

## **“Radioactive discharges at Sizewell C”**

### **- written representation by Frances Crowe to the Planning Inspectorate in respect of the DCO for Sizewell C, June 2021.**

This paper is Paper 4 of 6, submitted as part of the written submission for Deadline 2 by Frances Crowe. A written representation summary of all my submissions for Deadline 2 will be separately submitted.

I am a resident of Sudbourne. I have lived here with my family since 2001 (20 years), previously holidaying frequently in the area. My written representation includes detailed papers on air pollution (*‘Air pollution [tropospheric ozone and particulates PM2.5]’*) and on coastal erosion (*“Coastal erosion at Thorpeness and lessons for the Sizewell C Project”*) and a more general paper covering a range of other concerns (*‘Transport, health and other matters’*). I am also submitting three very short papers on radioactive emissions (this paper), water discharges and diesel generators, which were also submitted to the Environment Agency in September 2020. All six papers will be submitted separately for Deadline 2. All issues were referred to in my relevant representation.

A transcript of my oral representation (presented on 18<sup>th</sup> May, 2021) has been separately submitted.

#### **Radioactive discharges at Sizewell C**

- Within the Secretary of state’s consent for Sizewell B, limits and conditions were set to avoid an adverse impact upon on the health of local and regional human populations and sensitive ecosystems, many with protected status. The proposed cumulative limits for radioactive discharges (*‘activation products’*) for the combined site (Sizewell A, B & C) are significantly higher. Limits should be set informed by science, rather than being seemingly negotiable in proportion to the amount of development proposed on any single site. The consented limits granted for SZB should be upheld. On this basis alone, these proposals should be rejected. An increased limit could, moreover, be subject to potential legal challenge.
- In the non-technical summary EDF admit that *‘activation products’* (radioactive discharges) are an inevitable product of the production process and can be present in solid, liquid and gaseous form. These appear - assuming no accidents (which EDF do not rule out) - to be produced broadly in proportion to the size of the operation. However, EDF refer many times to processes that can reduce the amount of waste discharged. They also claim that discharges and impacts will be *‘reduced as low as reasonable (sic) achievable’*. For EDF, *‘reasonable’* in this context presumably refers to cost and operational convenience - hardly reassuring for those whose health could be impacted by these discharges. They also state that their application *‘has*

demonstrated that the performance of the two UK EPRTMs at Sizewell C have been optimised, and that Best Available Techniques have been applied and demonstrated'. This is not clear from my reading of the non-technical summary unless they mean optimised to minimise costs and do what is absolutely necessary, rather than what is desirable. It seems clear that further measures could be taken to reduce radioactive discharges.

- EDF must investigate greatly increasing the measures they take to minimise discharges to ensure that no increased exposure to local populations and ecosystems arise from their desire to build additional nuclear capacity on the site of an existing reactor. Expanding on an existing site presumably offers EDF significant cost savings. However, it is totally unacceptable to subject local populations an increased level of radioactive discharges as a result of this.
- Any increase in the cumulative amount of radioactive waste that EDF is permitted to release at the Sizewell site is particularly risky given EDF's unproven track record with this type of reactor. EDF's flagship EPR reactor at Flamanville remains unproven, still not being operational after a decade of delays, and ridden with technical errors, some very serious. A permit for Sizewell C should not be granted to a corporation and reactor-type with such a poor record of delivery and which, due to huge financial pressures (which have been widely reported on), is likely to be under pressure cut corners to reduce costs which are escalating out of control at all its sites.
- The site itself is not secure for the period of intended storage of nuclear waste on site. Sea defence plans are inadequate/incomplete and insufficient account is taken of climate change impacts (more severe/frequent extreme weather events, sea level rise and coastal erosion). It is not a suitable site for storage of nuclear waste (especially for the duration proposed until mid 22c) or for the operation of additional nuclear reactors - let alone two reactors of this size and of this unproven type.

Frances Crowe  
2/6/21