SIZEWELL C DEVELOPMENT APPLICATION

NNB Generation Co (SZC) Ltd: EN010012 WRITTEN REPRESENTATION BIODIVERSITY PROTECTION ISSUES.

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Contents

- 1. AONB Access road: protection of biodiversity from permanent operational impacts of roads and road traffic.
 - 1.1 Design of wildlife road barriers and underpasses
- 2. Use of the mitigation hierarchy and assessment of biodiversity loss.
 - 2.1 Measuring and managing biodiversity loss.
 - 2.2 Monitoring and a credible 50 yr feedback mechanism for biodiversity
- 3. Quality Standards in implementing practical habitat and species management activities and legal considerations.
 - 3.1 Preparation of habitat to a suitable state for reptile release.
 - 3.2 Catching and translocation of reptiles.
 - 3.3 Legal considerations regarding species.
 - 3.4 Gross shortfall in loss of beach habitat communities
 - 3.5 SSSI habitat and species losses: coastal fenland
- 4. Consultation and communications.
- 5. Annexed supporting information

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About the author

Tom Langton is a professional ecologist and UK-based wild habitats and species conservation specialist, living near Halesworth in East Suffolk. He has authored, co-authored and edited hundreds of reports, scientific papers, conference proceedings, book chapters and books (1, 2) over the last 45 years (1974-present). He has an honours degree in Ecology from the University of East Anglia (1984) where he was awarded the UEA Michael Graham prize.

After 6 years of voluntary work for wildlife charities, he became the first honorary conservation officer of the British Herpetological Society Conservation Committee, involving sand lizard, smooth snake and natterjack toad protection work. After four years working in the voluntary sector including extensive survey and management work on all 12 native UK species across Britain, from 1987 he established and still runs as owner-Director the consultancy Herpetofauna Consultants International Ltd. This is a freelance consultancy on protected species, habitat management (notably, in the UK, wetlands, grasslands, heathlands, coastal dunes and woodland) & in relation to especially development control work in England. He has worked as a paid advisor for local and national government, the Council of Europe (Strasbourg), the European Union (Brussels), across Europe (3) & the USA. From 1995 work broadened to include terrestrial and freshwater animal and plant species other than herpetofauna including plants, invertebrates, birds and mammals.

In parallel he was co-founder of *Froglife*, a charity concerned with mainly the widespread reptiles and amphibians and also of Herpetofauna Groups of Britain and Ireland (now ARG UK) a body addressing coordination, standards and methods. He has expertise in trapping and handling animals (4) for example has led training courses on the safe handling of adders in England, Scotland and Wales.

Since 1987 he has undertaken and supervised hundreds of surveys and evaluations to inform habitat enhancement and creation, capture and translocation of amphibians and reptiles at over 8,000 locations in Britain and advised on over 60 habitat creation and management projects involving reptile translocation. He conceived, advised on, co-edited and produced both the *Froglife* advice sheet on reptile survey methodology (5) and the HGBI guidelines on reptile mitigation/translocation best practice.(6), still standard references after 20 years. He has run conferences and contributed other publications on aspects of mitigation and translocation in the UK including that for the UK Joint Nature Conservation Committee (7). He is also a pond and small wetland creation and management specialist.

His expertise extends particularly to impact-mitigation of transport infrastructure, notably that of roads on small animals and has worked on research, mitigation planning, construction and post construction monitoring for multiple road evaluation projects for the Transport Ministries, County Councils and major road builders, also contributing case studies to UK Highway Agency Design Manuals (8). He has presented regularly to the IENE and ICOET international conferences (2015-2019) and in 2021 co-authored a best management practice guide for the Californian government on roadside fencing and road crossing passages for herpetofauna (9). He is a professional consultant for many protected UK species including bats, badgers, otter and water vole. He has been an expert witness in planning inquiries and hearings and for legal matters as expert witness in Magistrate, Crown, and High Court cases for over 35 years.

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- (8) Design Manual for Roads and Bridges. 2001. VOLUME 10 ENVIRONMENTAL DESIGN AND MANAGEMENT, SECTION 4 NATURE CONSERVATION. PART 6 HA 98/01, NATURE CONSERVATION MANAGEMENT ADVICE IN RELATION TO AMPHIBIANS. UK Highway agencies.
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Preamble:

We should recall what the Environment Secretary George Eustice said in recent weeks:

"Much of the UK's wildlife-rich habitat has been lost or degraded, and many of our once common species are in long-term decline....

"to actually reverse the downward trend we have seen in recent decades, we need to change our approach and we need to change it right now."

The EDF Sizewell website states.

"EDF wants Sizewell C to be an exemplar of how industry and environment can coexist peacefully when sensitively developed and managed."

It is quite shocking to read Natural England's statement on deficiencies in the SZC application. There is good reason to believe that the application is a threat to the requirements to protect biodiversity under S 40 of the NERC Act 2006.

Across the entire biodiversity proposals for the SZC application there is an insufficiency of analysis, of clarity in any specific goals and quality systems, of command-control operational methodology and of independent stakeholder engagement.

No overview and clear pathway to protection is made. It is as if this location is 'anywhere' in the degraded English landscape, with no regard to it being an AONB and of critical local, national, and international biodiversity importance.

Information supplied is piecemeal, fragmented, incomplete, often vague, and open to unaccountable failure. Resting upon some future charitable notion that biodiversity will be 'looked after', irrespective of real outcomes by a Trust.

Reference material to summary:

1. AONB Access road: protection of biodiversity from permanent operational impacts of roads and road traffic.

1.1 Design of wildlife road barriers and underpasses

There has been some kind of gross misunderstanding with respect to the total severance effect of the campus, car park and road areas on AONB wildlife that in place overlap in area. This may be because the impact is so huge and total, that it is mitigatable in the short term, during construction as opposed to later.

The entire perimeter of the campus car park and road area will need to be surrounded by deer and small animal fencing dug into the ground and with and overhang, to a specification that has not yet been provided or approved. This will separate development from habitat areas to help prevent avoidable death and injury of animals. To the north of the road, the campus site will, for a decade or so prevent wild animals from moving north and south other than at the disturbed platform area underpass.

There is a choice either to build the road underpass structures to their final specification at the start of development or to rebuild the road once the campus is no longer needed. This is not clear yet because the subject has received almost no attention by the applicant. The omissions also relate to issues such as:

- Bat and bird strike from vehicles by day and night
- Small non-flying animal death and injury from vehicles
- Noise, chemical and light pollution effects

It is absolutely imperative that the road design should cater for all forms of animal moving north and south across the permanent road within the AONB. This will make it safe for animals as well as road users. Humans have been killed in this part of Suffolk due to collision with wild birds and mammals.

It is my view that at least four wildlife passages capable of use by animals as large as red deer should be made at strategic locations between SZC and the edge of the AONB and at least one further installation beyond on the road towards Yoxford. Further details are provided at Annex 1. (SSSI crossing)

A complete underpass and barrier system proposal is missing from the application. This is incredible and a function of lack of oversight and forward

planning. The last-minute discussions regarding the SSSI underpass demonstrates the paucity of thought and application to the permanent impacts of the road.

In thirty years of practice I have never seen an approach so lacking in thought and detail anywhere in the UK on a major road construction project and especially for such a sensitive site.

This matter is also important because claiming roadside grassland as 'net gain' depends upon the extent to which it is fenced off. Barriers need to be placed at angles, so up to half of the land area is not usable by many animals and has low(er) value in net gain estimations.

2. Use of the mitigation hierarchy and assessment of biodiversity loss.

2.1 Measuring and managing biodiversity loss.

The applicant should have hired a university or other expertise (as was done with Sizewell B) to look at the fragile population dynamics and genetic issues regarding species depletion and severance of the coastal ecosystems.

Survival and recolonisation could have been measured and represented in both descriptive and model-based formats with projection of potential impacts and remediation. This could have been tied in with existing recovery aims and objectives for each habitat, rare animal, or plant, giving the applicant an opportunity to demonstrate proactive contribution to the future survival, colonisation and persistence of habitat, micro-habitat, community, and species.

Instead, we have a defensive application, looking at bare minimum statutory obligations on a piecemeal basis as if this were a location anywhere in the country of no special value and un-interrelated parts.

The defensive approach taken by the applicant is wrong and by virtue of its size scale and permanence in my view may be unlawful under current legislation, irrespective of the merits or otherwise of the approaches suggested for individual species and habitats. There is a dire need to think again with a widely supported and proactive application.

2.2 Monitoring and a credible 50 yr feedback mechanism for biodiversity

All there seems to be currently, are obligations that would be linked to basic statutory licensing and the briefest reference to some future charitable trust. There is no evidence or comfort whatsoever that a joined-up biodiversity prescription exists that can be monitored and checked along the way. That would be subject to delivery milestones and with public engagement and comment at clearly defined stages. The application is bare in these respects and should not be approved.

There should be a most detailed and comprehensive programme bringing together all aspects of biodiversity protection, now, during construction and post-construction. A 'greenwash' image is all that has been offered to try to reassure people in a highly superficial manner. Habitat is dark green and development areas made to look small in pale grey to try to hide them.

3. Quality Standards in implementing practical habitat and species management activities and legal considerations.

For these matters, please see Annex 1: SIZEWELL C: LAST MINUTE CHANGES TO PLANNING APPLICATION BY EDF/SZC IN NOVEMBER 2020: (5th) CONSULTATION RESPONSE BIODIVERSITY PROTECTION ISSUES.

3.1 Preparation of habitat to a suitable state for reptile release.

In relation to the police matter and the enabling project at Coronation Wood, PC Simon Cain contacted me in May 2021 and offered to re-approach EDF and the nuclear police force with respect to a site visit to inspect the area. This regarding allegations of wildlife crime in the actions taken in relation to reptiles and bats over winter 2020/2021. The matter is still in-hand.

I am not in a position, to write further on more detailed aspects of this matter that I believe to be a crime in progress. Those visiting the area should be aware that it is a potential wildlife crime scene.

Preparing habitat and translocating animals properly is a matter of overriding importance. Compare the length and detail to which RSBP went about recovering heathland at the Minsmere reserve close to Westleton Pits. These are detailed procedures over many years, not quick fixes. What has been done to date at Sizewell is simply not fit for purpose. It is important that old habitat that has been managed in recent times is not confused with the large expanses of abandoned arable with cursory treatments, being promoted as acceptable.

At Studio fields and elsewhere, farmland have been sown with wildflower mix. But it should have been nutrient stripped and decompacted first. Effort to provide for Marsh Harrier and the huge reptile populations on and around the development platform are compromised and capacity to provide for these species highly limited as a result and likely to fail.

3.2 Catching and translocation of reptiles.

Until habitat is suitable reptiles cannot be translocated. At Coronation wood, the used of habitat destruction to 'disperse' reptiles has in my view been abused. Dispersal is a method used for very small areas where ample suitable area exists nearby, and numbers are low. This does not apply to the Sizewell situation where there are large numbers of several species over a very large area. The

SZC platform area is an 'open mosaic habitat of previously developed land' under Section 41 of the NERC Act 2006, a habitat of principal importance.

Normal planning applications would show where animals will be taken to and released and the schedule for safeguarding them. This is a very considerable undertaking with a substantial budget and a flexible programme may be needed but the stages and locations should be clearly quantified and mapped out with competent and coherent data based on expert study. Arrangement of enclosure and exclosure fences and traps to enable capture should be described and like for like change over the project duration mapped out and described.

There is no such approach made in the application. This is entirely outside the common good practice expected for planning applications and lawful compliance.

3.3 Legal considerations regarding species.

There are concerns that reptile habitat will be cleared and animals left to disperse and die in unsuitable or overpopulated areas nearby, as a substitute to normal good practice of adequate habitat preparation, proper trapping and relocation effort accompanied by detailed record keeping and reporting.

Of major concern is that the development areas contain significant populations of adders and their fate is of particular concern as they are increasingly rare and capable of giving a bite that can lead to health issues for humans and dogs. A dedicated adder management plan should have been produced and consulted upon at the outset and is missing.

It is not lawful to kill and injure reptiles that are partially protected by Schedule 5 of the Wildlife and Countryside Act 1981. Reasonable avoidance of this is laid down by best practice guidelines. The 'dispersal' approach followed by destructive search as used at Coronation wood is not lawful over such large and highly populated areas. It is not reasonable to displace animals rather than to take them to suitable alternative habitat and it is not lawful to try to dig them up with machinery before proper trapping and transfer methods have been exhausted.

With bats, it was not clear that barbastelle and other bats were not using the woodland to a greater extent than recorded. So much was accepted as a possibility. Checking potential roosting holes while chopping trees down in winter without a statutory licence is poor practice and unlikely to be accepted

for normal development project, where it is likely to result in prosecutions. It has been used *in extremis* for significant infrastructure projects (under NE 'Policy 4') but the felling of Coronation wood was not however granted as a part of the SZC development but as a standalone project. The rules have been bent.

3.4 Gross shortfall in loss of beach habitat communities

It may be that in recent weeks some concessions have been negotiated with respect to plants seed collection. But this is only a tiny part of the issue. Invertebrate and reptile interest is high and there are no coherent plans for beach destruction and restoration or compensatory effort along the cost for some distance over the decades to come until the beach is restored.

This is not just a big part of the reptile issue but a habitat issue as delicate lichen habitats exist on the beach. The restoration of beach habitats needs a detailed plan for consideration of a type that currently appears to be non-existent.

3.5 SSSI habitat and species losses: costal fenland

Fen Meadow loss in the Sizewell Marshes SSSI is a confused planning matter. The tiny and remote Benhall and Halesworth water meadow sites are all next to Sewage Works and nutrient rich catchment as are the pond digging attempts at Aldhurst Farm. Aldhurst Farm in any case was a project undertaken independently of Sizewell C (See Annex 2 with regards to consideration by the Council senior planner Mr P Ridley, in 2015)

The late (2020) EDF plans try to ship the problem to Pakenham, near Bury St Edmunds, a different geographic administration. This is bad planning practice. I visited Pakenham and found many issues with the choice. (Annex 3)

The applicant has missed the point in any case. It is the matrix of coastal fenland habitat in the Sizewell Marshes SSSI, of which fen meadow, wet woodland, clean water at varied depth and other habitats together provide for the SSSI Exceptional interest. The SSSI citation gives these as coastal fenland invertebrates (Annex 4).

In September 2019, the applicant refused to let me survey the for coastal fenland invertebrates across the habitats of the SSSI, targeted to investigate just

this point. (Annex 5) EDF have mistaken both the needs and process in mitigating biodiversity loss.

Further, the Aldhurst Farm project was billed in repeated EDF leaflets to local people as 'compensation' for loss of the SSSI. At a public meeting in Leiston I asked why no wet woodland was being developed for invertebrates.

Dr Steven Manning replied that wet woodland was 'too expensive to create' which seemed illogical and remained unexplained. It was asked why the road improvement around the existing culvert and otter fencing had not been built (enlarged and re-aligned) now (in 2015) that otters were being enticed to the new pools. "That is too expensive to do for now" came the answer.

Result as predicted; at least one otter subsequently killed on the road in the area also one or more badgers. Otters are a SSSI interest damaged in advance of the main project being approved.

In any case Aldhurst farm was too polluted from agricultural use to have been of much help. Other cleaner sites should have been considered, or Aldhurst farm properly nutrient-stripped first.

4. Consultation and communications.

A meeting with Jim Crawford project development director was held in October 2018. Mr Crawford heard all of the concerns regarding Aldhurst farm and reptile mitigation and pledged a full inquiry and that he would come back to us on with the environment team and with proposals and a road map for proper consultation and engagement. It never happened.

He left his job three months later and no one responded. That was in effect the end of any way to end the lack of stakeholder participation on biodiversity matters.

None of the points raised during consultations and exhibitions have been addressed.

5. Annexed supporting information

Annex 1. SIZEWELL C: LAST MINUTE CHANGES TO PLANNING APPLICATION BY EDF/SZC IN NOVEMBER 2020: (5th) CONSULTATION RESPONSE BIODIVERSITY PROTECTION ISSUES.

Annex 2. Communications with Mr Ridley of East Suffolk Council in 2015

Annex 3. Hydrological limitations of the Pakenham 'mitigation' site and potential river nutrification threat.

Annex 4. E-mail communications in September 2019 between Tom Langton and EDF representatives relating to critical matters in respect of SSSI habitat loss (invertebrates).

Annex 5. SSSI Citation for Sizewell marshes SSSI

Annex 1

SIZEWELL C: LAST MINUTE CHANGES TO PLANNING APPLICATION BY EDF/SZC

IN NOVEMBER 2020

(5th) CONSULTATION RESPONSE

BIODIVERSITY PROTECTION ISSUES.



18 December 2020

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ICOET 2019 Sacramento Presenter.

Contents.

Page references are those of the information posted to local residents, headed Community Newsletter, November 2020 and related supporting documents.

https://www.edfenergy.com/sites/default/files/szc-newsletter-fullversion-nov2020.pdf

1, Page 2. Reference to reptile habitat creation	03
2, Page 6. Environment	05
3. Page 7. SSSI Crossing	07
4. Page 8. Aldhurst farm	08
5 Page 9. Other changes	09
6. Reptile translocation generally	10

(cover photo – reptile exclusion fence at Kenton Hills with large gap)

1, Page 2. Reference to reptile habitat creation

The image shows a large expanse of grassland (Studio fields) suggesting substantial provisions for a sensitive species group (snakes and lizards) that will undergo massive upheaval and localised extirpation due to road, construction site and power plant development.

Studio fields areas have been sown with a grassland mix without the appropriate nutrient stripping required for a successful project. As with most if not all areas described as habitat creation, the land was also not de-compacted adequately after arable use. As a result, the sward tends towards neutral, the plants struggle in the highly desiccated topsoil and the more natural acid grassland and heath described will not be achieved. The area is likely to become overgrown with thistle, bramble and scrub, becoming a maintenance headache.

Further, instead of a detailed and sophisticated design of reptile habitat, with hibernation areas and good feeding capacity for them it appears that a simple gutter has been dug, filled with wood and chipping and covered over with turf forming a linear feature with hay bales that will rot and settle to ground level in a relatively few years. There is sporadic tree and shrub planting, some of which has died off or is struggling.

There does not appear to be a publicly available rationale, masterplan design or maintenance plan but provision on an informal ad-hoc manner. The area is suitable for native rodents, rats and deer especially but not reptiles and while being of some low biodiversity value, represents a massive unrealised opportunity that is currently described as specialised habitat provision.

These comments apply to the areas with the same treatment in and around Great Mount Walk. The mistakes have also been repeated within woodland clearance where areas felled have been left without ground topsoil stripping. As a result, woodland regeneration (seen at Kenton Hills and St James's covert for example) is constant and rapid with bramble and bracken creating an annual maintenance nightmare where the habitat is mechanically ground down or just left to return to thick bracken or woodland.

All these areas are either unfenced or fenced poorly with gaps under gates and due to lack of expansion provisions in the plastic fencing. Reptiles have colonised many of the excluded areas some of which are limited by shade and unsuitable habitat.

In effect this leaves little or no provision for reptiles to be released without high risk of death or injury and the project has become self-defeating due to poor control and implementation. This is either lack of specialist advice or inadequate carrying out of necessary actions over the last ten years or more. An independent investigation should be made because, for example there are very important and sensitive meta-population of

adders that could be severely damaged or destroyed should the development be granted permission. The work is far from the exemplar status claimed on notice boards.



Land West of Studio field, 'Lover's Field' view from gate south towards these c 5 year old sparse grassland on nutrient rich compacted farmland with fenced enclosures and linear gutters filled with decomposing organic matter.

2, Page 6. Environment

Studio fields and Aldhurst farm projects are described as being mitigation for habitat losses caused by the <u>temporary construction area</u>.

Aldhurst farm was previously described as compensation for SZC habitat losses but terrestrial habitat there has also not been treated correctly for priority Sandlings habitats to be developed (see 1. above). The wetland area has high nutrient loadings due to watercourse pollution from Leiston. Algal blooms can be seen in the photograph on page 8 of the newsletter even after several years of settling.

In fact the SZC temporary construction area is mostly farmland and plantation woodland and the measures are more likely to be due to habitat destruction for the extensive permanent road and large carpark construction on AONB habitats as well as the removal of the wildlife populations all over the extensive beach, dune and powerplant footprint.

The casual language used in the newsletter is reflected in the consultation documents and creates confusion in stakeholder groups. It makes communications and understanding with respect to what exactly is being proposed difficult or impossible. This was reported to the SZC/EDF chief executive in 2018 during a meeting at SZC offices in Leiston over previous stages consultation, with undertakings to address the matter that were never actioned. The same matters were raised at public meetings but also apparently ignored.

The overview maps shown on page 6 appear generous but are too small to show detail. The overall impression given is one of transition from arable use to 'green' use including woodland and 'dry Sandlings grassland'. However, if this is a reference to effectively abandoning nutrient-rich farmland with haphazard low-quality features, with low nature conservation/biodiversity value, then a species-poor environment is being proposed.

Again, this is no substitute for a comprehensive and comprehensible bespoke biodiversity plan with clear markers for the major protected habitats and species. The construction of a permanent main road is probably one of the most significant destructive force in the proposals (severance, fragmentation, and mortality impact of the Road Effects Zone, REZ) but is given only minor reference.

There is reference to a future Trust to manage the site and to rewilding. Rewilding has formed no part of the plans to-date that describe a far more controlled approach than rewilding, which is unlikely to work in this landscape for multiple reasons, not least its locally high recreational use and steep sided ditches. These kind of miscommunications on approach and precision confound the references to Biodiversity Net Gain calculations and may badly undermine them.



Example: SZC documents have an artists impression on the cover. The St James covert area currently looks nothing like the artists impression of a post-construction view (in circa 2035?) on the cover of the Sizewell planning application. To achieve this would require the removal of 95% of the trees currently present, to form effectively grassland with scattered mature trees. In reality this would mean removal of all or nearly all of the pine trees and the ground litter layer and retention of mostly deciduous trees at the density shown of around 35 trees per hectare/15 per acre. This would need to be done rapidly so the trees grow from now in manner capable of withstanding heavy coastal winds. Rather than as plantation trees to be later exposed by removal of surrounding trees when they would be unable to withstand coastal wind strengths. This is a further example of current ambiguity in environmental protection in the SZC projections.

3. Page 7. SSSI Crossing



The design shown does not appear to conform to Highway Agency standards for the importance of this AONB setting, and the species present, nor good practice. At least a further four additional crossings of this type, every 200 metres or so are needed to enable deer and other wildlife to cross under the road between SZC and the B1122.

The design shown is not wildlife friendly. It shows use of post and rail fence which is unsuitable. Deer fencing to prevent fatal vehicle collisions and accidents and constant wildlife deaths are essential in this wildlife rich area. Other specialist fencing for (for example) protected species such as bats, birds, otter, badger, hedgehog, reptiles and amphibians and many other species needs to be properly and fully designed prior to consultation and examination. This should be located back behind the construction line and in front of the passage entrances. It should be high quality, maintained and suitably angled towards the passage. As should the concrete wing walls of the crossing itself. The drawing only shows a two-lane road, whereas it will be four-lane for over 9-12 years. It does not show the 3-metre-high temporary baffle needed to protect aerial species during the construction period. It does not cater for all the bat flight lines.

Following the design work, it will be possible to identify the road and wildlife excluded embankments and land take and hence accurate figures for Biodiversity Net Gain/Loss calculations. Not to do so would make the current presentations invalid, so this is a matter of great urgency in advance of public examination. It formed a major element of Stage 3 and 4 comments but appears to have been overlooked yet again and apparently rejected according to these plans.

The passage is thought to be 47 metres long and 30 metres wide. Height appears to be at least 3 metres. Embankment as shown is perhaps 50 metres wide. This needs to be made clear. As above, the passages need to be designed properly for bats, otter, natterjack toad and snakes in particular following *population viability analysis* in relation to severance, inbreeding depression and other road related factors including interference with existing, draft or in-need Area Recovery Plans (e.g. the hoped-for outward spread of Natterjack toad southwards once the population establishes fully) that will otherwise be devastated and confined by the massive permanent AONB severance proposals for this main road.

As presented, the road network required for the development is grossly unaddressed in documents in respect of underpasses for animals between the SZC and Yoxford and elsewhere. There has already been withholding of the construction of an underpass with fencing at Aldhurst farm despite this being a condition of the planning permission. An otter and a badger attracted to the area after its agricultural abandonment has already been killed on the Lover's Lane, as predicted. This is arguably a breach of the planning condition and is an example of what can happen when apparently ill-conceived and de-minimis plans are implemented without proper care. Loss of further otters is arguably a police enforcement matter now as they are a feature interest of the SSSI, and the breach of planning permission becomes more obvious. There is some information that this maybe be done in 2021 but no clear commitment has been made.

Provision of ponds for amphibians is lacking, the Studio fields was previously identified as having natterjack toad potential. Movement of animals across the road in a safe way is an essential element of protecting the AONB.

4. Page 8. Aldhurst farm

Aldhurst Farm was a large habitat creation project commenced with planning consent that made it a standalone project from SZC and to be done whether, or not permission for SZC was granted. The problem with the area was nutrification from farming, however no nutrient stripping was done and so the indication of heathland creation was impossible. The water supply is equally nutrified as it includes discharge water not only from Leiston Town surface water but also from the sewage works making this a high nutrient system.

The project has established areas of reed bed and grassland of differing pH. This will have the effect of attracting some rare species such as otter and bittern but its contribution to SSSI quality habitats is severely limited. The crossing of a busy road without safe passage measures (as above) was a severe limitation flagged at the time but deemed to be too expensive. The legal context of this decision has not been investigated.

5. Page 9. Other changes

A large area of fen meadow is to be destroyed. Because the two sites at Benhall and Halesworth are too small and soaked in agricultural nutrients by virtue of their agricultural location and proximity to sewage farms, they are hence unsuitable. Further Natural England have now asked for a 9X habitat area/volume compensation package to be implemented. A location at Pakenham has been chosen in proximity to an SSSI where disruption to that SSSI has not been adequately described or addressed.

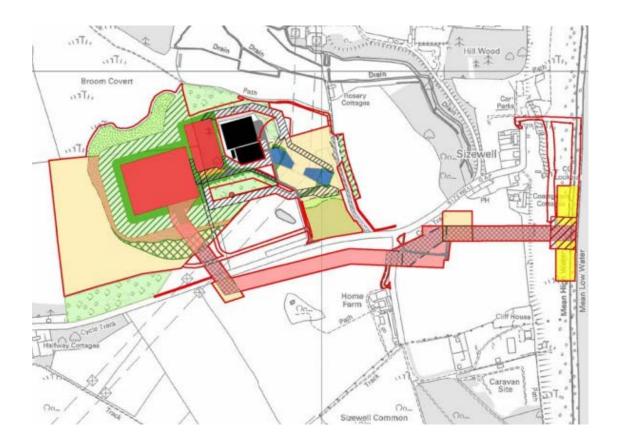
The concept that damage can be dealt with by doing something elsewhere has not been justified by an explanation as to why habitat cannot be created on a part of the Sizewell estate. Is it just the cost that is off-putting to the developer? The matter is a serious one because the invertebrate and plant interest is of international importance.

Far too little information is available to make informed comment on the proposals in these rushed late plans. All the locations involve changing existing habitat by creating artificial bunding to try to form trapped water that is uncharacteristic of the landscape and that have their own invertebrate value that will be lost.

The idea of recreating conditions for the SZC species assemblage is far-fetched. Such actions will deplete their value to existing local species and create the need for further mitigation to compensate for those losses. This is destroying one habitat to create another, as opposed to habitat creation and the process is questionable. Any net gain calculations will have to take these further losses into account.

6. Reptile translocation generally in and within the immediate proximity of the SZC application area.

The SZC planning application are includes Coronation wood and Pillbox fields. Use of these areas is an integral part of the SZC enabling works and in a practical sense cannot be separated as a phase of the proposed development to be examined. Pillbox fields is already a grassland area with reptiles present. These areas are close to the Galloper development area which is a cumulative impact that intrudes on the AONB.



The past ecological surveys of Coronation wood demonstrated the presence of all four of the more common native reptile species; adder Vipera berus, grass snake Natrix helvetica, slow-worm Anguis fragilis and common lizard Zootoca vivipara. These species of reptiles are protected under the Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way Act 2000. It is an offence to intentionally or recklessly kill or injure them.

Developers must recognise such interest and seek approval for measures to ensure compliance with this legislation.

Information received indicates that loose surface structures within the woodland were removed in 2019. 'Refuge piles' were built to the south of the woodland to 'act as a receptor' although the extent of capture and exclusion has not been adequately described.

Indications are that there was no trapping-out of the area but just handsearching and removing any 'suitable refugia' although it is not clear what this means. These will be 'safeguarded until Spring', the implication being that tree felling has taken place with the knowledge that reptiles may be present under the woodland canopy (torpid overwintering) while heavy machinery is used. The precaution seems to be the keeping to narrow corridors with any heavy machinery, but this is not an approach that is endorsed in the guidelines referred to in the application (HGBI guidelines) and appears to be an attempt to avoid the normal trapping and translocation process prior to habitat destruction. In such circumstance displaced animals are unlikely to survive unless the surrounding habitat is shown by survey to hold adequate capacity, including that arising from habitat enhancement. There are further concerns regarding damage to reptiles and reptile habitat on pill box fields for soil storage.

The original planning conditions (DC/19/1637/FUL) that specify that the developer has to be mindful of the provisions of the W& C Act1981 and adherence to the matters set out in EDF's Environmental Statement.

This refers to reptile surveys in 2012 and 2015 and their recommendations. The 2012 survey was presence/absence only and the 2015 survey (now out of date) was carried out in late season, indicating <u>further surveys</u> would need to be carried out in Apr-Aug to get more <u>accurate results</u>. The April 2019 Environmental Statement (ES) refers to very old surveys where details are not provided on survey method or findings beyond dot maps.

The evidence seems to be that there was no proper reptile population survey done prior to habitat destruction and crushing of surface layers with the additional hazard of exposing previously sheltered ground to winter 2020/21 weather including waterlogging, but it is unclear if the recent actions were conducted under mal-practice or were even unlawful.

A police investigation has been requested but officers have not been in touch since the events and an FOI request has been made to East Suffolk Council. A police officer advised against the writer approaching contractors on site to alert them to potentially unlawful actions being taken. Their principal planning officer at ESC (Mr Ridley) has suggested contacting EDF on a dedicated landline but this was on answerphone and the message left has not been responded to for several days. An invitation to SZC to attend a site inspection for clarification has not been taken up.

How these matters reflect upon the wider reptile strategy is unclear ,but should be clarified in time for the postponed examination. However, they do appear consistent with the lack of clarity in many elements of the SZC application.

Environmental Statement extract: Vol 1, Chapter 6: Terrestrial Ecology and Ornithology

Reptiles

- 6.7.5 All reptile species are protected from killing or injury under the W&CA (Ref. 6.6). A reptile mitigation strategy would be developed that would set out the habitat clearance and reptile mitigation requirements for both the stockpiling area, Coronation Wood and Pillbox Field. It is therefore recommended that, prior to the commencement of construction, a suitably experienced ecologist conduct an inspection of any potential reptile refugia, after which all refugia would be removed.
- 6.7.6 Reptile mitigation for displacement and removal would be conducted through a combination of habitat manipulation and a phased vegetation clearance approach. Any clearance of trees or hedgerows would also be undertaken in accordance with mitigation for nesting birds (see below).
- 6.7.7 Prior to full vegetation clearance, it is important to ensure the area is unsuitable for reptiles. There are two options for how to proceed with vegetation clearance, the suitability of which is to be determined based on if the vegetation clearance is to take place during reptile hibernation period or not.
- 6.7.8 Within Coronation Wood, a phased vegetation clearance programme (see paragraph 6.7.8) would be conducted during the reptile active season (April to October) of the scrub habitats to the west and south of Coronation Wood in order to clear the surrounding area of reptiles. Reptile fencing would then be installed around the perimeter of Coronation Wood, also during reptile active season. This would prevent reptiles from moving back into hibernate.
- 6.7.9 Following this, in all areas (stockpiling area, Coronation Wood and Pillbox Field):
 - all hibernacula would be carefully removed by hand.
 - Option 1: A phased vegetation clearance to displace reptiles would take place during the preceding reptile active season (April to October):
 - Cutting of vegetation to a height of approximately 100-150mm by an experienced sub-contractor. The area would then be left for a minimum of 24 hours to allow any reptiles to disperse. Cutting of vegetation during late

Continued/.

- February to August inclusive must include appropriate nesting bird checks and mitigation.
- The next stage, vegetation clearance to bare ground, would then take place.
 The area would then be left for another 24 hours.
- Option 2: Vegetation and reptile displacement would commence during reptile hibernation period (October to March):
 - there would be the cutting of vegetation to a height of approximately 100-150mm by an experienced sub-contractor;
 - the next stage, vegetation clearance to bare ground, would not take place until after the reptile hibernation period (April to October);
- after each vegetation removal, all arisings would be collected and removed to avoid creating additional constraints;
- vegetation would be maintained in an unsuitable condition (bare ground) until
 works commence. Bare ground would also be maintained throughout construction
 works to continue to discourage reptiles from recolonising the area; and
- all works would be overseen by a suitably qualified ecologist.
- 6.7.10 As part of the primary mitigation for Pillbox Field, a 10m buffer would be maintained with the north, east and south boundaries (see Section 6.5). Within this buffer area, suitable reptile mitigation measures would be implemented. The vegetation would be allowed to grow long, and scrub to develop, and reptile refugia/hibernacula would be installed. This mitigation would be in place prior to site clearance (see next paragraph). In addition, there will be coppicing of some trees along the eastern edge of Pillbox Field to create a more varied edge with arisings used to create log piles and refugia around the edge of the field. A 5m width of grassland from the construction boundary will be mown at intervals throughout summer whilst construction of the Outage Car Park is underway, to maintain a shorter sward and further discourage reptiles from accessing the construction site. The remaining grassland within the field and outside the construction area would be unmown and allow to develop into longer rough grass.
- 6.7.11 On the slopes north and south of Coronation Wood, a proportion of the existing bracken will be sprayed to allow grassland to develop and create a mosaic habitat. Log piles will also be created to provide hibernation features.
- 6.7.12 No reptile fencing is proposed within the stockpiling area or Pillbox Field. In order to ensure the absence of reptiles from these areas, the vegetation would be managed to bare ground or as a very short grass sward. All storage bunds would be managed so that they remain unsuitable to reptiles. All locations would be regularly inspected by a suitably qualified ecologist to monitor continued unsuitability for reptiles.
- 6.7.13 Following the displacement exercise (see paragraph 6.7.8), a destructive search and topsoil strip during the reptile active season (April to October) would be conducted under the supervision of a suitably qualified ecologist. Any reptiles found during vegetation and topsoil clearance would be relocated to suitable habitat outside the construction area and beyond the exclusion fencing.
- 6.7.14 Details of the reptile mitigation and enhancement measures would be presented in the CEMP, to be developed by the appointed contractor.

ES extract: Vol 1, Chapter 6: Terrestrial Ecology and Ornithology



Coronation wood prior to destruction commencing in December 2020

Annex 2. Communications with Mr Ridley of East Suffolk Council in 2015

From: Philip Ridley <a>@eastsuffolk.gov.uk>

Sent: 12 February 2015 17:20

To: 't.langt@virgin.net'

Cc: Lisa Chandler @eastsuffolk.gov.uk>

Subject: DC/14/4224/FUL - aldhurst farm

Dear Mr Langton,

I have been forwarded your e-mail correspondence relating to the above by the case officer Lisa Chandler. I am fully aware of all the matters relating to this application having been involved in many of the pre application discussions.

I have considered your previous emails and am of the opinion that application reference no. DC/14/4224/FUL is a stand-alone application for habitat creation and is to be determined by this Council acting as Local Planning Authority, on that basis. As confirmed by the Council's Screening Opinion (published November 2014 and available on our website), the scheme is not considered to constitute a 'Schedule 1 development' under the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (SI No. 1824), but is considered to constitute a Schedule 2 development. The question of whether a development falls within Schedule 1 or 2 must be answered in relation to the development applied for and not anything contemplated beyond that (R (Candlish) v Hastings Borough Council [2005] EWHC 1539 (Admin)).

That the proposed habitat creation project is a stand-alone scheme, intended to be implemented and retained regardless of what does or does not happen with the Sizewell C Project in due course, has been made clear in the application documents, and in particular in the Planning Statement. When considering likely significant impacts, including cumulative impacts, the Courts have distinguished between such stand-alone schemes which can go ahead irrespective of planned future proposals, and those which on the facts can only be treated as integral parts of some larger development. The former can and should appropriately be assessed and determined on their own (see Bowen-West v. SSCLG [2012] EWCA Civ 321; [2012] Env. LR 22 per Laws LJ at paragraphs 22-26 and 33-35.

The proposed habitat creation scheme is being considered as an independent application in relation to adopted planning policy. There is no judgement with regard to compensation being made by this Authority in determining the proposal. As such, it is considered that we have carried out all the necessary consultation as required by this Council in carrying out our statutory duty as LPA. Should you wish to submit further representation for consideration in the determination of this application, then I would ask that you submit by midday on Tuesday 3rd March 2015, in order for your representation to be considered at DC Sub-Committee taking place the following day.

Yours sincerely,

Philip Ridley BSc (Hons) MRTPI
Head of Planning & Coastal Management
Suffolk Coastal and Waveney District Councils

Tel:

@eastsuffolk.gov.uk

Suffolk Coastal and Waveney District Councils are working as a partnership and all emails received from us will use the @eastsuffolk.gov.uk email address

SZC LANGTON WR

 $\frac{www.suffolkcoastal.gov.uk \mid www.twitter.com/suffolkcoastal}{www.waveney.gov.uk \mid www.twitter.com/waveneydc}$

Annex 3. Hydrological limitations of the Pakenham 'mitigation' site and potential river nutrification threat.



 $Rough \cdot guesstimate \cdot of \cdot how \cdot land \cdot drains \cdot run \cdot in \cdot the \cdot proposed \cdot Pakenham \cdot compensation \cdot site \cdot Subject \cdot to \cdot verification \cdot Oddly \cdot a \cdot range \cdot of \cdot soak \cdot drains \cdot run \cdot away \cdot from \cdot the \cdot river \cdot Blackbourne \cdot to \cdot the \cdot spine \cdot drain \cdot River \cdot water \cdot does \cdot back-flow \cdot via \cdot the \cdot woodland \cdot ditches \cdot when \cdot flooding \cdot occurs. \\ \rightarrow TL \cdot 16421\P$

Annex 4. E-mail communications in September 2019 between Tom Langton and EDF representatives. [Yellow Highlight added]

SIZEWELL C EVIDENCE SENSITIVE

DOCUMENTED REFUSAL BY EDF TO ALLOW THIRD PARTY INSPECTION OF INVERTEBRATE HABITAT AND SURVEYS TO CHECK ACCURACY OF INFORMATION, IN SEPTMEBER 2019

From: Christian Farmer
Sent: 25 September 2019 09:37 To: Tom Langton
Subject: RE: Sizewell
Dear Mr Langton
Thank you for your email. I can confirm that the technical, ecological reports
that underpin the ecology impact assessment will be available to all
stakeholders once the application has been accepted; and this includes the
reports undertaken by the Wildlife Trust on behalf of EDF Energy.
I can reiterate that EDF Energy do not allow access to their land.
Kind Regards, Christian Christian Farmer
Partner
Gerald Eve LLP
www.geraldeve.com
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GERALD EVE
OLIVALDE VE
From: Tom Langton <
Sent: 19 September 2019 15:36
To: Christian Farmer
Cc: Winstone, Beth @nnb-edfenergy.com>;
dayne.west@suffolkwildlifetrust.org; Gilmour Hugh @edf-
<pre>energy.com>; Vince Carly</pre> <pre>@edf-energy.com>; Rachel Fulcher</pre>
(s coastalfoe@yahoo co.uk) <s co.uk="" coastalfoe@yahoo=""></s>

Subject: RE: Sizewell

Thank you, just to be clear:

- Opportunity to consider the work of the Suffolk Wildlife Trust will be confined to the application period and so they will not be available for study before then.
- The SWT reports will be made available for public access then but not before.
- You are not allowing me to visit and view the areas that you are planning to destroy despite offers in the past for cooperation.

I would ask you to put in place an internal review to reconsider your position as this is a matter of extremely high and growing public interest.

Thank you, Tom Langton

From: Christian Farmer

Sent: Wednesday, 18 September, 2019 6:31 PM

To: Tom Langton

Cc: Winstone, Beth; oscillation: oscillation: os

Carly

Subject: RE: Sizewell

Dear Mr Langton

Further to your e mail I must reiterate that the DCO will include a detailed Ecological Assessment for the main development site at Sizewell which draws on an extensive series of bespoke baseline ecological surveys undertaken over a ten year period as well as data from Suffolk Wildlife Trust and other sources. This information will be available for public viewing as part of the DCO process. Furthermore, additional surveys will be undertaken by EDF Energy in 2020 and onwards to support Protected Species licences as well as routine surveys that support and inform the management of the Sizewell Marshes SSSI. EDF Energy do not therefore believe additional surveys are necessary or the SWT surveys should be separately published at this time. As such, I have been asked by EDF Energy to advise you that permission is not granted to access EDF Energy's Sizewell estate and that the SWT surveys will not be sent to you.

Kind Regards, Christian, Christian Farmer Partner

Gerald Eve LLP

www.geraldeve.com

From: Tom Langton

Sent: 17 September 2019 22:19

To: Christian Farmer @geraldeve.com>

Cc: Winstone, Beth one-edfenergy.com;

@suffolkwildlifetrust.org

Subject: RE: Sizewell

Dear Christian,

Thanks for your note and that I won't be allowed to survey. Surveys are needed to inform decisions next year so now is the last chance to do so unless someone has surveyed recently. Otherwise how will the process be informed? To be clear you are saying a detailed invertebrate survey of the areas to be lost has been done in the last two years. Is it OK to see the SWT reports or will you stop me seeing those too until the tight comment window?

Is it OK at least to view the areas? I was down there last week and saw a Norfolk Hawker. The gate into the area was open with a well-worn track but I would rather go with someone who knows the area such as Dayne. As the season is late I will visit tomorrow or Friday unless I hear from you that it is not OK.

Many thanks, Tom Langton

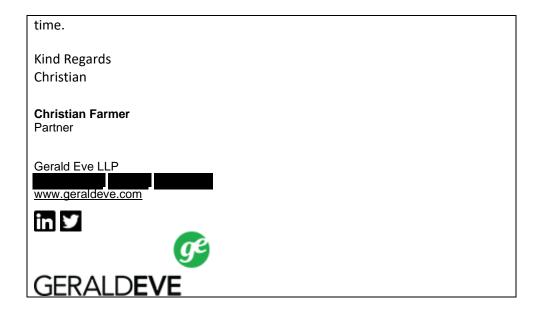
From: Christian Farmer @geraldeve.com]

Sent: Tuesday, 17 September 2019 5:55 PM

To: Tom Langton
Cc: Winstone, Beth
Subject: Sizewell

Dear Mr Langton

Further to your conversation and e mail exchange with Dayne West at the Suffolk Wildlife Trust, I can advise you that NNB Generation Company (SZC) Limited EDF Energy is submitting an application for a Development Consent Order (DCO) to the planning inspectorate in Q1 2020 (which will be available for public view) and that application will be accompanied by an Environmental Statement (ES). The ES will include a detailed Ecological Assessment for the main development site at Sizewell which draws on an extensive series of bespoke baseline ecological surveys undertaken over a ten year period as well as data from Suffolk Wildlife Trust and other sources. Further surveys will be undertaken by EDF Energy in 2020 and onwards to support Protected Species licences as well as routine surveys that support and inform the management of the Sizewell Marshes SSSI. In this context, we see no clear benefit from third parties conducting additional baseline surveys on the Sizewell C estate at this



Annex 5. SSSI Citation for Sizewell Marshes SSSI

DISTRICT: SUFFOLK COASTAL

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended

Local Planning Authority: SUFFOLK COUNTY COUNCIL, Suffolk Coastal District Council

National Grid Reference: TM 466638 Area: 104.33 (ha.) 257.80 (ac.)

Ordnance Survey Sheet 1:50,000: 156 1:10,000: TM 46 SE

Data Notified (Under 1949 Act): - Date of Last Revision: -

Date Notified (Under 1981 Act): 1987 Date of Last Revision: 1992

Other Information:

The site has been extended at the 1992 revision.

Description and Reasons for Notification:

Sizewell Marshes are important for their large area of lowland, unimproved wet meadows which support outstanding assemblages of invertebrates and breeding birds. Several nationally scarce plants are also present.

The site occupies a low-laying basin of deep fen peat. The water table is permanently high, with the area being prone to flooding, and there is an extensive network of ditches across the site.

In the areas of unimproved wet meadow the principal grass species are Sweet Vernalgrass Anthoxanthum odoratum, Crested Dog's-tail Cynosurus cristatus, Rough-stalked
Meadow-grass Poa trivialis and Yorkshire-fog Holcus lanatus. There are many other
typical species including Marsh Pennywort Hydrocotyle vulgaris, Ragged Robin
Lychnis flos-cuculi, Large Bird's-foot-trefoil Lotus uliginosus, Marsh-orchids
Dactylorhiza spp., Bogbean Menyanthes trifoliata, Bog Pimpernel Anagallis tenella,
Yellow Iris Iris pseudacorus, sedges Carex spp. and rushes Juncus spp. The nationally
scarce Marsh Dock Rumex palustris and Greater Water-parsnip Sium latifolium are
also present. It is considered that these communities are representative of the Juncus
subnodulosus – Cirsium palustre fen-meadow and the J. effusus/acutiflorus – Galium
palustre rush-pasture, as described in the National Vegetation Classification. In
addition, several areas of reedbed dominated by Common Reed Phragmites australis
and alder carr occur.

Annex 5., continued.

The extensive ditch system supports a diverse aquatic flora which includes the nationally scarce Soft Hornwort Ceratophyllum submersum, Fen Pondweed Potamogeton coloratus and Whorled Water-milfoil Myriophyllum verticillatum. The variety of ditch depths and widths, together with their fringing vegetation provide an important contribution to the site's habitat value for invertebrates and birdlife.

Sizewell Marshes are of exceptional interest for their invertebrate fauna, supporting a wide range of taxa and many nationally rare or scarce species. These include terrestrial and aquatic beetles (Coleoptera), flies (Diptera), moths (Lepidoptera), dragonflies (Odonata) and spiders (Araneae).

The breeding bird assemblage is also of national significance with many species that are typical of wet grassland and associated habitats, including Shoveler, Gadwall, Teal, Snipe and Lapwing.