



**Suffolk Coastal
Friends of
the Earth**

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EDF Energy's Sizewell C Stage 2 consultation.

The following response is on behalf of the 165 members and supporters of Suffolk Coastal Friends of the Earth.

1. What are your overall views on the proposals?

- This is not a suitable place for another nuclear power station. The site is too small for such a massive development, the proposed land-take having increased substantially since the plans were first put forward under the National Policy Statement for Energy, EN-6. The original 110 ha has grown to 300 ha, mostly within Suffolk Coast & Heaths Area of Outstanding Natural Beauty (AONB) and along our Heritage Coast. Even more land purchases/compulsory purchase orders are now proposed, together with the additional destruction of Coronation Wood. The amount going under concrete would be approximately twice the size of Leiston town. This is totally unacceptable.
- Suffolk Coast & Heaths AONB was designated for its 'quality of landscape, wildlife and historical identity'. It is described as a 'source of inspiration to countless artists, writers and musicians ... rich in history but largely spared from modern development' (www.suffolkcoastandheaths.org). The major works proposed for Sizewell C would completely divide the AONB from east to west during the twelve or more years of construction. It would totally change the landscape character from one of tranquil natural beauty to that of a modern industrial development. Post-construction, the AONB would remain permanently divided by the new access road. There is no guarantee that the destroyed areas could ever be returned to their original natural state.
- All AONBs are protected under the Countryside and Rights of Way Act 2000. It is the duty of the local authorities and any person holding public office to 'have regard to the purpose of conserving and enhancing the natural beauty of the area of outstanding natural beauty' (CroW Act 2000, section 85). Our AONB should be conserved and enhanced, not destroyed.

- Our tourist industry depends on the beauty of the coastal landscape and its tranquility. Visitors come here for the quiet enjoyment of walking and bird-watching, and in summer swimming and sailing. Such a vast development, with its accompanying noise, dust and pollution, and increase in heavy traffic, would be abhorrent to our visitors and deter them from coming here. This would have a very negative impact on the economy of the area.
- The main development site lies mostly within Flood Zone 3 and is at risk of flooding from both the land and the sea, especially with climate change, an increase in storm surges and rising sea levels. The Suffolk coast is well known for its rapid erosion. Any interference with coastal morphology and longshore drift, due to hard defences, jetty and beach landing facility will have a knock-on effect on other coastal communities, especially those to the south. This would put them at increased risk.
- The pressure on the small rural and peaceful communities of Theberton and Eastbridge would be intolerable, with the noise, pollution and disturbance caused by 600 heavy lorries a day along the B1122 and a large campus of 2,400 mainly young male workers so close by.

Climate change: Bearing in mind the very long time frame until SZC would be finally decommissioned (c. 2180), and considering that nuclear waste may have to be stored at Sizewell indefinitely while a deep store is unforthcoming, the developer has not presented fully worked-out scenarios concerning the increasing vulnerability of the nuclear power stations as sea levels rise and storms increase. As all local people know only too well, this coastline is one of the most rapidly eroding anywhere in the world.

Moreover, while storm surges are acknowledged under 7.5.36 of the Consultation Document along with 'significant erosion', no calculation has been put forward of their likely increasing frequency nor specific details of impacts and how these would be managed. It is completely inadequate to say 'appropriate contingency planning arrangements would be developed in advance of these works, including appropriate monitoring and mitigation measures'. Our members are left wondering: what contingency plans, what kind of monitoring and what sort of mitigation measures? We are not convinced that SZC would be safe under the changing conditions.

The Marine Management Organisation (MMO) acknowledges that nuclear power stations are particularly at risk from sea level rise, which 'can result in more flooding, coastal erosion and the inundation of coastal regions.... It reduces the return period for extreme water levels and threatens existing coastal ecosystems...This is a particular concern for coastal infrastructure (e.g. nuclear power stations with life cycles that could exceed 100 years)' (MMO, March 2016). The Consultation Document does not identify the high-risk scenarios within the long term time frame.

The Sizewell and Dunwich Banks: The developer continues to maintain that SZC would be protected by the offshore Sizewell Bank. Suffolk Coastal Friends of the Earth dispute this. Recent scientific papers demonstrate that the two banks, which were formerly joined together, have more recently been parting, leaving a 'col' between them through which large waves can penetrate under storm conditions, causing erosion to the shore. This is exacerbated by the fact that the two banks have lowered in height. (See in particular Pye & Blott, 2006) EDF Energy needs to acknowledge these changes and the likely impacts over the long term.

2. Main development site: Environment

- This is an environmentally extremely sensitive area. It would mean building on the north-eastern part of Sizewell Marshes Site of Special Scientific Interest (SSSI), a protected site due to its rare and uncommon flora and fauna and many protected species which thrive in this mosaic of open water, reed bed, wet woodland and fen meadows. Although new reed beds have been planted at Aldhurst Farm, no compensation is being offered for the permanent loss of wet woodland and fen meadows.
- SZC would be, in part, directly adjacent to Minsmere, famous bird reserve and internationally designated Ramsar site. Also adjacent is the Minsmere to Walberswick Special Protection Area (SPA) of European importance. Currently, protected creatures are able to travel freely from these designated sites into Sizewell Marshes SSSI, which they use for breeding and feeding. Many of these are rare, including Marsh Harrier and Greater Bittern. Division of this important inter-connecting landscape would mean that such creatures would be less able to thrive. It is the mosaic of varied habitats across this entire area which is so important, especially for creatures that need large spaces in which to move about, such as birds, bats and otters.
- Off shore is the Outer Thames Estuary SPA, into which a jetty would be built, along with cooling infrastructure. A certain amount of dredging would be necessary to bring very large ships to the jetty. This is a protected area, designated in particular for Red-throated Diver, which uses this marine environment for feeding. The outfall pipes from SZC would raise the temperature of the surrounding sea by 10 degrees, thus changing the marine ecology and the ability of Red-throated Diver to find its natural food source. This rare bird would be put at risk.
- The shoreline itself in front of Sizewell B and C consists of vegetated shingle, a County Wildlife Site (CWS), important for nesting Ringed Plover and Little Terns, together with the rare Sea Pea and other uncommon plants. The public is requested not to walk within the roped-off area here, yet the entire stretch would be totally dug up and removed and filled with rock armouring.

- Within a 10-mile radius there are 21 further protected sites with European and International designations and another 23 nationally designated SSSIs. This is not a suitable location for such a massive building project, which would have catastrophic consequences for our local wildlife and their habitats.
- Much woodland would be destroyed, especially at Goose Hill, Kenton Hills and Dunwich Forest. Rare bats, including the barbastelle, would lose their foraging corridors. Uncommon birds such as Hobby and Crossbill would lose their nesting sites.
- All the badgers in Goose Hill and Coronation Wood would be exterminated and their setts destroyed for construction and laydown areas and car parking. Otters and water voles in the northern part of Sizewell Marshes would lose their habitat. Drainage of the marshes would alter the ecology here pushing many species over the edge. The consequences for our wildlife would be disastrous.

Mitigation offered

The new habitat at Aldhurst Farm is being offered by way of compensation, but this is an artificially constructed habitat that will never compensate for what would be lost, particularly wet woodland and fen meadow. The habitat is too close to human habitation, unsuitable for ground-nesting birds which would be disturbed by walkers. There is no guarantee that it would ever receive an SSSI designation, which can only be conferred by Natural England.

3. New access road and SSSI crossing

- There is insufficient detail here concerning design elements and environmental impacts to be able to make an informed decision.
- The access road will act as a substantial barrier to wildlife and established foraging corridors. Any of the options for the SSSI crossing would significantly change the character of this part of the landscape, which is currently wet woodland with Leiston Beck running through. Even option 1 with planted embankments would be visually extremely intrusive on what is currently low-lying marshland.
- EDF Energy states under 7.4.78 that ‘the affected habitats would be compensated for at the Aldhurst Farm habitat creation scheme’. This is blatantly untrue. As mentioned above, there would be no compensation for loss of wet woodland, as there is none at all at the farm. Wet woodland is a Biodiversity Action Plan Priority Habitat, now scarce and declining. It is an important habitat for bats, birds and invertebrates.

- There is no detail at all about the possible impacts of flooding due to such a large structure right across the main drainage route, which takes water not only from the marshes, but back to Leiston. Local residents are worried about back-up flooding if the Minsmere Sluice should be closed at high tide at the same time as a heavy deluge. Climate change will increase precipitation. There will be extra run-off from so much hard standing and less ability for the marshes to soak it up. Far more detail needs to be given about how this would be dealt with.
- Otters and water voles (both protected species) would lose their habitat here, which is currently ideal for them. Otters prefer to go over land rather than use a culvert. They would be put at risk crossing the road.

4. Managing construction materials/borrow pits and stock piles

- Stockpile height could be up to 35m and at least 20m for four years or more and visually horrible. The area required for stock-piling is huge and entirely within our AONB, as are fields 2, 3 and 4. Management of the borrow pit earthworks would be very noisy from excavation machinery and would disturb the nearby Minsmere to Walberswick Heaths and Marshes Special Protection Area (SPA) along with the wildlife of Ash Wood.
- The proposed fields are also close to Eastbridge and the noise and dust would be a significant health hazard.

None of these options is acceptable.

5/6. Your views on the accommodation strategy

The campus

- There has been, and continues to be fierce opposition from residents of Eastbridge and Theberton for such a large accommodation campus (2,400) so close to small rural communities. Yet despite requests and concerns at Stage 1 Consultation, these have not been heard nor responded to.
- If the building of Flamanville in France is anything to go by, many of these workers would be from Eastern Europe, presenting language and cultural difficulties. Most would be young males. This would seriously upset the demographics of the area. Even if they had to sign a 'good behaviour' contract, this does not guarantee a lack of disturbance or indeed an increase in crime.
- While just outside the AONB, the height of the modern buildings would be seriously intrusive in this historic rural landscape. Residents would not wish to stay on the campus for recreation and would seek those facilities

elsewhere, necessitating many car journeys. Shift working would also cause disturbance during unsociable hours.

- It is too close to Leiston Abbey Grade 1 listed building and Pro Corda music school, where quietness is essential.
- It seems to our members that EDF Energy is thinking primarily of benefits to themselves rather than disbenefits to local residents. The company would be competing globally for skilled workers and would obviously want to attract the best. It would also be more efficient and cost-effective in terms of managing the workforce.
- The campus would, in effect, be a small town with high-rise buildings, about half the size of Leiston, intruding into a historic Special Landscape Area, where property is typically low-rise.

Use of tourist accommodation

- This is a concern as it will reduce availability of accommodation for visitors, especially in the less expensive band. There is bound to be an effect on our tourist industry. B & Bs will lose their regular tourists.

Purchase of houses

This is likely to push up prices, already very high throughout Suffolk. There is an urgent need locally for low-cost housing. An influx of permanent workers and their families will make stepping on to the housing ladder even more difficult for local people.

7. Transport, overall strategy

- Even after 4 years since Stage 1, transport modelling is still incomplete. We do not know whether or which ports are likely to be used, Ipswich, Lowestoft, Felixstowe and to what extent. This should have been determined by now so that road use, particularly along the A12, could be better calculated.
- Taking spoil to RSPB Wallasea Island was proposed at Stage 1, but this is no further forward. The amount of materials going by sea to and from Sizewell should have been calculated by now, as this obviously affects rail and road usage. As it is, it is unclear what the stated number of rail movements is based upon.
- It is disappointing that there are no proposals for using trains to convey workers to the site, or indeed offering them for public use also.

- There is nothing about emergency planning, nor how the strategy relates to SZB's outages (when there are an additional 1,000 workers), nor to decommissioning of SZA. This is a glaring omission.

8. Rail

How would the additional trains fit within the overall network? This is not explained.

Option 1, temporary rail extension (Green route)

- Proposed route runs too close to existing farms and houses and too near to Leiston Abbey/Pro Corda Music School, a very fine Grade 1 listed building. Construction would be very disturbing from dust, noise and lighting.
- There is known archaeology here of historic importance, which would have to be investigated.
- There would be significant loss of good quality farm land (Grades 2 and 3) and thereby loss of income to farmers. There are apparently no proposals for compensation.
- The route runs through part of Fiscal Policy woodland and along its edge and along by Kenton Hills into Goose Hill. These are ecologically very sensitive areas with rare protected bats (including barbastelle) breeding and foraging here, which have established commuting routes. Noise and lighting would be deeply disturbing and dust generation extremely harmful. The cutting down of trees here is totally unacceptable and would be ecologically damaging.
- The proposed level crossing over B1122 could only be a serious hazard to traffic, pedestrians and equestrians and the long, slow trains would cause significant delays.
- The proposed contractor's area is directly adjacent to Buckle's Wood, which is an ancient woodland, a precious habitat which should not be disturbed. No details are given of its ecology. This should be properly surveyed.
- It seems that the route may also be used at night. This cannot be tolerated.
- Why hasn't the noise modelling already been carried out? There has been a full four years since Stage 1 and no excuse for not producing this.

Option 2, new rail terminal, E. of Eastlands Industrial Estate

- This is a green field site, opposite the new Aldhurst Farm habitat creation. Noise, dust and lighting from the works would put pressure on the

establishment of the new habitat, for example scaring away birds and bats. This seems to be counter-productive. Walkers on the new perimeter footpath would have an unpleasant view and be less likely to want to use it.

- The heavy machinery and rail terminal itself would cause compaction of the soil. No details are given how this would be overcome when being returned to agricultural land.
- More loss of good/moderate agricultural land. There is no mention of compensation to farmers from loss of earnings.
- The noise from the trains would cause disturbance to nearby residential properties.

9. Sea transport

Options 1 and 2, temporary wide or narrow jetties

- It is impossible to comment on this as EDFE has not decided whether aggregates and soil/clay would be removed from the site by sea.
- In principle any jetty is likely to affect sediment transport, even if open-piled, increasing erosion further south. The persistent scouring away at the base of the piles causes turbulence on the down-drift side, upsetting longshore processes. This puts communities such as Thorpeness at increased risk. Dredging would be necessary to maintain the stability of the jetty and for the approach and docking of big ships. Large gantry cranes would be visually very intrusive into this coastal scene.
- The seas off Suffolk shores are important for porpoises. Ships cause sound pollution which would harm the porpoises' ability to communicate and orientate themselves.
- The works would be in the Outer Thames Estuary SPA European designated site. What plans are in place for the protection of Red-throated Diver?

Option 3, beach landing facility

- Any dredging, which would be necessary, will alter the coastal geomorphology and increase the risk of erosion. Monitoring would not be effective, as most erosion occurs very suddenly due to unexpected storm surges. It is not good enough to make vague statements such as putting 'contingency plans' in place. What are these supposed to consist of?
- This, together with the hard defences, would lead to the total ruination of vegetated shingle along the shore. This is a Biodiversity Action Plan Priority Habitat important for rare plants and invertebrates and a nesting

site of endangered Little Terns. Where is the commitment not only to protect, but to enhance these special habitats?

- The BLF would act as a hard defence and increase erosion to the north, leading to salt intrusion into Minsmere to Walberswick SSSI. No details are given as to how the drainage system to Minsmere Sluice might be affected. Such details need to be properly worked out.

10. Transport, park & rides

South, Wickham Market

- The site is adjacent to a Special Landscape Area. Light pollution and traffic disturbance would affect this area.
- Inevitably traffic would increase through Wickham Market, where there are very narrow roads, in part only wide enough for one vehicle, and many parked cars. It is already difficult driving through this town to the supermarket and beyond. The extra traffic would cause many hold-ups.
- The increase in traffic through Hacheston would be very disturbing to residents along the B1116. The stretch from the village to the roundabout is already dangerous with many bends, and would become more so.
- There are bats and birds in the adjacent woodlands. Construction works and traffic movements would disturb their breeding sites and foraging corridors. Much more detail needs to be provided concerning the impact on wildlife. Evidence of great crested newts in the ponds has not been investigated. It should be.
- There would be loss of quiet enjoyment of the ProWs and bridleway due to encroachment of traffic into this agricultural land and open countryside.

North, Darsham

- This continues to be a nightmare for adjacent residents, especially at Moat Hall which is run as a quiet retreat. It will be impossible to continue with this business. What compensation would be offered?
- There is a local astronomical society at Darsham, which would be seriously affected by night-time lighting.
- There are known to be great-crested newts in at least one of the ponds at the site. Putting the surrounding area under concrete will destroy their foraging and hibernation areas.
- There are protected bats and barn owls at Little Nursery woodland. Barn owls hunt across this area and bats are attracted towards the ponds due to the supply of insects. So many moving vehicles would put them at risk.

The lighting would be deeply disturbing to them and construction noise and dust would frighten them away.

- Increase of traffic would worsen the situation for residents north of the station making their way by foot or cycle to catch a train. A safe passage along by the A12 would be needed.
- How many vehicles would be heading for the P & R at the same time, due to shifts? This is not stated, so has it not been calculated? Would this cause a back-up of traffic on the A12? There is already a queue of traffic when a train comes through each hour. How will timing of shift work relate to arrival of trains? All this needs to be worked out.

11. Road improvements to A12

- Research consistently shows that road improvements and bypasses simply encourage more traffic. The only sure means of reducing traffic is to supply excellent public transport. Much as we sympathise with the plight of villagers suffering from traffic fumes, noise and disturbance, any bypass will simply transfer the problems to someone else's back door.
- Bypassing Farnham poses significant ecological problems. The land around the River Alde is unploughed meadow used for grazing, a habitat now rare in the UK. With its trees and hedgerows, it is a magnet for wildlife, including bats, owls, great crested newts, water voles and various reptiles, all protected.
- As it is a flood plain, the new road would have to be raised, visually intrusive into this Special Landscape Area.
- Who would want to use the amenity space next to the Riverside Centre, with heavy traffic roaring by?
- Bypassing Stratford St Andrew and Farnham has already been considered in the past and rejected on environmental grounds. A two villages bypass would have an even greater environmental impact and would fragment many important habitats, including many ponds and ancient woodland. In addition to all the habitat loss and fragmentation that SZC would cause elsewhere this cannot be justified.
- The only solution for villagers is for SCC to reduce traffic on the A12 through good public transport.

12. Road improvements, Yoxford, B1122

- Clearly, the B1122 isn't suitable for so many extra HGVs. This is one very good reason why SZC should not be given the go-ahead at all as rural Suffolk simply does not have the infrastructure to support it.

- Speed limits and pedestrian enhancements along the B1122 should be put in place anyway for safety reasons.

13. People & economy

- Some businesses would benefit in the short-term if SZC were to go ahead, but, as with SZB construction, it would simply result in a boom-bust scenario.
- Many smaller construction businesses lost key employees to SZB, lured there by better remuneration. Some went out of business as a result. What might be done to avoid this happening again?
- Nuclear power needs, above all, workers with experience. The length of time since SZB's construction means that such skills have been lost to the local area, so that much of the work force would have to be brought in from outside and from abroad. It is too late to start educating school children. There would be insufficient time to gain that essential experience, apart from some lower grade jobs. Nuclear power in future will be unable to compete with renewables, so children should be educated to work in the renewables industry.
- Most local people expect that SZC would result in harm to our tourist industry, which may never recover. The area would be substantially changed and no longer recognised and valued to anything like the same extent for its beauty, peace and wildlife, much of which would be destroyed, especially during the 12 years of construction.

14. Consultation process

- Key staff members were not available to answer certain questions at the individual exhibitions.
- Insufficient notice was given of the impending stage 2 consultation (only 2 weeks).
- The consultation was yet again carried out over Christmas, despite many protests.
- Even after four years, much surveying, modelling and research has yet to be done concerning all the main aspects of the project. Lack of detail makes it, once again, difficult or impossible to make informed responses. This is very disappointing.

Conclusion

Overall, the destruction and damage to our special landscapes, designated habitats and protected species would be so severe that members of Suffolk Coastal Friends of the Earth are unable to support any aspects of these proposals.

We would particularly like to point out that the site must be tested against the other nominated sites within the National Policy Statement EN6. This is set out at paragraph 2.4.4:

‘Given the very limited number of sites identified as potentially suitable for the deployment of new nuclear power stations before the end of 2025, the Government considers that all eight are required to be listed in this NPS. This is to allow sufficient flexibility to meet the urgent need for new nuclear power stations (see Part 3 of EN-1) whilst enabling the IPC to refuse consent should it consider it appropriate to do so.’

Clearly, the Sizewell site should be tested against the other potential sites. It would not be difficult to show how unsuitable it is. The planning application should be refused.

Rachel Fulcher, Coordinator

REFERENCES

Marine Management Organisation, March 2016: *Potential spatial effects of climate change in the South and East Marine Plan Areas.*

Pye, K & Blott, S J, 2006: *Coastal processes and morphological change in the Dunwich-Sizewell area, Suffolk, UK.*