

The Sizewell Site – Executive Summary

Appraisal of Sustainability Site Report for Sizewell – October 2010

PURPOSE

This paper was undertaken to review the proposals being brought forward by the Applicant against the Assessment of Sustainability study [AoS] carried out in 2010, recognising that it helped to inform the decision making for the SSA.

SUMMARY

The AoS is over 11 years old and is the basis on which decisions have been made that will influence decisions that will impact Coastal Suffolk for over 160 years.

Consequently, it is important to understand the criteria within it and the degree of conformance the current proposals have with it, as well as the variances from the core assumptions applied at the time of it being written.

This document considers all of the components of the AoS (including the Base Case), reviews the context ‘then and now’ and brings forward; observations, issues and questions for the ExA to carry into the Examination of the dDCO.

There are over thirty reflections offered to the ExA and where appropriate an accompanying commentary providing background, alongside suggestions on possible courses of action.

IKH Galloway



The Sizewell Site

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1. Summary

1.1 The stated purpose of the Appraisal of Sustainability Report (AoS) “...is to assess environmental and sustainability impacts on the Sizewell site and surrounding area. It also identifies the significance of those effects, and suggests possible ways of mitigation.”

1.2 For the purpose of this paper the “surrounding area” is assumed to include the entirety of the A12 from J58 of the A14 through to Lowestoft in the north.

1.3 The report for Sizewell also “...helped to inform the decision-making for the SSA”.

1.4 Importantly the AOS summarises “...beneficial and adverse effects were identified as **potentially significant** at the local level and it is recommended that these need to be further considered by the developer, regulators and the decision-maker (the IPC), during project level assessments.”

1.5 In summarising its key findings the report points out that; “A number of the potential effects identified for Sizewell will be similar across all the sites, including positive effects for employment and well-being. However **a number of potential effects have been identified that are of particular note for the nominated site at Sizewell**”.

1.6 The summary continues “Of particular note ...is that the site lies on the Suffolk Heritage Coast and is wholly within the Suffolk Coast and Heaths AONB. Although set in the context of the existing power station, **the development may have an adverse impact on landscape character and an adverse visual impact on a nationally designated landscape; this could not be fully mitigated.**”

Rather than a statement of fact, this has subsequently been interpreted (by many) as endorsing the use of the site for additional nuclear installations in spite of these considerations.

Contrary to that interpretation, it is my contention that as the report was commissioned on the basis that “Strategic suitability means the judgment Government is able to take on the information available at the SSA stage, against the assessment of those criteria it has identified as strategically important.”¹ it now falls to the Planning Inspectorate acting in a pivotal role, to scrutinise the further developed proposal of the nominator (or successor).

So ensuring the proposed outcome is not only aligned with the strategically important criteria of 12 years ago, but also that the 12+ year journey to the final outcome will be in accordance with the strategic intent and consistent with changes (environmental, socio-economic, geophysical, climatic, etc.) occurring throughout the 25 years between the inception of policy and its culmination in hard deliverables.

Nowhere is the importance of this approach more clear than in; climate change, coastal processes and geomorphology, ecology, environment etc.

¹ Government response to consultations on the Strategic Siting Assessment process (January 2009)

1.7 Continuing further, the AoS highlights potential adverse effects on at least five nature conservation sites (of UK & European importance) and further impacts on water quality, fish and shellfish in nearby coastal waters.

2. Sizewell Site AoS Base Case

2.1 In conducting the AoS, a 'Base Case' was adopted providing a standard approach irrespective of the nominator or the site.

In the case of the Sizewell site there were two significant variations:

A] The nominator was at variance with the Base Case; citing "*At least 1 reactor*" in contrast to the more explicit wording of '1 Nuclear Reactor' used in the Base Case.

B] The nominator was also at variance with the Base Case; quoting "Land raising and/or flood defence improvements and coastal protection measures" in contrast to 'Coastal flood and protection measures (where relevant)'

2.2 The dDCO is absolutely clear that the Nominator (and/or successor) is seeking approval for a two reactor power station.

2.3 In respect to the quoted "Land raising and/or flood defence improvements and coastal protection measures" it is still unclear (in detail) at the dDCO stage, what proposals the nominator is currently bringing forward.

The lateness of submission of 'material changes', the continuation of modelling and subsequent data generation (through April 2021), as well as the degree of obfuscation clear during the Preliminary Meeting, all combine to intensify concerns regarding the Applicants clarity of thought and the robustness of the work needed in these critical areas. Consequently, I am petitioning the ExA, EA and MMO to persevere in rigorously challenging the Applicant with regard to the specifics of Coastal; processes, geomorphology, erosion, defence as well as the increasingly serious 'climate change' challenge, individually all issues critical when contemplating a site lifetime in excess of 160 years.

2.4 Of more concern are the emerging variances not identified during completion of the AoS specifically;

C] **The base case assumed a 5-6 year construction period.** Seemingly the Nominator saw no reason to contradict this very bullish assessment. As is common knowledge, construction of Sizewell C may well exceed 10 years and may even be double the base case.

D] **The base case assumed 4,000 construction workers.** Again the Nominator appears to have seen no reason to contradict this equally bullish assessment. As is common knowledge, construction of Sizewell C may well need double the base case, if not more.

As the ExA are well aware, variances of this scale in key drivers of a project of the size and
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complexity of Sizewell C have widespread detrimental impacts; i.e. housing, infrastructure, health provision, traffic, environment, resources, schools, socio-economic, roads, water, services, noise, pollution, etc. Accordingly, it is my contention that the variances unobserved (or undisclosed) during the AoS are both detrimental and material.

Furthermore, their absence may have materially and detrimentally skewed the “...*standardised approach to the appraisal of nominated sites...*” advocated at *Para 1.19 of Appraisal of Sustainability Site Report for Sizewell*.

Consequently, I am asking the ExA to re-examine (in combination with the appropriate statutory and regulatory bodies as required) the suitability of the Sizewell site for the proposed development and ancillary works being proposed under both the dDCO and/or in combination with the late ‘Changes’.

Additionally, in so doing, to examine the current and/or proposed agreements between parties with respect to ownership of parts of the Sizewell estate currently regarded as SZA and SZB.

I anticipate any subsequent regularising of contingent arrangements may have wide ranging consequences, possibly necessitating the involvement of Regulatory bodies and other statutory consultees.

3. Communities

3.1 The report notes “*The Sizewell area is not well served by major road transport links. The area is connected to the main A12 via local ‘A’ roads and the A12 (Lowestoft to Ipswich and London) is the subject of strategic local development of improvements (i.e. bypasses). The A14 (Ipswich to Newmarket) has been identified as a national road route.*”

Although the report is not specific, I believe the assertion that the A12 was the subject of strategic local development of improvements may have been true at the time, but there is little evidence indicating it has been implemented in any significant way, indeed if at all.

The report also notes “*Congestion issues in the local area are noted in the region’s population centres (Ipswich, Bury St Edmunds, and Lowestoft).*” and continues “*Strategic development plans are in place for a scheme to provide a new route for the A12, bypassing the four villages of Farnham, Stratford, Glenham and Marlesford.*”

Whilst having currency at the time, the report admirably demonstrates why Planning Applications are assessed on confirmed development, not ‘potential’ or ‘in the pipeline’. As the ExA may be aware, the scheme was to fall (allegedly for lack of Central Government support).

Subsequently, the Applicant identified a ‘band aid fix’ for the most contentious part of the A12, in
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order to overcome a potential HGV bottleneck and existing air quality hotspot.

In short the Applicants 'two village bypass' was born out of parsimony, rather than a commitment to a much needed and substantive improvement to the A12 betwixt the northern end of the Wickham Market dual-carriageway and the southern end of the dual carriageway at Friday Street.

Consequently, as with the incremental impact(s) of 'construction duration' and 'workforce numbers' multipliers referred to above, I am asking the ExA to re-examine the suitability of the Sizewell site for the proposed development and ancillary works.

On this occasion, my request is based on the AoS anticipating a significant improvement to the A12 that has failed to materialise.

3.2 In respect to other modes of transport, the AoS notes:

RAIL CONNECTIONS: *"...are adequate for the area's current transport loading and there are proposals for further improvement to the East Suffolk Rail Line."*

MARINE: *"...currently no marine off-loading facility at Sizewell, but it is noted that a temporary facility was built for use during the construction of the existing nuclear power station."*

As evidenced by the Applicants initial hesitancy in proposing significant use of either rail or sea it would seem that there has been little tangible movement in either mode since the AoS was written.

However, the Applicants more recent volte-face in bringing forward ambitious proposals for both modes, subsequent to submission of the dDCO raises the prospect of some progress once more.

The questions that urgently need answering (amongst many others) are whether these new proposals are substantive, have the necessary commitments in place and are funded.

Subsequently I am seeking with some urgency, the engagement of the ExA in bottoming out the status of these specific proposals, either to discount them or to make them conditions of the DCO, should it be given.

4. Human Health and Well-being

4.1 The AoS notes *"The most recent census (2001)...reported good or fairly good health...life expectancy greater than the English average...Infant mortality is also below the English average..."* and continued *"Health Profile 2008...estimates of the number of people claiming incapacity benefit for mental illness in the area (14.8 per 1000 population) are significantly below the English average (27.5 per 1000 population)."*

4.2 Later the report notes *“...the Audit Commission for 2005 suggest that the crime rate in Suffolk Coastal District Council’s area is much lower than the national average.”* and that *“Local access to medical services is reasonable with one general practitioner (GP) practice within 5km of the site. There are also four additional GP practices within 10km of the site...The nearest accident and emergency department is at Ipswich (33.5km), whilst the nearest mental health hospital is the Suffolk Mental Health Partnership NHS Trust (34.3km).”*

What is striking is that some of these assertions are now up to 20 years old, yet remain ‘suitable’ for long term decision making, that could adversely impact thousands of people.

For example, the AoS makes no mention that as of May 2021, there will not be a dental surgery in Leiston and no significant NHS dental patient places for some distance, possibly as far as Halesworth Woodbridge or exceptionally Framlingham.

I am aware that some readers will skip over this issue, dismissing it as a minor inconvenience or an exaggeration.

However, I must reiterate these are not small issues to a population with limited access to public transport, residing in a largely rural area, with a significant proportion of older people, as well as young parents, many single with limited incomes.

These are every day issues, that in combination with; fewer GP surgeries who are finding recruitment difficult, remain under increased pressure from Covid-19, lengthy ambulance journeys, distant hospital provision (both for physical and mental health treatment); turn the smallest daily issues into a potential crisis.

Link all the foregoing to; increased demand on services during 12 years of construction, huge daily increases in traffic levels, dirt, pollution and all the other detrimental impacts of the Sizewell proposal, and soon it becomes an existential threat to life in Coastal Suffolk.

In light of this, I would ask the ExA to revisit the assertions made in the AoS, update the data (especially the 15+ year old elements) and review the real and current position of the locality, prior to completing their report and recommendation to the Secretary of State.

4.3 The AoS identifies *“One of the wider determinants of health and well-being is access to local recreational facilities.”* continuing *“...as Suffolk Coastal is a rural and coastal location, the area offers good potential for outdoor recreational activities, such as walking, cycling...almost all of which is set in an Area of Outstanding Natural Beauty.”*

The ExA’s attention is drawn to a third submission, entitled *“Sustainable transport in the Sizewell C Project”*. This examines the multitudinous detrimental impacts Sizewell C traffic will inflict locally

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Amongst them are three fundamental requirements;

1. The Applicant to be proactive in shielding and ensuring the preservation of the wider road and lane networks surrounding the A12 that provide; an extensive leisure, health and recreational resource for residents, visitors, holidaymakers as well as the proposed Sizewell C workforce
2. The essential role for the Applicant to actively protect small roads, lanes, ditches and verges from damage arising from inappropriate traffic and/or inconsiderate drivers utilising country lanes as short cuts and rat-runs
3. The Applicants recognition, compliance with, and promotion of, SCC's Quiet Lanes initiative and its phased roll out in Parishes adjacent to Sizewell C sites. Principally achieved by the Applicant taking substantive steps to; develop a culture that ensures the entire construction workforce act responsibly in attitude, behaviour and actions, thereby preserving the amenity for all.
4. The Applicants diligence in pro-actively managing and monitoring each individual SZC associated vehicle movement (Car, Light Commercial, HGV, AIL, Bus, Coach, etc.) within the Coastal Suffolk area. Reinforced by effective interventions (real-time and offline) reinforcing the imperative for all individuals working at SZC "to reduce the impact of SZC traffic on residents, local businesses and visitors".

5. Landscape

5.1 The AoS is explicit, *"The site falls wholly within the Suffolk Coast and Heaths AONB, an area designated as being of national landscape importance with statutory protection. Paragraphs 21-22 in PPS7: Sustainable Development in Rural Areas identifies this as the 'highest level of protection for nationally designated landscapes', where 'major developments should not take place ... except in exceptional circumstances'. The site also lies on the Suffolk Heritage Coast, a non-statutory defined area, recognised for its scenic beauty and with a function to conserve, protect and enhance the coastal landscape.*

5.2 So while the characterisation of the current UK energy circumstance may be considered by some as *"exceptional circumstances"* it is not necessarily so clear cut in the mind of many others.

Likewise, the inability of the UK Government to attract (and retain) any other suitor, for any other of the sites 'available' within the NPS, is considered by many observers as both a; market, Governmental and nuclear industry failure.

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A failing of such magnitude that, the UK is left considering; an almost impenetrable proposal, from a potential quasi ‘special purpose vehicle’ lacking an extensive and successful track record with the proposed technology as well as uncertain funding model(s).

Additionally, the cornerstone partners who are, according to some commentators, either sliding inexorably toward a financial precipice or are aligned to a foreign power that has an abundance of domestic and international issues currently attracting unwelcome worldwide attention. Consequently, it is entirely predictable that the Applicant takes every opportunity to replay the UK Government “urgency” card at every opportunity.

Nevertheless, I do not believe this is sufficient justification to ride roughshod over national and internationally designated assets and attempt to construct the product of an “unusually, large and complex Application” on the second smallest available site in the entire UK. A task recently characterised as “something akin to passing a camel through the eye of a needle whilst wearing mittens.”

Many of these considerations are beyond the remit of the ExA, but do nevertheless contribute to a rich tapestry of issues, feeding the rhetoric of the Applicant when justifying their proposals.

That said, the key issue of site size relative to the proposed power station is most certainly one for the ExA to examine in the minutest of detail, an undertaking I am sure they are very aware of.

5.3 The AoS also points out two important, but understated features of the area that must be considered as part of the ExA’s examination, especially as both are vulnerable to direct and indirect impacts that could imperil their continuance, specifically the:

5.3.1 *“...coastline has distinctive shingle spits and ridges resulting from longshore drift.”* and the

5.3.2 *Countryside Agency and Campaign to Protect Rural England (CPRE) county tranquillity map identifies the nominated site as lying within a tranquil part of the East of England region.*

In conducting their Examination the ExA are asked to identify the actions being proposed by the Applicant to safeguard both features during construction, through operation and during decommissioning. There may be actions proposed amongst the documents, but as yet I have not yet unearthed them.

6. Soils, Geology and Land Use

6.1 Commenting on this topic the AoS limits its observations to the Sizewell site confirming they are largely *“located on agricultural Grade 4 and non-agricultural land that is not of high value for agriculture.”*

6.2 The ExA are asked to note (For the avoidance of doubt) this is in stark contrast to the valuable farmland being sequestered by the Applicant for the proposed SLR – with a total acreage not dissimilar to the Sizewell site itself.

Given the stated purpose of the Appraisal of Sustainability Report (AoS) at the beginning of this document and the materiality of acreage needed for works other than at the Main Development Site, especially the proposed SLR – the ExA are asked to consider the impact of this on the sustainability of the Sizewell site for the siting of the proposed power station and any subsequent augmentations.

6.3 The AoS identifies one geological feature as “*...the main geological hazard...*” which it postulates “*...is related to the high risk of compressible ground stability probably related to the local peat.*”

On the assumption that this ‘hazard’ requires rectification during groundworks, the ExA are asked to examine, what the projected carbon load and/or carbon released as a consequence of these works will be, as well as any subsequent impacts of any necessary remediation.

6.4 At Para 4.59 the AoS implies that as previously when “*Local mineral abstractions of sand and gravels have been used for previous phases of construction at the current Sizewell power station sites...*” *this may be the case with the proposed Sizewell C.*

However, the Applicant has alluded (more than once) to this not being the case, with the potential sourcing of some sand and gravels potentially being from as far afield as Norway. If this were the case, with over 12m tonnes of materials being imported to site, it may significantly impact the sustainability credentials of the proposal.

The ExA are asked to thoroughly explore the potential divergence of the Applicants proposals from assumptions in AoS to establish whether they are significant in dimension and the overall impact on the sustainability criteria of the site.

6.5 The ExA may be aware that the British Geological Survey assesses the risks of Compressible Ground Stability Hazards on the site, ranging from very low through to high risk.

7. Water Quality and Resources

7.1 The AoS confirms what residents in the locality are ever mindful of, specifically; that the Sizewell site is “...located in the Anglian River Basin District (RBD), one of the driest areas of England, because of low rainfall...”

Consequently, there is considerable concern about the potential long term damage that construction of Sizewell C may have on local water quality and supply. In the last few years localised supply was so short at Tiptree in Essex (south of Colchester) that an intervention by Essex and Suffolk Water was necessary to safeguard domestic supplies over commercial users.

The Applicant has made it known that they intend to obtain potable water via increased pipe capacity from Barsham (midway between Beccles and Carlton Colville) to the Sizewell site.

The ExA are asked to examine the robustness of the planned supply, recognising that it appears dependent on works that lay totally outside of the control of the Applicant, and that timely delivery will presumably be reliant on the planned provider submitting and receiving all necessary consents.

The ExA are also asked to seek clarity from the Applicant in respect to a ‘Plan B’ and the resilience provisions if the potable water supply provided is lost during construction.

8. Flood Risk

8.1 The AoS submits that “...the site is almost completely surrounded to the west, north and south by land within Flood Zone 3, ‘High Probability’.” adding that this means the Sizewell site is “at risk from coastal or fluvial flooding with an annual probability of flooding of >0.5% in any one year.”

Given the ongoing discussion in respect of flood defence provision observed during the Preliminary Meeting, it is difficult to see how the public could be reassured that the Applicant is across the detail.

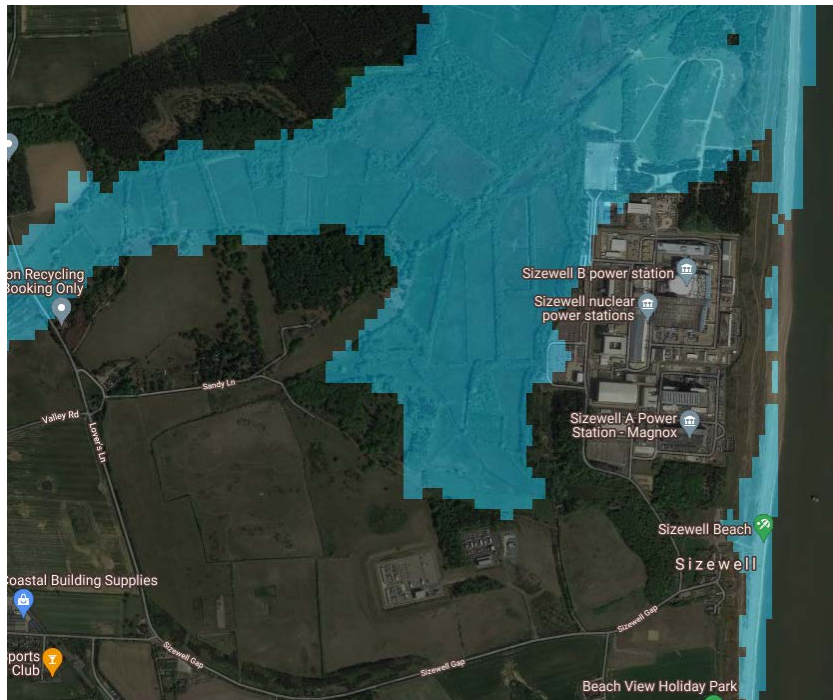
Moreover, an observer might conclude that a developed and agreed proposal that has been adequately modelled with the relevant data made available for the necessary scrutiny by the statutory body(s) is still some distance away, months past the Applicants submission of a dDCO.

Given this seemingly parlous position, the ExA are requested to maintain pressure on the Applicant to make available; complete, documented, substantive, modelled and tested proposals to the statutory consultees at the earliest opportunity.

8.2 Eleven years since the publication of the AoS, current forecasts indicate predictions made at the time (at 4.76 and 4.77) may be optimistic. The picture portrayed by Climate Central demonstrates

the potential for Sizewell A, B and the proposed C site to be partially ‘moated’ by 2050, as demonstrated in the following figure.

Therefore, the ExA are asked to thoroughly examine the most recent data regarding Climate Change impacts on the Sizewell site and the surrounding area prior to making their recommendation.



9. Overarching Appraisal Sustainability – Sizewell Site 2010

9.1 Local significant effects

The AoS recognises that *“Some of the effects identified are significant at the local level and are more appropriately addressed through the development consent process to the IPC.”* and continues *“The significance of such effects will be investigated at project level through the EIA process. These effects can often be minimised and controlled through careful design, working in accordance with good site practices, and managed through the use of Construction Environmental Management Plans (CEMPs), which will be agreed with, and monitored by, the environmental regulators and planning authorities.”*

The AoS also addresses effects that potentially have wider consequences, observing that *“Other identified adverse or beneficial effects are more significant strategically, as they are potentially of wider national, or even international, importance. These may include, for example, an effect on biodiversity of national and international value (see also the HRA Report for Sizewell).”* continuing

“Where an effect is considered to have significant implications for the wider region (in this case, the East of England)... this has been considered as a strategically significant effect.”

9.2 Air Quality

9.2.1 In making the assertion that *“There is potential for air quality impacts during the construction, operation and decommissioning stages of nuclear power stations.”* the AoS incorrectly asserts *“Sizewell is likely to have localised adverse effects on air quality in the short term (5-6 years) including dust and emissions from construction vehicles, Heavy Goods Vehicles (HGVs)...”* and continues, again incorrectly *“...and traffic movements generated by the estimated construction workforce of 4,000.”*

The ExA are already acutely aware that; these estimates are wildly inaccurate and have subsequently been revised by the Applicant, at Hinkley Point C and also within the Pre-Application and dDCO phases of the Sizewell C proposals development.

In reality, the period of impact can no longer be considered ‘short term’ as it is likely to exceed nine years, possibly extending to twelve years. Moreover, with the construction workforce now forecast to be at least double at circa 8,500+, the volume of traffic movements will increase similarly.

The ExA are asked to reflect on the gross understatement of key parameters by the applicant and the impairment this has on the level of sustainability of the proposals for a very small site, with the severely restricted access options being proposed.

9.2.2 At Para 5.6, the AoS highlights that *“...the traffic generated by the operational workforce has the potential to create longer-term adverse effects on air quality.”* reinforcing the assertion above.

The AoS continues *“Whilst important at a local level, impacts on air quality arising from construction and increased traffic movements during operation and decommissioning are not considered to be of strategic significance.”*

The ExA are requested to revisit this assertion and consider whether the impact of at least 12,000 additional traffic movements throughout Suffolk (and potentially neighbouring Counties) on a daily basis throughout “Peak Construction” should now be regarded as of strategic significance.

9.2.3 At Para 5.7 the AoS acknowledges there *“...is a small risk that increased concentrations of airborne pollutants or nutrients could have an adverse effect on adjacent sites of nature conservation interest.”*

In light of the significant increase in the workforce and their accompanying traffic movements (as opposed to the dimensions considered by the AoS), the ExA are asked to revisit the conclusions of the AoS and identify the increased risk to nature conservation generally and specifically in areas close to the A12, B1122 (and if approved the proposed SLR) i.e. the Simpson Fromus Nature Reserve adjacent to the A12 at Kelsale-cum-Carlton.

10. Biodiversity and Ecosystems

10.1 At Para 5.9 it is acknowledged that “Construction activities, such as earthworks, new buildings and infrastructure could lead to direct habitat loss, increased noise disturbance and impacts on air and water quality, which, in turn, could affect sensitive ecosystems.”

At Para 5.10 it is also acknowledged that there “...is the potential that activities may lead to detrimental effects on, and displacement of, important bird populations associated with the Minsmere-Walberswick SPA and Ramsar sites and Sizewell Marshes SSSI. This may include visual and noise disturbance from general construction and operation site activities, plus potential impacts from construction traffic and site lighting.

At Para 5.11 further acknowledgement is given to “The site boundary indicates a land-take from Sizewell Marshes SSSI. Construction and the presence of development are likely to lead to direct loss and fragmentation of priority terrestrial and coastal habitats (including habitats within Minsmere-Walberswick Heaths and Marshes SAC; and Sizewell Marshes SSSI; and Outer Thames SPA) and wildlife corridors for protected species. This may include direct loss of grazing marsh and coastal habitats, through the construction of a new access road and a potential marine landing station. Indirect impacts may also occur at four National Nature Reserves (NNRs) in the region. Within 20km of the site.”

In combination, these three paragraphs form a damning indictment of the proposal to build one (of two) of the largest nuclear power stations in such close proximity to exemplars of the UK’s conservation efforts.

Were the dDCO to be approved by the SoS, that single act would erase over fifty years of concerted effort to turn around some of the ravages of the UK’s post ‘industrial revolution’ era.

Consequently, the ExA are asked to consider the immense risk facing UK and migratory species that enjoy the security and tranquillity afforded by the Suffolk Coast and Heaths AONB, RSPB Minsmere and the surrounding agricultural area; should the ExA choose to recommend that the SoS approve the Sizewell C dDCO.

10.2 On a more positive note, the AoS also confirms that *“There will be a need for the developer to avoid or minimise such losses and disturbance to protected species through careful site layout, design, routing, location of the development, associated infrastructure, and construction*

management and timings.” noting “There is potential for habitat creation within the wider area in order to replace lost ‘wet meadows’ habitats of the Sizewell, but it may not be possible to fully compensate for losses of this habitat. The developer will therefore need to develop an ecological mitigation and management plan to minimise the impacts.”

It is questionable whether the dDCO demonstrates enough effort having been expended in identifying appropriate ‘avoidance measures’ rather than mitigation and compensatory actions.

Specifically, there are significant question marks regarding the Applicants; construction management plan, the timing of activities to avoid sensitive periods as well as ecological mitigation and management plans.

The ExA are asked to probe the validity of these proposals, thereby increasing the overall level of ‘harm avoidance’ in preference to mitigation and management.

The overriding principle being, it is better (and less expensive!) to ‘design out’ the detrimental impacts of projects, rather than having to become a leading expert at vindication.

10.3 At Para 5.14 the AoS highlights *“Cooling water abstraction may impact on fish species as the coastal waters adjacent to the site are important and prosperous fisheries for a range of commercial species.”* and advises *“The incorporation of fish protection measures within cooling water intake/system design will therefore need to be secured to safeguard the marine environment.”*

It continues *“Discharge of heated waters into the North Sea may affect aquatic ecology but further studies by the developer are necessary to determine impact.”* and *“Increased boat activity in the Outer Thames Estuary SPA related to a marine landing station may also impact aquatic ecology but again further studies by the developer would be required to determine the impact.”*

At Hinkley Point, C EDF is currently seeking to remove the Acoustic Fish Deterrent [AFD] from the range of measures previously agreed as part of fish safeguarding.

The ExA are asked to ensure that suitable safeguards (identified and agreed with the appropriate statutory consultees) are inherent to any agreed resolution for the proposed Sizewell Site development.

10.4 At Para 5.15 the hydrological context of the Sizewell site is linked directly with the Sizewell Marshes SSSI, raising the issue of pollution into the watercourses throughout the life cycle of the proposed power station. It is notable that in the opinion of the author(s) of the AoS, whilst *“Risks would be minimised and impacts avoided through safe operation and monitoring procedures.”* they don’t state risks can be eliminated.

10.5 In concluding they also raise the issue of the water table of the Sizewell site and the lack of clarity in respect to the likely impact on it of the proposed development.

It is assumed that the ExA (and the relevant Statutory Consultees) have or are in the process of obtaining satisfactory agreements with the applicant on issues relating to the hydrology of the Sizewell site and its interconnected neighbours. If this is not the case, it is hoped that the ExA will ensure these issues are addressed during the examination.

11. Climate Change

11.1 At Para 5.19 there is recognition that there will be *“Short term increases in greenhouse gases during the construction and decommissioning phases of a new nuclear power station... outweighed by the savings in overall emissions during the lifetime of the facility compared to fossil-fuel powered stations of equivalent output.”*

11.2 However, at Para 5.20 it is also recognised that *“Given the relatively remote location of the site and the lack of sustainable transport links, a new nuclear power station at Sizewell may result in increased emissions from the transport of goods and labour throughout the construction, operation and decommissioning phases. However, there is some potential for the developer to promote increased use of public transport through provision of appropriate transport links.”*

The ExA are requested to explore the extent of the Applicants promotion of increased use of public transport during the initial construction, operation and decommissioning phases and to establish why wider integration was not undertaken or augmentation of existing capability was not considered i.e. trams on the Leiston Branch Line or an overhead cable car between Saxmundham and Leiston as a tourist legacy option, possibly with a station at the SZC site Visitor Centre to enable longer term reductions in traffic movements and wider use during regular maintenance and outages.

11.3 Additionally at Para 5.21 the AoS outlines the requirement for a power station at the Sizewell C site to incorporate *“...carbon emission mitigation measures including; sustainable design, sustainable and low carbon technologies and transport, and potential increased investment in public transport and renewable energy services infrastructure.”* much of which, appears to be absent from the dDCO.

12 Communities: Population, Employment and Viability

12.1 Paras 5.23 and 5.24 play out the usual scenarios regarding large scale developments potentially bringing both positive and negative impacts to the local area, touching on employment, in-migration, economic, community cohesion, traffic and pressure on services and infrastructure.

12.2 Additionally at Para 5.25 an assertion is made about the uncertain effect of a strategic regional impact on demand for construction workers and the potential for it to *“...lead to a shortage of local construction workers to meet the needs of other industries. Such pressures would increase if the construction phase were to coincide with other major projects in the sub-region, for example, the decommissioning of the existing Sizewell A reactor.”*

This was certainly the experience during construction of Sizewell B with local businesses losing skilled workers and residents unable to locate tradesmen.

Now however, with two concurrent dDCO's for renewable projects, several potential interconnect projects 'on the blocks' and a major housebuilding commitment from East Suffolk Council extending through to 2038 yet to be delivered, it seems reasonable to assume that the local workforce won't stretch!

The ExA are asked to reflect on the likelihood of this during their examination and prior to making their recommendation to the S.o.S.

12.3 Para 5.3 confirms the prognosis, hypothesising that *“A potential negative effect of regional significance is the project leading to a shortage of local construction labour available to other industries.”*

13. Communities: Supporting Infrastructure

13.1 Despite the traffic analysis undertaken by the Applicant, the AoS confirms what every Coastal Suffolk resident and business knows only too well; *“Local villages (on the A12) currently suffer from heavy traffic flows, particularly heavy goods vehicles and this leads to problems of community severance, noise and other quality of life concerns. continuing “This is considered to be a local effect, and **will require further assessment at detailed planning stage** were the site to be developed.”*

13.2 At Para 5.32 this issue is developed stating *“There could be effects on national road infrastructure through increased congestion and disruption of traffic on some of main regional routes (for example the A12 and the A14). These effects will be most prominent during the construction phase, but may also have impacts during the operational and decommissioning phases. However, these issues are primarily localised and can likely be mitigated, provided the design includes transportation management plans, green travel plans and consideration of alternatives to road for the transport of large loads (for example, transport by sea). Nevertheless, further studies should be undertaken by the developer.*

The ExA are asked to thoroughly examine the issue of traffic on the A12 and the surrounding road network prior to making their recommendation to the S.o.S. It is essential to the long term viability

Continues...

...Continued

of Coastal Suffolk communities (whether or not the dDCO receives the go ahead), that the traffic issues be thoroughly and objectively assessed and quantified, enabling the full impact of seasonal variation occasioned by visitors, tourists and day trippers to be understood and built into all future consideration of significant developments in the locality.

14 Human Health and Well-Being

14.1 For the avoidance of doubt, comments on Radiological issues are not made in this document, primarily because of the multiple layers of statutory regulation, monitoring and management operating in the UK.

14.2 However, this should not be interpreted as support for the construction of a “...unusually large and complex Application...” for a two reactor nuclear power station on the Sizewell site.

14.3 At Para 5.47 the AoS once again highlight that the “...*presence of, and more particularly the construction of, a new nuclear power station at the Sizewell site may increase community disturbance to some degree. Such disturbance may include noise and vibration, dust in the construction phase and increased traffic in all phases.*” and continues “...*Potential traffic issues in all the project’s phases can be mitigated through the adoption of a transport plan aimed at minimising community disturbance whilst also promoting ‘green’ travel.*”

The ExA are asked to reflect on foregoing comments and those made in my complementary paper entitled “Sustainable transport in the Sizewell C Project” and consider whether the Applicant has been sufficiently diligent in understanding the breadth and complexity of the issues that their traffic volumes will have on Coastal Suffolk.

The ExA are also asked to review all the transport plans being proposed by the Applicant, and reflect on the proposed steps to; materially reduce “disturbance” to communities on, or within 5km of the A12 and actively promote ‘Green Travel’ modes over car, motorcycle, etc. for Sizewell workers.

14.4 At Para 5.49 it is advised that “Construction noise will arise from plant/activity and transportation sources...” and “...will be variable and transient in nature and will need to be mitigated by the use of good construction practice, regulation and timing of construction operations, the use of noise controlled plant and equipment and noise and vibration monitoring. These would be strategically managed through the construction management plan procedures.”

14.5 It is acknowledged that some construction is noisy and that some activities and machinery can be noisier than others. However, the experience of residents at Hinkley Point demonstrate that the Applicant has not been effective in reducing construction noise to their satisfaction, quoting; having

to wear ear defenders to enjoy the amenity of their own gardens, being disturbed by construction activity during the night, light and vibration disturbance as well as noise throughout the day, the fitting of triple glazing and still finding that inadequate, etc.

Consequently, the ExA are asked to seek clarification from the Applicant on what specific learning points from Hinkley Point C they will be carrying through to the Sizewell site in order to reduce the impact of construction on residents in Coastal Suffolk.

It is noted that night time disturbance and disrupted sleep patterns are recognised as potentially debilitating and detrimental to both the physical and mental health of children as well as adults.

14.6 At Para 5.9, whilst recognising that noise from a nuclear installation in operational mode is relatively low to other industrial processes, the AoS identifies the opportunity to avoid some of the residual noise through careful layout and design.

The ExA are asked to examine the degree to which the design being proposed by the Applicant has sought to reduce the level of noise generated when the power station is in operation.

15. Local Health and Recreation

15.1 At Para 5.50 the AoS identifies potential negative impacts *“...for example provision of adequate healthcare services to the local community during the construction phase...continuing It is recommended that the potential effects on health and well-being of the population (not covered by specific regulations) are considered by a developer proposing to develop a new nuclear power station on this site.”*

This is a particularly important consideration in light of; the closure of the last Dental Practice in Leiston in May 2021, the acute problems of recruiting and retaining GP's in Coastal Suffolk and the high demographic bias towards 50+.

The ExA are asked to examine the potential crisis that could arise through the influx of the planned workforce and associated families into the locality and the steps being taken by the Applicant to mitigate the risk. If confirmed necessary by the ExA, a Health Impact Assessment should be undertaken (as per Para 5.51).

16. Cultural Heritage

16.1 At Para 5.60, summarising potential impacts on Cultural Heritage the AoS appears almost dismissive of potential the threat to Coastal Suffolk's cultural inheritance stating *"There is potential for adverse setting impacts upon SAMs, Conservation Areas, Listed Buildings, historic landscape and historic townscapes. There is also potential for adverse physical impacts upon significant buried archaeology."*

16.2 The appropriate mitigation suggested by the AoS appears to be *"...these may be mitigated to some degree by appropriate facility location. Further detailed assessment at project level, possibly through the provision of an integrated landscape, heritage and architectural plan, will be required."*

The ExA is asked to closely scrutinise the efficacy of proposals being brought forward by the Applicant to ensure that cultural heritage is appropriately safeguarded during all works associated with the Sizewell C power station (not just the Main Development Site). This is essential in order that irreplaceable landscapes are not lost to the bulldozer, species are not eradicated through expediency, buildings are not impacted by acts of thoughtlessness and damage is not sustained to assets recognised (in the UK and/or Internationally) as requiring safeguards.

Cultural Heritage is not a commodity available at a supermarket, it comprises items that lay beyond 'value', items that provide the context for the area, its people and the space it occupies.

17. Landscape

17.1 At Para 5.61 the AoS addresses the issue of impact on the landscape character. As the AoS solely concerns itself with the Sizewell site in this respect, it makes no comment on other 'associated' developments that perhaps have as significant and/or potentially greater impacts on their local landscape character; primarily two park and rides, the proposed Sizewell Link Road, the proposed two villages bypass, etc.

17.2 On one level this might seem just, however when a proposal has significant detrimental impacts elsewhere, for them to be ignored seems totally inappropriate as sustainability extends beyond the front gate of the proposed 'main development site'.

In considering the Applicant's proposal, the ExA are asked to consider the cumulative impact on the landscape character of Coastal Suffolk, being cognisant that the burgeoning leisure industry is reliant on the setting it provides for; tourism, holidaymaking, day trippers and a myriad of leisure pursuits.

17.3 In respect to the 'main development site' itself, the AoS identifies *"In combination adverse effects are likely to arise from potential new raised roadways and access connections to the rail head and potentially new associated transmission lines/ grid connectivity.*

It also observes that "The new power station will be seen within the context of the existing power stations, before decommissioning. However, given the likely scale of the development there are likely to be some long lasting adverse direct and indirect effects on landscape character and visual impacts on the AONB, within which the nominated site lies, with limited potential for mitigation. Detailed work at the EIA stage will need to consider landscape character and visual impact.

Recognising the Sizewell site is the second smallest available site in the UK (See Figure on next page), and that the *"unusually large and complex dDCO"* being brought forward by the Applicant is the equal largest nuclear power plant proposal (with Hinkley Point C) in the UK for the foreseeable future. It must be assumed that the options for mitigating the intrusiveness of the proposal are minimal, if any.

In which case it has to be questionable whether the Sizewell site is suitable for a power station of the scale proposed? A point presumably the ExA will consider before making a report to the S.o.S.?

17.4 At Para 5.63 it is observed that *"there is likely to be a noticeable deterioration in local views, which would not be able to be fully or effectively mitigated, including, in particular, those effects arising from the main power station buildings, some of which could be potentially up to 70m in height."* And concluding at Para 5.65 that *"Further detailed assessment at project level, possibly through the provision of an integrated landscape, heritage and architectural plan, will be required."*

As indicated previously, the ExA is asked to examine the opportunity for an integrated landscape, heritage and architectural plan encompassing the proposed bypasses (i.e. Sizewell Link Road including the Theberton bypass, and the Two Villages bypass)

18. Water Quality and Resources

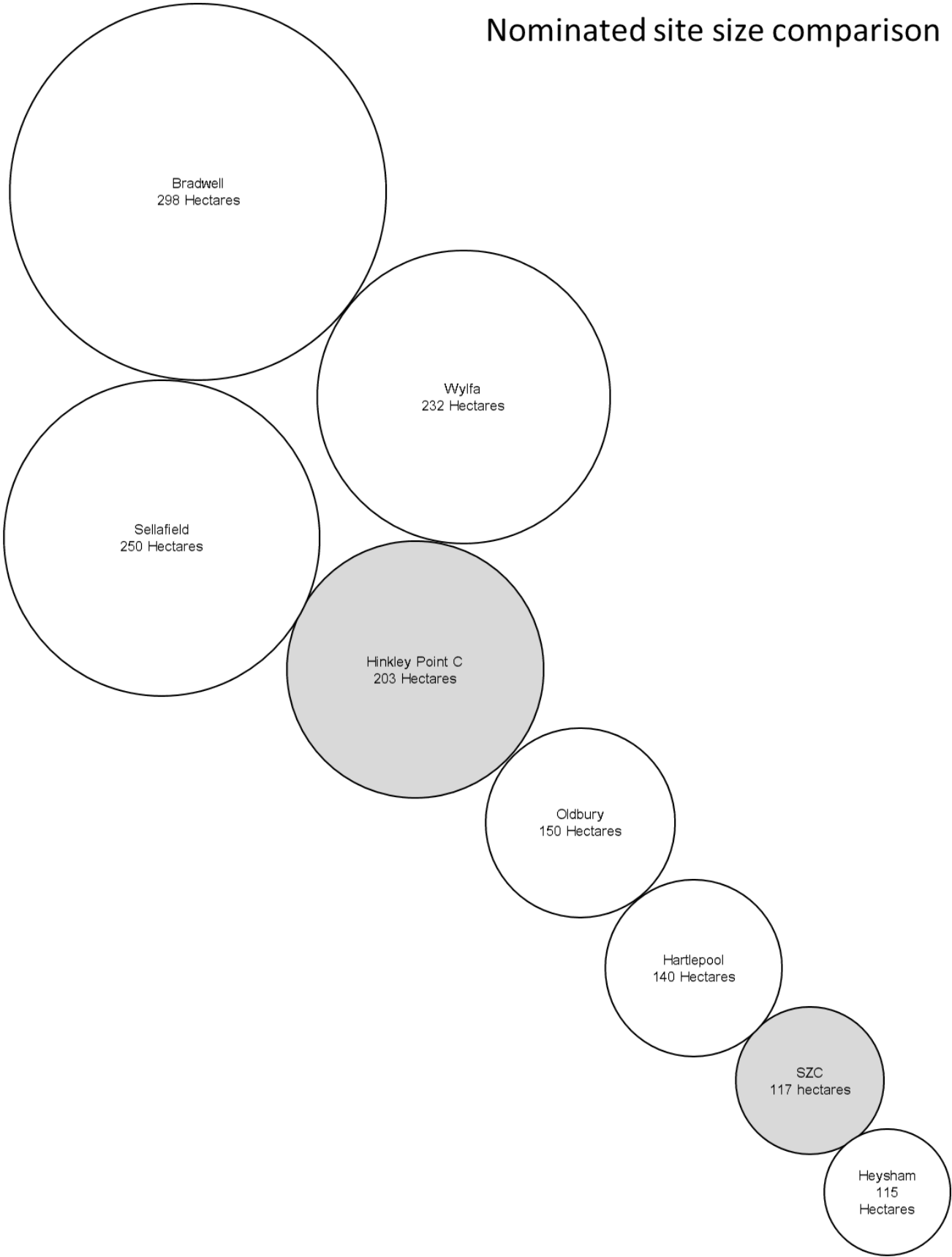
18.1 Whilst concerned about the local issues of; rivers, potable water availability, coastal stability and the marine environment, the author has neither the knowledge nor expertise to enable them to make an informed comment on these issues, with the exception of;

a] Para 5.74 - a construction period of 10 years barely qualifies as a *"short-term"*

b] Para 5.75 – *"...long-term impacts on water resources..."* surely need addressing within the DCO?

c] Para 5.76 – *"...adverse impacts...surface water features..."* surely need addressing within the DCO?

Nominated site size comparison



19. Flood Risk

19.1 Whilst concerned about the local issues of; rivers, flooding and the marine environment, the author has neither the knowledge nor expertise to enable them to make an informed comment on these issues, with the exception of;

a] Para 5.81 – assertion regarding the siting of vulnerable parts in areas of low flood risk to avoid extensive mitigation does not build confidence!

b] Para 5.82 – *“To mitigate against the risk of the site becoming isolated by flooding...”* feels too esoteric!

Submission ends

IKH Galloway

[Redacted signature]