The Sizewell C Examination

Key concerns raised in the Written Representations of the Royal Society for the Protection of Birds and Suffolk Wildlife Trust

Based on submissions at Deadline 2, 2nd June 2021

KEY CONCERNS RAISED

1 The Suffolk Coast is a network of coastal, estuarine and freshwater wetlands with shingle beaches, areas of Sandlings heathland, many of these areas designated for their conservation value. The area around Sizewell is particularly valuable, being next to Sizewell Marshes, a nationally protected site with irreplaceable habitats and species, and adjacent to Minsmere, the RSPB's flagship reserve and part of a wider site designated at the highest levels for its conservation value. The proposals for the development of Sizewell C pose significant risks to both these sites, and nature conservation more widely on the Suffolk Coast. Here we summarise the overall potential impacts.

2 Minsmere has a unique place in the history of nature conservation in the UK, being the place where the avocet, an iconic species previously lost from the UK, returned to breed and from where it began its recolonisation of the UK's wetlands. Likewise, the marsh harrier, now a familiar sight drifting over reedbeds on the Suffolk Coast and beyond, was reduced to a single pair but made its comeback from here. As well as its bird life, the reserve is important for a range of other species of plants, invertebrates, bats, amphibians and reptiles and has a known (but constantly growing) list of well over 6000 species. This is due to the range of habitats Minsmere contains, including reedbed, open water and scrape, wet grassland, ditches, coastal shingle, woodland, heather heathland and acid grassland.

3 Sizewell Marshes is a nationally designated nature conservation site, important for its lowland wet meadows, fens, reedbeds and wet woodlands. It holds populations of breeding wildfowl, rare invertebrates and plants. Important populations of bats also breed, hibernate and forage here, including nationally significant population of rare barbastelle.

4 The proposals for Sizewell C incorporate part of Sizewell Marshes, meaning that over 6ha of this SSSI is proposed to be lost entirely and a further 3ha damaged. The loss of nearly 10% of a nationally protected site is of serious concern to us, especially as some of the habitats lost are very hard, if not impossible, to recreate. The proposals for Sizewell C do include habitat compensation sites to try to recreate the habitats lost, but whilst reedbed has been created at Aldhurst Farm, the likelihood of success in recreating fen meadow is still not known and we still do not believe the proposals for fen meadow and wet woodland are adequate to ensure the reestablishment of the specialist plants and invertebrates lost from these habitats.

5 The Sizewell C proposals have the potential to significantly affect the habitats and species of Minsmere and Sizewell Marshes, mainly because of the proximity of the planned development to these sites. The construction area would be directly adjacent to the Minsmere South Levels and to Sizewell Marshes, containing important areas of wet grassland and pools for breeding and wintering wildfowl and for foraging marsh harriers. The significant levels of noise and visual disturbance from the construction area and the length of time over which these impacts would be expected (10-12 years) means that any displacement of these species could have a significant effect on their populations. For marsh harriers, from Minsmere foraging on the South Levels to further afield on Sizewell Marshes and the surrounding farmland, this means that they will effectively lose significant parts of their regular hunting grounds, which could affect their ability to provide food for their chicks. Over a period of years, this could affect Minsmere's marsh harrier population numbers. Waders and wildfowl on the South Levels and Sizewell Marshes may also be displaced by construction disturbance, and with significant proportions of Minsmere's populations of these species using these areas, this again could affect population levels in the medium term. We are also concerned that for some elements of the construction, timing is key to avoid impacts – if the timing of the construction of one of the water storage areas in the northern part of the construction area slips into the spring, the noise disturbance from this could affect breeding birds in Minsmere's reedbeds, home to specialists such as the bittern, marsh harrier and bearded tit.

6 Bats, including the rare barbastelle, would also be disturbed and displaced by construction – by the presence of lighting, noise and human activity, and the loss of some of the important connecting and feeding habitats between Minsmere and Sizewell as a result of the construction area. Roosting and hibernation sites for barbastelle may also be significantly impacted and it is likely that many unrecorded roosting sites will be lost.

7 The wetland areas of Minsmere and Sizewell Marshes are also at risk from changes to their hydrology. The movement of ground and surface water is crucial to maintaining the function of specialist habitats and the species they support. This is why we are so concerned about any potential impacts on Minsmere Sluice – a key structure which controls the drainage of Minsmere and much of the surrounding area. The combination of waterways entering the Sluice means that impacts on one of these waterways has the potential to have much wider effects. During the construction of Sizewell C, the discharge of water to one of these waterways, Leiston Drain, is expected to increase. The amount of water entering the Sluice from this source may mean that it is more difficult for water from the other waterways to drain at the same rate as previously.

This could mean that it is not possible to drain Minsmere quickly when spring flooding occurs, meaning that nests of species such as lapwing, redshank, avocet and bittern are flooded out and habitats take longer to recover.

8 The Sluice also allows some entry of seawater into Minsmere to help maintain some of the specialist brackish habitats in the ditches and on the scrape. This means that these habitats are vulnerable to any contaminants entering by this route. Sizewell C would discharge hydrazine, a toxic chemical used as an anti-foulant in the cooling water system, during the later stages of construction and throughout its operation. At certain states of the tide it is possible that low levels of hydrazine would enter Minsmere via the Sluice. As yet, we do not know what the long-term impacts of this would be on the habitats and species of the scrape and ditches.

9 As the construction site for the power plant currently consists of soft, wet soils, the site will need to be drained and a hydrological cut-off wall constructed to stop water draining back into the site. This cut-off wall will affect the way water moves through the ground all around the site. Two ditches which run through the proposed development site will also need to be combined and rerouted. The changes to water movement could mean that parts of Sizewell Marshes become wetter and some southern parts of the Minsmere South Levels become slightly drier. In the long

term this could lead to changes to habitats in these areas, and changes to the species they support.

10 A small population of the rare natterjack toad is also found close to Sizewell, between the South Levels and Sizewell Marshes. The field where their breeding pond is found is currently proposed to become a water management zone during the construction of Sizewell C. Whilst it appears that the breeding pond and hibernation site within the nearly rabbit warren will be avoided, there will still be a significant loss of foraging habitat for the natterjacks. The proposals do not include enough mitigation to enhance connectivity to excellent habitat within Minsmere to the north.

11 The proposals for Sizewell C include large amounts of marine infrastructure, including intakes, outfalls, landing facilities and coastal defences. The new structures all have the potential to affect the way coastal processes along the Minsmere and Sizewell frontage work. The coastline in this area is highly dynamic, with climate change and sea level rise adding to the vulnerability of this frontage. We are concerned that some of these structures, particularly the coastal defences, could exacerbate coastal changes in the medium to long term which could affect the future frontage of Minsmere. At present we are concerned that it is not clear what the impacts of this will be.

12 The marine environment of the Greater Sizewell Bay is part of a wider marine protected site, important for red-throated divers in winter and for providing foraging areas for Sandwich, common and little tern colonies at Minsmere and other sites nearby. All these species are heavily dependent on their fish prey, and anything which affects the abundance or distribution of their prey species could have knock-on effects on their populations and breeding success. The construction of Sizewell C could affect fish through underwater noise and vibration, increasing suspended sediment though dredging and through discharges of chemicals such as hydrazine during the commissioning stages. During the operation of the power plant, large numbers of fish

would be abstracted by the cooling water system. While some of these will be collected and returned to the sea, many of these will already be dead or dying by this point, leading to changes to water quality in the area. This impact could be significantly reduced by the use of an acoustic fish deterrent, in line with best practice and the advice of the Environment Agency, but this is not currently proposed at Sizewell. The return of the cooling water to the sea will also lead to the formation of a thermal plume, which will also contain chemicals such as hydrazine and compounds derived from the chlorine added to the cooling water system. The effects of these on birds and their fish prey is unclear, but of concern, particularly when considered alongside the other impacts affecting the marine environment. The number of vessels required to bring in deliveries to the site is also a cause for concern, particularly in relation to the internationally important red-throated diver population. These birds are highly sensitive to disturbance, with vessel traffic known to cause them to move away from and avoid busy areas.

13 The beaches at Sizewell and Minsmere support internationally important vegetated shingle habitats and rare beach nesting birds such as ringed plover. These birds and plants are very vulnerable to human activity on the beaches; the ringed plover are easily flushed from the nests and may abandon them if disturbed significantly or repeatedly by people or dogs while the specialist plants can be easily damaged by trampling. With parts of the footpath network in the Sizewell area being either closed, diverted or just unattractive to users due to the construction works, we are concerned that people are likely to use the neighbouring areas more heavily during the construction period, meaning that sensitive beach wildlife may be affected. In addition, whilst the main visitor areas of the Minsmere reserve have infrastructure designed to allow large numbers of people to visit without disturbing the wildlife, the outer parts of Minsmere are more sensitive and usually much less heavily visited. We are concerned that these areas, particularly the heathlands where the vulnerable stone curlew, woodlark and nightjar nest, may be very attractive to those displaced from the Sizewell area. Without careful management of the impacts of additional visitors, these heathlands could be damaged by trampling, dog waste and disturbance.

14 The Love Minsmere campaign aims to see both RSPB Minsmere nature reserve, the protected and designated sites including Sizewell Marshes SSSI, and the surrounding wildlife that calls the Suffolk coast home, protected against potentially harmful impacts from the Application. To date the Love Minsmere campaign has comprised of three different actions:

• Stage 3 Public Consultation - over the course of the consultation, 20,419 supporters submitted consultation responses to the Applicant on the importance of RSPB Minsmere and why it must be protected.

• The Love Minsmere Festival - on 15 September 2019, during the Application's fourth and final consultation, the RSPB held their first ever Love Minsmere Festival. Over 1000 people gathered on Whin Hill and together they collectively declared their love for Minsmere.

• Pre-examination e-action - supporters who shared our concerns (based on our Relevant Representations) signed the RSPB and Suffolk Wildlife Trust's e-action. In just 12 weeks, 104,836 people took our e-action, showing the breadth and strength of concern regarding the Application and potential impacts on nature.

15 In summary, we do not believe it will be possible to develop Sizewell C as proposed without significant effects on Minsmere, Sizewell Marshes, Greater Sizewell Bay and the wider nature conservation value of the Suffolk Coast. The proposals have the potential to damage highly protected wildlife sites and to impact nationally and internationally important populations of rare species, which are valued in their own right, by those that live on and visit the Suffolk Coast and all who care about nature conservation across the UK and beyond.

For the RSPB and Suffolk Wildlife Trust's complete Written Representations and other submissions visit the Planning Inspectorate's website