

CONSULTATION ON THE SITING CRITERIA AND PROCESS FOR A NEW NATIONAL POLICY STATEMENT FOR NUCLEAR POWER WITH SINGLE REACTOR CAPACITY OVER 1 GIGAWATT BEYOND 2025

RESPONSE OF THE BLACKWATER AGAINST NEW NUCLEAR GROUP (BANNG) SUPPORTED BY COLCHESTER BOROUGH COUNCIL.

ANNEX TO BANNG PAPER No. 34

Response to Proposed Criteria

Proximity to Civil Aircraft Movements

BANNG's initial comment on this criterion was stated in our response to the proposed strategic siting criteria for new nuclear power stations in November 2008 (BANNG, 2008, Paper No. 1). It is reproduced in this response (Paper No. 34). In the ten years since our comments were first written the issue of civil aircraft movements in proximity to Bradwell has become more critical. We now consider that it would be irresponsible to develop a new nuclear power station in such a location, exposed to the risk of attack or accidents from aircraft.

The proposed Bradwell B site on the Dengie Peninsula for both a nuclear power station and high and other level radioactive waste stores is both directly under and adjacent to major air corridors and so this is a consideration relevant to the suitability of the Bradwell B site.

The Dengie Peninsula, including the proposed site, is under a major air corridor for flights into the UK to the main London airports, e.g. Heathrow, and other corridors at a lower altitude, e.g. Southend, which is a rapidly developing airport in the budget airline sector.

There appears no scope to move this corridor to the north or south. To the north, any movement is prevented by the air corridor used by flights coming out of Stansted airport.

To the south, flights out of Gatwick and Southend to Northern Europe and other destinations pass over the Dengie Peninsula to then join the major air corridor at the Clacton beacon before proceeding over the North Sea.

The air corridor over the Dengie Peninsula is also used by aircraft flying across the UK from Northern Europe to destinations in and outside the UK and to the north has a similar corridor used by aircraft flying across the UK from North America and from Northern Europe.

In addition to this, an air corridor exists passing under these main flights over the Dengie Peninsula for aircraft that are being re-positioned between Stansted and Southend by airlines that are using both airports for regular flights or to use maintenance facilities at either airport.

The number of corridors and high frequency of their use was not a feature at the time of approval of the Bradwell A site but now increases the risk of an accident, which may have serious consequences, arising from an aircraft crash or falling off of parts of an aircraft on to the site.

This risk may be mitigated by the protection of the structure of a reactor but not structures and services upon which the safe operation of a reactor or associated radioactive waste facilities are dependant, either directly from impact or indirectly, such as from a resultant fire.

In the context of Emergency Planning this would be a “credible accident” for which under REPPIR an emergency plan should be made. However, the scale of impact might make a plan difficult to achieve, suggesting that the site is unsuitable.

Under Statutory Instrument 2007 No 1929 (The Air Navigation (Restriction of Flying) (Nuclear Installations) Regulations 2007) all nuclear power stations in the UK are afforded some protection from aviation activity by the establishment of a Restricted Area near to each site.

Aviation activity within any Restricted Area is limited to that specifically permitted by the Regulations. Typically, such Restricted Areas have a radius of two nautical miles and extend vertically to 2,000 feet above the surface. EN-6 states this is to be revised as necessary.

It appears this is designed to prevent an accident from over-flying but the limits are too low to allow warning of a deliberate act of terrorism or using an aircraft laden with fuel as an incendiary device to attack a nuclear site.

It is arguable that with such strategic infrastructure and with the increase in terrorist and other hostile activity, not only should a credible accident be considered but also a credible incident arising from design, location and any emergency planning arrangements.

Furthermore, over-flying of nuclear sites at any height should not be permitted as this may prevent the identification and incident of a rogue aircraft movement.

The height restriction of 2,000 ft. requires review as in the context of commercial aviation it is only that of an approach height for landing and appears inadequate in the context of a 2 mile horizontal exclusion area which at 300 knots is about 30 seconds from any impact

The above factors suggest that the site is unsuitable for the construction of a new nuclear power station and radioactive waste store owing to its proximity to civil aircraft movements both from and to the UK, as well as international flights that over-fly the UK. The exclusion zone must be defined to ensure no accidental or deliberate impact is possible from civil aircraft movements.