

Comments on the Secretary of State's request for information regarding Sizewell C  
Frances Crowe - IP20026749

### Sea defences and coastal erosion

I endorse the comments made by Nick Scarr (IP 20025524) and Suffolk Coastal Friends of the Earth (IP 20025904), Bill Parker (IP 20026713) and Theberton & Eastbridge Parish Council (et al). It is inexplicable that the applicant has not proposed sea defences that will endure the lifetime of the project up to and including decommissioning. It is clear according to the ONR's own recommendations that this work cannot be completed by 2140 and a more realistic timescale would be circa 2200. To give these plans go-ahead in their current state would be subjecting tax payers to an enormous and certain financial burden of carrying the costs of reinforcing sea defences at a time when sea level rise could already have created a Sizewell nuclear island. Additionally, the applicant still fails to give detail of how the north and west of the site will be defended, given its vulnerable low-lying location, surrounded by marshes, and also how the erosion at the southern end will be avoided once Sizewell B ceases operation.

To subject future generations to the risks and costs of defending this low-lying site, packed with high level nuclear waste, is indefensible given that other cheaper, quicker, greener, and British options are available for ensuring energy supply without leaving this terrible legacy of thousands of tonnes of waste on this highly vulnerable coast.

I have personally monitored through photographs the changing coastline at Thorpeness (where I own a holiday let business) for over twenty years and the speed and suddenness of coastal change can be really alarming even though to those who know the coast well and expect long-term erosion. This is not a stable coast and interventions always lead to unexpected changes. History shows that we can expect massive and unpredictable changes in the next 175 years, especially in the light of what we know about sea level rise and climate change. Please do not add to the problems that future generations will have in protecting low lying infrastructure - not least London - by going ahead with this ill-advised development in spite of the considerable knowledge we now have of the certain risks this would entail.

### Road transport

It is inexplicable that after 10+ years of consultations, and in the light of the very poor rural road infrastructure in the Suffolk Coastal area, the applicant does not understand the necessity of putting road improvements in place BEFORE construction commences. Given the huge number of major infrastructure projects in this area, to go ahead without improvements in place would make life insufferable for local businesses, residents and visitors (who play such an important part in making this a vibrant and economically strong place to live and work). The costs (and mental stress) incurred due to the inevitable delays would be intolerable. (See REP2-275b).

I am particularly concerned that already unusually long journey times to hospital would be very adversely affected, leading perhaps to loss of life (when Sizewell B was built we had local emergency facilities in Aldeburgh and Southwold; these are long-gone) (also REP2-275b) and that the inevitable traffic snarl-ups would lead to unacceptable levels of air pollution, often in the vicinity of residential housing and schools. I am especially concerned about particulate pollution (PM2.5) and ozone pollution. Despite the obvious impacts of the increased traffic - and especially the impacts of stop-start traffic due to traffic congestion if the build goes ahead without appropriate road improvements - totally inadequate measures have been in place to mitigate - or even to monitor adequately - PM2.5 in the Suffolk

Coastal area. This is of great concern given that the World Health Organization states that there is no safe level for particulate matter of this size which can penetrate into the bloodstream and even into the brain (see my submission on this REP2-275, para 6), giving rise to a huge range of poor and long-term health outcomes. Given the length of the construction period, this neglect is putting people of all ages but particularly the young, the infirm and the elderly at huge risk. There should be absolutely no question of the project build commencing without appropriate improvements being put in place first.

#### Desalination plant and water supply

The incompetence with which the applicant has dealt with the issue of fresh water supply is another example of the applicant's lack of preparedness in making this DCO application and their unsuitability for taking on a project of this size, complexity and risk. The full costs and implications of securing a suitable water supply without jeopardising supplies to residents, agriculture and tourism in the region must be known before a decision can be made on this application.

Additionally, as a frequent sea-swimmer and owner of a tourism business in Thorpeness, I am personally very concerned at the possibility of a permanent desalination plant on site. I am concerned about air pollution impacts of diesel generators but also the impacts on sea water quality both for wildlife and for humans, with the possibility of irreversible damage to sensitive marine habitats, including the following:

- the impact on turbidity of water at Sizewell and Thorpeness (already high) due to the desalination construction and due to dredging. Additionally, clarification is requested of how often will dredging have to take place.
- increased levels in potentially toxic chemicals in water (for example, phosphorus, chlorine, zinc and chromium)
- the need for a bentonite recovery system to be used during drilling to minimise emissions
- the potential for algal blooms caused by chemical inputs.
- increases in water temperature
- potential for the 6,000m<sup>3</sup> per day of brine (1.6 x more salty than seawater) which will be discharged to collect on the seafloor between the sandbars.

The applicant stated themselves that a desalination plant should not be considered (even temporarily) due the pollution generated in a highly sensitive site for both wildlife and visitors and its energy intensity.

Furthermore, the applicant repeatedly states in its submissions that impacts are likely to be similar to those previously assessed (eg suspended sediment, zinc & chromium discharges, etc). At what point do these additional pollutants constitute a tipping point into something that is no longer acceptable?

To create this as a permanent feature would, I believe, be a total travesty in such a unique and sensitive area for wildlife and visitors, in the heart of an AONB.

It would indicate a complete failure of the planning process that a suitable site with an adequate water supply could not be found for this development.

#### Size of site – and cost & safety implications vs HPC

The applicant's response about the siting of the desalination plant confirms what we already know: that this site is already too small and constrained by low-lying land & protected habitats to accommodate yet more infrastructure. The applicant maintains that cost savings will be made against Hinkley Point C but this seems highly implausible given the particular

difficulties of this site (poor transport infrastructure, too small, numerous protected habitats, low-lying vulnerable location on a sandy eroding coastline).

Moreover, HPC costs continue to escalate and we know, from experience of all EPR reactors elsewhere in Europe, that they inevitably will continue to do so. In the case of Sizewell C, it is totally unacceptable that tax payers, bill payers and investors (perhaps our pensions) will have to carry this risk. Furthermore, the costs for Sizewell C that are being quoted are already out of date. We all know that £20 billion is no longer remotely plausible yet we have seen no revision of this cost estimate. No decision should be made on giving this project go-ahead until the real costs are known, including all costs related to the currently still unresolved issues described here. This must include the costs of creating appropriate sea defences (defending the site from all sides) which are capable of maintaining the site safety until at least c 2200, when decommissioning should be complete; all costs related to resolving the problem of fresh water supply both in construction and in operation (and any planning related issues arising from this); and all costs relating to ensuring the necessary improvements to all transport infrastructure are implemented before construction begins.

I am also concerned that cramming infrastructure onto too small a site will not only cause costs to escalate but could also jeopardise site safety. We know that fires have broken out at Hinkley Point on at least two occasions during construction. On a more constrained site (Sizewell C is 40% smaller and now also needs to incorporate desalination plant), the outcomes could be much more serious.

These risks need to be properly examined and, should the site be found to be too small, the project must be refused planning approval.

Moreover, the project's value for money must be evaluated on its true and current costs, not a dated and inaccurate guesstimate.

#### The applicant's lack of forward-planning and unsuitability for tackling complex infrastructure projects.

Despite a consultation period vastly in excess of that for HPC, the applicant has failed to tackle so many fundamental issues - not just the water supply but also transport infrastructure and sea defences. This has already caused significant delays just with the DCO process - it can be assumed that the impact on the actual build would be enormous. It is as if the applicant never really thought this scheme would actually go ahead.

EDF's unsuitability is further reinforced by their problems elsewhere. All the evidence points to the EPR reactor being too difficult, perhaps impossible, to build. Only two reactors of this type have been completed anywhere in the world - both at Taishan - and one of these has been shutdown for nearly a year already due to unexplained problems with fuel rods damage and unacceptable emissions. EDF have been unable to complete any of the planned European EPR reactors, including the envisaged roll-out to their own ageing fleet of reactors. The so-called French 'flagship' project at Flamanville is well over a decade late and billions over budget. Furthermore EDF's competence must be called into question by the performance of their whole fleet of reactors in France with a reported half of them recently being out of action due to either defects or routine management

[REDACTED]). Last year, the UK too saw an unprecedented level of unplanned outages in its EDF-managed nuclear reactors. Nuclear is not reliable - and EDF's track record of failure makes them a highly unsuitable developer for such critical and hazardous infrastructure.

Furthermore, EDF's financial stability also raises considerable concerns. Despite being propped up by the French state, EDF have had to issue recent profit warnings – and to revise them upwards just one month after publishing. EDF will have to foot the bill for a raft of safety improvements in their existing fleet of reactors in France, for their decommissioning and, presumably, for their replacement. How can the Secretary of State be happy to entrust this developer with this massive project here when, unlike at HPC, the UK taxpayers and bill payers would carry the burden of risk... and for nearly two centuries? The British Government has, rightly, made a huge play of creating resilient energy infrastructure for the UK – but the EPR reactor means we would be totally dependent on a French developer with a very poor track record and insecure finances, on uranium sourced from Russia, Russian-influenced countries or China, and on institutional or government investors from abroad (perhaps from Saudi or India, given the understandable reluctance of UK institutional investors to invest in the project). Given our current experiences with Ukraine and the very long-term nature of this project, this dependence on foreign powers (some with distinctly dubious track records on, for example, human rights) for our energy seems unforgivable when we could have cleaner, faster, greener and cheaper energy from renewables *without* such dependence. We need genuinely resilient British energy infrastructure. We know this is possible so why place our futures in foreign hands, especially a developer that has such a miserable track record of failure with this technology?

### Biodiversity

The applicant continues to make absurd claims about future biodiversity increases. The fact is we are facing a biodiversity crisis now which the Government has pledged to address. This project would destroy rare, diverse and precious habitats which are delivering biodiversity benefits currently, leading to a permanent catastrophic 29.5% loss of biodiversity at the main site (REP6-075) – all for a shambolic, high risk project that will not deliver any climate change or energy benefits in the timescales that are needed. Moreover, the applicant's proposals for the development of Sizewell Marsh Site of Special Scientific Interest do not even meet Environment Act 2021 requirements (REP6-075).

### Decarbonising our energy supply

The applicant insists in their response that delays in giving the go-ahead for Sizewell C will jeopardise the Government's ability to decarbonise the UK's energy supply. However, they have failed to provide a full and properly independent breakdown of the carbon impact of Sizewell C, which take full account of the impact of its decommissioning, reinforcing sea defences to make the site safe until the decommissioning is complete and waste can be transferred to a geological depository (at least 2190), of ensuring a suitable fresh water supply and of the mining and enriching of uranium. A full calculation will reveal that this project's claims to be low carbon are 'pie in the sky' and on that basis alone, permission should be refused for this project.

### In conclusion

Every day new information is coming out which reinforces the inappropriateness of this project in this place – or, indeed, *anywhere*, given the applicant's track record of failure. Moreover, the application is clearly incomplete with a raft of critical issues still to be resolved, even by the applicant's own admission.

The applicant has not brought the local community with them in this planning process. On the contrary, anger, frustration and disbelief at their incompetence and half-truths is increasing and the applicant no longer has the support of very large numbers of local people, including numerous parish councils, and visitors.

The Secretary of State has stated that communities should be given the right to decide whether they should have onshore windfarms in their area. How then can the imposition of Sizewell C onto the communities of Suffolk - with all the massive shortcomings that we have seen and its huge unresolvable long-term safety issues and risks - therefore be justified?

The Secretary of State is urged to refuse permission to this project – in particular, for the sake of future generations, both in Suffolk and throughout the UK. Our legacy to them is already challenging enough without it being compounded by the terrible risks associated with this project.

I genuinely believe it would be recklessness of the highest order to proceed with this project and urge you to make the right decision for the UK, for Suffolk - especially for its rich, unique, precious and supposedly protected wildlife and habitats - and for future generations by rejecting this poorly planned and ill-judged project, which is based on hugely expensive yet failed technology that cannot be relied on to deliver on time, on budget or without error - if delivered at all.

I urge you: please let's be good ancestors.

I additionally endorse the submissions by made by Nick Scarr (IP 20025524) and Suffolk Coastal Friends of the Earth (IP 20025904), Bill Parker (IP 20026713) and Theberton & Eastbridge Parish Council (et al) and the concerns expressed by the RSPB.

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23/5/22