

BRADWELL FOR RENEWABLE ENERGY (BRARE)

RESPONSE TO:

The Consultation on the Nuclear Industry Association's Application to Justify New Nuclear Power Stations with reference to:

The Justification of Practices Involving Ionising Radiation Regulations 2004

- The International Committee for Radiological Protection (ICRP), in its Principle of Justification, rules that no practice involving exposures to radiation should be adopted unless it produces significant benefit to the exposed individuals or to society caused by the use of ionising radiation.
- The Department of Energy and Climate Change (DECC) has said there is a "need to demonstrate to the satisfaction of the Justifying Authority that any health detriment from ionising radiation is outweighed by the benefits associated with the proposed class or type of practice". (DECC Consultation Document 2008 Vol 1 1.11).

The two bodies mentioned above present a particular challenge to the Nuclear Industry Association (NIA) which is seeking permission, within the Justification Practices, to build new nuclear power stations.

1. Nuclear power generation leaves a long environmental footprint, encompassing hundreds of thousands of years, whose effects are, as a consequence, imperfectly understood.
2. The benefits of such a practice are therefore of an extremely short duration, and cannot take into account any ill effects on succeeding generations.

The above points encapsulate our concerns, firstly of nuclear power generation as a viable electricity generation option, and secondly as justifying any health detriment.

The effects of nuclear generation on climate change

The NIA has made great play of describing nuclear generation as the saviour of climate change. However the Sustainable Development Commission has calculated that, to meet Britain's climate targets for 2050 nuclear generation would only account for 5%. There will still have to be other measures in place (SDC Role of nuclear power in a low carbon economy 2006). The question must be asked: will the associated detriments be worth a carbon reduction that could be made by other, existing, less invasive practices?

The effects of climate change on nuclear generation

For those of us living close to proposed sites, this is a big question. The NIA has concluded that studies show that climate change effects within a hundred years can be managed. However this confident approach is being undermined by the rapid adjustments that climate change scientists are making, as their knowledge increases on possible outcomes. For example, the Copenhagen summit on climate change has recently revised its projections of sea level rise in the year 2200 to 1.5 to 3.5 metres. This scenario shows a tendency towards an unmanageable and unsustainable future for any new plants built under such circumstances, and a consequent burden on future generations.

The radioactive legacy:

1. Waste disposal

It seems to us incomprehensible that a serious attempt to build new nuclear power stations is in progress, when measures to deal with the large quantities of legacy wastes are still in the conceptual

stages. The high burn-up waste produced by the latest generation of nuclear reactors is of particular concern. At least the Magnox fuel rods could be transported off site to Sellafield. The new generation of spent fuel will have to remain as High Level Waste on each site for up to a hundred years before being dealt with by methods as yet to be determined. Our concerns are echoed by Lord Smith, Head of the Environment Agency: "...the long term storage and disposal of High Level Waste is the great unsolved issue of nuclear fission. It is an absolute necessity if a new nuclear programme goes ahead that the issue of High Level Waste is properly resolved" (Public Service.co.uk 20/11/08).

We recommend that there be a separate consultation on how to dispose of new wastes, in accordance with the wishes of the Committee for Radioactive Waste Management (CoRWM).

2. Low level radiation and its effects on living organisms

Of low level radiation: "...remaining uncertainty is too small to cast any significant doubt over the conclusions on radiation health detriment presented in this application"...(NIA application Vol 3 Appendix B).

We have yet to see the evidence that supports this conclusion. In 2004 the Committee Examining Radiation Risks and Internal Emitters (CERRIE) focussed on an increasing awareness of the uncertainties involved. The main report was endorsed both by British Nuclear Fuels Limited and the National Radiological Protection Board.

Since then the KiKK study in Germany has shown a 2.2-fold increase in leukaemia and a 1.6 fold increase in solid cancers under the age of 5 years. These findings were discovered over a 5km radius of German nuclear power stations.

We recommend that, as a condition of Justification, a similar study be carried out at the corresponding British sites.

The Process

1. We are concerned that DECC, that has openly advocated the nuclear option, is to be the decider of whether the NIA application is successful under the Justification process. **We recommend that an objective body, such as the Environment Agency, be the decider.**
2. The Strategic Siting Assessment was an unsatisfactory exercise. It showed the Government's lack of seriousness towards environmental issues, together with insufficient weighting given to local opinion. We are concerned that there has been insufficient discussion with communities and community organisations on what is a huge shift of policy with long-term ramifications.

We recommend that an Inquiry be held into the events leading to the Justification process, and on the nature of the Justification process itself.

Conclusions

1. **Before Justification is granted we recommend that there be a separate consultation on how to dispose of new wastes.**
2. **We recommend that, as a condition of Justification, a study on the lines of the German research on potential low level radiation effects be carried out at the corresponding British sites.**
3. **We recommend that an Inquiry be held into the events leading to the Justification process, and on the nature of the Justification process itself, with an emphasis on wider stakeholder involvement.**

Bradwell for Renewable Energy (Brare) is a community based organisation with members based in Essex. Members of the group have reviewed this submission.

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