

# ENVIRONMENT AGENCY CONSULTATION ON RADIOACTIVE WASTE DISCHARGES AND DISPOSALS FROM NEW NUCLEAR POWER STATIONS.

## Response from the Nuclear Consultation Group (NCG)

### Nuclear Consultation Group

The Nuclear Consultation Group (NCG) comprise many leading UK academics and experts in the fields of environmental risk, radiation waste, energy policy, environmental sustainability, energy economics, political science, nuclear weapons proliferation, science and technology studies, sociology of scientific knowledge, environmental justice, environmental philosophy, particle physics, environmental philosophy, energy efficiency, environmental planning, and participatory involvement.

### Nuclear Consultation and the 'Big Society'

The public mistrust of policy decision-making on issues involving nuclear risk is a defining issue. In order to overcome this mistrust, government has consulted with the public about a series of issues relating to proposed new nuclear build in the UK - the idea is to weigh expert knowledge with every-day knowledge to arrive at a democratic and balanced view. Here, the practice and purpose of this public dialogue, and the models of engagement to enable it, are core to the relationship between government and the public in a modern democracy.

It is now recognised that the old 'decide-announce-defend' (DAD) approach based on the so-called 'public knowledge deficit model' is dead. As a result dialogue with the public is no longer seen as an 'optional add on' to science-based policy making. This view is echoed in more recent environmental risk controversies, where the focus of risk disputes have centred on government credibility and trustworthiness. This shift has seen government move toward a 'Big Society' engagement model, which focuses on a two-way dialogue between specialists and non-specialists. This approach views dialogue and debate as a means of forging a more lasting consensus by increasing social involvement and participation, thereby fostering a sense of community.

### Good Practice Consultation

The first pillar of the EU Aarhus Convention on 'Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters' aims to ensure that the public is informed about the environment and their role in decision-making. Here, in order for the public to be able to invest trust in the governance of nuclear technology; consultation must be a truly involving process. In this context, the EA must clearly address all substantive issues raised by stakeholders and provide detailed responses. In doing so, the EA must interpret their role intelligently – for example, responses have

included statements about rad-discharges and rad-wastes. The detailed rationale for these statements have been included by stakeholders in their submissions. Here, the EA must take on, and respond to, the questions raised by these statements.

In other words, in order to overcome the widespread belief that institutions wishing to impose their arbitrary actions upon the public may be partial or secretive, all the key issues raised during the consultation must be explicitly, openly and transparently addressed by the EA. Any failure to do so would leave the Regulators and, hence, Government vulnerable to legal challenge and may lead to hostility and mistrust of any future energy policy decision.

## Consultation Responses

It is beyond the scope of this paper to rehearse in detail the sets of issues and questions raised by other stakeholders responding to the EA Consultation on radiation waste disposals and discharges from any proposed new nuclear reactors in the UK. It is clear that the EA must provide a full response to all the detailed issues and questions raised by stakeholder consultees. However, the following summarises some core issues raised:

- The EA fails to explain how the proposal to approve new gaseous and liquid radioactive waste discharges into the environment from new reactors can possibly be consistent with commitments made by the UK Government to OSPAR to achieve concentrations in the environment of artificial radioactive substances close to zero by 2020. (NFLA, 2010).
- The EA ignores one of the Guiding Principles of the OSPAR Strategy with regard to radioactive substances - which is the application of “*best available techniques and best environmental practice, including, where appropriate, clean technology*”. In the case of electricity generation clean technology would include the various forms of renewable generation. (NFLA, 2010)
- The emplacement of legacy waste in a ‘Geological Disposal Facility’ (GDF) is unlikely to be completed until at least 2130. New reactor spent fuel could require storage on site for at least 160 years. This means communities around new reactors might be expected to host a waste site for almost two centuries and possibly indefinitely. (NFLA, 2010).
- The EA consultation leaves communities around nuclear sites with far too many uncertainties. As well as not knowing how long waste fuel might be stored on site, or what kind of a store will be used, they don’t know whether they will be required to host an encapsulation facility, with its associated risks, or even an Intermediate Level Waste incinerator. Communities on transport routes don’t know when waste may be transported through them, and some unsuspecting community may be asked to host a centralised storage and encapsulation facility at some point in the future. (NFLA, 2010).

- If the nuclear industry is not required to prove they have a safe disposal route for wastes until after the planned reactors are built, then a powerful financial momentum would be created towards allowing the reactors to operate – and so produce waste fuel for which there was no long term safe management route. (NFLA, 2010).
- The EA Assessment Reports fail to fully analyse the NDA's 'Disposability Assessment' reports and the Requesting Parties responses. Instead they postpone dealing with outstanding disposability issues to some unspecified time in the future. This is unacceptable. (NFLA, 2010).
- The consultation documents fail to acknowledge other work by the EA which states that it is possible that an acceptable safety case for a GDF cannot be made. (NFLA, 2010).
- If a new build programme is much larger than around 6 new reactors, two sites for Geological Disposal Facilities are likely to be sought – doubling the risk to the UK population. (NFLA, 2010).
- At present it is quite apparent the nuclear industry would not be able to dispose of new build reactor wastes safely. It would be wholly irresponsible to wait until such wastes are created to confirm this. Unless and until the nuclear industry are able to demonstrate that new reactor wastes could be disposed of safely there should be no further steps taken towards the development of new reactors. (NFLA, 2010).
- It is imperative that the regulators proactively seek to inform, engage and encourage a wider and participative consultation before proceeding to take any final decisions on the acceptability of the proposed designs. (BANNG, 2010).
- The regulators must make an unambiguous declaration that GDA approval will not proceed unless and until detailed, credible and verifiable information and evidence is provided to enable a robust safety case to be made. (BANNG, 2010).
- Regulators must suspend the GDA process until such time as there is adequate information provided on how the wastes arising from new build will be managed and there is in place a long-term management solution that is scientifically robust and socially acceptable. (BANNG, 2010)
- Estuarial locations have a more limited capacity and the impacts of cooling water on marine ecosystems in such shallow and enclosed locations is liable to be much greater than if discharges occur to open sea. Thus, estuarial sites should be withdrawn from any further consideration in the GDA process. (BANNG, 2010).

- It is imperative that the GDA analysis takes into account the impacts of climate change and that unless the regulators are fully satisfied that nuclear activities can be safely and securely operated on coastal sites for the indefinite future the GDA should not approve any designs for new nuclear power stations. (BANNG, 2010).
- There are questions over the precise nature of this consultation and how the outcomes will be decided for the generic design assessment process which is not legally binding. (Greenpeace, 2010).
- EA should make clear exactly how this particular process fits in with other regulatory and policy making processes e.g. Nuclear national policy statement, Justification, HSE/NII GDA, and planning processes. (Greenpeace, 2010).
- The EA does not fully explain how all aspects of waste disposal - including essential intermediate steps and processes (e.g. spent fuel encapsulation) - will take place. (Greenpeace, 2010).
- The EA consultation appears to take too much at face value in terms of industry 'proposals' which are not firm plans and which are liable to change. In other words, the EA appears to accept industry proposals as firm plans – which they are not. This fact should be fully reflected in the document. (Greenpeace, 2010).
- The application does not define a 'reactor' and so does not give an indication of what doses may arise from either separate practices (i.e. only a single reactor operation) or cumulative doses from a number of nuclear facilities e.g. two reactors on a single site, spent fuel stores and encapsulation (spent fuel packaging) plants. (Greenpeace, 2010).
- The consultation, the first and last of its kind within the GDA process, overburdens the reader with information. It assumes access to documents (including computers and printers) as well as a level of knowledge this is unreasonable. As such it cannot be deemed a truly public consultation. (Greenpeace, 2010).

## Conclusions

To date, many core issues and questions raised by key stakeholders in response to consultations relating to nuclear 'Justification'; 'Strategic Siting Assessment'; 'Fixed Price Unit' for rad-waste; and the draft 'National Policy Statement', have not been satisfactorily addressed or answered by Government Departments and Regulators.

For complex issues with uncertain futures, a key goal of consultation is to bring people together, and keep them together, in order to ensure that better decisions are made in the future. For people to be able to trust in the governance and regulation of nuclear risk, it is critically important for all new nuclear build consultations to be more than 'tick-box' exercises. Otherwise,

the risk is that 'DAD' (decide-announce-defend) will simply metamorphose into UNCLE (unlimited nuclear consultation leading to exhaustion)

In the context of moves to greater public involvement and engagement that underpins the concept of the 'Big Society' - and given the environmental, economic, and political high-stakes relating to all proposed new nuclear build decisions - the EA must acknowledge, address, and respond in detail to all the issues raised by stakeholders concerning the Consultation on Radioactive Waste Discharges and Disposals from New Nuclear Power Stations. Any failure to do so would leave the Regulators and, hence, Government vulnerable to legal challenge and lead to hostility and mistrust of any future energy policy decision.

**The Nuclear Consultation Group (NCG)**  
**18 Oct 2010**

## **REFS**

Blackwater Against New Nuclear Group (BANNG) (2010): Environment Agency Consultation on Radioactive Waste Discharges and Disposals from New Nuclear Power stations, Response by BAANG, 2010

Greenpeace UK (2010): Environment Agency Consultation on Radioactive Waste Discharges and Disposals from New Nuclear Power stations, Response by Greenpeace, 2010.

UK and Ireland Nuclear free Local Authorities (NFLA) (2010): Environment Agency Consultation on Radioactive Waste Discharges and Disposals from New Nuclear Power stations, Response by NFLA, 2010.