

**Strategic Siting Assessment Consultation.
Response from Bradwell for Renewable Energy.**

Question 1:

Do you agree that, at this time, the SSA should focus only on sites that are nominated as being suitable candidates for deploying new nuclear power stations by the end of 2025? If not, why not?

We do not agree. The terms of the Energy White Paper are that all likely sites are to be looked at, including conventional power station sites, and sites not normally associated with such activity. The SSA should be a neutral undertaking, broad enough to take in all issues. By limiting the study to existing nuclear power plants, it appears that the Government is bending to the will of the Energy utility companies, who see their best and easiest profits coming from areas already used to nuclear generation.

Question 2:

Do you agree that the overall SSA process provides an appropriate mechanism for identifying and assessing those sites which are strategically suitable for the deployment of new nuclear power stations by the end of 2025? If not, how should the process be changed?

We are not party to the process whereby these sites have been singled out. We are concerned that the engagement process is being run by an agency that has already nailed its colours to the mast, namely the department of Energy and Climate Change. As a pro-nuclear nominator of the site in our area, we are concerned that the broader interests of the site and the community will not be heard, and that the engagement with the public is on limited terms.

Furthermore it is not clear from the criteria that there is a methodology by which the community response can be measured and weighted. Then there is the added difficulty (still being grappled with on the disposal of nuclear wastes) of what is a community, and how it will be defined for the purposes of this exercise. What role will members of the public have in defining what is their community? It is our belief that the limited nature of this exercise will not achieve an authentic account of the best way forward. Local communities should have been consulted at the outset to discuss and identify their criteria.

Our experience, in ten years of stakeholder engagement, is that there is a huge gap in perception between those whose conceptualising is desk-bound, and the priorities of those who belong to and care for the environment in which they live. For example, by nominating Bradwell as a new build site without prior consultation DECC is ignoring the wishes of the population of north and Mid Essex, who, in 2002-3, petitioned the Crown Estate and related government departments to use the Bradwell grid connection for the transmission of off-shore wind-generated electricity. The letters were signed off by a number of environmental groups a range of local councillors and one Member of Parliament.

We would like to know why a full Strategic Environmental Assessment is not being carried out at this stage. This present consultation flies in the face of the First Environmental Report envisaged in DECC's SEA Scoping Report published earlier this year. It seems that we are being shoe-horned into a consultation for the benefit of the newly privatised energy industry and its European corporate utility partners. WE NOTE THAT ON THE CRITERIA CHART THERE IS NO MENTION OF THE IMPACT OF PUBLIC VIEWS AND STAKEHOLDER ENGAGEMENT. Here is part of a statement we gave to Colchester Borough Council's Scrutiny Panel on 4th November.

Up to now we have all been focussing on British Energy's plans to build a twin reactor. However this is only part of the story. The Nuclear Decommissioning Authority is preparing to sell a tranche of land adjacent to the old Magnox site. In the journal Nuclear Engineering International of September, Ian Jackson writes on the implications of this. He describes how the NDA, in order to maximise its profits due to short-fall in Government subsidy, is encouraging hot competition amongst the major European utility companies. He envisages that the land at Bradwell could sell, in real estate terms, from £2million to £6 million per acre, the equivalent of prime residential development land in London. To recoup the costs, the successful utility will want to take full benefit of the land potential. But because a single nuclear site might be able to accommodate two or even three reactor units, the total profitability of

each station could be as high as £4.8 billion for a twin-unit, or £5 billion for a triple-unit AP1000, 4-5 times larger than that of a single reactor.

So in the future Mersea residents could be looking over the Blackwater Estuary at five or more nuclear reactors, together with a twin reactor in a state of decommissioning, in a heavily industrialised landscape. Once the land is sold, all decisions (other than regulatory) will be out of Whitehall's hands, and of course ours. Where the public fits into this scenario is far from clear. The SSA Criteria do not include the impact of local views on any plans. It seems that commercialisation of our energy supply means that we the public are squeezed out of major plans for our area.

On behalf of my group I would be grateful if the Council would consider these implications, which takes us all into new areas, and which could constitute a threat to local democracy.

Question 4:

Do you agree that the proposed exclusionary and discretionary criteria are appropriate for the assessment of a site's suitability at a strategic level? If not, how should the criteria be changed to achieve this objective and, specifically, are there any additional criteria that should also be used? Should the classifications of any of the exclusionary criteria, discretionary criteria, or issues for local consideration be changed?

The narrowness of this consultation ignores the potential for other activities on the site, especially in the field of renewables, energy conservation manufacture, CHP, etc. (see previous point). How will this attitude square with regional development agencies' plans? Previous Berr guidance registers the "suitability of land for other industrial or amenity uses" as N/A (not applicable).

There should be a criterion developed to take account of, and act upon, a scenario whereby a site may be bought up to exclude competitors, and then not used for a considerable length of time. This could cause hardship and economic uncertainty in the area.

Although the subject of discharges is to be brought out in a later consultation, the iterative and holistic nature of looking at suitability or otherwise of a site will always bring certain subjects to the fore.

In the Local Criteria section, HEALTH is not listed as an issue related to nuclear safety. Bradwell for Renewable Energy notes concern about unresolved explorations of radiation pathways. Attached are papers from the German study on childhood leukaemias, plus two sets of documents (under peer-review and therefore not to be publicly disclosed) on findings connected with the Bradwell area. We urge that this issue be recognised, and dealt with on both a local and a generic level.

Looking at the proposed criteria through the eyes of the Bradwell site, there is mystification as to how the site could have been selected.

- Criterion 1.1 regards seismic risk as exclusionary. Rightly, in our view. Yet the Bradwell site lies on the fault line of Britain's most powerful earthquake, in 1884.
- Criterion 1.4/5 on flooding, tsunami, storm surge and coastal processes, is discretionary. Given the uncertainties over climate change, coastal erosion, sinking of the East Coast, and the equivocal nature of the Halcrow Report into sea defences in its Introduction, para 3 page 6, (http://www.british-energy.com/documents/halcrow_review.PDF) we find this assessment over-optimistic. This uncertainty is exacerbated by the low-lying nature of the area, on the east side of Britain, which is sinking. There is a big issue over the impact of immense sea defences on the Blackwater Estuary.
- Criterion 1.7 Proximity to hazardous industrial facilities and operations – the site will be next to a station in process of decommissioning. Rather than being discretionary, its nature as exclusionary could be challenged by the appropriate research.
- Criterion 1.8 Proximity to civil aircraft movements. Bradwell is close to Heathrow flight path. Should that be a discretionary criterion? Accident or terrorism could be a factor here.
- Criterion 1.10 Demographics. This is regarded as exclusionary. A difficult subject, which needs to marry two needs: safety for the populace (implying remote areas) and proximity to major sources of transmission uptake (implying dense population). We feel that accidents/terrorism and emergency planning, which are listed as Local Criterion 1.11 should be of *national* concern, with local characteristics. There needs to be a discussion on widening this scenario, away from the existing contamination distance, especially as these new plants are of much greater capacity. At first glance the Dengie Peninsula is isolated in terms of population. Yet 3 km downwind, across the water lies Mersea Island, population 10,000 in the summer, some 15 km further on, downwind, lies Colchester, population 100,000. Chelmsford and north London are in close proximity.

- Criterion 1.12 Proximity to military activities. The Bradwell site is close to Foulness and Fingringhoe military ranges. Colchester is a garrison town. How does the SSA process distinguish between exclusion and discretion on this matter?
- Criteria relating to environmental protection, societal issues and operational requirements are to be considered as discretionary. For the public living around such areas, this is a concern of the first priority. The Blackwater Estuary is used as a fishing ground, and as a recreational area, particularly in the summer. As it is a protected environmental area we would like to challenge the status of this as discretionary.
- Criterion 4.1 Size of site to accommodate construction operation and decommissioning. Missing here is the opportunity to debate whether this particular project is the most suitable for the use of this particular land. The previous Dberr guidelines mentioned discussion of regional and local spatial development plans and environmental and land use impacts. The rush to nuclear has meant that this section has been scrapped for the purposes of this exercise.
- There are two parcels of land for sale at Bradwell, that of BE (EDF) and the Nuclear Decommissioning Authority. As mentioned in Question 2, Ian Jackson's article in Nuclear Engineering International of September 1st 2008 <http://www.neimagazine.com/story.asp?sectioncode=76&storyCode=2050837> suggests that commercial pressures, with the Nuclear Decommissioning Authority encouraging competition in order to fetch the highest possible sum for its land in order to make up the Government short-fall in decommissioning funds, could result in a number of reactors being built, in order to re-coup and to maximise profits. Given that four or more reactors could be built in such a situation, we recommend that the existing criteria be re-examined for any resulting qualitative differences. For example, how might the impact of four reactors as opposed to two affect emergency planning? A good example would be to look at the plans for evacuating Mersea Island, with only one road out, subject to tides. Equally, there may be new criteria that would have to be developed to reflect more intense industrial use of the land. For example, value for money in relation to the local economy. Will the inflated price of this land be reflected in the region's prosperity?
- Criterion 4.3 Access to transmission infrastructure is classed as a local criterion. This issue should be made a *national* one. It is crucial that transmission of all sources, whether nuclear, fossil-fuelled or renewable, be discussed as a national issue. Where the sites are, and their ability to transmit via the National Grid, is of crucial importance. At Bradwell, for example, the existing transmission structure will have to be re-built. Then there is the issue of pylons, which will have to be much larger to carry the greater capacity from the new reactors, with the effect on land values, not to mention public opinion. There needs to be discussion on nominated sites with poor grid connections.

General discussion

Back end issues

Much is made of the ability of new reactors to be quickly dismantled. Yet the legacy they leave has to be dealt with. Spent fuel, which is high-level waste, will have to be stored on site until it is safe to handle. This waste, although smaller in quantity than that produced by the old Magnoxes, has a high burn-up rate and is consequently more radioactive. It is disappointing to note that there are few references to this subject in the Dberr document. There will have to be stores built to last for 100 years. We understand there is much discussion as to how exactly such stores will be managed, and indeed how to deal with this material if/when it goes into a geological repository.

We note the Government's rush to build new nuclear reactors without having finalised plans for dealing with the legacy wastes. We also note that the Government is preparing to build new nuclear reactors without having full understanding of how to deal with the spent fuel arising from this process. Missing from the criteria is the impact on intergenerational equity.

How does the SSA fit into other current processes?

How does the above align with the Justification process on new nuclear plants and the Generic Design Assessment process?

How can an SSA exploration be conducted without knowledge of its relationship with other frameworks such as the Overarching Energy National Policy Statements, and the Transmission and Electricity Networks National Policy Statements?

Bradwell for Renewable Energy – who we are

This local group, named as the Shut Down Bradwell Campaign, was formed in 1987 in response to concerns over the Long Term Safety Review of the twin nuclear reactors at Bradwell-on-Sea. From then on it campaigned consistently for their closure. In 2002, with their closure, the group expanded its remit (and changed its name) to promote renewable energy and energy conservation and to oppose new nuclear development. Membership ranges from Harwich in the north of Essex, to Brentwood in the south, as well as neighbouring counties.

This document has been reviewed by, and has received input from its members.

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