



Comhshool, Oidhreacht agus Rialtas Áitiúil  
Environment, Heritage and Local Government



Oifig an Aire  
Office of the Minister

Ed Miliband, M.P.  
Secretary of State for Energy and Climate Change  
Department of Energy and Climate Change  
3 Whitehall Place  
London  
SW1A 2AW

22 February 2010

Dear Ed,

I am writing to you in connection with the draft National Policy Statements for Energy Infrastructure published for consultation recently by the United Kingdom's Department of Energy and Climate Change. This letter also constitutes a submission to the consultation on the draft National Policy Statement for Nuclear Power Generation and associated documents, and to the consultation on your proposed decisions as justifying authority on the regulatory justification of the new nuclear power stations designs. I have therefore sent a copy to the relevant address for consultation responses, as detailed at the end of this letter.

Before raising some specific issues with regard to the draft National Policy Statement for Nuclear Power Generation, I would like to inform you that the Government of Ireland is reserving its position with respect to the possibility that a transboundary consultation under the Directive 2001/42/EC on the Assessment of the Effects of Certain Plans and Programmes on the Environment may be required in respect of the United Kingdom's new nuclear build programme including the aforesaid National Policy Statements and the justification process. In this regard this letter is without prejudice to submissions and observations that might be made should such a consultation take place.

The Government of Ireland respects the principle that each State is entitled to determine its own energy mix, including its reliance or otherwise on nuclear power. For our part, as a near neighbour, we are entitled to be assured of the protection of our environment and the safety of our citizens.

I would like to take the opportunity afforded by the abovementioned consultations to raise with you a number of matters in this regard and to request information on certain issues of interest and potential concern to Ireland. In each of these instances Ireland wishes to be assured that environmental impacts have been assessed and addressed and alternatives fully considered in particular in accordance with Directive 2001/42/EC on the Assessment of the Effects of Certain Plans and Programmes on the Environment.



These issues might be grouped as follows:

- Assessment of effects on the environment;
- Implications for and interaction with the existing nuclear facilities at Sellafield;
- Management of radioactive waste;
- Rationale underpinning your proposed justification decision.

With respect to each of these areas there are a number of matters I would like to raise.

#### Assessment of Effects on the Environment

It is noted that seven of the ten sites proposed for the development of new nuclear power plants in the United Kingdom are located on the coast of the Irish Sea and three of those sites are at or near Sellafield. Given our shared interest in this marine environment, including our responsibilities under UNCLOS, the OSPAR Convention and European Union law, and mindful of the historic contamination of this environment by radioactivity associated with nuclear processes in the UK, and of the continuing discharge of radioactive waste arising from nuclear reprocessing facilities at Sellafield, I am concerned to know whether an appropriate assessment has been conducted of the environmental impacts, including cumulative effects, of the development of further nuclear sites on the Irish Sea as a whole and on the northern part of the Irish Sea opposite Sellafield. It is not immediately apparent that the cumulative impacts of these proposed developments have been satisfactorily assessed in respect of either or both of the said areas.

Further, it is noted that UK Government policy on the management of radioactive waste includes the development of a Geological Disposal Facility (GDF) for the disposal of such waste. It is also noted that decisions have not been made in respect of the design and location of a Geological Disposal Facility (GDF), and that, at present, the only indication of community support appears to be from the Sellafield area. This suggests the possibility, if not the probability, that the GDF may be located in or around the Sellafield area. It is noted that the GDF is intended to take all of Sellafield's legacy waste plus all of the spent fuel from the proposed new build programme. It is difficult to understand how a comprehensive assessment of effects on the Irish Sea including the northern part of the Sea opposite Sellafield can be said to have been conducted in relation to the proposed new build programme when the potential effects of such a significant element of the programme have apparently not been assessed at all.

In addition it is not immediately apparent that satisfactory consideration has been given to assessment of transboundary impacts on the environment.

In summary can you inform me as to what assessments have been conducted of possible transboundary effects of the proposed developments? Has the necessary Strategic Environmental Assessment (SEA) been conducted at the level of the entire new build programme, taking into account all cumulative effects and in respect of all relevant environments, and with adequate consideration given to alternatives?

### Implications for and Interaction with Existing Nuclear Facilities at Sellafield

I note that three of the proposed sites are in Cumbria, with one located adjacent to the existing Sellafield nuclear facilities. As you will be aware, the Government of Ireland holds the view that these facilities present an unacceptable risk to Ireland and Irish interests and continues to call for their closure.

In light of this, I am concerned at the proposal to develop up to three further nuclear complexes in the vicinity of Sellafield itself and would welcome information on the outcomes of assessments conducted to determine the risks associated with this approach and on planned mitigation.

Among my specific concerns are the following:

- The emergency planning zones at the proposed nuclear power plant at Sellafield, and potentially the plant at Braystones, are likely to include the site of the reprocessing plants and other facilities at Sellafield. The corollary is also likely, i.e. that the proposed new plants will fall into the existing emergency planning zone for the reprocessing plants and other facilities at Sellafield. Given that a serious accident at a nuclear power plant could require short or longer-term evacuation from the detailed emergency planning zone, how will safe and continued operations to reduce the hazard at Sellafield be ensured in such an event?
- Have off-site emergency response capabilities been stress-tested to cope with a simultaneous event at two nuclear facilities in one region? For example, is Cumbria adequately resourced to deal with simultaneous events at Braystones and Sellafield?
- Given that the proposed sites include three new nuclear power plants in the area near the Sellafield facilities, how will optimisation be applied for the local critical group and for protection of the environment? If site applications were received sequentially, could the final application be refused on the grounds of optimisation? What would be the case if three site applications were received concurrently? What is the projected cumulative radiation dose from the three proposed plants and the existing facilities including reprocessing plants at Sellafield?
- Water to the Sellafield site is supplied by a number of reservoirs in the area. Will there be an impact on these supplies should there be a nuclear reactor built beside Sellafield (and at Kirksanton and Braystones)? For example, are these reservoirs to be used as back up water cooling supplies for nuclear reactors?
- What is the justification for the proposed three nuclear power plants at Sellafield, Kirksanton and Braystones? This seems to be an extraordinarily high density of nuclear electricity generation in the region. Our concerns regarding consideration of alternatives are particularly relevant in this regard.

- I note that current UK Government policy does not envisage spent fuel from new reactors being reprocessed. In light of the detrimental impact of nuclear reprocessing on the environment, I would welcome confirmation that there would be no reprocessing of spent fuel from the proposed new build programme.
- Will the construction, operation or decommissioning of the new plants have any impact on the transportation of nuclear materials in the Irish Sea?

#### Management of Radioactive Waste

The UK Government's assertion that adequate arrangements will be in place for the management of the radioactive waste generated by the proposed new build programme seems to rely on a number of assumptions, including in relation to the successful implementation of the policy to develop a Geological Disposal Facility for radioactive waste. As mentioned above, given the uncertainties surrounding this policy, I would be interested to understand how it has been possible to conduct a comprehensive SEA of the proposed new build programme.

In this context, I would also like to raise the following specific questions:

- The NPS and Justification case rely on the GDF being in place in a timely manner. The 2008 DEFRA-DTI Consultation identified a number of steps for choosing a site or sites for deep geological disposal. Once expressions of interest have been received from communities, the process as laid out, envisages the British Geological Survey (BGS) being asked to apply sub-surface screening criteria in order to eliminate from the process any proposed area that is obviously geologically unsuitable. While it is indeed best international practice to gain community support for a GDF site before proceeding with any site characterisation, it is unclear how the UK government will progress finding a suitable GDF site should the volunteerism approach fail. What are the risks to the current process that could prevent a suitable site being found? What are the contingencies should the current approach fail to deliver a suitable site?
- The BGS has noted that "There are a number of rock types and geological environments that are suitable for such a facility [GDF]. These include low permeability rocks such as granites, clays, mudstones and halite (salt) beds. The principal geological consideration is that fluids, including groundwater, flow very slowly through the repository and the rocks in which it is constructed" and BGS concluded that "a sufficiently high proportion of the country offers potentially suitable geological environments". Based on this preliminary assessment, which areas of the country have been identified as not potentially suitable?
- Some preliminary work on geological mapping of the Sellafield/Cumbria area was undertaken in the 1990s - what were the findings of this work and how are they being factored into the search for a suitable GDF site?

- It is widely acknowledged that the storage capacity of the current Low Level Waste Repository (LLWR) at Drigg is limited and a new repository is required. How will low level waste arising from new nuclear build be managed?
- While there is considerable experience internationally with on-site interim storage of spent fuel, the length of on-site storage (160 years) envisaged for spent fuel from the new reactors far exceeds any of this experience. Such storage of spent fuel at multiple locations along the coast of the Irish Sea for 160 years would require a security analysis and a risk assessment from Ireland's perspective.
- The consultation documents allow for the possibility of centralised storage of new build waste. Can you rule out the possibility of such wastes being stored, even on a temporary basis, in the existing Sellafield facility?

#### Rationale Underpinning Your Proposed Justification Decision

The case you make for the justification for expanding the UK nuclear programme relies heavily on claims that nuclear power generation is a necessary part of the UK's response to climate change. The life cycle carbon impact of nuclear power is a matter of some uncertainty and debate. In light of the risks inherent in the expansion of nuclear power (an acknowledgement of which is implicit in the requirement for a justification case), I am concerned to know what alternative technologies were considered and on what grounds they were dismissed in favour of nuclear. How has the issue of accident potential, including risks to human health and the environment, been factored into this decision making process, and what costs were assigned to catastrophic events for the purposes of the cost benefit analysis?

In conclusion, I wish to point out that I raise these issues with you out of concern over the possible implications of the proposed new build programme for Ireland and Irish interests. The UK Government's recognition of the Government of Ireland as a stakeholder in matters of UK nuclear policy is welcomed.

I would also like to take this opportunity to acknowledge the ongoing and constructive dialogue at official and regulator level on matters of nuclear safety and radiological protection. I look forward to further engagement on these matters which are of such importance to us both.

Yours sincerely,



John Gormley, T.D.  
Minister for the Environment, Heritage and Local Government.

cc. *Robin Clarke, OPM, 252b Gray's Inn Road, London WC1X 8XG*