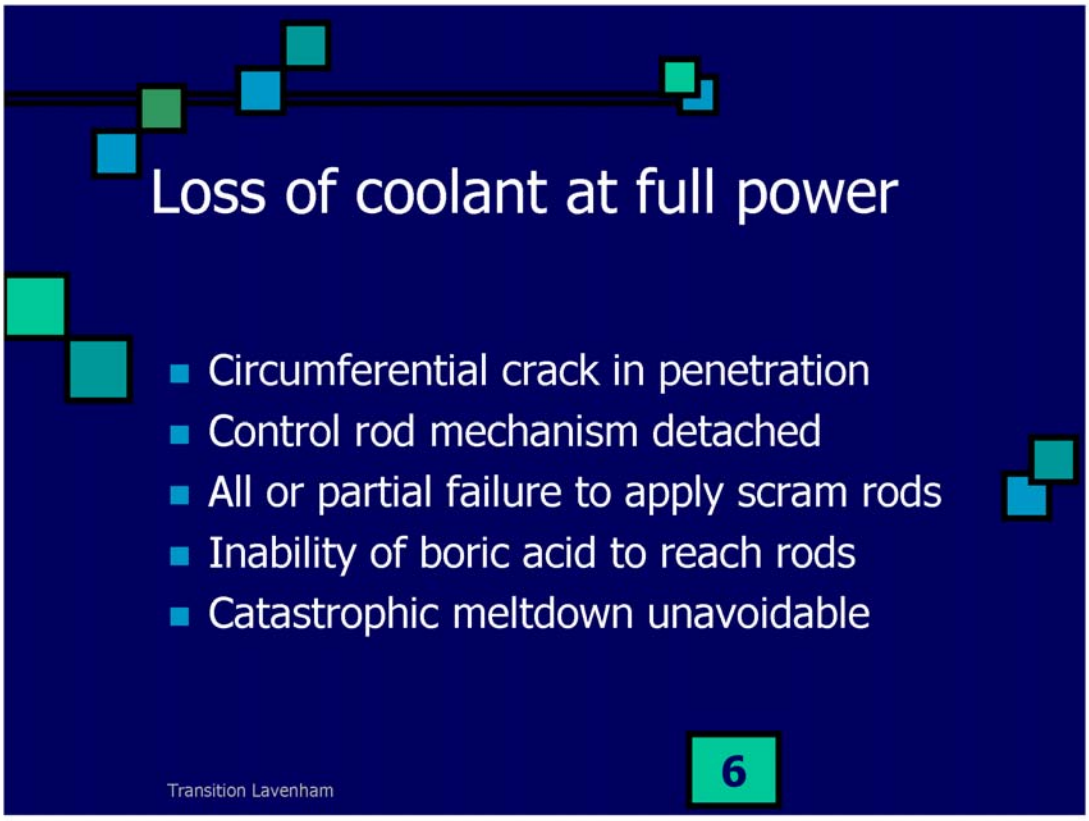


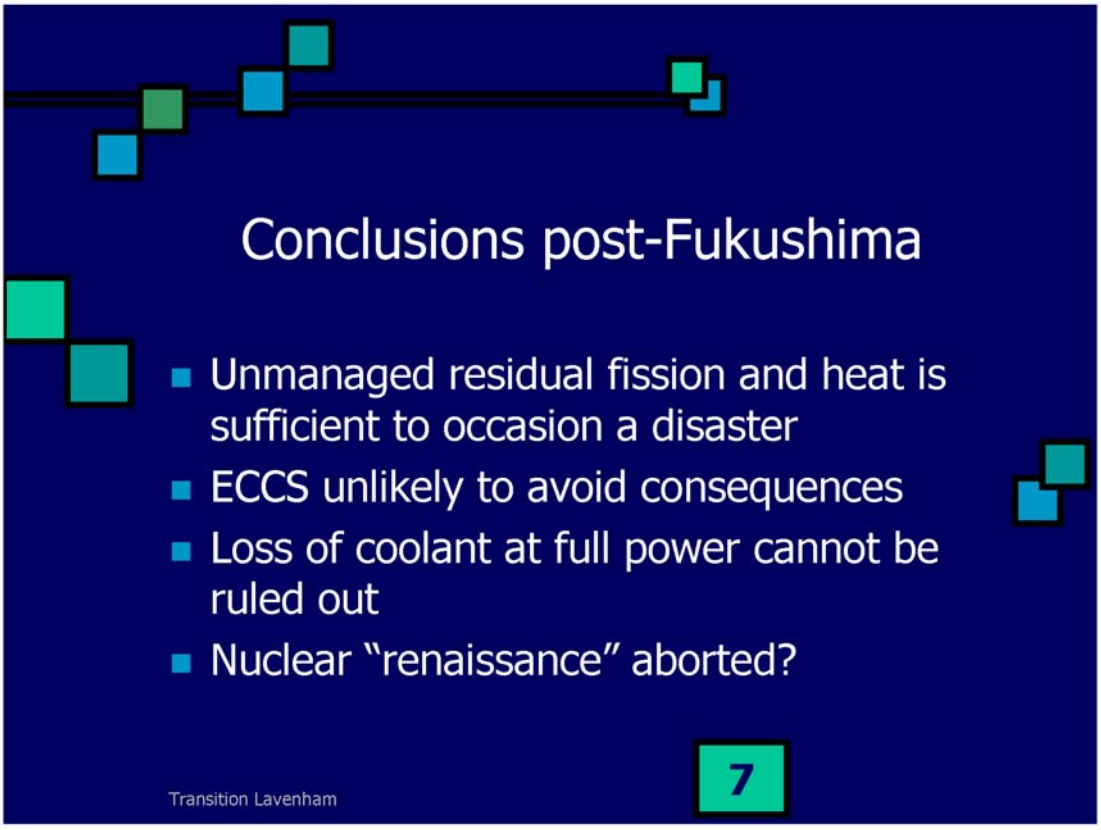

The AGR and the LWR
The AGR is a low-intensity reactor
The PWR and the BWR are LWRs
The PWR is a high-intensity reactor
There is only one PWR – Sizewell B
Public Inquiry decided ECCS would work
Transition Lavenham
2


Residual fission and heat
TMI and Fukushima reactors tripped
Residual fission and heat caused the TMI and Fukushima incidents
PWR needs coolant pumps, SGs, turbine bypass and feed water to cool
BWR needs bypass and feed water
Grid or standby power needed for orderly shutdown for re-fuelling
Transition Lavenham
3


TMI and Fukushima
Reactor pressure relieved before heat removed
Pressurised hot water produced flash steam
Lower heat transfer from cans
Hot zirconium reduced steam
Hydrogen exploded
Transition Lavenham
4


Emergency core cooling systems
Pressure reduction needed for water injection
Flash steam barrier to fuel rod cooling
EPR has 63,865 rods 4.2 m long
AP1000 has 45,373 rods 4.3 m long
Cores too complex for cooling to reach
ECCS unable to prevent fuel meltdown
Transition Lavenham
5





Mike Weightman thanked John Busby for the presentation.

The conclusion inferred from the slides was that the occurrence of a circumferential crack in one of the multiple control rod drive mechanism nozzles on the top of the reactor vessel head would produce a loss of coolant accident (LOCA) while the reactor is operating at full power with severe consequences. It could lead to a failure in inserting all or some of the control rods needed to shutdown the reactor (scram). In circumstances when there is a failure to insert control rods, a solution of boric acid is injected, but the LOCA would lead to the production of flash steam between the fuel rods preventing the borated water from substituting for the function of the control rods.

Questions were invited:

Mike Taylor suggested that the presentation leads to questions around how to cool plant down in the event of the loss of cooling to the reactor and spent fuel ponds. At Sizewell, there is controversy and uncertainty about how much town water is required or would be required at the plant and how much stress this places on supplies in a water scarce area.

ONR noted that the issue of demand for town water as part of the assessment will be checked. It noted that the GDA covering the issue of the supply of cooling water in the event of grid and sea water supplies being unavailable needs to be checked.

Openness and Transparency Discussion

Mike Taylor began the discussion by outlining the difficulties at Sizewell where the management attempt to be open and transparent (O and T) but the involvement of EdF appears to restrict the flow of information to the public to a minimum level. The level of information made available through the site stakeholder group (SSG) is 'laughable'. He asked if there should be a standard form to determine the level of information provision.

Mike Weightman said that he would take the issue of the complexion of the SSGs, liaison groups and the concerns about O and T as one which deserves the attention of the ONR.

He confirmed that the statutory corporation status which ONR is seeking to achieve would still be subject to FoI and he would check the remit and scope of the criminal environmental law and how it impacts the statutory corporation. They would seek also to encourage EdF to be more open in its dealings with the community.

Mike Weightman asked if the reports made by ONR inspectors to the SSGs are fit for purpose. He confirmed that it is the ONR's intention to make them so and to incorporate O and T and inclusivity into its interface with local nuclear communities.

Jean McSorley mentioned the recent Guardian story on email exchanges between DECC officials and agencies. She argued that ONR seemed to have stepped over the line and is too close to the industry. Its invitation to make comments on the GDA process gives the wrong impression and reduces trust in the ONR.

ONR replied that the facts around the GDA process are discussed with industry - but there is no influence by industry in respect of the conclusions or recommendations made.

NGOs argued that the GDA dialogue is exclusively between the regulators and operators with no public input. NNP statement does not give any visibility of emergency planning. These are big issues for corporations seeking to be open and transparent. In addition, REPPIR is up for review, but this is not mentioned anywhere. Has ONR accepted this and where is the conclusion?

ONR responded that the GDA process should be taken forward into planning

Jean McSorely argued that ONR must be totally open. Spent fuel issues have to be known to public not just to the ONR and regulators.

ONR pointed out that it is producing Project Assessment Reports and putting them into the public domain.

NGOs argued strongly that to achieve true openness and transparency, the input into processes such as GDA should come before decisions are made, not afterwards in an attempt to give the appearance of O and T.

Peter Burt agreed with Jean McSorley in that the information is invariably sourced from the site in the first instance, rather than the regulators. The AWE SSG, for example, has no external representation at all and no public participation. This must change.

ONR agreed to do what it can to address these concerns.

Peter Burt argued that the SSGs and liaison committees do not encourage or permit challenge and that the ONR has to have input into complexion of committees to address this, to encourage challenge and to move to a far more O and T situation,

Andy Blowers expressed a concern that there is a lack of sufficient inspectors to do the important job to the level expected. He made an analogy with Customs and Excise where he argued control was very lax, adding that communities trust the ONR to undertake these inspections but it is incumbent on the ONR to demonstrate and convince the communities that the ONR is capable of doing the job.

ONR suggested that they regularise the way information is put into the public domain and should encourage open reporting on the grounds that the more information is released, the less chance there is of the culture of secrecy taking hold.
'Low level' reporting should be the norm to inculcate the culture of disclosure. With the increase in salary levels ONR has recruited 70 inspectors in the couple of years, but will need to continue at the rate. In the next 2-3 years, 60 of their senior people including inspectors could retire.

Reg Illingworth asked if unemployed German regulators could be employed.

ONR replied that most are non-technical, whereas ONR requires good technical capability that would be needed for some years at Federal level to regulate the industry.

Wilf Mound raised a number of issues and questions:
Does FOI still apply to the statutory status ONR seeks? (The answer given immediately was that there will be no difference in the relevance of FoI to the new status):
Were there many redactions in the email exchanges on commercial confidentiality grounds?
Who will be the 'nominated department'?
Local site reports should more inclusive
The GDA report acts as a heads up to industry, and gives the impression of too close a relationship.
Can we really trust ONR, government and the industry?

Kevin Allars responded, saying that ONR checks the facts with whoever ONR's stakeholders are when putting information in the public domain. The ONR was not asking for comments. GDA process requires ONR to hold meetings with industry about programming re Fukushima and final report. Redactions in the FOI request are merely names and not Fukushima-related matters. There were no comments back from industry. The report was released on the 5th April this year and is all in the public domain. The question we asked of industry was 'can you cope with the requirements of the interim report?' Next week, the GDA quarterly report will be published. Write to us at ONR and tell us if the report is not O and T. ONR believes that it is.

Val Mainwood commented that, in respect of exercising the ability to challenge, who is involved in determining ALARA and ALARP?

ONR replied that it is the operator's technical and design people who determine this in collaboration with ONR., but ONR, as the regulator, generally has the final say

Val Mainwood continued that public perception is different from technical interpretation and ALARA and ALARP practices need input from non-technical people and this should be achieved through being more O&T with the public so that they can follow and understand the process of the justification of such practices by the ONR.

ONR noted that its regulatory judgement were founded on principles consulted on but agreed that there needs to be more bilateral interface with the public to open up the issue and make the process far more clear.

Val Mainwood continued that ONR should feel more at ease with recognising and acknowledging the nature of accidents and incidents and be more forthright in its language.

ONR proposed arranging national and local level 'advisory groups'.

Andy Blowers made the point that the interim report is not open to consultation and asked if we are really engaging or just 'ticking the box'? He argued that the engagement should reach beyond the usual skills and experiences to make the process better over the longer term. When the ONR achieves its corporation status, it should consider setting up an advisory body to ask the question, interalia, of where does regulation stop and policy begin?

ONR argued that written submissions to the interim report are encouraged but it recognised the wider point made about the usefulness of an advising body..

Peter Burt recognised that this meeting was a first step but he thanked ONR for taking it and expressed encouragement. He suggested that independence and credibility were two other strands that went deep in this process of engaging with and feeling confidence in ONR. In that respect, the tone of the interim report sends a message which can be misinterpreted. Is making the ONR unpopular with the industry something with which it would feel comfortable? What are the criteria and benchmarks?

Doug Parr took up this theme and asked to see a clear separation between the industry and the ONR. He added that O and T in itself is not a solution as it simply allows people to see into the process. What is needed is confidence in that process. O and T can be achieved by process but it is the culture beneath which is telling.

ONR suggested that its people have to do more to achieve in demonstrating its role as a public servant and not simply a group of technical experts. Some of its staff felt as though they were being diverted from their prime role of ensuring nuclear safety when asked to deal with FoI requests and did not yet appreciate fully that dealing with such requests is in fact part of the day job. How far can regulators be under the skin of industry/how close to improve nuclear safety is an interesting question? There needs to be a safety culture: it is about what is done when the regulator is not there. ONR can't regulate a culture but can have more of an impact on it. There are cultural and process issues. The ONR's Plan on the page demonstrates ONR understands stakeholders need to value what it does, even though they might not like some of its decisions.

Jean McSorely asked whose views are the inspectors receiving – those of the site managers? And what is the ONR's attitude to 'whistle-blowers'?

ONR replied that anyone can write in to the ONR and good inspectors will receive information on which they act. They also interact on site and discuss issues frequently with union's representatives in particular. There have always been good 'narks' on site and inspectors are not naive. Inspecting is not just a technical task.

John Busby asked what the relationships were like between ONR and ASN and STUK.

ONR replied that they held annual meetings with ASN that relationships were good and there was an agreed joint approach to working with EdF. With STUK they have similarly good and open contacts

GDA and new build session

Jean McSorley argued that issues are not resolved when Design Acceptance Confirmations (DACs) are issued and the licensing process is still ongoing.

Kevin Allars pointed out that the GDA process is voluntary. A quarterly report will be published next week and comments on it are invited. The report details GDA issues and the industry's plans to resolve those issues. The GDA report is based on pre-Fukushima situations and asks the operators what they intend to do to resolve the issues identified. The credibility of those responses is challenged as necessary and, once ONR is happy with those responses, they are posted on the ONR website.
GDA (voluntary process) entered by the Requesting Parties.

There is an added GDA issue for both designs in the shape of the question, 'what are you doing to respond to the ONR interim report? Only when all GDA issues are resolved will the final report be issued. At the end of 2011 ONR will consider issuing interim DACs when the resolution plan has been approved. The final DAC will most likely be issued at the end of 2012 for EPR. There is currently no start date for the AP1000 design but the process is essentially the same. The technical assessment reports will go on the website late this year. ONR will wait for the Fukushima issues resolution report and be posted at the same time as the EPR resolution plans. The reports produced around this process are mostly 50 pages but some are up to 200 pages long. The quarterly report to be published next week will contain a summary of the executive summaries and will thus be a summary of the outstanding GDA issues.

The Hinkley C programme needs a site licence and an application will be made. The site licence provides greater regulatory control even if a site licence is issued; the operators will need 'consent' to undertake nuclear related work. This consent is not just reliant on the GDA process. However, the 'nuclear island' work requires GDA to complete and issued to vendor and is the final DAC condition. Granting the licence puts extra controls on the licensee, for example in the supply chain.

Reg Illingworth raised the issue of the role of the IPC.

ONR said that the IPC is separate from the ONR and performs a different function but will look to the ONR before agreeing on planning consent to ensure that no show-stoppers exist.

Mike Weightman clarified that permission to construct is the responsibility of ONR while the IPC was responsible for planning issues. To clarify further, he explained that a hole can be dug and given a shallow covering of concrete ("blinding") with concrete to protect the excavation without a site licence and consent but nuclear safety-related construction activities – associated with cooling water, sea walls etc – need consent and so will also need a licence.

Crispin Aubrey suggested that no ancillary work should be allowed without consent.
Consent for non-reactor activity?

Phil Davies asked about the role of the Environment Agency and asked if radioactive waste management issues had been given the green light. i.e. is the countersigning of the licences by the EA a forgone conclusion?

Kevin Allars informed the meeting that DAC and SODAs (Statement of Design Acceptability) sit together.

Phil Davies asked for clarification: if the EA goes not give the green light for radwaste management, the ONR cannot issue a licence. The Nuclear Decommissioning Authority has given the green light to the disposability of spent nuclear fuel and the Environment Agency has blindly accepted that assurance.

ONR noted that before granting a license ONR consulted EA, agreed to check this latter aspect issue with the EA.

Jean McSorely asked if spent nuclear fuel encapsulation plants and other spent fuel management facilities as may be required, were not agreed by the end of 2012 when the GDA sign off process is scheduled to conclude, where does that leave the EPR spent nuclear fuel process?

Kevin Allars said that issues are 'enveloped' and the site specific safety case will pick up these issues. The operator is responsible for safety and if the GDA issue falls within the GDA issues envelope, it can be addressed there, but if not, it will be covered by the site specific safety case.

Jean McSorley argued that licensing procedures related to site specific and future builds (spent fuel pond) issues, unlike the GDA process, are not open to public input and there needs to be openness in licensing process and be under ONR safety and planning system if not already covered by the IPC.

Mike Weightman reiterated that future nuclear build; spent fuel and encapsulation were under ONR control while planning aspects were the responsibility of the IPC and local authorities.

Reg Illingworth asked, what is a 'suitable site'? Do the operators need ownership of all the land?

ONR replied that it will depend on the type of reactor, size of footprint etc. The licensed site is marked on the application and if the land allocated was only large enough for one reactor, another licence would need to be issued to build on other land owned elsewhere.

Mike Taylor remarked that the Sizewell site is cramped for space and asked if the safety and security of spent nuclear fuel would be compromised by the conditions there.

Roger Brunt replied that these issues fall within the ONR's jurisdiction and the site security plan must be in place or the approval for the site licence cannot be issued. Charles Hendry has recently agreed to extend the nuclear security plan to allow vetting of personnel. Multi-nationalism and language problems to ensure the communication of safety information are a recognised problem.

Phil Davies suggested that everything rests on the safe management of the waste. If there are no designs for encapsulation, assessment of the implementability of waste management processes cannot be undertaken. Therefore, the ONR could be accused of not meeting the IAEA Basic Safety Standards nor its own SAPS. **John Busby** remarked that the current policy is for the use of dry casks to store the waste for 100 years before despatching to a notional repository and this can raise intergenerational issues.

ONR suggested that disprobability is an Environment Agency issue (see their decision document on disposability) and it would have to look at these issues which are outside the ONR remit. The issue will be raised with the EA.

Phil Davies pointed out that the NDA is not a regulator

Doug Parr suggested that the process panders to incrementalism in that the spent fuel issue is added to by the need for a spent fuel store and then an encapsulation plant not to mention the new reactor itself and this should all be subject to a Strategic Environmental Assessment. Where is it? This sort of approach would not be allowed on a wind farm site, for instance.

ONR replied that this is a planning issue. ONR look at safety case and the facility on a site.

Phil Davies pointed out that the Basic Safety Standards at article 7 require that no undue burden is placed on future generations and the justification principle requires the entire fuel cycle to be taken into account. Therefore, if encapsulation cannot be demonstrated, the detriment might be entirely different from what is assumed for the purposes of demonstrating justification. An encapsulation plant is central to completing the fuel cycle and therefore the ONR should not licence the site.

ONR replied that the interpretation in of the justification principle in UK law is taken forward by SOS not ONR.

Phil Davies replied that the ONR's signature on the licence demonstrates their approval but the cycle and sign off processes are flawed. ONR has a responsibility NOT to sign off. It should fall to the Secretary of State to make these assurances and take responsibility, not ONR.

Jean McSorley asked about timing of encapsulation plant. When should that plan be expected?

ONR agreed to come back to the group with greater clarity on these issues.

Julie McBride said that it was the same for the submarine issue: no-one took overall responsibility. This raised ethical issues relating to the willingness of the ONR and others to stand up for people and the sign off role of the ONR.

John Busby pointed out that fuel arisings would continue until 2080 and would need to be stored at least until 2090 – the end of the century. How can we guarantee there will be diesel supplies available then when we can't predict what will happen by that time?

ONR accepted that these inputs were important and they were appreciated but they cannot impinge on and take responsibility for matters which are in the EA's and the Secretary of State's territory.

Reg Illingworth questioned logic of the nuclear programme and contrasted what was happening in the UK with what he called the 'refreshingly different' approach in Germany. He argued that in the UK we are lead by government myopia and foreign interests.

ONR reiterated its position that it had to work within its remit.

Jill Sutcliffe suggested that the Health Protection Agency role in advising on radiation risks should not be diluted with the proposals to do away with the HPA. It should sit higher in the pecking order and have a statutory role.

Doug Parr argued that the loss of such institutional capability issue was not being covered anywhere as far as he could see: not with the Secretary of State, nor the EA nor the ONR.

ONR suggested that the issue sits with government and parliament and that there was a need to secure institutional robustness to secure long term viability as a responsible regulator. To this end it did support the continuation of the work of the HPA in advising on ionising, etc.

Mike Taylor suggested that the HPA should be more directly engaged in monitoring.

Phil Davies asked who countersigns for the EA and what is job title of person who writes letter.

ONR volunteered that it would be Joe McHugh, Radiological Services Director

ONR will confirm this and let participants know if this is the case.

Summing up

Participants were asked, was the meeting useful? Would they like to repeat it? Should the format be amended?

The following points were raised:

A technical discussion with NGO would be useful. Once the decisions are made, it is too late to influence and the point of influence has to be before the decisions are finalised so as to be able to influence the process and the outcomes. John Large and perhaps one or two other 'independent' experts might be brought into the technical discussion. That discussion should be held in public to enhance O and T. Such a meeting would depend on other commitments people may have and should be planned so as to avoid consultation fatigue.

The idea of 'bolting on' an extra hour after a DECC meeting planned for late July was dismissed as the relationships are different and in any case the technical issues deserved full attention and should not be rushed.

Funding should be provided to get people to meetings and in the meantime, the timing of meetings should reflect the ability of people to use off-peak travel.

The meeting was 'very useful' overall. Credit should go to ONR for taking the initiative.

Pete Wilkinson should write up the minutes and questions arising from this meeting which require further attention and evaluation as well as identifying topics for next time. ONR has between now and September (when the final report is due) to cover the rest of the nuclear fuel cycle to determine if any further recommendations are required.

How were accident scenarios challenged at Hinkley and Sizewell inquiries? Are the means through which challenges can be made emerging from discussions and historical evidence?

It was agreed to meet again in six months time (although this was subsequently reduced to between 3 and 4 months by email exchanges)

ENDS