



Date: May 2006

No. 3

Subject: NFLA Response to the Health and Safety Executive consultation on Pre-licensing Safety Assessments of New Nuclear Reactors

1. Introduction

Nuclear Free Local Authorities very much welcome the decision by HSE to seek our views on its thoughts relating to its review of its strategy for regulating the design of new nuclear power stations (in the light of the DTI's request for advice on the potential role of pre-licensing assessments of candidate designs). We understand that this invitation has also been extended to the public at large and the public's municipal and non-governmental organisations and we are pleased that it is considered appropriate and right that they should be involved in considering how to provide for the regulation of the safety of nuclear installations.

To structure the garnering of views HSE has posed a series of 29 questions but also sought views on any points that we believe HSE should take into account when it submits advice to DTI.

2. Preliminary remarks

2.1 Pre-licensing per se

It appears to be taken as read that some form of appraisal of a candidate design may be undertaken in the absence of a specific site licence application. We reserve our position on the extent to which this may be lawful or not. It seems to us that whilst it may be lawful for HSE to work up the knowledge that a regulator must have in order to, broadly speaking, regulate, this is always a question of degree. We question, for example, from our own experience, at what point it would be lawful for a local authority to commission research necessary to judge and arrive at a conclusion on the acceptability of a theoretical planning application, where

- this was entirely speculative,
- it had not been made,
- the location in the authority's area had not been identified, and
- the authority did not itself stand to gain from any subsequent application.

In fact we do not see why a serious developer wishing to have the view of the HSE on a candidate design should not at the same time apply for a site licence. This would allow for the consideration of all three aspects: design, location and organisation inter-actively in the usual way and in full compliance with all statutory requirements to reduce risk. To depart from this norm seems to us to go beyond being a matter of degree and to be outside the contemplation of the legislation.



THE LOCAL GOVERNMENT VOICE ON NUCLEAR ISSUES

2.2 Uncertainty

Potential developers are concerned that a public inquiry that considers safety issues will be lengthy. The solution apparently suggested, namely that safety be excluded from the remit of the inquiry and confined to the licensing process, is inept. Nuclear power is a controversial technology and safety concerns are at the heart of the controversy. It is not the procedures that induce slow decision-making, it is the controversy. This cannot be swept under the carpet. If there is no mechanism to examine safety issues in public, there will be no semblance of political or popular legitimacy for any development and it will be dogged by difficulties thereafter. Doubts about safety have to be openly and transparently considered.

3. **The questions posed**

We consider only some of the questions raised:

Q3. What would be the pros and cons of separating HSE assessment of plant design safety from assessment of site-specific aspects and assessment of the organisation of the licence applicant?

It seems to be assumed that if design were separated from the two other matters the design issue could be excluded from detailed scrutiny at a public inquiry. This seems to us to be naïve: during the period whilst the design issue is purely abstract and non-site specific, the community subsequently chosen for the actual site licence application may not have voiced its concerns. Conversely when the design becomes site specific, much political argument and legal ingenuity will be deployed locally to ensure that the design will be challenged again at the inquiry, like it or not.

Q6. Could HSE issue a formal regulatory report summarising its findings following separate assessment of a detailed design safety case and if so, how should the period of validity of its conclusions be determined and what caveats might apply?

If HSE could issue such a report, it would have to be so hedged about by caveats to ensure independence of action subsequently (in the light of the ratchet effect of the duty to ensure that risks were reduced so far as reasonably practicable and of the particular site application), that its value to a potential developer might be limited.

Q13. How should HSE be financed to cover the resourcing requirements associated with any pre-licensing assessment of new reactor designs?

The party seeking HSE's views should provide the finance. We have already stated that on the issue of the use of NII resources, it is clear to us that they are stretched as they are and we would strongly argue against diversion from statutory functions to extra-statutory functions or from dealing with actual hazards to merely abstract ones. NII resources have already had to cope with additional pressures arising from the NDA and much reorganisation of the industry as well as increasing competition.

Q16 to 21 Overseas nuclear regulators

If overseas regulatory experience and judgement is to be taken advantage of, then issues of access to that knowledge by the public will also have to be guaranteed.

Q22. What lessons can be learned from the Sizewell B licensing and subsequent Hinkley Point C inquiry experiences?

In part it has to be said that the public scrutiny of safety within the framework of an inquiry under the electricity legislation resulted from the absence of any opportunities provided to

the public for scrutiny under the licensing legislation. Please see under 25/6 for our views on this.

Q23. How might the industry or others help improve the effectiveness and efficiency of the licensing process?

See below under Q25/26

Q24. Might there be scope to have greatly clarity of the respective roles and scope of regulatory processes and local planning processes and inquiries, and how they are linked together?

European law does not recognise individual member states divisions of regulatory regime: the vital process of environmental assessment required by EU law embraces impacts on workers and the public just as much as on flora, fauna and habitat. This can be overlooked but means that the assessment process has to include explicit assessment of radiation impacts on workers and the public during commissioning, operation, decommissioning and short and long term waste management. The process therefore unavoidably crosses regulatory boundaries for safety, environmental protection and land use regardless of which authority makes discrete decisions on which aspects of regulation. This means that the inquiry will necessarily require to consider matters that are relevant to other legislative regimes. It is also worth emphasising that Article 6.4 of the Environmental Assessment Directive as amended states:

The public concerned shall be given *early and effective opportunities to participate in the environmental decision-making procedures* referred to in Article 2(2) and shall, for that purpose, be entitled to express comments and *opinions when all options are open to the competent authority or authorities* before the decision on the request for development consent is taken.

HSE will wish to take careful note that any pre-licensing might constitute the first “environmental decision making procedure” if it preceded all site specific applications under other regulatory regimes.

Q25. Is the licensing process sufficiently transparent?

Q26. How might public confidence in the outcomes of regulatory assessments of candidate designs and licensing applications be enhanced without diluting duties?

These two questions are interrelated. Public confidence depends on transparency and transparency alone is insufficient without public participation by stakeholders beyond industry and other regulators to include members of the public in their own right and or acting through their municipal and non-governmental organisations. The rationale for this is that decisions are more robust for the additional scrutiny and more acceptable because legitimated by public involvement. We believe HSE accept this fully in principle.

In this context NFLAs welcome:

(a) the general acceptance of the desirability of public consultation in the context of nuclear safety as evidenced in the statement by the Energy Minister in his letter to HSE of 10th January:

Any consultation or other engagement with the public that the HSE wish to carry out in preparing this report would help contribute to the Government’s *commitment to full public engagement* throughout the process of the Energy Review and would have [his] support.

(b) the recognition by HSE of the importance of working with stakeholders as exemplified in the following written and web-site documents:

- Nuclear Installations Inspectorate – A Public Opinion Survey 2000

- Improvement Plan: Knowledge management and stakeholder engagement at the NSD 2001
- NSD Stakeholder Engagement Project – Project Initiation Document
- Communications and Engagement Strategy
- Staff stakeholder survey
- External stakeholder survey
- Proactive communications strategy
- <http://www.hse.gov.uk/aboutus/plans/hscplans/janekennedy.pdf>
- <http://www.hse.gov.uk/nuclear/pow0506.pdf>

(c) the recognition by HSE that the concept of stakeholders is not confined to industry and other regulators:

see for example

- (Justin McCracken, Deputy Chief Executive HSE in an email to Mr Woolley of 25th April 2006): it is HSE's "policy to consider and value the views of all [its] stakeholders" and, by implication, that the concept of stakeholders is not confined to other regulators and nuclear site licensees but extends to organisations such as ours.
- (Colin Potter, Nuclear Policy Unit HSE, 25th January 2006 in an email to Mr Woolley vis-à-vis the current process)

We will be looking to engage stakeholders in that review process; ... We would see the NFLA as a key stakeholder and will invite its participation in our engagement process.

(d) the recognition that a commitment to openness and transparency is one which embraces public consultation: e.g. (Dr Andy Hall HM Deputy Chief Inspector, Nuclear Safety Directorate) in an email to Greenpeace of 7th April, which has been shown to us:

We have taken the step of seeking stakeholder views because we wish to ensure that any conclusions we make on this issue benefit from a wider range of observations than would have been likely had we chosen to restrict ourselves to our own counsel, or just engage with the nuclear industry or our fellow regulators. HSE's policy is to be open and transparent in our approach to regulation, and this exercise seemed to us to offer an ideal opportunity to that put that policy into practice.

This welcome commitment to public participation in the present discussions must be extended to the licensing process itself: in 2006, 41 years after the legislation was passed it is completely unacceptable that the public are entirely excluded. It is equally no longer acceptable or logical that the public should be consulted in detail on what to do with the waste product of the nuclear industry [both at policy level: c.f CoRWM and site level: c.f. EA/SEPA practice to consult on all applications for authorisations] but *not* on whether the waste should be produced in the first place by the grant of a site licence or any legal approval for any reactor design falling short of a licence.

The prerequisite of public involvement is borne out by developments in law and policy at international, EU and UK levels. For example Nirex advise as follows:

Modern licensing processes and the EC Environmental Assessment Directives¹ emphasise communication with stakeholders to help inform the outcomes that must be achieved by those carrying out a potentially harmful activity.² Furthermore people who may be affected in some way by an environmental decision now have a legal right to know what criteria will be applied. The UK is a signatory to the 1998 *UN Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters Justice* (the Aarhus Convention) which

¹ Official Journal of the European Communities, Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment, OJ No. L197, 21.7.2001, p. 30, 2001 and Official Journal of the European Communities, Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment, OJ No. L175, 5.7.1985, p. 40, 1985.

² Environment Agency, *Delivering for the environment, A 21st Century approach to regulation*, 2005.

entered into force in October 2001. From October 2003 the Convention has entitled members of the public to bring cases of alleged Governmental non-compliance to the attention of the Aarhus Convention Compliance Committee.³

The involvement of the public is consistent with the views stated in “The Tolerability of Risk from Nuclear Power Stations” (1992) (“TOR”) that

...final judgements about whether a given risk is tolerable are not matters for experts alone but for people who have to bear the risk and who are therefore entitled to be given the best possible technical advice about them.

and

It is not however for the regulatory authorities but for Parliament *and the public* to weight the benefits of nuclear (power) with the risks we have outlined. (our emphasis)

More recently in HSE’s “Reducing Risk, Protecting People”⁴ there are many references to the need to factor in “societal risk” i.e. ordinary people’s perception of risk and the importance to be placed on this.

We have previously stated in a letter intended for consideration at the workshop as follows:

...public participation and consultation [must]... be fully factored in to any pre-licensing and licensing processes. We hope that all will agree that “decide and defend” died once and for all at the Nirex inquiry and that without changes in practices and regulatory framework, the outcome of any pre-licensing or licensing will no longer carry legitimacy if it has resulted from a closed iterative process between would-be-operator and regulator. Those who argue that a public inquiry can be curtailed by deciding the safety issues previously in private have missed the point.

Secondly once it is agreed that any pre-licensing and licensing must be processes involving the public, careful thought need to be given to ensuring how confidence can be maintained in ensuring a transparent and participative process in the face of potential claims to commercial confidentiality or secrecy for ostensible or real security reasons. If this is not done, any authentic commitment to an open transparent process will be undermined so that legitimacy will once more be lost.

Q27. Can the current goal setting UK nuclear site licensing system continue to respond robustly to the demands of a changing, market-led nuclear industry?

We have previously stated

As far as ongoing regulation is concerned more generally, we doubt whether the philosophy that places the full responsibility on the operator can be allowed to operate quite as it has in the past. Whilst the state ran the plants, it could be argued that a relatively hands-off approach was acceptable. With any advent of a number of different private operators, HSE will have to expand its resources and manpower to pursue a more-hands on approach consistent with IAEA standards and with any EU standards that may yet be introduced.

Q28. Are any changes to HSE’s regulatory approach to new nuclear reactor design necessary or desirable to provide continuing confidence in the current regulatory system?

Please see answers to 25 and 26 above. Applications for a pre-licensing assessment or a site licence must be advertised and made public in order to modernise current procedures. There is some difficulty over current HSE procedures and the nomenclature of relevant

³ Para 1.4 Context Note 1.6: Licensing and Regulation September 2005 Number: 484404 NIREX for CoRWM

⁴ Reducing risks, protecting people (“R2P2”) <http://www.hse.gov.uk/risk/theory/r2p2.pdf>

“...risk evaluation... includes such considerations as the ... the way that public perceptions of the risk should be taken into account.” (Para 82) “When constructing the regulatory tool we apply, our approach ... involves consulting our stakeholders.” (Para 114) “...our process for ensuring that risks are properly managed would not be complete without procedures to review our decisions after a suitable interval to establish ... whether decisions previously reached need to be modified and, if so, how; for example, because levels of protection that were considered at the time to be good practice may no longer be regarded as such as a result of ... changes in the level of societal concerns;” (para 115)

documents: as HSE states: “There are no formal processes that lead to and follow the grant of a licence.”⁵. Crucial documents such as safety guidelines, safety cases, reference design, preliminary safety report and pre-construction safety report and contract design should all be available at the various points at which they are first produced with a suitable period set aside for the public to obtain their own technical assessment of the documents. Non-technical summaries may be required to assist the process.

4. Further points

The Nuclear Safety Division is tasked to provide HSE, regarding nuclear power, with a submission to include:

- a description of the technology;
- standards generally applied, nationally and internationally, and how these are developed and reviewed;
- overview of human health and safety risks (to workers / the public);
- implications in terms of risk control measures required; and
- implications, if any, for HSE's regulatory strategy

On the second indent, we assume that HSE will remind Government that it is resisting EU Commission proposals to provide for common EU Nuclear Safety Standards and that this in part reflects the historical nexus between nuclear power and weapons and the French and UK Government's determination to resist EU encroachment. This makes it difficult to provide for the acceptance by one Member state regulatory authority of the judgments made by another EU member state's nuclear safety body.

On the third indent we remind HSE that the Committee Examining Radiation Risks of Internal Emitters (CERRIE) published its report in October 2004 and stated in its accompanying press release as follows:

Tougher action is needed to allow for new information about the risks from internal radiation. Uncertainties about the risks mean that in some cases we might be exposed to 10 times the risk previously thought, while in other cases the risk may be almost zero. Uncertainties in current methods of estimating risks from internal radiation require policy makers and regulators to adopt a precautionary approach when dealing with exposures to internal radiation, according to a Report published today by the Committee Examining Radiation Risks of Internal Emitters (CERRIE). The Report advises that greater attention should be paid to these uncertainties.

The Report warns also that newly discovered effects of radiation, genomic instability (ongoing, long-term increase in mutations within cells and their offspring), bystander effects (cells next to those that were irradiated can also be damaged), and minisatellite mutations (inherited germline DNA changes) are real biological events that need further research. However the Report finds no clear evidence to date that current radiation risks are substantially wrong.

We do not know what account of the precautionary approach advocated will now be taken in HSE's approach to any new pre-licensing/licensing but assume that HSE will advise Government of the need to allow for both the precautionary principle and for future developments in radiation protection safety levels. All the signs are that regulatory standards will tighten.

As to the precautionary principle, Article 174.2 of the EC Treaty states:

Community policy on the environment shall aim at a high level of protection...It shall be based on the precautionary principle and on the principles that preventive action should be taken...

Although the precautionary principle is therefore one of the principles on which Community policy on the environment is based⁶, the European Court of Justice has determined that,

⁵ Para A6.26 of 3rd UK Report <http://www.hse.gov.uk/nuclear/legal.htm>

⁶ See Article 130r(2) of the EC Treaty (now, after amendment, Article 174(2) EC)

because the protection of public health constitutes part of the policy on the environment, the precautionary principle also applies in regard to health protection.⁷ Article 174.2 does not define the principle but the European Court of Justice determined in “Pfizer” that the approach set out in the Communication from the Commission on the Precautionary Principle of 2 April 2000⁸ represents “a codification of the law”. It also found it applicable from 17 December 1998, the date when the particular legislative act, the subject of the judgement in point, was adopted by the European Council.⁹ Insofar as UK Health and Safety legislation implements EU Health and Safety Directives and the principles of both are reflected in HSE’s approach to licensing, then it will in our view be necessary for the licensing regime to allow for these uncertainties with an adequate margin for error.

5. We would be grateful for feedback on these comments in due course.

J.K.Woolley for
Nuclear Free Local Authorities
April 2006

⁷ see Case C-180/96 United Kingdom v Commission [1998] ECR I-2265 Pfizer Animal Health v Council Case T-13/99 (“Pfizer”) para 114; para 228 Opinion of the Advocate General Case C-491/01 The Queen v Secretary of State for Health ex p British American Tobacco (Investments) Ltd

⁸ COM (2000)1.

⁹ Pfizer op cit para 149