GOVERNMENT MUST LISTEN TO PUBLIC VIEWS ON NEW NUCLEAR POWER STATIONS

Civil servants drafting the White Paper on energy policy face deeply conflicting views on whether new nuclear power stations should be built in the UK.

Key stakeholders are calling for a definitive decision either way. The nuclear industry argues for massive Government support to make investment in new stations attractive. Green campaigners recoil in horror and argue that this is an opportune time to wind down the industry.

In contrast, focus groups and deliberative workshops commissioned by the DTI indicate that the public wants more information, further discussion and stringent conditions to be met before definitive decisions are made about the future of nuclear power. The NFLA Steering Committee set out this case in *New Nuclear Monitor No.4* (June 2002) and argued the case in its response to the Government’s Energy Review.

This issue of *New Nuclear Monitor* underlines the NFLA case for greater public engagement on the future of nuclear energy and its alternatives. The case in the following pages has been submitted to the DTI and the Energy Minister.

The Government must now heed this message rather than give highly controversial support for new nuclear stations. In making this case, we outline the nuclear industry’s proposals, and contrast these to the views of the public. All NFLA supporting authorities are urged to write to their MPs and to the Energy Minister in support of the case made in this briefing.
THE NUCLEAR INDUSTRY’S CALL FOR STATE SUPPORT

BNFL and British Energy (BE) have spelt out the dramatic level of support that they want from Government in their submissions to the energy review.

BNFL argues that the nuclear option is “currently closed in the UK, and urgent action by Government is needed to render it open”\(^1\). According to BNFL, these actions must address the obstacles to private investment and include:

- enabling long term electricity contracts, at prices which will encourage new baseload capacity;
- leveling the playing field for low carbon generation, by internalising the cost of all environmental impacts;
- implementing quicker planning processes for all major UK infrastructure projects;
- enabling Government/industry joint funding for early regulatory approval of new reactor designs;
- providing certainty on used fuel and waste costs through “pay as you go” funding for long term management;
- playing a leading role in ensuring that legacy waste issues do not cloud decision making on new nuclear build; and
- providing Government funding to support research on reactor technology and waste management.

BE focuses on two challenges: how to close the gap between the estimated cost of electricity from new nuclear stations and current electricity prices; and how to fund the construction of around ten new stations, “costing some £10 billion over a period of around 20 years”\(^2\).

To close the price gap, BE argues that the Government should put in place a “long term premium recognising nuclear’s environmental and other benefits”. To do this, BE proposes that a “Carbon-free Obligation Scheme” should be introduced, modelled on the existing Renewables Obligation, which makes up the difference between market price and the cost of electricity from renewables. For illustrative purposes, BE suggests that new nuclear stations would require a premium of 1 p/kWh over the market price of electricity\(^3\).

On funding, BE argues that as long as Government takes action to make private investment attractive, it should be possible for the bank and capital markets to provide between 50% and 80% of the funding, which could be up to £400 million per year. BE then suggests that the Government takes on the company’s pre-1996 spent fuel and waste management liabilities, so that it can use its own cash flows to provide the remaining funding for a new build programme (estimated at up to £250 million per year).
If implemented, these proposals would amount to large-scale Government intervention in the market to support the construction of new nuclear stations. Before commenting on some of the detail, it is important to ask whether there is any evidence of public support for such intervention?

**WHAT THE PUBLIC THINKS**

The DTI commissioned a number of participatory processes to inform the preparation of the White Paper. Two approaches were used to involve members of the public:

- **Focus groups**: these involved evening discussions based on people’s “off-the-cuff” responses to questions about energy policy, and were intended to establish the pattern of “common sense” views held by citizens without exposure to detailed information on energy policy.

- **Deliberative two-day workshops**: these built on the themes covered in the focus groups, but exposed the participants to a range of briefing materials on energy policy and allowed an extended period of discussion.

A third, web-based, process was used to draw in comments from a range of invited expert contributors.

The results have been grouped under the headings of low or no consensus, emerging consensus and solid consensus:

- **Low or No Consensus**: the role of nuclear power; the role of increases in energy prices in changing consumer behaviour; and allocating targets to new technologies in terms of percentage of power generation.

- **Emerging Consensus**: the importance of tax incentives to favour energy efficient products, construction and consumption; the need for Government to amend the pattern of incentives in the energy market to favour energy efficiency and low-carbon options.

- **Solid Consensus**: the importance of assured supply of power; the need for more support for renewables development; the importance of environmental policy as a driver of energy strategy; the imperative of taking determined action to promote energy efficiency; the need for solutions to nuclear waste problems; the importance of consistent messages about energy priorities; the importance of public education campaigns on energy challenges and choices; the vital role of Government in setting out the urgency of the challenges and promoting potential solutions.
The conclusion on nuclear power was as follows:

“The most controversial and complex element of the debates on energy mix concerned nuclear power: in all the processes there were strong views for (eg it is a low-carbon option) and against (eg safety concerns), and a large body of concerned but undecided opinion. Waste management was a dominant issue for all shades of opinion on nuclear power, with many people unable to envisage acceptable solutions to the problem of waste disposal. In the focus groups and workshops a highly conditional view began to emerge, with acknowledgement that nuclear power won’t go away, alongside a reluctance to accept it except under very stringent conditions – for example, rejecting new building until waste storage issues are dealt with more effectively. In the non-expert processes there was a strong sense that people did not have enough unbiased and trustworthy information on which to base opinions and help citizens contribute to decision-making.”

In contrast to the position with renewables and energy efficiency, these findings do not provide any support for large-scale Government intervention in the market to enable the construction of new nuclear power stations. Indeed, the public appears to want more information, further discussion and stringent conditions to be met before definitive decisions are made about the future of nuclear power.

These findings strengthen the conclusions set out in the previous issue of New Nuclear Monitor:

- the Government should put concerted action on energy efficiency and renewables at the top of its energy policy agenda, and not succumb to those who want state support for a large, capital-intensive and inflexible programme of new nuclear power stations; and

- if the nuclear option is to be kept open as insurance against the failure of energy efficiency and renewables to deliver, proper attention needs to be paid to identifying and meeting conditions of public and stakeholder acceptability.

IDENTIFYING THE BUILDING BLOCKS OF PUBLIC ACCEPTABILITY

To be implementable, a convincing insurance policy would have to identify the building blocks that need to be put in place before new nuclear build could become a publicly acceptable. It is likely that these building blocks would have to address:

- What the public would consider to be a ‘solution’ to the long-term management of radioactive wastes. This might be defined in terms of reaching a significant milestone in the implementation of policy, for example, securing planning consent
for new facilities for long-term storage or disposal, or construction of the facility, or a period of successful operation.

- **What the public would consider to be adequate progress in putting the rest of the ‘nuclear house’ in order.** This might be defined in terms of reaching significant milestones in: (a) winding down reprocessing and the accumulation of separated plutonium and highly active liquid waste; (b) immobilising potentially mobile and hazardous materials, including separated plutonium, highly active liquid waste and unstable intermediate level wastes; and (c) demonstrating an ability to decommission and dismantle existing nuclear power stations.

- **What the public would consider to be an acceptable standard of safety for a new generation of reactors.** This might be defined, for example, as there being no physically credible events which could require off-site actions. This could require the development of reactor designs that could survive the total absence of coolant and withstand high impact external events, such as the deliberate crashing of a commercial jet airliner. It might also include rejection of the use of plutonium-containing Mixed Oxide (MOX) fuel, not least because of the security risks of transporting it to reactor sites.

- **What the public would consider to be an acceptable level of expert agreement about the risks of low level radiation.** Much hinges here on the satisfactory conduct and outcome of the current review of the risks of low level radiation, and on the findings of any further research identified as necessary by that review.

A more extended and focussed process of public participation is now required to explore these building blocks.

Findings from the DTI-commissioned focus groups lend some support to this position:

“‘The groups welcomed the Government’s commitment to consult the public on energy issues but felt that more needed to be done to emphasise the importance of energy issues to citizens. They felt that such consultation with the public could build trust in subsequent policy implementation, but that people need to feel that it is part of an ongoing process.’”8 (emphasis added)

It is evident from the conclusion on public views on nuclear power, that this is a key issue which requires an ongoing process of public participation.

**THE NEED FOR BALANCED PUBLIC INFORMATION**

The public call for more information and “education campaigns” raises some challenging issues in relation to nuclear power.
In its submission to Government, BNFL argues that “major misperceptions” provide obstacles to new nuclear build, and that Government should actively project the “true picture” to the public. It then seeks to counter what it considers to be two examples of such misperceptions: firstly, that “nuclear waste remains an unsolved technical problem and its management carries high and uncertain costs”; and secondly, that “nuclear industry costs projections are unfounded and optimistic”.

The critical point here is that the industry’s claims about misperceptions are themselves contested, as explained in previous issues of New Nuclear Monitor. This means that the Government should be extremely careful about the ways in which it might go about providing more information or running “education campaigns”.

A good starting point for Government would be to take account of the findings on information provision from public participation initiatives on radioactive waste management. These have found that members of the public:

- are wary of being ‘sold’ a message and are concerned that information should be accessible by all (but not forced on anyone);
- consider there to be “no single, neutral, balanced or independent sources of information”, and that there is a “need for the points of view of all sides of the debate to be heard”; and
- consider that information from official sources “cannot be trusted”, and there is a need for the ‘checking’ of information by third parties, including environmental groups.

These findings suggest that the process of assembling and peer reviewing public information should involve a wide range of perspectives, and that any attempt by the Government to actively promote the industry’s perception of the “true picture” would backfire dramatically.

MEETING THE COSTS OF NUCLEAR LIABILITIES

This is an aspect of the industry’s proposals which requires specific comment. There are two main components:

- BE’s proposal that the Government take on the company’s pre-1996 spent fuel and waste management liabilities; and
- a proposal for “pay as you go” funding for the long term management of spent fuel and radioactive wastes.

The first proposal has its roots in the privatisation of the AGR stations and Sizewell B in 1996, when the industry attempted to argue that the new private sector company - BE - should be exempt from responsibility for meeting the costs of reprocessing.
existing AGR spent fuel. As argued at the time\textsuperscript{13}, this would have been deeply unsatisfactory because provisions to cover these liabilities had been invested in the assets which BE would acquire on privatisation.

This was recognised by the then Energy Minister. He stated that “as a basic point of principle, the liabilities are going to be transferred to the private sector along with their associated assets”, and that “what would be totally unreasonable would be if the assets .. were put into the private sector without the appropriate associated liabilities.”\textsuperscript{14}

It would be even more unreasonable if the BE proposal were to be acted upon now, especially if designed to enable the company to fund a programme of new nuclear build “from its own cash flow”\textsuperscript{15}.

The second proposal – for an US-style pay-as-you-go system of payments to meet long-term spent fuel and radioactive waste liabilities – could have major implications for the proposed Liabilities Management Authority (LMA), which the Government intends to set up to manage public sector nuclear liabilities\textsuperscript{16}. Although not made explicit, the industry proposal implies that post-1996 liabilities, including those from any new stations, should be transferred to LMA ownership if moved to an LMA site for management, leaving BE to make a regular payment in return for that service (eg the reprocessing of AGR spent fuel).

This possibility raises a number of critical issues. The first is a matter or principle: should the LMA fulfill such a role for a private sector company, particularly as it would set a precedent which could lead to the LMA managing spent fuel or radioactive waste liabilities from a new build programme? The second concerns the level of regular payments to the LMA should the proposed scheme go ahead. Clearly, this level should properly recompense the LMA for the management role it fulfills, and be demonstrated not to involve a hidden subsidy to BE. The latter would almost certainly be the case if BE were to make payments for the reprocessing of spent fuel based on the level of payment used in the US, as implied in its proposals to Government.

**SUMMARY**

This issue of *New Nuclear Monitor* has outlined the nature of the industry’s proposals for large-scale market intervention to support the construction of new nuclear stations. It has also set out the key findings from focus groups and deliberative workshops, commissioned by the DTI to identify public views which should be taken into account in the preparation of the forthcoming Energy White Paper.

The findings from these events fail to provide support for the nuclear industry’s proposals for large-scale market intervention. Indeed, the public appears to want
more information, further discussion and stringent conditions to be met before definitive decisions are made about the future of nuclear power.

This strengthens the view that if the nuclear option is to be kept open, proper attention must first be paid to identifying and meeting the building blocks of public and stakeholder acceptability. A more extended and focussed process of public participation is now required to explore these building blocks.

The briefing also warns that the call from the public for more information and “education campaigns” raises some challenging issues. In particular, the process of assembling and peer reviewing public information must involve a wide range of perspectives. Any attempt by the Government to actively promote the nuclear industry’s perception of the “true picture” would backfire dramatically.

Finally, problems with the industry’s radical proposals for dealing with the funding of spent fuel and radioactive waste liabilities are highlighted.

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1 BNFL. ‘Nuclear now .. for tomorrow’s generation’, Submission to the Consultation on UK Energy Policy, 5 September 2002.
3 Based on estimates of costs by the Performance and Innovation Unit of the Cabinet Office, the required premium could be as much as double the illustrative figure put forward by British Energy. For further details see NFLA, ‘Government Launches Consultation on Energy Policy’, New Nuclear Monitor, No 4, June 2002, p4-5.
5 IPPR et al, as above, p22.
7 The review has been set up by the Government under the auspices of one of its advisory committees, COMARE, and is known as the Consultative Exercise on Radiation Risks of Internal Emitters (CERRIE).
8 IPPR et al, as above, p11.
9 BNFL, as above, p8-9.
13 COLA, ‘Nuclear Privatisation: Dealing with the Liabilities?’, Special Briefing, No 18, December 1995.
15 Or indeed to help BE repay the large-scale loan that the Government has been forced to make during the company’s current financial crisis.