



**Response to
Department for Business, Energy and Industrial Strategy
Request for Further Information issued on 31 March 2022
from the Royal Society for the Protection of Birds
and Suffolk Wildlife Trust**

**Submitted on
12 April 2022**

Planning Act 2008 (as amended)

In the matter of:

**Application by NNB Generation Company (SZC) Limited for an Order
Granting Development Consent for
The Sizewell C Project**

**Planning Inspectorate Ref: EN010012
The RSPB PINs Registration Identification Ref: 20026628
Suffolk Wildlife Trust Registration Identification Ref: 20026359**

Thank you for giving us the opportunity to comment further. We would also be grateful for the chance to comment on the answers given to your first set of questions issued on 18 March 2022¹, as well as responses provided to these second set of questions issued on 31 March 2022². A number of the questions asked pertain to topics where we had not reached agreement with the applicant at the end of Examination. The questions confirm the importance of this further information and therefore we believe it should have been available during the Examination where we would have had a chance to comment on it, including flagging any environmental concerns we may have had for the Examiners and ultimately the Secretary of State as the Decision Maker to take into account.

Due to the large number of questions relating to areas and topics in which we actively engaged, almost entirely, having residual concerns about and our inability to comment in detail previously due to the Applicant providing updates within the final deadline. Whilst we appreciate this chance to comment on a few aspects, we believe we should have an opportunity to comment on all responses provided by others particularly the Applicant especially if further, new information is being provided.

Question 8.12. In relation to changes to coastal processes/sediment transfer impacts on the Minsmere to Walberswick Heaths and Marshes SAC and the Minsmere - Walberswick SPA and Ramsar site, Natural England, the MMO, the EA, the RSPB and the Suffolk Wildlife Trust and ESC are invited to comment on the Applicant's updated submissions in relation to changes to coastal process and sediment transport made at the final examination deadline:

- Deadline 10 Submission – 9.12 Preliminary Design and Maintenance Requirements for the Sizewell C Coastal Defence Feature [REP10- 124]; and
- Deadline 10 Submission – 6.14/10.5: Environmental Statement Addendum, Volume 3, Chapter 2, Appendix 2.15.A: Coastal Processes Monitoring and Mitigation Plan [REP10-041].

1.1. Overall, we believe there has been some positive progress made with the further development of these documents, but we remain concerned by the following elements:


- 1.1.1. the approach to particle size for the Soft Coastal Defence Feature (SCDF) does not appear to be confirmed and there remains a risk that further technical modelling could lead to a decision for coarser material required for engineering function that is not compatible with the ecological function of the neighbouring Minsmere to Walberswick Heaths and Marshes SAC³ (particularly with respect to the annual vegetation of drift lines and the perennial vegetation of stony banks interest features) and Minsmere - Walberswick SPA⁴ (particularly with respect to nesting little tern) and Ramsar site⁵ (particularly with respect to shingle beaches and nesting little tern) (and their underpinning SSSIs)(the protected sites), therefore our concerns about the lasting impacts to those sites remain;

¹ Dept for Business, Energy and Industrial Strategy - [Request for information](#) 18 March 2022

² Dept for Business, Energy and Industrial Strategy - [Request for information](#) 31 March 2022

³ [Minsmere to Walberswick Heaths and Marshes SAC](#)

⁴ [Minsmere to Walberswick SPA](#)

⁵ 

- 1.1.2. we remain very concerned that there are currently no established mitigation techniques to address adverse impacts on the annual vegetation of drift lines and since this has not been satisfactorily addressed there could be lasting impacts on the protected sites; and
- 1.1.3. there remains no apparent clear commitment to mitigation should the monitoring of the effects of the offshore infrastructure or the temporary onshore infrastructure reveal unexpected impacts.

Deadline 10 Submission - 9.12 Preliminary Design and Maintenance Requirements for the Sizewell C Coastal Defence Feature REP10-124

- 1.2. We welcome recognition in this document, section 1.1 (vegetation), of the continued presence of the drift line vegetation feature on the Minsmere to Walberswick Heaths and Marshes SAC and Minsmere - Walberswick Ramsar site correcting the previous incorrect assertions that the drift line vegetation feature had been lost as covered in RSPB submissions to the Examination (e.g section 11.2 in [REP8-173⁶](#)).
- 1.3. We also welcome that the subsequent paragraph has been amended to reflect the vegetation feature remains *in situ* but we continue to contest the confident assertion that the provision of sediments to the SCDF is likely to provide a benefit to the vegetation communities on the Minsmere frontage (as per section 11.5 of our Examination submission in [REP8-173](#)). This concern also remains due to the approach to particle sizes which retains some uncertainty due to section 2.4 which states that

“SZC Co is comfortable with retaining the native size distribution and not coarsening the pebble sediments as suggested below for Option A. Further fine tuning of the SCDF design will be conducted (numerical and, potentially, physical modelling), and any proposed changes will be consulted on with the Coastal Geomorphology subgroup of the Marine Technical Forum and require approval by the discharging authorities.”

- 1.4. Whilst the confirmation that SZC Co is ‘comfortable’ provides some reassurance, it does not give us sufficient reassurance that this issue has been satisfactorily resolved and secured by the DCO process and requirements. The need for further changes to be consulted on with the Coastal Geomorphology subgroup does not give sufficient confidence now that a technically feasible solution in engineering terms compatible with retaining the ecological function of the adjacent Minsmere to Walberswick Heaths and Marshes SAC and Minsmere - Walberswick SPA and Ramsar site can be resolved.

- 1.5. Section 2.4 continues:

“Two very similar particle-size options are presented that utilise coarse sediment particles to increase erosion resistance, beach stability and therefore longevity. This approach – using sediment coarser than the native size distribution – is commonly used for beach recharge schemes in the UK (Rogers et al., 2010). The SCDF uses a similar approach, although the SCDF’s very coarse pebbles (Option A; Section 2.4.2) would be within, but at the coarse end of, the Sizewell particle size distribution. In both cases (options), the aim is to increase beach stability and longevity of the placed sediments. Beach coarsening is considered suitable for the steepening intertidal zones of the East Coast of England (Rogers et al., 2010, p. 730).... The SCDF composition would have a low sand volume to enhance its erosion resistant properties.”

⁶ RSPB Deadline 8 Submission - Comments on any additional information/submissions received by D7

1.6. This also does not resolve our concerns that the SCDF will not reflect the natural beach particle size required to support the interest features of the protected sites and follows on from our previous concern following Issue Specific Hearing 11 where the Applicant proposed that if material size was fixed it could be problematic to engineering function and it would be better to discharge as a condition in due course (see section 5.14 [REP8-173](#)⁷). We remain concerned that the technical solutions for the SCDF will ultimately be determined by engineering requirements rather than ecological sensitivities. As per our Examination Submissions (see sections 3.108 – 3.122 [REP2-506](#)⁸), the vegetation communities for which the shingle beach is designated and therefore should be protected, require a dynamic environment and are not necessarily supported by ‘increased stability’. In terms of ecological function, the SCDF should retain a sand component that is consistent with the current proportion of sand in the existing beach profiles. The presence of fine particles, including sand, is an important component to enable the shingle beach to support the vegetated conservation interest features of the protected sites. Walmsley and Davy (2001)⁹ reporting on their studies of vegetation establishment at Sizewell following the construction of Sizewell B identified the need for 10 – 20% sand content to enable vegetation to establish.

1.7. Section 2.4.2 states:

“SCDF Option A: Very coarse pebbles

As noted above, Option A has been superseded by retention of the native size distribution without coarsening. However, the text on this topic has been retained as all of the evidence in support of the SCDF design, including fine tuning, has yet to be presented.”

1.8. The Applicant has failed to present any tangible evidence to support the apparent commitment to retaining the native particle size distribution within and adjacent to the protected sites that we believe is essential to ensuring no adverse effects on integrity to the Minsmere – Walberswick SAC as set out in our previous submissions. We therefore believe this issue has not been satisfactorily resolved and that there is a high level of risk that the technical conclusion in engineering terms will lead to a solution that results in adverse effects on the integrity of the protected sites.

[Deadline 10 Submission - 6.14/10.5: Environmental Statement Addendum, Volume 3, Chapter 2, Appendix 2.15.A: Coastal Processes Monitoring and Mitigation Plan - Clean Version REP10-041](#)

1.9. Our concerns expressed in section 20.4 of [REP10-204](#)¹⁰ remain regarding the Terms of Reference for the Marine Technical Forum to oversee the CPMMP.

1.10. Our concern that no commitment is made to mitigation should unexpected adverse effects be identified with the offshore infrastructure remains, and also now extends to the additional section 6 relating to the Temporary Discharge Outfall. Whilst we understand the Applicant’s reasoning that the modelling indicates that no significant impacts are anticipated, we still believe that, should the monitoring reveal impacts that the modelling did not identify, a commitment should be in place to seek to resolve these where necessary.

⁷ RSPB/SWT Deadline 8 Submission - Comments on any additional information/submissions received by D7

⁸ RSPB/SWT Deadline 2 Submission - Written Representation (WR)

⁹ Walmsley, C. A., & Davy, A. J. (2001). Habitat creation and restoration of damaged shingle communities. In JR. Packham, RE. Randall, RSK. Barnes, & A. Neal (Eds.) *Ecology & Geomorphology of Coastal Shingle* (pp. 409-420). Westbury Academic & Scientific Publishing, Settle, Yorkshire

¹⁰ RSPB/SWT Deadline 10 Submission - Final Submissions

1.11. We welcome the commitment in section 7.1.1 that the

"SCDF is a maintained sedimentary feature (using the native particle size distribution as a default without coarsening as agreed during the examination)".

1.12. However, this appears to be undermined by the further detail presented in section 7.1.1.2 and as noted in our Examination submission in response to the **Deadline 10 Submission - 9.12 Preliminary Design and Maintenance Requirements for the Sizewell C Coastal Defence Feature REP10-124** the security of the commitment to a specific particle size does not appear to be strong and appears to be based upon further technical investigations that are needed to satisfy the engineering requirements. We therefore cannot agree that this result has been satisfactorily agreed and that the anticipated *"supply (of) SCDF eroded sediments to the neighbouring frontages"* will be compatible with the conservation interest of the Minsmere – Walberswick SAC features.

1.13. The references to other documents that have been updated at Deadline 10 do not appear to have been updated in this further version, making cross-referencing difficult (e.g. a new reference in an updated section 7.4 to TR544 section 3.1.1.2 when the D10 submission of v4.0 of TR544 does not have a section 3.1.1.2)

1.14. Regarding the proposed approach to monitoring with remote pilot aircraft (RPAs -drones) (Section 7.4.2: *"The RPA survey method will be detailed by technical reporting (BEEMS Technical Report TR546, due later in 2021)"*) we have not seen this Technical Report, but as per comments on section 8 below wish to be reassured that impacts on other interest features of the protected sites have been appropriately considered when determining the methodology for RPA surveys. The Minsmere – Walberswick SPA (and its underpinning SSSI) is important for ground nesting and non-breeding bird populations and it is yet to be confirmed if there is a compatible method of RPA survey, which may require low altitude flights to record the level of detail required, and the potential conflict with the designated SPA and notified SSSI including for Schedule 1 bird features and the strict requirements not to disturb especially during the breeding season.

1.15. Section 7.5 states:

"As the precise conditions requiring mitigation cannot be known a priori, neither can an individual mitigation activity be specified years or more in advance. This is, of course, the same problem faced by coastal managers when managing their frontages. Evidence based judgements must be made closer to the time when a beach or defence feature approaches a threshold condition and, according to the evidence, the specific mitigation activity devised."

1.16. Whilst we recognise this conundrum, it does not provide reassurance that a suitable solution that enables the needs of the Minsmere – Walberswick SAC and Ramsar feature will be accommodated. It is our view currently the only known method for maintaining dynamic shingle features of high conservation value is non-intervention and the ability for the features to move as required in relation to coastal processes. The engineering requirements of the proposed SCDF may not prove compatible with this requirement to protect and maintain natural process for the conservation features, with an engineering need to intervene driving the mitigation decisions. We remain of the view that insufficient attention has been devoted to determining how such a scenario *could* be managed and therefore we cannot conclude that the longer-term approach to coastal management associated with Sizewell C will avoid adverse effects on the integrity of the adjacent Minsmere – Walberswick SAC, Ramsar and SPA.

- 1.17. In section 7.5.2 Sediment bypassing we note the retention of the northern orange area in the Figure 12 sediment bypassing illustration proposing that material will be won from the Minsmere – Walberswick SAC for this scenario. We recognise that the figure is described as being for illustration purposes, but are left wondering if the Applicant has recognised the actual extent of the SAC when devising this scenario and whether it is actually viable as proposed.
- 1.18. In addition, section 7.5.3 on Beach sediment recharge includes additional content continuing to reference value of coarser particle sizes despite referring to the default position of a native particle size.
- 1.19. We are disappointed that section 7.5.4 refers to a final pre-construction version of this report which will detail ‘sample’ cases illustrating the proposed application of SCDF mitigation measures. We believe this information is needed to help inform the DCO decision.
- 1.20. We continue to contest that the assertion in section 7.5.5 that the potential impacts of beach maintenance practices on designated sites “*will cause some localised short-term beach accretion...which may enhance habitat over time*” does not take account of the fact that the annual vegetation of drift lines is part of a dynamic habitat that could be adversely affected by an artificially influenced (from material supplied by the SCDF) more stable frontage and increased supra-tidal extent or subsumed if the particle size transpires to be coarser and affects the structure of the shingle as per our previous representations (see sections 3.108 – 3.122 of [REP2-506¹¹](#)).
- 1.21. We would support the revised statement “*These sediments are no different from the material already present*” if the native particle size default had been satisfactorily secured in this document and TR544 v4.0¹², but we do not believe this is the case for reasons presented above.
- 1.22. We welcome the amendment of Section 8 to include reference to the “*vegetated shingle...currently present along that southern Minsmere frontage, an internationally important feature part of the Special Area of Conservation (SAC) and Ramsar site*”.
- 1.23. We also welcome much of the revised description in section 8.1, but we remain concerned that the particle size within the SCDF remains uncertain and therefore the potential to change the nature of the beach remains possible. As mentioned above we remain unaware of any successful mitigation methods that could be called upon should an unexpected impact arise. We do not believe it is acceptable to say that “*appropriate mitigation will be discussed and agreed*” given that we remain unaware of any appropriate mitigation for annual drift line vegetated shingle features. To further state that “*It is not possible to identify mitigation*” does not provide any further reassurance.
- 1.24. Ultimately, our main concern is the ambiguity over the technical detail with the SCDF and the mechanisms to how this will be resolved. It appears that the most suitable engineering solution could be approved without taking sufficient account of the impacts on the adjacent habitats. We also remain concerned that should damage to the adjacent habitats within protected sites occur, there are no examples of suitable mitigation strategies that could be implemented.

¹¹ RSPB/SWT Deadline 2 Submission - Written Representation (WR)

¹² 9.12 Preliminary Design and Maintenance Requirements for the Sizewell C Coastal Defence Feature REP10-124

- 1.25. The retention of options for coarser particle size in the revisions of both the Coastal Processes Monitoring and Mitigation Plan (CPMMP)¹³ and TR544¹⁴, along with no legal securing mechanism regarding particle size and the reference for the need for further technical modelling do not provide sufficient comfort that an acceptable solution has been found for particle size compatible with the neighbouring SAC feature.
- 1.26. We remain concerned that if any further refinement of the SCDF design identifies the need to coarsen the particle size in engineering terms, and if the ecological advice indicates this is not acceptable due to the potential for adverse effects on the integrity of the neighbouring SAC habitat, the Applicant has failed to identify how this would be resolved. Given that we are unaware of any example of a successful mitigation strategy for the annual vegetation of drift lines feature, we cannot be reassured this issue can be addressed. On this basis, we cannot conclude that the coastal management scheme is sufficiently advanced to avoid adverse effects on the integrity of the Minsmere to Walberswick Heaths and Marshes SAC.

¹³ Deadline 10 Submission - 6.14/10.5: Environmental Statement Addendum, Volume 3, Chapter 2, Appendix 2.15.A: Coastal Processes Monitoring and Mitigation Plan - Clean Version REP10-041

¹⁴ Deadline 10 Submission - 9.12 Preliminary Design and Maintenance Requirements for the Sizewell C Coastal Defence Feature REP10-124