

SAPs Seminar 26 January 2007

Points raised in discussion

The themes arose from the discussion before lunch: additional questions and comments were made under some of the themes. The formal presentations and the seminar aims and objectives are also on this website.

Key: Q = Question; C = Comment;

A = NII/EA/DNSR Answer/Response

Issue: Implementation

1a) Process

A. HSE said that the process of implementation was being undertaken in two parts. Firstly, all inspectors have attended or will attend an internal familiarisation seminar giving an overview on the use of the SAPs06. Secondly, Nuclear Topic Groups (NTGs) will add to this by having more in-depth discussions on detailed areas to address the issue of consistent application of the SAPs06 in particular nuclear safety specialist fields. An explanation was given of the structure of the operational divisions of NSD and the cross-cutting nature of the Nuclear Topic Groups and the role of Nuclear Topic Leaders (NTLs) as advisors to inspectors on the topic.

Dr Weightman said that the NII was looking to improve its performance in this respect and the role of Nuclear Topic Leaders would be strengthened in the future.

Q. The SAPs review came along at the same time as the Energy Review – therefore there was a timing issue, with insufficient resource and time to comment in the depth desirable – in short the timing of the engagement process was not ideal.

A. Dr Weightman expressed some empathy with the issue of resources but emphasised the need to progress the revision process which predated the Energy Review. The seminar was informed that comments on the SAPs06 can be sent to the SAPs email account, which will be kept live (the account is also accessible via the SAPs website) and the comments received will be considered and, where appropriate, they will be fed into future reviews of the SAPs.

C. Changes to the SAPs being notified via the website may be a problem as industry may not realise that a change has been made.

A. HSE pointed out the SAPs were not guidance for industry but for its own inspectors so industry should not be concerned overly about changes. Stakeholders should note that as the SAPs06 on the website was the controlled version of the document, it was most appropriate to use the same medium to administer changes. However, ways to communicate changes proactively will be investigated.

Update: a free e-Bulletin service is being introduced as of March 2007, and those registering will periodically be advised of significant changes to the NSD website e.g. SAPs changes

Q. Is it possible to obtain hard copies of the SAPs?

A. Dr Weightman said that hard copies can be requested via the SAPs email account and will be made available to those who cannot download the document. HSE will consider the possibility of sending hard copies of the SAPs to libraries that are situated near to nuclear sites. Though it was noted that not all interested parties live near nuclear sites.

Update: NSD will investigate the feasibility of targeting libraries but an issue is the need to ensure readers are aware of updates which are web-based. NSD will hold a small supply of hard copies for individuals without the facilities to download the full document from the website at SAPS@hse.gsi.gov.uk.

Q. Would it be an advantage to hold joint training with the industry?

A. Dr Weightman stated that there was no intention of holding joint training between staff from the NII and staff from civil duty holders. One reason for this is that the NII did not want to compromise independence between the regulator and the industry.

1b) Application of SAPs – when?

A. HSE emphasised again that SAPs06 do not represent a step change to NSD's assessment process, so inspectors can use them now for new assessments.

Q. What is being done to improve proportionality, consistency and coherence of NII inspectors?

A. Dr Weightman said that the new SAPs were intended to facilitate this. In this respect the information in the Introduction is important.

1c) Level of trialling done or intended

A. Dr Weightman stated that we are in the trial process now but that it is not set in stone and we will consider lessons from the use of the SAPs06 and amend them for clarity and possible debate if specific issues arise in practice.

Q. Given that SAPs will be applied by different inspectors who are individuals, how will experiences be shared and how will feedback be obtained?

A. Dr Weightman pointed out that individual inspectors will report to their Nuclear Topic Groups on a regular basis of their experience in using SAPs06. Later it may be appropriate to share this experience with industry.

Q. How will SAPs apply in the pre-licensing process from the perspective of new build? At what stage in the process is judgement against SAPs applicable?

A. Dr Weightman stated that judgement will be based on the safety information that is given to the NII with SAPs06 assisting that judgement. How detailed a case is at a particular point in the process, where it to be involved, is an issue for outside this meeting.

Q. The targets in the SAPs06 do not directly relate to specific design faults, so how is this gap to be bridged when going through a pre-licensing process?

A. Dr Weightman noted that the basis for licensibility is different being much more generic from agreeing to construction after detailed considerations of the case for design faults.

C. [From floor]: The NII has been let off lightly by comments from the meeting with what seems like an unstructured implementation.

A. Dr Weightman repeated that there was no fundamental change in the way inspectors assess safety cases resulting from publication of the SAPs06, and hence the method of implementation reflected this. What the NII was seeking was greater clarity for stakeholders on the way inspectors assess and in addition getting consistency in the assessment process. Normal mentoring and management practices with NSD will push things along and improve the important issue of consistency.

Q. How will you be able to know that there has been a change in behaviour in the NII and when and how will you tell us?

A. Dr Weightman suggested the possibility of a wider Stakeholder survey of licensees and their experience of the application of the SAPs06 building on stakeholder surveys that had been undertaken recently. In addition, internal processes will be in place to judge the effectiveness of the consistency measures but we need feedback from the industry. This may need to be a formal process.

Q. Have you Key Performance Indicators for change?

A. Dr Weightman said HSE is more interested in indicators of outcome rather than process. This is a broader benchmark – is H & S improving? We are currently talking with Safety Directors Forum (SDF) on the subject. There are no magical indicators!

Q. We need to collect data more carefully

A. Dr Weightman – NSD’s Communication and Stakeholder Engagement team is leading on Stakeholder Engagement and will consider how best to deal with this issue. He also noted that one leg in NII’s Performance Indicators is assessment, which includes internal consistency. This is considered in NSD annually across the nuclear industry, and quarterly at Divisional level for the three nuclear sectors (Nuclear Power Plants, Nuclear Chemical and Research Plants and Defence related nuclear sites)

Q. It is noted that DNSR will perform a Regulatory Impact Assessment (RIA). Does this indicate different goalposts for the defence sector?

A. Andrew McFarlane, DNSR – In the defence nuclear programmes, in addition to the existing NII SAPs, DNSR has extant Safety Principles and Safety Criteria (SPSC). Unlike NII SAPs these are requirements which dutyholders are required to address, either by demonstrating compliance, or by justifying non-compliance. DNSR intends, in due course, to replace SPSCs by adopting the NII SAPs for DNSR as well as NII regulation of the defence

nuclear programmes, as guidance for DNSR inspectors. This is a more fundamental change, and it is this change for which DNSR will conduct an RIA, to inform the final decision of adoption of SAPs in place of SPSC.

Q. Implication is that the information in current Safety Cases will be sufficient – this is unlikely for PSA. When is information likely to be available so the new SAPs can be applied?

A. Dr Weightman: This is not a real issue as the SAPs are to help in making Regulatory judgements not setting requirements on dutyholders.

Issue: Public Communication

Q. How is NII going to have the resources to deal with public comments, not just on SAPs, but also new build. We may want to talk about specific areas that are not so clear to the public. Have you the resources to respond to details and for that matter, general points?

Q. For example, explain what is meant by site in particular in relation to a multi-facility site.

A. Dr Weightman: Resourcing is always an issue but we will take away this concern to consider what we can offer in terms of better dialogue. A new unit has recently been formed to provide more effective stakeholder dialogue.

A. Andrew McFarlane (DNSR): For the defence nuclear programmes, regulatory communication has to be better with the public – we do it badly now but we are keen to do better. We have no immediate answer.

C. [From floor]: FOI makes information available: the fact that it is there is important

C. HSE pointed out that a difficulty had been explaining how radiation exposures to the public were regulated. This is complicated because responsibilities are split between various bodies. The information was available but difficult to present in a simplified form.

C. Alan McGoff, EA advised that this is described in the “RIFE” (Radioactivity in Food and the Environment) Report. This was an annual report produced jointly by the Environment Agencies and the Food Standards Agency. Part of being open and transparent is trying to use language that makes the information presented understandable to the people that it is aimed at, although this can be difficult for some technical matters. It was also important to identify the relevant people who should receive information. The Environment Agency puts a great deal of effort into making its consultation documents use “plain English” where possible.

C. Dr Weightman – This is all about better engagement: we will consider producing a plain language guide to SAPs to better communicate with the public.

C. Look at examples of good practice around the world. Public meetings during reviews etc.

C. Sweden is regarded as people experts.

A. Dr Weightman – We are aware of international practices and will take this into account when looking at how we can communicate better.

C. HSE - Principal responsibility to secure safety but also we have a responsibility to communicate

Issue: LC14 - Impact on Arrangements

Q. Dr Weightman asked what was the concern?

Q. On behalf of the Safety Directors Forum sub group it was explained that the concern was if an NII inspector asked 'how does the safety case meet Numerical Target 4 as set out in SAPs06?' The answer is that it doesn't, as analysis has not covered Target 4. So until there are new arrangements, there won't be a consideration of Target 4.

A. HSE pointed out that SAPs06 Target 4 is just 1992 SAP 25 b) and c) expressed in a different form so a safety case must have had some consideration of this target even if not in so many words.

Dr Weightman: We judge your arrangements as demonstrated by your safety cases. SAPs are not a set of rules to produce safety cases.

C. May well change arrangements in the future

C. Concern is inspectors come back to ask for details and clear correspondence rather than do it themselves. This will also be a problem if inspectors move and different licensees have different arrangements.

A. Dr Weightman: Yes, but this is a LC23 matter rather than a SAP issue.

Issue: IAEA Benchmarking and link to 'Foreign' Designs

A. HSE explained the process of benchmarking the SAPs against IAEA Safety Standards. The benchmarking was a key part of the revision process as the Safety Standards are well-recognised international good practice. The IAEA documents were considered against the SAPs to recommend potential areas for improvement. This was a difficult process as IAEA Safety Standards are not in the style of SAPs. Recommendations were made for the SAPs and Technical Assessment Guides (TAGs) and these were given to NTLs for the relevant areas. It was impossible to track in detail how these comparisons were incorporated, but a final check to establish what has happened to the recommendations and then add any outstanding ones to be considered in the TAGs revisions project is in hand.

Alan McGoff, EA noted that the Environment Agency's development of principles is learning from HSE's experience and that the SAPs are being used to inform its process where appropriate.

HSE also noted that WENRA reference levels, which have also been established based on IAEA Safety Standards, would need to be covered in the TAGs.

C. The comment was made that the quality of IAEA safety standards was questionable.

C. HSE pointed out that the process of preparing the safety standards meant that all the standards could not be developed at the same time. Hence, there were bound to be areas of weakness. The NTLs are aware of the limitation and tried to incorporate key safety outcomes. Benchmarking means looking at

what is appropriate to include in the SAPs and not copying verbatim the wording in the IAEA safety standards. A similar approach will be taken when demonstrating how we meet the WENRA reactor harmonisation reference levels.

C. Dr Weightman noted that as part of the revision process of the IAEA safety standards, the Safety Fundamentals have recently been agreed and will be published shortly. As part of this revision we were able to influence the content of the Fundamentals, for example we were able to convince the world's Nuclear Safety Regulators to include a fundamental statement on Leadership & Management as a fundamental requirement.

Issue: Maintenance of Document

A. HSE said that they will track changes using history sheet even though this is not "HSE house style" and post this on the website. If more substantive changes are made, this will be signalled in some way as yet undetermined.

Q. Is there mileage in NII using a "case law" approach to publish judgements made using the SAPs?

A. Dr Weightman: FOI applies therefore, the basis of a judgement for a regulatory decision can be available. We can look at refining this approach, but it is not like making legal precedents e.g. as circumstances differ greatly and ALARP applies. We can put more on the website but our judgements are not the same as precedents in law and, thinking of them as such, could

interfere with dutyholders duties for thinking for themselves on ways to improve safety.

HSE also pointed out that ALARP positions may change with time.

DNSR then emphasised the push for continuous improvement

Q. Would change of principles be consulted on?

A. Dr Weightman – The principles are guidance for our inspectors on coming to judgement and we engaged with stakeholders mainly to develop mutual understanding and ensure clarity – it was not consultation. We would similarly engage with stakeholders if the change were deemed significant.

Issue: TAGs/TIGs Engagement with Industry

A. HSE said that the TAG revision programme will be produced but there are resource issues so revisions will have to be prioritised to ensure that those that are most needed get priority. HSE will engage stakeholders but the form of interaction has not yet been decided. It was likely that the TAGs will be published on the website for comment on clarity,etc, and the dialogue will be open with stakeholders. However, it would be too resource intensive to have a stakeholder engagement programme similar to that undertaken for the 2006 SAPs revision.

Q. Can the stakeholders influence the order of the revision?

A. Dr Weightman – We will publish the intent and ask for views. Additionally, there could be a route via SDF for licensee views. But at the end of the day it will reflect our priorities.

Q. Do HSE plan to revise the ALARP TAG?

A. HSE said that the ALARP TAG is already partially revised to reflect the revised SAPs.

C. It was important to understand ALARP. With new build – this is a high priority.

Q. It was pointed out that there is less about criticality safety in SAPs06 than in 1992 SAPs.

A. HSE agreed: the reason was that some of the 1992 SAPs were about looking after plant rather than people. HSE are currently reviewing the Criticality TAG.

Q. Is it possible to have a list of the TAGs showing which have been updated against SAPs06.

A. Dr Weightman – Seems a great idea.

Update: The TAG on ALARP is issued, but it will need further revision to bring it in line with SAPs06. Other TAGs are being worked on and when they are issued they will be shown on the nuclear e-Bulletin. At this stage stakeholders will have the opportunity to comment on the TAG.

Issue: Detailed Issues

a) Design Basis for Old Plant

Q. The issue of design basis analysis needs explanation: for example what is design basis earthquake? Doesn't make sense for old facilities, as they were designed to earlier standards, do we assess the risk by considering which level of earthquake can be withstood?

A. **HSE** said that was what was expected. It was not expected to undertake a full design basis analysis. Analysis should be undertaken sufficient to show that the plant could meet its functional requirements and risks are ALARP. In terms of earthquakes, what was described was what we believe we do in practice.

A. **Dr Weightman** said that there will be more explicit discussion of how we cover these design basis analyses in the TAGs

b) Use of Probabilistic Safety Analysis (PSA)

Q. What steps are HSE taking to ensure level 3 PSA is included in safety cases?

A. **Dr Weightman:** We are not setting down requirements for dutyholders – we are not saying there are new requirements. If the case is sound and well founded, it will continue to be. We don't anticipate major shifts going forward. It is for dutyholders to demonstrate to themselves that the facility is safe: SAPs are to guide our judgement and the challenge we make. PSA is important but the safety case must be looked at holistically.

Closing comments

Dr Weightman: Feel it has been a useful day. We welcome engagement. We will be looking at how we can engage better, even if it is challenging. Events like this help us to think how we can improve.