



## **Stop Sizewell C Deadline 3 submission**

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Stop Sizewell C would like to endorse any Deadline 3 submissions by:

- Together Against Sizewell C,
- The RSPB & Suffolk Wildlife Trust,
- Minsmere Levels Stakeholder Group,
- Suffolk Coastal Friends of the Earth,
- The AONB Partnership
- The Alde & Ore Association
- SCAR
- B1122 Action Group

## **A. Comments on EDF's responses to the ExA's written questions, and additional evidence:**

### **1. Response to the Draft DCO**

Due to significant resource constraints we reserve the right to comment on future drafts of the Draft DCO. However, we wish to express our concern about continued ambiguity about ownership of SZC Co., and the relationship between the current legal entity that is applying for and could potentially be granted Development Consent, and the nature of the eventual company that may eventually finance and implement the consented plan.

### **2. Response to Applicant's Answers to Examining Authority's Written Questions on Traffic and Transport.** These responses have been prepared with support from Richard Lewis of Active Planning.

T.1.33 Sources of AILs (early years)	<p>The vast majority of AILs, all of which will be for permanent structures, will come from Europe. Temporary construction AILs will come from the UK via the A12 and B1122.</p> <p>AILs from the south will also use the B1122, using the A12 via tight bends at Yoxford. There will be a dramatic impact on Yoxford and flow of traffic on A12 and the B1122. This illustrates the urgent need for an appropriately located Link Road of the development proceeds.</p>
Heavy loads route (referenced in several questions)	<p>Highways England heavy loads route 100 runs from Lowestoft along the A12 and includes the B1122.</p> <p>This designation relates to the status of the B1122 during the construction of the A and B stations. However, it is very clearly unsuitable for the proposed development, including before the construction of the proposed SLR.</p> <p>This illustrates the complete inadequacy of the existing East Suffolk transport network for SZC construction activities. The Applicant needs to build a link road in the correct position and if this means bypassing Yoxford for transport coming from the north that is what they need to do.</p>
T.1.36 Fly parking	<p>The Applicant's 'Fly Parking Team' would need to be proactive and also able to respond immediately to reports of misdemeanours by local communities</p>
T.1.42 Transport Assessment – traffic flow variations	<p>The Applicant acknowledges that traffic flows will be consistently busier on Monday to Thursday mornings than on Friday mornings, and also higher in the evenings.</p> <p>How will this be affected if (a) car sharing is banned due to Covid regulations, and (b) if more buses are required to ensure social distancing?</p>
T.1.43 Why shorter routes than the B1122 (from the south) are not being used.	<p>Route 8 covers the A1152 / B1069 and will be used.</p> <p>Surely all local roads from north, south and west would be used by construction workers and LGVs unless the Applicant forbids this and enforces it through contracts?</p>

T.1.44 Has a station at Leiston been explored?	Stop Sizewell C considers that more effort should have been put into this.
TT.1.50 Buses, LGVs and HGV numbers – derivation (once mitigations are in place)	<p>Calculated number of buses suggests that 16 buses (or five buses in every 10 minutes over 12 hours) will operate on the link road in addition to LGV and HGV movements.</p> <p>In spite of the opportunity (i.e. not affecting construction period) there are no proposals to lay on buses for construction workers in the early years.</p> <p>COVID – does the Applicant accept that Covid-19 social distancing rules, if legally enforceable, may necessitate earlier provision of bus services to reduce car-sharing and also the provision of additional buses to ensure social distancing by limiting passenger numbers? How many buses, and when would they commence operating?</p>
TT.1.52 Classification of HGV	<p>The Applicant confirms that HGVs are classified as vehicles over 7.5 tonnes (not 3.5 tonnes as mentioned in the transport assessment).</p> <p>There has been considerable focus on HGVs (over 7.5 tonnes). What is the estimated number of additional goods vehicles including vans and 3.5 tonne LGVs in total that will be on the B1122 each day in the early years? Where is this taken into account in the modelling?</p>
TT.1.64 Suffolk CC say highway mitigation proposed at junctions are not comprehensive.	Given the intention to make the B1122 a walking and cycling route, what arrangements are being made to accommodate walkers, cyclists and equestrians on that section of the B1122 between and including the proposed Yoxford Roundabout, the new link road spur and within Yoxford itself? Are these arrangements compliant with Government guidance LTN1/20 to ensure the safety and attractiveness of the infrastructure?
TT.1.91 Consideration of alternatives to the SLR	<p>The Applicant states that the SLR provides the main connection to the site after the early years and is proposed as a result of previous objections to the use of a slightly improved B1122 throughout the development period.</p> <ul style="list-style-type: none"> <li>Alternative routes (including route W / D2) would result in a worse impact on the landscape and listed structures</li> <li>Route W is longer than route Z</li> <li>Route W, if delivered alone, would mean HGVs travelling through Yoxford or on the B1122, devaluing the purpose of building a relief road.</li> </ul> <p>We do not accept that the alternative routes (including W/D2) would result in a worse result. The land to the west of Leiston is a flat former airfield, and a road here would be built to grade without cuttings or embankments to within half a mile of the A12.</p> <p>Route W/ D2 would only be marginally longer – 8km versus 7, but this must be balanced against its flatter, less disruptive and probably cheaper profile, its avoidance of villages and hamlets and its considerably greater legacy value</p> <p>Does the Applicant accept that a fully-specified DMRB layout is heavy-handed in the countryside and that a more sensitive design can be developed that</p>

	<p>meets all safety and loading requirements without the magnitude of adverse impacts on the landscape?</p> <p>The overriding argument is that neither route is completely satisfactory and the Applicant needs to provide answers and agree them with the Highway Authority and local communities. The Applicant has failed to achieve this agreement in 9 years of pre-DCO consultations</p>
TT1.92 Legacy benefit of SLR	<p>The Applicant claims the following benefits:</p> <ul style="list-style-type: none"> <li>• A permanent reduction of traffic on the B1122.</li> <li>• The permanent reduction of traffic would be felt even when there are outages.</li> </ul> <p>The B1122 would, as a result, become more popular with pedestrians, cyclists and equestrians.</p> <p>These arguments do not justify the wrong route for many good reasons and these have been illustrated in Stop Sizewell C's written representations.</p> <p>A quieter B1122 would not be a sufficient attraction for visitors deterred by the development from visiting in the first place.</p>
TT.1.93 SLR route D2 (W) consultees' preferred alignment vs selected route.	<p>See answer to TT.1.91</p> <p>We agree with SCC that a route south of Saxmundham would be preferable, plus an appropriate approach to the 15% of travel from the north, e.g. sensitive use of adaptations to the B1122 – safety measures, speed limiting measures, road crossing facilities and so on.</p>
TT1.94 Proportion of HGV traffic at SLR / A12 junction coming from south.	<p>The Applicant states that 85% of HGVs would arrive at the SLR from the A12 South and 42% of buses would arrive at the SLR from the A12 south and that most workers in cars will go to the park and ride sites rather than travelling along the SLR Regardless of use of the SLR, about 61% of workers' vehicles and 73% of LGVs are assumed to be distributed on routes south of the SLR and A1120.</p> <p>A link road route to the south of Saxmundham would provide greater legacy value, and reduce rat-running between Leiston and the A12.</p>
TT.1.95 SLR traffic on B1122 (early years): explain why mitigation works are not started in advance of all works, and why no mitigation is proposed on the B1122 during the early years.	<p>We are tempted to quote the expression "your failure to plan is not my emergency" It is unreasonable for EDF to expect local communities to bear the burden of EDF's newfound urgency when they have taken so long to bring their DCO application forward. Stage 1 consultation started in 2012!</p> <p>Transport to the construction site rivals environmental damage and coastal concerns as one of the most important issues that the Applicant has needed to address during all the years of pre-application consultation. They have still not got it right.</p> <p>NB, in spite of the opportunity (i.e. not affecting construction period) there are no proposals to lay on buses for construction workers living within walking</p>

	distance of services in the early years. This could be achieved without additional infrastructure.
TT.1.96 Pretty Road	Positive discussions about providing a bridge in response to objections are ongoing.
TT.1.112 Timing of transport assessments – representative hours do not reflect times of most impact on vulnerable road users.  Also referenced in TT.1.115 and 116	Applicant refers to IEMA guidance in which the environmental impacts are considered, based on periods of ‘greatest change’ in traffic flows, since these periods would have the greatest impact on any VRUs. Other times when VRUs are present would have lower traffic volumes unless there is coincidence of timing.  Stop Sizewell C argues that in the early years construction traffic on the B1122 (and other minor roads in the locality) would result in significant damage to residential amenity, pollution and dangerous conditions for all road users at all times; not only periods of ‘greatest change’
TT.1.114 Noise and other impacts – insufficient information	What is the detail of the additional screening proposition? This would not address the issue of early years while construction vehicles are using the B1122 and there is a new road being built behind these settlements. The longevity of the construction project will make this issue intolerable for communities .  Please note that currently the Noise Mitigation Scheme is not available for homes on the B1122.
TT.1.118 Mitigation in the early years for pedestrians – why is this not proposed on the B1122?	Response TT.1.95 But note: the impacts including safety will still be felt in the first three years when at the current time people find the B1122 “difficult to cross” (source: ES vol 6 Ch 3). Alongside proposed maintenance, the minimum intervention should include sight line improvements, footway extensions and crossings as described in the ES.
TT.1.132 Cumulative impacts and B1122. Why footway improvements in Theberton are not included when they were identified by Scottish Power’s assessment in relation to EA1N and EA2	SZC proposes [instead] the construction of the link road.  The impacts of construction traffic would occur from the early years and this will add traffic in Theberton and other communities, affecting the safety of vulnerable road users, creating intimidation and impacting quality of life. Three years is a long time for an older retiree to wait for what are, in fact, fairly basic, low cost and quickly implemented facilities that should reasonably be provided in advance of all construction works.

### **3. Response to Applicant’s Answers to Examining Authority’s Written Questions on Socio-economic and Community Issues**

#### **i. Socio-Economic issues**

This section has been prepared with input from Steve Lucas, Development Economics

	<b>Issues relating to Construction phase employment and supply chain effects</b>
G.1.24	<b>Temporary Construction Phase Employment Effects</b>

	<p>The Applicant has responded to queries regarding the scale of temporary construction phase employment effects, specifically concerning the estimate that around 2,000 home-based workers (HB) would be employed on the main development site at peak.</p> <p>It should be noted that the Applicant's estimates of HB workers is based on a 90-minute drivetime area, which extends beyond the boundaries of Suffolk into adjacent areas of Cambridgeshire, Norfolk, and Essex. Therefore, any suggestion that <i>'around 2,000 home-based workers would be employed on the main site at peak'</i> is synonymous with around 2,000 Suffolk residents benefiting from this employment opportunity simply cannot be proven, as the applicant's analysis is focused on a wider spatial area of which Suffolk is only part.</p> <p>Furthermore, it is also apparent from the Applicant's evidence that the majority of roles that the applicant expects to be available to HB workers are in low-skilled or semi-skilled occupational roles, such as in catering, cleaning, security, admin support, etc.</p> <p>However, setting all these points to one side for a moment, it is fundamentally still the case that none of the applicant's evidence concerning quantification of local employment opportunities can be regarded as soundly based, for the simple reason that their analysis excludes any proper assessment of local displacement effects during the construction phase.</p> <p>In short, the concern remains that a substantial proportion of jobs filled by local HB workers during construction would be offset by a reduction in business activity and employment in other local businesses during this phase of the proposed project.</p> <p>Further specific details of the concerns held by Stop Sizewell C regarding the approach taken by the applicant to factoring in displacement effects on other local businesses is set out below, especially in the responses to matters SE.1.3 and SE.1.37.</p>
G.1.25	<p><b>Supply chain opportunities</b></p> <p>The Applicant has been asked about the scale of opportunities that might be available for local companies to provide services to SZC. In response, the applicant places considerable stress on the experience and successes that 'local and regional' companies have had in supplying services to the Hinkley Point C (HPC) project that is currently underway.</p> <p>The Applicant would like local audiences to believe that the experience with HPC is a good guide to what could be achieved with a supply chain in the Suffolk/Norfolk area.</p> <p>However, for reasons that we set out in our previous submission to the Inquiry at Deadline 2 (<a href="#">REP2-449I</a>), the quantified estimates of supply chain stimulus for HPC is an entirely inappropriate benchmark for what would be likely to occur if the Sizewell C project is permitted and built as intended by the applicant. This is for two principal reasons:</p> <ul style="list-style-type: none"> <li>• First, the spatial impact area that is used by the applicant to assess the supply chain impacts of the HPC project is a much larger area than the area of Suffolk and Norfolk combined. Indeed, the spatial impact area used for the analysis of</li> </ul>

	<p>the HPC supply chain covers all of South West England (i.e. Wiltshire to Cornwall) and also all of South Wales, from Monmouthshire to Pembrokeshire.</p> <p>In short, the working age population and the number of businesses in the combined South West and South Wales area is around 5 times larger than the equivalent working age and business populations of Suffolk and Norfolk together.</p> <ul style="list-style-type: none"> <li>• The other key point is that having invested in developing a local and regional supply chain for HPC, the companies in that supply chain (including those in South West England and Wales, but also other parts of the UK) now have a considerable advantage when it comes to compete for contracts to supply services to any new nuclear projects that might be permitted, including Sizewell C.</li> </ul> <p>In other words, having developed expertise and experience of working on the first new nuclear project in nearly three decades, the companies that are currently participating in the HPC supply chain would have a substantial competitive advantage when it comes to bidding for contracts to supply similar types of services to a Sizewell C project, were it to be permitted.</p> <p>For both of these reasons, the emphasis that the applicant is placing on the current experience of the HPC supply chain across the South West England and South Wales regions cannot be regarded as a sound basis for the assessment of the size and pattern of any potential supply chain impact associated with the proposed SZC project on the economy of Suffolk and Norfolk.</p>
	<b>Issues relating to Employment and Supply Chains</b>
SE.1.3	<p><b>Displacement effects on local businesses – competition for a construction workforce</b></p> <p>The Applicant has responded to a concern by Westleton Parish Council regarding potential effects on the supply and provision of local trades people. The Applicant has responded by stating that any effect caused by SZC leading to local businesses finding vacancies harder to fill “...<i>is not displacement, and is a normal function of a positive intervention to which labour markets respond, and as such is not considered a significant adverse effect</i>”.</p> <p>Stop Sizewell C disagrees that such an effect should not be regarded as displacement. Our reasons are set out in a detailed response to SE.1.37 later in this response document.</p> <p>However, it is also clear from their response to SE.1.32 (see below) that SZC Co. is planning for significant levels of workforce recruitment during construction from other local employers. In particular, in responding to SE.1.32 they cite as an influence on their workforce planning strategy the experience of building of Sizewell B, where they state that 30% (600) of the peak recruitment year workforce had been recruited from other local employers, whilst only 20% of this workforce had been previously unemployed or inactive. This in turns suggests the remaining 50% of the workforce were working on the Sizewell B site with their current employers (presumably as sub-contractors).</p> <p>The implication of all of this is that 80% of the locally recruited workforce in the peak year for Sizewell B were displaced from other activities, either:</p>

	<ul style="list-style-type: none"> <li>• directly recruited from other employers (30%); or</li> <li>• undertaking work for their employers on site (instead of working on other projects for their employer).</li> </ul> <p>Therefore, if the experience of Sizewell B is repeated then circa 80% of the gross local construction phase effect will actually amount to local employment business activity being actively displaced from elsewhere (i.e., when the conventional definition of displacement is applied, rather than the Applicant's unique interpretation).</p>
SE.1.5	<p><b>Changing Structure of the Construction sector since Sizewell B reinforces concerns about workforce displacement effects</b></p> <p>In responding to SE.1.5 the Applicant states that in comparison to when Sizewell B was built (1988-1995), the Construction industry is now <i>"structured very differently with respect to qualifications and competencies"</i>.</p> <p>We agree entirely with this comment. Indeed, the evidence for the increasing skills requirement of the Construction sector is evidenced in trend data from the ONS Labour Force Survey. However, this fact suggests in turn that the Applicant's need to recruit a skilled and experienced workforce is likely to have an even greater impact on existing local businesses operating in this sector, thereby further reinforcing the point made in respect of SE.1.3 above.</p>
SE.1.15	<p><b>Pressure for Skilled Labour</b></p> <p>In responding to concerns expressed by Essex CC regarding cumulative effects on demand for materials and workforce, the Applicant states that: <i>"there is not considered to be a significant in-combination effect on demand for construction skills within the labour market"</i>.</p> <p>However, the Applicant has elsewhere stated that the previous experience of the construction of Sizewell B is a relevant source of evidence. In particular, in response to SE.1.3 they state that at its peak, 30% of the Sizewell B workforce had been recruited from other local employers. Moreover, a further 50% of the workforce on that project were working on site with their current employer (i.e., as sub-contractors), which is another mechanism by which displacement can occur – i.e., via effect on local supply chains.</p> <p>The potential effect on supply chains is a key consideration. However, even if the potential effects on the local contractor supply chain is set aside, the previous experience of 30% peak recruitment from other local employers must be regarded as a substantial adverse effect. The Applicant's conclusion that this scale of potential effect is insignificant is not robust or credible.</p>
SE.1.32	<p><b>Home Based Workers</b></p> <p>The Applicant has provided a detailed response regarding concerns about the proportion of homebased workers who would be already in employment. In particular, the Applicant draws upon two separate stands of evidence:</p> <ul style="list-style-type: none"> <li>• A research report published by the Resolution Foundation in 2015, which concluded that – depending on the economic cycle – between 40% and 52% of</li> </ul>

new jobs filled each year are filled by people not currently working (i.e., by those entering the workforce for the first time, or those re-joining the workforce after a period of unemployment or inactivity).

- The previous experience of constructing Sizewell B (referred to in the response to SE.1.3 above) which states that around 20% of the peak workforce had been previously unemployed or economically inactive.

However, neither of these sources can be regarded as a sound basis for estimating the likely proportion of the Sizewell C workforce that would be filled by people not currently working.

Starting with the second strand first (Sizewell B), the reason for doubting the relevance of this finding is articulated clearly by SZC Co. themselves in their response to SE.1.5, as noted above. That is, in responding to SE.1.5 the Applicant stated that in comparison to when Sizewell B was built (1988-1995), the Construction industry is now *“structured very differently with respect to qualifications and competencies”*.

The evolution of the skills needs of the Construction sector (as measured by qualifications levels of the UK construction workforce) can be clearly seen in the trend data for the ONS Labour Force Survey. The increasing requirement for skills and qualifications over the past 30 years or so means that the experience of the 1980s/early 1990s is not a valid comparison with which to develop assumptions about the labour market response in the 2020: i.e., changing technology and processes means that the skills needs of the industry have evolved since the later 1980s.

A further relevant consideration is that the national unemployment rate was significantly higher throughout the 1988-1995 period when Sizewell B was built compared to the current situation. Therefore, there is likely to be fewer undeployed workers with relevant skills waiting to be recruited from the available local pool of unemployed workers.

Although the other strand of evidence – the Resolution Foundation research (2015) – in itself is a good piece of research, it is, in our view, an inappropriate evidence base upon which to develop assumptions about the likely local labour market response for the Sizewell C project. This is because it is national research that covers the labour market as a whole and all industries together: in other words, the 40%-52% finding is an average response for all workers across all UK industries.

Moreover, the relevance of this research to the Sizewell C and Suffolk situation is weak because the UK Construction sector is not ‘average’ in terms of the characteristics of its workforce or the requirements it has for workforce skills. Neither is the Suffolk workforce ‘average’ in terms of its demographic characteristics compared to the rest of the UK.

For example, data from the ONS suggests that rates of workforce churn are highest among sectors such as: Accommodation; Food & beverage services; Retailing; and Arts, Entertainment & Recreation. These industries generally also have a lower skills requirement (compared to Construction) and are therefore likely to be making an above-average contribution to the 40%-52% finding reported by the Resolution Foundation.

	<p>For all these reasons, Stop Sizewell C cannot agree with the Applicant that their approach to assessing the scale of potential recruitment from other local employers is either a conservative or proper assessment.</p>
SE.1.37	<p><b>Displacement</b></p> <p>The Applicant claims that the concept of displacement has a ‘very precise definition’ and that it is defined by HM Treasury’s Green Book as:</p> <p><i>“the degree to which an increase in economic activity promoted by an intervention is offset by reductions in economic activity elsewhere”.</i></p> <p>However, the Green Book is not the only place where Government advises on the correct approach to assessing displacement. Indeed, on page 2 of the Green Book the role of supplementary guidance is clearly stated, as follows:</p> <p><i>Supplementary departmental guidance is produced by Departments and arms-length public organisations. It deals with the application of the Green Book in the particular context that is the organisation’s area of responsibility. (HMT Green Book, 2020, p2)</i></p> <p>In the case of planning decisions, an important place to look for supplementary guidance is the Ministry of Housing, Communities and Local Government (MHCLG) <i>Appraisal Guide</i> (December 2016). Section 4 of this document provides information on how project additionality factors – including displacement, leakage, and multiplier effects – should be treated in assessing projects.</p> <p>However, when it comes to detailed guidance on the quantification of additionality factors (including displacement), the MHCLG <i>Appraisal Guide</i> (December 2016) provides the following advice: “A useful guide to additionality and how users might decide appropriate levels of additionality is the Homes and Communities Agency Additionality Guide”.</p> <p>The HCA <i>Additionality Guide</i> (Fourth Edition, 2014) contains much more specific advice and case study examples of how project assessors should quantify additionality factors for different types of projects. This document contains the following specific statement about the construction phase effects of projects:</p> <p><i>Displacement arises where the intervention takes market share (called product market displacement) or <b>labour, land or capital (referred to as factor market displacement) from other existing local firms or organisations</b>. For example, an intervention may help a business to expand its operations. However, this business may take market share from other local firms producing the same goods or services, resulting in them losing trade and possibly staff. Alternatively, the supported business may use up <b>scarce local factors of production (such as skilled labour) or bid up factor prices</b>. (HCA Additionality Guide, p28, emphases added)</i></p> <p>On the same page the document goes on to say:</p> <p>The scale of displacement effects will vary depending upon the nature of activity supported and local markets. For example, if the supported business has few</p>

	<p>local competitors, then the level of product market displacement will be low. In terms of factor market displacement, <b>an intervention may result in an increase in demand for construction workers. If these are in short supply, the result may be delays to this or other interventions or an increase in costs.</b> (HCA <i>Additionality Guide</i>, p28, emphases added)</p> <p>It simply could not be clearer that the HCA Additionality Guide regards competition for skilled workers – and with construction workers cited as a specific example – is a key consideration in the assessment of displacement.</p> <p>Yet it is clear from their response to SE.1.37 that the Applicant is either unaware of or is unwilling to acknowledge the detailed advice on construction phase additionality from a leading national Government regeneration agency (and which is advice endorsed by MHCLG). In its SE.1.37 response the Applicant states:</p> <p style="padding-left: 40px;"><i>A worker or contractor moving company to work at Sizewell C is not itself displacement.</i></p> <p>SZC Co's interpretation of displacement is narrow, inappropriate and in basic contradiction to detailed Government guidance on the topic. As a result, the Applicant's assessment of the Economic Benefits associated with the Sizewell C project is completely unsound, with its quantified impacts likely to be very substantially overstated.</p> <p>Although we have emphasised the potential effects on existing local businesses of the competition for skilled workers, there may also be other effects, such as increased competition (and therefore increased prices) for raw materials, haulage, specialist equipment and other factors of production. But none of this appears to have been assessed by the Applicant.</p>
	<p><b>Issues relating to Tourism</b></p>
SE.1.7 SE.1.13 and SE.1.14	<p><b>Impacts on Accommodation and Displacement of Visitors</b></p> <p>In responding to the RSPB's concerns (SE.1.13) regarding effects on the visitor economy, the Applicant claims that <i>'there is limited empirical evidence that the Sizewell C project would lead to a quantifiable reduction in visitor numbers, behaviour or expenditure'</i>. They also state that there is little empirical evidence that business viability would be threatened as a result, particularly when support would be made available through a Tourism Fund.</p> <p>A similar response is made by the Applicant with respect to Snape Parish Council's concerns in SE.1.14.</p> <p>However, the response to SE.1.14 also reveals a tendency on the part of the Applicant to regard potential impacts on tourism as being confined to effects on the Tourist Accommodation sector. This tendency is also found in the response to SE.1.7, where the Applicant's response places stress on the opportunities for local accommodation providers to increase business <i>"by accepting bookings from construction workers as well or instead of tourists"</i> (emphasis added).</p> <p>Obviously, it will be up to individual accommodation providers to decide if providing accommodation to construction workers instead of visitors is a better business opportunity for them (although the apparent suggestion that construction workers</p>

	<p>should be accommodated alongside holidaying families does raise some potential concerns).</p> <p>Setting that issue aside, what seems to be clear is that the Applicant appears to be mindful of potential effects on Accommodation providers, there does not appear to be any consideration of the potential effects on other businesses operating in the visitor and hospitality sector that are dependent on visitor spending.</p> <p>As was pointed out in our previous submission to the Inquiry at Deadline 2 (<a href="#">REP2-449I</a>), research undertaken by the Destination Management Organisation identifies that only 9% of the earnings of the local tourism economy are generated by Accommodation providers, with over 90% of tourism expenditure generated by attractions, food &amp; drink outlets, retailers, and other businesses).<sup>1</sup></p> <p>Stop Sizewell C is concerned that the potential effects of the project on local visitor attractions, food &amp; beverage service businesses, and those parts of the retail sector that cater to the needs of visitors (e.g., local crafts, souvenir &amp; gift shops, etc.) have never been properly assessed by the Applicant.</p> <p>The stance of the Applicant regarding negative effects on local tourism is that any potential harm could be mitigated by additional promotion and marketing via the Tourism Fund. But even if a significant portion of Accommodation sector is diverted to providing bedspaces for the SZC Construction workforce, then this ultimately would generate little net effect if there is a shortage of suitable accommodation for visitors to stay in. And if this is the case, the knock-on effects on the local economy could be substantial, particularly for non-accommodation businesses that rely on staying visitors as an important source of revenues.</p>
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## **ii. Community Issues**

The sheer volume of material and serious resource constraints have limited our ability to respond to these questions in detail.

### **Chapter 4, Air Quality**

AQ.1.56. Noise effects are considered to be moderate adverse (**significant**) between the A12 Yoxford Junction, at Middleton Moor, Mill Street and B1125. Quality of journeys on the B1122 is expected to be major adverse (**significant**).

We remain concerned about the impacts on pedestrians (including those with mobility difficulties), cyclists and equestrians or people wishing to travel on local journeys – to school, shops, doctor, etc.. The applicant is aware that the use of the B1122 for the first 3 years or so of the development, combined with the movements and disturbance caused by SLR construction traffic will be enormous and will be particularly harmful to communities. There should be safety changes implemented prior to the early years' construction, including improved visibility at Mill Street, and safe crossings and footways in Theberton as shown in ES vol 6 ch 3 (DCO doc 6.7)

The applicant's Noise Mitigation Scheme should be extended to cover all the B1122 in the Early Years phase, and homes between the Middleton Moor Spur and the Yoxford Roundabout at all stages,

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<sup>1</sup> Destination Research: *Economic Impact of Tourism*, East Suffolk, 2018

The applicant's air quality data shows that the A12 through Yoxford is already on the limits of acceptable particulate levels, with annual concentrations of 15.5 and 10.6 µg/m<sup>3</sup> of PM<sub>10</sub> and PM<sub>2.5</sub> respectively [location YX3, 2018 baseline - 6.8 Volume 7 Chapter 5, Table 5.10]. Yoxford Primary School is only 200 metres away. The World Health Organisation's Air Quality Guidelines are 20 and 10 µg/m<sup>3</sup> of PM<sub>10</sub> and PM<sub>2.5</sub>, respectively

[http://www.who.int/phe/health\\_topics/outdoorair/outdoorair\\_agq/en/](http://www.who.int/phe/health_topics/outdoorair/outdoorair_agq/en/)

The applicant states in Tables 5.11 and 5.12 that particulate levels will fall during the Early Years, and further still once the Link Road is open. We find that inconceivable, given the substantial increase in vehicles of all kinds, including the near doubling of HGV numbers.

We recommend that the traffic and pollution modelling and the assumptions behind it are re-examined thoroughly by an independent authority.

## **Chapter 6, Amenity & recreation**

AR.1.2 The Applicant says civils workers will want to bring their own caravans. Based on reports from residents at Hinkley Point C, we are concerned about unregulated caravan sites popping up.

AR.1.8. Stop Sizewell C considers that the loss of beach, being reduced to a narrow 'coastal margin' and presence of a temporary and permanent beach landing facility will irrevocably damage the amenity value placed on the Coast Path.

AR.1.15 There are relatively few bridleways in the area and the loss to horseriders of Bridleway 19 is significant.

## **Chapter 12, Community Issues**

CI.1.6. states that EDF cannot mandate where workers live but expresses confidence the campus would be well used. The Guardian reported in August 2019 of the Hinkley C campus that a worker said: "You can find cheaper accommodation elsewhere," And you have more freedom to come and go without being monitored."

<https://www.theguardian.com/uk-news/2019/aug/14/hinkley-negative-life-site-shadow-bridgwater>

CI.1.12 the Applicant's response relates to the provision of medical support onsite. Given the Accommodation campus would only open in Year 3, how would this be provided in the Early Years? We find it implausible that there is expected to be no significant adverse noise effects on Norwood House given three years of substantially increased traffic during the early years. We further find it implausible that delays to health workers' journey times would be "measured in seconds per trip".

CI.1.14. The "significant differences" between the Applicant and Suffolk constabulary on the impacts of crime and non-crime incidents is concerning.

## **Chapter 13, Cumulative Impact**

CU.1.6. We find the Applicant's response here dismissive and patronising, describing how "unfounded" concerns may add to stress and anxiety. We consider that the local communities are well informed and their concerns well founded. In relation to the Applicant's statement about "a robust system for communication", as described in our oral submissions, EDF paused the Community Forum prior to submitting its DCO application, despite online options being available.

## **Chapter 16, Health and Well being**

H.1.2 The Applicant recognises that new roads bring severance and mentions how the SLR will dissect PRoW and rural roads, but gives no mention of severance of people; where part of a community is trapped on the wrong side of a new road. The Applicant claims the new roads themselves provide mitigation of severance effects but make no mention of mitigation until they are built.

HW1.13 - HW.1.16: Vulnerable groups. While we welcome the Applicant's reply to H.1.1: "With regard to sensitivity, inequality and the potential for disproportionate impacts , Volume 2, Chapter 28 etc. sets out how sensitivity can vary within a community and can further vary by individual health pathway. This rationale is then provided as to why a precautionary approach has been applied, where every resident is considered highly sensitive to every health pathway" we find it hard to reconcile this with the claims that almost no care home will have any perceptible impacts. Would an acoustic bund around Old Abbey Care Home be the very first thing constructed if Sizewell C goes ahead?

## **Chapter 17, Historic Environment**

See B1122's submission concerning vibration damage.

HE.1.25 Ancient and Veteran trees. We are not clear whether the SLR will affect any ancient or veteran trees? We are concerned that the Applicant does not appear know the location of veteran trees and important hedgerows. These are significant landscape features.

HE.1.31 Impact on historic landscape character. The proposed link road would have a significant local impact on the landscape: field boundaries, cuttings and embankments, PRoW which may not eliminate the landscape pattern but will eliminate the use of it by humans and wildlife – patterns which would have been recognisable back to the Middle Ages.

HE.1.33 Farming landscapes at Moat Farmhouse. We find the Applicant's response that it does not consider the landscape to be of significant value as it is not rare in Suffolk or nationally questionable. If the Applicant applied this to all such landscapes, it could set a precedent that would result in the erosion and eventual loss of all of them.

## **Chapter 21 Noise and Vibration**

See B1122's submission concerning vibration damage.

NV.1.33 The quantity and duration of piling is a significant concern, especially their concentration during Construction Phase 1. Giving a week's notice to residents for noise disturbance that would last months seems wholly inadequate.

NV.1.51. This would appear to be the first explicit acknowledgement that significant long term adverse effects would remain for at least eight properties on the Sizewell Link Road, but the Applicant's answer implies only two of these locations include significant adverse effects on health and quality of life. Why is the same mitigation not being applied to all these properties?

NV.1.79 The Applicant states that the working hours on the main site are 24/7. Can the Applicant confirm this includes the borrow pits, which are within 300m of Eastbridge?

#### **4. Comments on Landscape and Visual Impact**

We observe that the Applicant has at no time attempted to provide detailed “real-life” visualisations of the impact of the construction phase of the project upon the landscape. An example of what could be provided is available in the application by Horizon for the Wylfa Newydd site where two sets of images have been submitted. [Set One](#) and [Set Two](#). See also examples below. We strongly recommend that the Examining Authority request the Applicant to provide a similar set of images at various stages of construction and different seasons from key viewpoints.





**5. Response to Applicant's Answers to Examining Authority's Written Questions on Coastal Geomorphology.** These comments have been prepared by Andrew Cooper and Derek Jackson of Ulster University.

CG 1.0.

- (i) No design of structures that protrude into the nearshore can claim to have no impact on coastal processes.
- (ii) Renourishing the "sacrificial" beach defences cannot be said to "ensure that the HCDF does not interrupt the prevailing sediment transport processes". If the coastline either side has retreated, leaving a protruding headland, this will certainly have an effect and nourishing a headland is an exercise in futility where wave energy will always be drawn and sediment will constantly be removed from.

CG. 1.5. Here, it is acknowledged that the end of decommissioning will be about 2140 - some considerable time later than is considered in the expert geomorphological assessment.

CG 1.14. The spatial extent of the area of interest for the timescale involved (to the end of decommissioning and beyond) must surely be larger than the Greater Sizewell Bay. How, for example, did the Sizewell coast prograde for almost a century after 1826 without additional sediment input from outside the delineated cell?

We also reject the simple assumption that increased erosion will lead to an increased sediment supply to the beach - historically, sediment has accumulated on the banks.

The maintenance of the sea defences at Sizewell C will likely create a headland that would not otherwise persist - this will certainly have an impact on shoreline planform into the future.

CG. 1.16. It cannot be said that “geomorphic impacts at Sizewell C would spread slowly and would not be detectable far (10s – 100s of metres) from the impact source”. There is no evidence to support this; on the contrary, studies elsewhere demonstrate the 10-100 km range of impacts alongshore from the original perturbation.

Thorpeness as a cell boundary is most likely “leaky” in that sediment can enter and leave the system. It is not a fixed boundary. Future geomorphic change will also alter its effectiveness as a cell boundary.

C.G. 1.18. The timescale of these measurements is insufficient to conclude that “there would be no impact at the Minsmere Sluice outfall”.

CG. 1.19. The fact that “The changes on one stretch of coastline ... do not reflect, and cannot be predicted from, the other section” does NOT mean they are unrelated.

CG. 1.20. See above - it cannot be stated with certainty that there will be no impact south of Thorpeness.

## **6. Response to Applicant’s Answers to Examining Authority’s Written Questions on Climate Change**

These responses have been prepared for Stop Sizewell C by Jim Hart, sustainability consultant and academic researcher.

### **G.1.21 Need**

We note EDF’s attempt to reframe the question, but in doing so, they have not rebutted the point that the carbon emissions invested in the project will not be recouped (in reduced operating emissions) until 2040 at the earliest. Even if the average grid emission factor expected immediately before Sizewell C connects is used for the calculation (41gCO<sub>2</sub>e/kWh), with no further decrease, then the construction emissions debt would still take until around 2040 to be paid off.

In their answer, EDF states that *“In the short-term the GHG emissions associated with the construction of Sizewell C will not affect the ability of the Government to meet its relevant carbon budgets”*. This is highly debatable. Whilst the millions of tonnes of emissions invested are modest relative to the Government’s budgets, it is clearly the case that if the budgets are eventually exceeded, then the emissions associated with the construction of Sizewell C will have been a contributory factor. As such, those emissions must not be dismissed.

The point that Sizewell C is likely to displace (unabated) fossil fuel facilities such as CCGT from the grid is contentious. It is likely that insofar as fossil fuel or nuclear generators are needed on the grid, fossil fuel stations will be investing significantly in carbon capture and storage (CCS) by the mid-2030s, and so it is likely that Sizewell C will be an alternative to CCS investments and/or more renewables projects and/or interconnectors, with energy storage.

### **G.1.20, G.1.21 & G.1.22**

Whilst the per kWh emissions of nuclear and renewable generators may be at a similar scale to that of some renewable generators, the point should be made that onshore/offshore wind have a distinct advantage in terms of payback time, so EDF’s response here misses the point. Whilst Sizewell C will take around a decade (or more) to build, and will then have to operate for a few years before the

carbon emissions investment is repaid, a wind farm can be built in a much shorter period of time, and the emissions investment repaid typically within a year of connection.

Comments specifically on the LCA (referred to in G.1.21 and .22) are shown below.

Carbon focused Life Cycle Assessment of the proposed Sizewell C nuclear power plant development (May 2021) contained within the document 9.11 Responses to the ExA's First Written Questions (ExQ1) – Volume 3 Appendices Part 3).

#### a. Optimism Bias

The figure used in the LCA for gross generation over 60 years (approximately  $1.694 \times 10^{12}$  kWh, or 1,694,000 GWh) is 92% of the maximum possible output from a plant rated at 3.5 GWe, implying a very high level of availability and very little downtime. The net figure is 85%. [Note, also, that the figure for gross generation is greater than 100% of the maximum possible if the plant capacity is taken as 3.2 GWe, as EDF has stated elsewhere rather than the 3.5 GWe stated in the LCA]."

Given experience of nuclear energy in the UK to date, these figures appear highly optimistic. Figures from the BEIS Digest of UK Energy Statistics show that the net load factor of the UK nuclear fleet in the five years to 2019 averaged 74%, rather than the 85% implied for Sizewell C. Furthermore, the proposed lifetime of 60 years also appears optimistic given that no nuclear generating facility has survived this long to date. In other words, the LCA has presented a case based on the best possible scenario, with negligible margin for error over a period of 60 years.

Alongside this scenario, EDF should present a realistic case, in which the facility operates at a lower net load factor for less than 60 years, and adjust the GWP results per life cycle stage in table 12 accordingly (core operation, core infrastructure - construction, core infrastructure - decommissioning).

#### b. Construction Emissions Inconsistencies

Emissions of CO<sub>2</sub>e associated with construction have previously been stated as follows:

- 5,738,084 tCO<sub>2</sub>e, then recalculated as 6,237,269 tCO<sub>2</sub>e in the Environmental Statement Addendum (The Sizewell C Project – 6.14, Volume 1, Chapter 2, January 2021. Table 2.66) as more specific site information became available.

No such figure is presented in the more recent LCA, but the following information is provided which enables a calculation to be made.

- Construction of core infrastructure: 2.44 gCO<sub>2</sub>e/kWh
- Total net generation: 1,569,718,000,000 kWh

Multiplying the two implies that the total construction emissions (core infrastructure) are 3,830,112 tCO<sub>2</sub>e.

It is unclear why these emissions, having been revised upwards from ~5.7 to 6.2 MtCO<sub>2</sub>e in January 2021 are now assumed to be only ~3.8MtCO<sub>2</sub>e. If the old figures were 'wrong', what was the underlying cause, and what evidence is there that the new figure is less wrong?

### c. Fuel Cycle – Upstream emissions

The upstream emissions (associated with the extraction and preparation of uranium) reported in table 12 of the LCA are given as 2.75 gCO<sub>2</sub>e/kWh. Researchers<sup>2</sup> have previously shown how the carbon cost of uranium extraction and preparation may rise in the future under a scenario in which global nuclear generating capacity increases. This is because the industry must move on to ores containing uranium in ever-lower concentrations as the better deposits are used up, as there is now relatively little discovery of previously unknown uranium deposits. EDF should share its analysis of how the supply chain for fuel, and the associated embedded carbon, is likely to develop in response to this challenge.

## **7. Response to Applicant's Answers to Examining Authority's Written Questions on Funding (Compulsory Acquisition)**

General comment: It is clear from the Applicant's responses to the ExA's written questions on whether Adequate Funding is likely to be available that no substantive answers have been given. The Applicant repeats multiple times that nuclear is included in the government's 10 Point Plan but states that "further commitments to provide financial commitments from private sector third-parties" (expected to comprise the majority of capital investments) "are not expected to be confirmed until FID" and that "discussions *will be well progressed* in the period leading up to FID"; additionally "details of the proposed funding model and financial arrangements for the project *will become clearer* and finalised in the period leading up to FID." (our emphasis). Specifically:

CA.1.25 talks of "good progress that has been made" but there is no evidence to support this definition of progress as "good". On 23 June EDF CEO Simone Rossi said to Reuters' Global Energy Transition conference, that the legislation underpinning the new financing scheme was needed this autumn. "*I would say this is an essential prerequisite for the project to be enabled because the project needs to be timely delivered and this legislation is now really, really essential.*" Asked if his company had a Plan B in the event the government did not advance with the legislation, he said: "*We do not really. I have to say that would be for the UK government to consider.*"

<https://www.reuters.com/business/energy/reuters-events-edf-calls-uk-produce-sizewell-funding-legislation-2021-06-23/>

CA.1.26 attempts to deflect questions on the financial viability of the project. Given the expected role of consumers and/or taxpayer funds in supporting the project if the RAB model is to be used, and that the government would only approve it if it "passed" value for money assessments, it would seem reasonable for PINS to take an interest in the financial viability.

CA.1.27 Timescales. EDF's Annual Report and the updated Implementation Plan submitted by the Applicant at Deadline 2 [REP2-044](#) presumes a Final Investment Decision in mid 2022, but Sizewell C's Safety, Licencing and Assurance Director, Mike Lavelle told a meeting of the Whitehall Group on 27 May that this could be early 2023 (see link via <https://www.culandsoc.com/news/whitehall-group-on-line-discussion-hydrogen-production-possibilities-and-pilots-being-considered-for-sizewell-c/> - the comments are made at around 4 minutes), and the Government's commitment is for an FID by the end of the the parliament (potentially December 2024).

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<sup>2</sup> E.g. Norgate T, Haque N, Koltun P. The impact of uranium ore grade on the greenhouse gas footprint of nuclear power. J Clean Prod 2014;84:360–7. <https://doi.org/10.1016/j.jclepro.2013.11.034>

CA.1.28 and CA.1.29. These answers suggest the Applicant is very aware that the cost will increase. We question whether the predicted cost and/or contingencies include the potential for multiple adaptive approaches to the sea defence. We are also aware of significant price rises in construction materials, for example steel has increased 20%.

CA.1.30, CA.1.33 and CA.1.37 Our Deadline 2 submission [REP2-449t](#) examines whether Sizewell C can achieve reductions in cost, leading to a reduction in the price of electricity, and concludes that this is not possible.

CA.1.32 Our Deadline 2 submission [REP2-449t](#) reports that three of the UK's largest infrastructure investors, Aviva, Legal & General, Prudential have indicated they have no plans to invest in Sizewell C. We believe more will follow as the ESG challenges become clear.

CA.1.34 It is of concern that the Value for Money criteria have not been published and we are calling for greater transparency from BEIS on this. We respectfully suggest that the Examining Authority do likewise. In relation to the Applicant's reference to "need" see also Energy Systems Catapult's new report referenced below.

## **8. Response to Applicant's Answers to Examining Authority's Written Questions on Policy & Need**

None of the responses provided by the Applicant on issues relating to Policy and Need change the view of Stop Sizewell C that Sizewell C is not needed.

Since Deadline 2, a new report by **Energy Systems Catapult** and **Good Energy** has been published; *"Renewable Nation; Pathways to a Zero Carbon Britain"* (copy available from here <https://www.goodenergy.co.uk/business/exclusive/renewable-nation>). "This unique report demonstrates how renewable energy offers the quickest, cheapest and cleanest option to deliver net zero by 2050 and boost the economy to benefit everyone." On page 15, the report states, under the heading No role for nuclear? *"One of the key attributes of the ZCB scenario is the absence of new nuclear power. Much of the current modelling work on net zero has included a strong role for new nuclear plants over the next 30 years, based on optimistic cost reductions that are not borne out from 65 years of nuclear experience in Britain.<sup>5</sup> Our approach was different. We wanted to imagine how a net-zero system could exist without this technology, providing a unique vision of the future and a set of new options for policymakers. A separate reason for excluding nuclear power is the difficulty in balancing the technology with renewables. The energy system in the modelling needs greater flexibility without adding further inflexible capacity to the mix. A recent example of this was the unusual case of National Grid paying a nuclear plant, Sizewell B, to reduce its output during a period of low demand and high renewable generation.<sup>6</sup> Adding both more nuclear power and more renewables will likely lead to higher costs for consumers and much higher levels of constraints for wind generators. We have found that beyond the existing Hinkley Point C plant, new nuclear is both unnecessary to reach net zero and would be difficult to manage alongside such a large fleet of renewables."*

Additionally since Deadline 2, news has emerged of **technical issues at the Taishan 1 EPR** reactor in China. It's been reported that it has five damaged fuel rods which led to a build up of noble gases.

<https://www.bbc.com/news/world-asia-china-57474384>. Whilst we recognise this is a matter for ONR, Taishan's reactors are the only working EPRs in the world. We have urged that questions about the EPR must remain if it cannot be proved that there is no link between the reactor design, the high burn-up fuel that it uses and this incident.

## **9. Coastal Defences:**

The combination of the coastal defence report ([REP2-116](#)) and one dimensional modelling report ([REP2-115](#)) still leave the assessment of the overall coastal defence incomplete and we await the two dimensional modelling submission due at Deadline 3 before making any further response to these submissions.

We agree with Minsmere Levels Stakeholders Group ([REP2-377](#)), that the reports so far do not account properly for the easterly permanent Beach Landing Facility design and protection or the potential for this structure to significantly interfere with coastal processes at the northern end of the Sizewell C site.

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## **B. Comments on ASI**

We were grateful for the opportunity to take part in all the ASIs.

On the main site ASI (8 June), we consider a disproportionate amount of time was spent looking at mitigation in comparison to the impacts, eg a similar length of time was spent looking at an intended Natterjack toad pond and marsh harrier mitigation as at the Sizewell C frontage.

On the Hinkley C ASI (22 June) the arrangements were very confused and the visit started an hour late and finished about an hour early compared to the itinerary. It is unfortunate that there seemed to be no coordination between EDF and PINS over the itinerary and what was actually delivered as a tour with the Inspectors leaving over an hour before EDF expected. The result was a rushed tour of the site which resulted in only a few questions about site particulars and similarities or differences between the Hinkley Point and Sizewell sites.