

Nuclear Free Local Authorities **RADIOACTIVE WASTE POLICY** Briefing on the Government Review

No 10, February 2004

GOVERNMENT PROPOSES NEW DECOMMISSIONING POLICY

The Government has issued a consultation paper on policy for decommissioning nuclear industry facilities¹. It has concluded that existing policy needs updating to reflect developments in the industry and in decommissioning practice.

The Government proposes to:

- reaffirm that decommissioning must be conducted as soon as reasonable practicable in a manner which is safe, secure, efficient and cost effective, and represents the Best Practicable Environmental Options (BPEO) for the site;
- make it clear that the policy applies to all of the UK's nuclear industry facilities rather than to its reactors alone;
- clarify what decommissioning means in practice, in particular that it includes the need to remediate and, where practicable, to restore associated land;
- recognise that restoration to unrestricted use may not always be the BPEO, and that there may be a range of possible end points reflecting different potential uses of the site; and
- make clear that decisions on site end points should only be reached after consultation with local communities and other stakeholders.

The consultation paper raises a series of key issues for the future of nuclear sites and the management of radioactive wastes, which could impact on local authorities across the UK. This briefing discusses these issues and makes recommendations for comments that should be fed back to the DTI.



THE LOCAL GOVERNMENT VOICE ON NUCLEAR ISSUES

DECOMMISSIONING OBJECTIVES

The consultation paper explains that decommissioning includes full or partial dismantling of buildings and their contents and the management of waste arisings. It may also include other operations such as the decontamination of buildings which are not to be dismantled, and the remedial treatment of land under and around the facility. It will be for a BEPO study to determine the extent of decommissioning in the light of proposals for future site use.

The paper proposes that “the immediate objective of decommissioning is to reduce the hazard associated with a site and its plant in a progressive and systematic manner which ensures safety of workers and the public and protects the environment”. It adds that the “wider objective of decommissioning is to reduce the number of sites, and acreage of land, which remain under regulatory control.” Furthermore, where regulatory control is still necessary, “the goal will be to minimise the area of land to which those controls apply”².

The *immediate objective* corresponds to the priority of the Nuclear Installations Inspectorate (NII), and should be cautiously supported bearing in mind nothing is ruled out for future site use.

The *wider objective* introduces a new driver, which the Government clearly sees as appropriate to the era of nuclear decommissioning and is to be welcomed.

IMPLICATIONS OF REDUCING THE NUMBER OF LICENSED SITES

On the face of it, an objective of reducing the number of sites under regulatory control makes sense. It is certainly likely to be supported by those local authorities that wish to see the delicensing of a nuclear site in their area. However, this raises the prospect of transporting wastes – particularly Intermediate Level Wastes (ILW) – from a site undergoing decommissioning to one where the interim storage of wastes is being concentrated. This is likely to lead to concern in the communities around the licensed site being used for interim storage, and along the main transport routes.

National green groups have often taken the view that radioactive wastes should be stored in monitorable and retrievable form on the sites where they were produced. More recently, there has been some recognition that there could be overriding reasons why wastes should be moved. In other words, although there should be a presumption against off-site transport, there could be exceptions in clearly justified cases³.

In the light of the proposed wider decommissioning objective, what constitutes a clearly justified case, and how any justification might be established, will become important issues for local and national stakeholders. How stakeholders might become involved in resolving such issues is referred to below under ‘Framework for Stakeholder Engagement with the Nuclear Decommissioning Authority’.

SITE END POINTS

The consultation paper makes a number of statements about site end points. It states that it is clear from completed decommissioning projects that there are more potential uses for decommissioned sites than was previously thought, including industrial and commercial re-use. It adds, however, that restoration for unrestricted use (i.e. return to ‘green field’ status) will not always represent the BPEO. For instance, “if significant parts of a site are contaminated radioactively or chemically it may be more environmentally disruptive to move the contaminated material to another site than to leave it in its present location”.

As highlighted in *Radioactive Waste Management Briefing No 8*⁴, the issue of site end points was flagged by RWMAC in advice to Ministers last year. In that advice, the Committee suggested that consideration be given to the in-situ burial or on-site landfill of low level radioactive wastes (LLW) from decommissioning, so as to avoid the excavation and transport of huge volumes of slightly contaminated material from one site to another.

Subsequently, the UKAEA has issued a consultation document asking for comments on a BPEO study about [on] options for the management of future arisings of LLW at the Dounreay site⁵. The study ranked disposal in an engineered, below surface, facility at Dounreay as the favoured option. This facility would be similar to the UK national LLW disposal facility at Drigg in Cumbria.

Potential site end points clearly raise very important issues for stakeholders. This is recognised by Government. The decommissioning consultation paper states that “decisions on site end points should only be reached after consultation with local communities and other stakeholders”. It adds that “Government expects operators to address the future use of sites in good time and to take decisions which take into account local factors and wishes of the local community.” Good notice of proposals for future site use is vital given that new nuclear build is one alternative that could be considered at a number of existing licenced nuclear sites.

IDENTIFYING THE BEST PRACTICABLE ENVIRONMENTAL OPTION

The consultation paper places great stress on the need to undertake decommissioning in a manner which represents the BPEO for the site. It emphasises that a ‘one size fits all’ approach does not apply, and that the weight to be accorded to relevant factors in determining strategy “can only be determined on a case-by-case basis”.

The consultation paper suggests that decommissioning be undertaken “as soon as reasonably practicable.” However if it is proposed that decommissioning strategy for each site be developed through a Best Practicable Environmental Option (BEPO) study then clearly questions of timing are matters for a BEPO study and should not be determined in advance of it.

In principle, this emphasis on identifying the BPEO is to be welcomed. However, the consultation document does not offer any guidance on how the BPEO should be identified, nor on how relevant factors should be weighed in the balance in determining strategy⁶. These are important issues, given the contentious nature of some of the trade-offs that have to be made, for example, in identifying the optimum timing of dismantling a reactor⁷, or of achieving prompt hazard reduction through retrieving and conditioning dangerous legacy wastes.

The recent history of industry approaches to BPEO appraisals illustrates the sorts of difficulties that can arise. In particular, as discussed in *Radioactive Waste Management Briefing No 8*, Magnox Electric's use of a Multi-Attribute Decision Analysis (MADA) to identify a BPEO for Magnox reactor decommissioning has been criticised by the NII⁸. The NII reported that:

- it had asked the Company to review the “appropriateness” of its decisions to reject key options at the screening stage, and “justify any proposals not to progress further work” to address each of the rejected options;
- it is concerned that policy that decommissioning be carried out “as soon as reasonably practicable” may not have been sufficiently addressed, and considers that the desirability of earlier decommissioning should have a more significant influence on the MADA results;
- it is concerned that the costs (‘net present value’) attribute heavily influences the MADA results, and that this should be initially excluded from a further analysis so that the effects of other attributes can be more clearly identified; and
- it considers that the Company should engage with its external stakeholders to review the retention or rejection of options, and subsequent scoring and weighting.

Although a significant step forward, the UKAEA's approach to BPEO studies at Dounreay has also been subject to critical comment. UKAEA has developed a two stage process to secure stakeholder and public participation in BPEO assessments. The first step consists of a review of a BPEO assessment by internal and external stakeholder panels. The results of the review are then published for public comment.

Although “impressed by the efforts being made”, the RWMAC has suggested:

- greater involvement of stakeholder panels in the early stages of BPEO assessment eg option screening and attribute scoring, prior to involvement in looking at the impact on BPEO outputs of varying attribute weightings; and
- a more robust approach to deciding which projects are to be subject to stakeholder participation, for example by using the existing external stakeholder panel to develop a set of guidelines⁹.

RWMAC has also argued that there is an urgent need for public guidance on the scope and content of BPEO assessments¹⁰. It suggests the need for clarity on a range of issues. These include: how BPEO assessments can be used strategically or for specific projects; how BPEO assessments should be used as a tool for decision-making; the role of MADA within a BPEO assessment; the scope of BPEO assessments (eg whether socio-economic factors should be included); and what should trigger a BPEO.

This guidance should also identify best practice for involving stakeholders, so that BPEO assessments are properly informed by their views¹¹.

NII REVIEW AND AUDIT OF DECOMMISSIONING STRATEGIES

Radioactive Waste Management Briefing No 8 discussed how to build on the reviews of decommissioning strategies carried out by the NII on a five-year cycle. The Briefing argued that a starting point would be to require early publication of an operator's submission to the NII as a matter of policy, so that stakeholder comments could be taken into account by the NII as part of its review.

The decommissioning consultation paper does not address this point, referring simply to the need for strategies to continue to be subject to periodic reviews by the regulators. This omission should be rectified in the policy statement produced by Government following consultation. Government policy should require site operators to publish their submissions at the time of submission to the NII, publicise its availability, and invite comment so that proper account can be taken of stakeholder views.

A FRAMEWORK FOR STAKEHOLDER ENGAGEMENT WITH THE NDA

A theme running throughout this briefing is the need for effective stakeholder engagement when addressing the issues raised by the decommissioning consultation paper.

Stakeholder engagement is the subject of a second consultation paper from the DTI, 'Draft Framework for Stakeholder Engagement and Transparency for the NDA'¹². This paper sets out "the attributes of a NDA that is successfully engaging in an open and transparent way with all of its stakeholders", and asks for comments.

In principle, the attributes identified in the consultation paper should provide the basis for effective engagement. For example, it states that the NDA should:

- ensure the timely input of local and national stakeholder views, advice and recommendations into NDA and licensee decision making;
- ensure that communities local to NDA sites can input into the development of site clean up plans;
- provide effective liaison and interaction between national and local levels of engagement and between sites.

For the local level, the consultation paper states that amongst a range of attributes the NDA's engagement structure should be:

- sponsored by the NDA, but independently chaired or facilitated;
- given a proper level of guaranteed resourcing;
- made up of participants drawn from a wide range of local stakeholders;
- input timely advice and recommendations; and
- able to fulfil a scrutiny role in relation to site activities.

For the national level, the paper states that the NDA's engagement structure should:

- input timely advice and recommendations into NDA decision-making on strategy, priorities and work programmes;
- be given a proper level of guaranteed resourcing;
- have clear links to local engagement mechanisms, including membership from the local level;

- include a representative of the NDA Board; and
- be able to fulfil a scrutiny role in relation to the NDA's performance¹³.

These attributes have been formulated after discussion in a series of regional stakeholder workshops. After receiving further comments, the DTI intends to develop more detailed proposals. In doing so, it must ensure that the NDA stakeholder engagement framework will be able to adequately address the issues raised in this briefing.

An important additional point is the need for British Energy (BE) to take on board the thinking that has gone into the proposed attributes for NDA stakeholder engagement, and improve its engagement practices accordingly. If it does not do this, the potential effectiveness of the NDA's stakeholder engagement will be undermined, particularly where BE and NDA facilities are located side-by-side, and where transfers of wastes from BE to NDA sites are under discussion.

CONCLUSIONS AND RECOMMENDATIONS

The Government's consultation paper on decommissioning raises a number of important issues for the future of nuclear sites and the management of radioactive wastes. These include:

- the potential increase in transportation of ILW, and concentration of interim storage on a small number of sites, to enable a reduction in the number of sites and acreage of land subject to regulatory control;
- potential site end points, which raise questions of re-use, on-site disposal of LLW and restoration of contaminated land;
- the development and revision of strategies for decommissioning at specific sites;
- the identification of BPEOs for specific projects; and
- the NII review and audit of decommissioning strategies.

The DTI should ensure that the draft NDA stakeholder engagement framework is developed in ways which enable these issues to be addressed effectively by local and national stakeholders. It should also ensure that parallel and linked improvements in engagement take place around British Energy facilities.

The decommissioning consultation paper lays great stress on the need to undertake decommissioning in a manner which represents the BPEO for a site. However, it does not offer any guidance on how the BPEO should be identified, nor on how relevant factors should be weighed in the balance in determining strategy. There is an urgent need for further guidance on the nature, role, scope and content of BPEO assessments for decommissioning. Timing of decommissioning is part of that assessment.

Finally, on the NII review and audit of decommissioning strategies, the Government's policy statement should require early publication of an operator's submission to the NII, with notice of its availability and an invitation to comment, so that stakeholder views [comments] can be taken into account by the NII as part of the review.

¹ DTI, 'A Public Consultation on Modernising the Policy for Decommissioning the UK's Nuclear Facilities', November 2003. Available from Jeff Hoare, DTI, Nuclear and Coal Liabilities Unit, 1 Victoria Street, London, SW1H 0ET (jeff.hoare@dti.gsi.gov.uk). The closing date for comments is 27 February 2004.

² There is some inconsistency in the precise form of words used to describe the objectives in the consultation paper. The objectives should be consistently described in the final policy statement.

³ This position is discussed in a discussion paper presented to the NFLA Steering Committee on 16 October 2003, 'Radioactive Waste Transportation', Item 9, Report for Resolution.

⁴ NFLAs, 'Decommissioning Policy Under the Spotlight', Radioactive Waste Policy Briefing, No 8, May 2003.

⁵ UKAEA, 'Developing the Long Term Strategy for Managing Dounreay's Solid Low Level Radioactive Waste', Consultation Document, September 2003.

⁶ Note also that the consultation paper provides an incomplete list of the factors that should be weighed in the balance. For example, an important omission is inter-generational equity.

⁷ There are bound to be various interpretations of what "as soon as reasonably practicable" might mean for different types of facilities. These various interpretations needed to be identified and addressed within participative BPEO processes.

⁸ NII, 'Magnox Electric plc's strategy for decommissioning its nuclear licensed sites', HSE, 2002.

⁹ RWMAC, 'Twenty Third Annual Report', December 2003, para 6.57.

¹⁰ RWMAC, as above, para 3.39.

¹¹ As highlighted in Briefing No 8 (see above), the Royal Commission on Environmental Pollution has highlighted that a BPEO should be the outcome of "systematic consultative and decision-making procedure", RCEP, 12th Report, 1988. It provided the following definition: "(It is)...the outcome of a systematic consultative and decision-making procedure which emphasises the protection of the environment across land, air and water. The BPEO procedure establishes, for a given set of objectives, the option that provides the most benefit or least damage to the environment as a whole, at acceptable cost, in the long as well as the short term" The RCEP's view was that:

- "...the procedure should be open" (para 1.7)

- "...openness and accountability are central to BPEO" and

- "...there should be the widest possible opportunity for others who may be affected to contribute to the decision" (Para 1.13)

"...(W)here the trade-offs are difficult or controversial, the selection of BPEO cannot be left to scientists, industrialists and regulatory experts alone. Public involvement is needed so that the public values underlying the choice of BPEO are identified." (Para 3.20) "...(T)here must be appropriate and timely consultation with people and organisations directly affected. The circle of those involved in taking the decisions should be appropriately wide." (Para 5.5)

In October 1998 RCEP in its 21st report recommended that:

"...(V)alues should be articulated at the earliest stage possible in setting standards and developing policies. The public should be involved in the formulation of strategies, rather than merely being consulted on already drafted proposals." (See para 7.22 and 9.77 RCEP 21st report Setting Environmental Standards)

¹² DTI, 'Draft Framework for Stakeholder Engagement and Transparency for the NDA', Consultation Paper, December 2003. The paper is available from Richard Griffin, Nuclear and Coal Liabilities Unit, DTI, 1 Victoria Street, London SW1H 0ET (richard.griffin@dti.gsi.gov.uk). Comments should be sent to the DTI by 31 March 2004.

¹³ For a full list of proposed attributes see the consultation paper.