

Comments on Written Representations

for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust

Submitted for Deadline 5 23 July 2021

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
RSPB Registration Identification Ref: 20026628
Suffolk Wildlife Trust Registration Identification Ref: 20026359

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1. Comments on Written Representations

1.1. We have provided comments on the Applicant's Comments on Written Representations¹.

The RSPB and SWT Written Representation ² reference and concern	Applicant's Comments on Written Representations ³ reference and response	Comments from the RSPB and Suffolk Wildlife Trust
Land take from Sizewell Marsh	nes SSSI (including impacts of the SSSI crossing)	
3.21 – 3.49 The principle and justification for the proposed loss of part of the Sizewell Marshes SSSI	14.2.2 The responses provided to Issues 48-50 in the response to Natural England's Written Representation within Chapter 11 of this report are relevant here; please refer to those responses for this purpose.	The Applicant's response provides no evidence to support the conclusion that the benefits of the development outweigh the harm. Therefore we consider that the Applicant must provide further evidence to justify its conclusion and positioning re no need to consider alternative layouts, designs as detailed in our Written Representations submitted at Deadline 2 ⁴ . We are also still concerned that the information before the Examination is inadequate for the Examining Authority to consider fully and robustly all possible effects on the SSSI and its features nor
		the feasibility of possible alternatives as detailed in our Written Representations submitted at Deadline 2 ⁵ and our Comments on Other Submissions (submitted at Deadline 2) submitted at Deadline 3 ⁶ .
3.50 – 3.59 Temporary land take from Sizewell Marshes SSSI	14.2.3 The response provided to Issue 51 in the response to Natural England's Written Representation within Chapter 11 of this report is relevant here.	The Applicant provided no further update. The concerns detailed in our Written Representations submitted at Deadline 2 ⁷ remain.

¹ Comments on Written Representations [REP3-042]

Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

³ Comments on Written Representations [REP3-042]

⁴ Paragraphs 3.21 – 3.30 of our Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

Paragraphs 3.31 – 3.49 of our Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

⁶ Section 3 of our Comments on Other Submissions (submitted at Deadline 2) submitted at Deadline 3 [REP3-074]

Paragraphs 3.50 – 3.59 of our Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

The RSPB and SWT Written Representation ² reference and concern	Applicant's Comments on Written Representations ³ reference and response	Comments from the RSPB and Suffolk Wildlife Trust
3.60-3.91 Adequacy of the proposed habitat compensation for the loss of fen meadow	14.2.4 The responses provided to Issues 48-50 in the response to Natural England's Written Representation within Chapter 11 of this report are relevant here.	Fen meadow The Applicant notes
		A draft of the Fen Meadow Plan, referred to by Natural England will be submitted to examination at Deadline 6. A note on the potential impacts to the Snape Wetland RSPB reserve will be submitted to examination at Deadline 5.
		The draft Deed of Obligation (Doc Ref. 8.17(D)) and the Fen Meadow Strategy [AS-209] will be updated at a suitable deadline to extend the contingency fund to a wider geographic area to include Norfolk, Suffolk, Essex and Cambridgeshire.
		These are welcomed, and we will review and comment when they are submitted to the Examination.
3.229-3.260 <u>Hydrological</u> <u>Impacts and Risks to Sizewell</u> <u>Marshes SSSI.</u>	14.4.1 The table below provides SZC Co.'s response to the hydrology issues raised within the RSPB and SWT's written representation [REP2-506].	The Applicant notes a monitoring plan will be submitted at Deadline 5 (23 July 2021). We will review and comment when it is submitted to the Examination.
	Table 14.1: SZC Co.'s response to key issues raised within the RSPB and SWT Written Representation [paragraphs 3.229-3.260]	
FoE written reps Expert Report: A critical review of SZC Co's site	15.4.1 Table 15.1 provides SZC Co.'s response to the issues raised within Suffolk Coastal FotE's WR [REP2-463] ⁸ . SZC Co. is disappointed that this report was not shared earlier as we would have been pleased to discuss the concerns raised, many of which	We refer to Friends of the Earth and their experts written submission to D5: Written Submission of Oral Case (ISH7) and Expert Comments on the Applicant's response to our Written Representation.
characterisation, impact assessment, and proposals for impact mitigation, in relation to the risks posed to the	appear to be rooted in misunderstandings over the Conceptual Site Model relating to Sizewell Marshes SSSI. However, we recognise that we have submitted a significant volume of evidence into the examination on the likely effects of the construction and operation of Sizewell C on the hydrology of the SSSI. We have drafted a paper that summarises this evidence and signposts	

⁸ Suffolk Coastal FotE's WR [<u>REP2-463</u>]

The RSPB and SWT Written Representation ² reference and concern	Applicant's Comments on Written Representations ³ reference and response	Comments from the RSPB and Suffolk Wildlife Trust
ecohydrological integrity of Sizewell Marshes SSSI	across to the source documents which provide further detail. This 'Groundwater Conceptual Model Paper' can be found in Appendix B of this report. SZC Co. would be pleased to engage with Suffolk Coastal FotE and their technical advisors on this paper and our tabulated responses below.	
Bats		
3.622-3.762 in relation to Bats	14.9.2 The Applicant has provided a response to the issues raised	Construction – Habitat Loss (Roosts)
Summary of lighting concerns: It remains unclear how, in practical terms, unacceptable levels of light will be defined and mitigated during	within the RSPB and SWT written representation, in addition to issues raised by others, within the SZC Co's Comments on the Local Impact Report (Doc Ref. 9.29) [REP3-044] ⁹ and the reader is	We welcome confirmation that no woodland removal along the north of Kenton Hills is required.
	directed to the response provided therein. Further responses will be provided as necessary at Deadline 5 but one point in relation to deer management is worth making here. 14.10 Deer Management	We will comment further when the Estate-Wide Management Plan and further information is submitted to the Examination.
construction. There appear to	Extract from REP3-044: Three large dark corridors will also be	Construction – Habitat Fragmentation
be potential conflicts between health and safety requirements and further controls being implemented. We have major concerns over the lack of detail on task-specific lighting during construction and how this will	retained within development area during construction as shown on the indicative lighting plans appended to updated Lighting Management Plan at Deadline 3 (Doc Ref. 6.3 2B (A)). These corridors will ensure bats have the ability to commute from roosting grounds in the north and foraging areas to the south, whilst dark boundaries will also ensure bats can move around the	We will comment further when the Estate-Wide Management Plan and further information is submitted to the Examination.
		The Applicant refers to updated lighting management plan submitted at Deadline 3. We assume this refers to the Technical note on indicative lighting modelling ¹⁰
be mitigated i.e. controlled,	boundaries of the development.	submitted at Deadline 3 and we provide comments on this below:
practically speaking on-the- ground on a day-to-day basis and at present there is nothing presented that could be easily adapted to provide the basis for a Working Method		There remains some ambiguity relating to lighting levels especially at the Compounds and Vehicle Entry Area. Normally these will vary between 20-50 lux, so fairly high, but all of these have the caveat that 'additional enhanced localised lighting may be needed'. There are no further details and therefore impossible to determine true impact bordering some of the key areas.

Comments on Councils' Local Impact Report [REP3-044]
 Technical note on indicative lighting modelling [REP3-057]

The RSPB and SWT Written Representation ² reference and concern	Applicant's Comments on Written Representations ³ reference and response	Comments from the RSPB and Suffolk Wildlife Trust
Statement for an Ecological Clerk of Works.		The modelling is <u>indicative</u> . The comment in paragraph 2.7.1 is of significant concern since it makes clear that the Technical Note does not 'constitute detailed design'. We believe that detailed design is very much needed for potential effects to be considered. This uncertainty further compounds the uncertainty from the first bullet.
		 Paragraph 2.5.2 shows Bridleway 19 as well as Ash Wood, Ash Cottages and either side of WMZ 3 and 4 have a lighting buffer of only 10 metres. This isn't enough in our view, especially for Bridleway 19 as the buffer is taken from the centreline, so in reality, the actual buffer is considerably less.
		There is clear spillage of 25 lux into Ash Wood indicating further mitigation is needed.
		 East of Ash Wood cottages and the flight line along the north of the site also looks like it might be over 25 lux, hence more mitigation is required.
		• We are concerned about the connectivity between Bridleway 19 and Kenton Hills as the dark area is intersected by the rail line.
		The updated bat impact assessment ¹¹ paragraph 4.1.4 notes - the approach to maintenance of dark corridors at light levels below 1lux and evidence that this would be achievable is presented in Section 8.2.
		Paragraph 8.4.51 notes Within the impact assessment for all bat species (Section 8.2), modelling that demonstrates that it will be possible to control the lighting impacts on key areas, extrapolated to other areas across the site is presented. This is the same for all bat

Volume 3 Chapter 2 Environmental Statement Addendum Terrestrial Ecology and Ornithology Appendices 2.9.A-2.9.D Part 1 of 2 [AS-208]

The RSPB and SWT Written Representation ² reference and concern	Applicant's Comments on Written Representations ³ reference and response	Comments from the RSPB and Suffolk Wildlife Trust
		species and shows that lux levels below 1lux can be achieved within sensitive areas across the site. (emphasis added)
		We request measures to control light spill to below 1lux in all bat sensitive areas are provided and are secured through requirement 4.
		We have shared these concerns with the Applicant and will continue to discuss them further.
		Whilst we appreciate the Terrestrial Ecology Monitoring and Mitigation Plan does mention lighting (and are also aware this document will be updated for Deadline 5) currently there is no mention of lighting levels and therefore our concerns remain.
		Construction disturbance – noise
		The Applicant has submitted no new information.
		Sizewell Link Road
		The concerns detailed in our Written Representations submitted at Deadline 2 ¹² remain. We understand the Applicant will be submitting further information in response to our written representation at Deadline 5. We will review and comment when further information is submitted to the Examination.
Natterjack Toad		•
3.763-795	14.11.1 The concerns raised by the RSPB and SWT in relation to natterjack toad are informed by the Amphibian and Reptile Conservation's Report (2020) to SWT appended in the appendices to the Written Representation [REP2- 506]. These are itemised	We understand the Applicant will be submitting further information to the Examination at Deadline 5 including the draft licence application to Natural England. We will review and comment when further information is submitted to the Examination.

Paragraphs 3.735-3 of our Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

The RSPB and SWT Written Representation ² reference and concern	Applicant's Comments on Written Representations ³ reference and response	Comments from the RSPB and Suffolk Wildlife Trust
	and responded to in Table 14.2 [not copied here, please see REP3-042 ¹³ . The existing draft licence [AS-209] is in the process of reviewed and updated (where necessary) as part of a final licence application to be submitted in summer 2021 (and subsequently to the examining authority). SZC Co. would be happy to engage with ARC / SWT on a without prejudice basis to optimise the mitigation approach for natterjack toads, prior to the submission of the final licence.	We also appreciate the Applicant's offer of further discussions with us and once the further new information and draft licence applications are received, we will arrange a meeting with them.
Hydrology		
3.85	Table 14.1 A note on the potential for impacts arising from the proposed works at Benhall on the RSPB's Snape site, downstream on the Fromus, will be submitted to examination at the appropriate deadline. The interim assessment conclusions are that there is no potential for any impact since there would be no water control structures within the River Fromus and no substantive alternations to flows. Water used for fen meadow habitats would be achieved by intra-site drainage changes and potentially lowering ground levels (which would intercept ground water and also remove nutrient rich top soils).	We welcome the commitment to respond to the potential risk of the Benhall Fen Habitat Compensation site on the RSPB's Snape site, but request that clarity is provided regarding the deadline for submission.
3.221 & 3.222	Table 14.1 states it is recognised that reassurance monitoring is required to demonstrate that the predicted change is realised, and not exceeded, as the project progresses	We welcome this commitment and paragraph 1.3.2 in Appendix 19F of APP-309 reference to 'any potential changes that may extend to the Minsmere Walberswick Heaths and Marshes SSSI', but remain unclear on any proposed mitigation measures should actual changes be realised.

¹³ Comments on Written Representations [REP3-042]

The RSPB and SWT Written Representation ² reference and concern	Applicant's Comments on Written Representations ³ reference and response	Comments from the RSPB and Suffolk Wildlife Trust
3.167 – 3.228	Table 14.1 various responses	We welcome the additional clarity provided regarding the potential for water level impacts on the protected sites - Minsmere – Walberswick SPA, SAC, Ramsar and SSSI. We note that this assessment is dependent upon the success of the embedded mitigation and continue to have concerns that the embedded mitigation is caveated with statements that lack certainty. As per our Deadline 3 submission paragraphs 2.2 re need for the Construction Code of Practice (CoCP) to be secured rigorously through DCO and contain further details, we note in paragraphs 2.7 – 2.25 of it caveats around economic benefit, avoiding damage to critical structures and buildings, the use of the term 'where possible'/'wherever practicable', ongoing design, formal confirmation, potential rather than confirmed measures and therefore cannot conclude that the impact has been satisfactorily controlled until details of the mitigation are progressed. We note that these concerns are also shared by other Interested Parties such as East Suffolk Internal Drainage Board 16
3.227	A technical paper on the proposed control structure will be issued at Deadline 5 (23 July 2021). Additionally the control structure will be subject to further controls beyond the DCO process, including an Impoundment Licence, Flood Risk Activity Permit, and Land Drainage Consent.	We welcome this commitment, but note that this will be subject to further licence, permit and consent controls beyond the DCO process and need reassurance that these will consider the potential relationship with Sizewell Marshes SSSI and Minsmere – Walberswick SPA, SAC, Ramsar and SSSI.

¹⁴ 19.6.40 of <u>APP-297</u>

^{15 [}REP3-074] Comments on Other Submissions (submitted at Deadline 2) for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust section 2.2 and 2.7-2.25 relating to in [REP2-033]¹⁵ Volume2 Chapter2 Appendix2A of the ES Outline Drainage Strategy

¹⁶ [REP3-066] response to FR.1.69 East Suffolk Internal Drainage Board - Comments on responses to ExA's Written Questions (ExQ1)

The RSPB and SWT Written Representation ² reference and concern	Applicant's Comments on Written Representations ³ reference and response	Comments from the RSPB and Suffolk Wildlife Trust
Landscape Strategy		
3.796-3.816	c) Habitat enhancement, reinstatement and creation 14.12.11 SZC Co. note RSPB and SWT's comments on the creation of dry Sandlings grassland on land used for construction purposes. SZC Co. have submitted an updated Outline Soil Management Plan for Deadline 3 (Doc Ref. 6.3 17C(A)) which provides high level principles regarding soil handling methodology, control measures and monitoring programme for the site. The Outline Soil Management plan notes that soil management will be aligned to the Landscape and Ecological Management Plan end use and management practices will be adapted to support this.	The Applicants response refers to the updated outline soil management plan [SMP] which notes that soil management will be aligned to the Landscape and Ecological Management Plan [LEMP] end use and management practices will be adapted to support this. However the LEMP does not yet exist, and the lack of detail in the outline Landscape and Ecological Management Plan (oLEMP) 17 and outline SMP do not provide us with confidence that dry Sandlings grassland can be created on land used for construction purposes. The outline SMP notes at paragraph 7.1.1 - The final SMP will include a set of specifications for the required characteristics of soil profiles for each defined end use. And at paragraph 1.2.5 - Prior to any soil stripping works commencing this outline SMP will be updated by the Contractor and detailed Soil Resources Plans (SRP) will be produced for each part of the Sizewell C Project to provide the required detail (as highlighted throughout this document). These SRPs will form part of the SMP And at paragraph 1.2.6 - The SRPs will be produced by the Contractor to include: • A target specification for the restored soils (i.e. depth of soil profile, horizon thickness, textures, available soil nutrients where applicable, etc.)
		The Applicant proposes the required detail will be provided after the close of the Examination. We request the Applicant provides further information to demonstrate that dry Sandlings grassland can be created on land used for construction purposes to the Examination.

The RSPB and SWT Written Representation ² reference and concern	Applicant's Comments on Written Representations ³ reference and response	Comments from the RSPB and Suffolk Wildlife Trust
Biodiversity Net Gain		
Section 5	14.13.1 SZC Co. believe that there is a misunderstanding of biodiversity net gain in the response provided by RSPB / SWT. Net gain does not 'supersede' species mitigation and does not 'double count'. The two must be considered separately. BNG seeks to be a holistic way to look at the impact of a project on biodiversity. Therefore it is appropriate to include all areas which are modified, whether this be to facilitate the development or offset impacts to species. The Environment Bill, May 2021: - https://bills.parliament.uk/publications/41447/documents/196 states: 14.13.2 "The biodiversity metric does not address impacts on species, recognise the significance of site designations, take account of indirect impacts, cumulative impacts or in combination impacts. In recognition of these limitations, the biodiversity net gain requirement for development on such sites is additional to any existing legal or policy requirements for statutory protected areas and their features, including restoration and conservation of designated features and the achievement of favourable conservation status and favourable condition. These requirements will need to be dealt with separately by the developer and planning authority." 14.13.3 The landtake impacts to the Sizewell Marshes SSSI and the related compensatory habitats are excluded from BNG approach, as defined by guidance. This and other related points are further	We thought it useful to update the ExA on the Environment Bill and mention there is now a further version ¹⁸ following the House of Lords Committee stage and (among other additions) a new government clause on BNG as follows "95 Biodiversity gain in nationally significant infrastructure projects Schedule 15 makes provision about biodiversity gain in relation to development consent for nationally significant infrastructure projects." But our main concerns remain including the current policy guidance on BNG e.g. National Planning Policy Statement, BNG Good Practice Principles for Development ¹⁹ as well as the latest draft of the Environment Bill ²⁰ (as set out in detail in our written representation's ²¹ submitted at deadline 2) namely: • The Environment Bill is an outline piece of legislation, not near Royal Assent, nor have the BNG secondary legislation and guidance required been drafted (we are confident the regulations will not be finalised before the end of the Examination or DCO decision) and therefore the new system a long way from being up and running. • In addition both the Environment Bill and current Policy and Guidance presumes projects damaging protected features cannot claim to be delivering net gain, therefore some of the technical

Outline Landscape and Ecological Management Plan (oLEMP) [REP1-010] section 6.2 https://bills.parliament.uk/publications/42243/documents/555

Baker, J., Hoskin, R. and Butterworth, T. (2019) Biodiversity net gain. Good Practice Principles for Development. A practical guide

https://bills.parliament.uk/publications/42243/documents/555

Section 5 of Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

The RSPB and SWT Written Representation ² reference and concern	Applicant's Comments on Written Representations ³ reference and response	Comments from the RSPB and Suffolk Wildlife Trust
	explained in the Responses to the ExA's Q1, Bio 1.260 onwards [REP2-100].	arguments within in the Applicant's response may be deemed not relevant.
	14.13.4 Given the detailed comments provided in relation to biodiversity net gain, a further response will be provided for Deadline 5	 Although the use of the BNG 2.0 metric could be an interesting review tool to get a different informal perspective on direct habitat impacts, we would question too much reliance being placed on it.
		However we do believe there could be double counting currently within the Application (as set out in paragraphs 5.27-5.31 re the inclusion of mitigation and compensation), but knowing a further response will be provided by the Applicant at Deadline 5 and look forward to reviewing the further information to be provided.
		For now we simply summarise the points in our WRs –
		 BNG Good Practice Principles for Development²², section 9.5 states projects affecting statutory designated sites or irreplaceable habitat cannot as a project achieve BNG (para 5.27-5.31)
		 The Biodiversity Net Gain Report²³ provides no indication of specific measures for other species over and above protected species mitigation and compensation measures. (para 5.37)
		 Only if the Applicant can demonstrate robustly having BNG aspirations in mitigation area will not have any impact on effectiveness of mitigation can the same area be used for both.

Baker, J., Hoskin, R. and Butterworth, T. (2019) Biodiversity net gain. Good Practice Principles for Development. A practical guide.
 ES Volume 2 Main Development Site Chapter 14 Terrestrial Ecology and Ornithology Appendix 14E Biodiversity Net Gain Report (REP1-004)

2. Comments on Applicant's Response to the RSPB/SWT Written Representations

14.5 Noise and visual disturbance (waterbirds)

14.5 b) iv Baseline Data – breeding bird survey methodology

2.1. The Applicant takes the view that the breeding wader and waterfowl surveys carried out in 2020 follow a similar methodology to those from which the historic RSPB data are derived and that they are sufficient to inform an analysis of bird distribution:

"14.5.3 Based on the correspondence, the RSPB survey methods are broadly similar to those used by Sizewell C Co. During the SZC Co surveys, vantage points were used rather than undertaking detailed manual searches of vegetation along all waterbodies to minimise disturbing any nesting birds, particularly Schedule 1 and those which are highly sensitive to disturbance. Observers walked between the vantage points around the South Levels. The RSPB methodology uses a walked transect around the South Levels, undoubtedly with occasional stops and scans by surveyors but follows a similar route to that used by the SZC Co survey team."

- 2.2. However, based on a comparison of the RSPB's transect route for waterfowl surveys and the Applicant's vantage points²⁴ it does appear that the RSPB's route includes greater coverage of the ditches where breeding waterfowl might be expected to be found (although note that the RSPB methodology does not include "manual searches" or any deliberate disturbance as stated above).
- 2.3. The response goes on to explain that the 2020 surveys carried out by the Applicant provided details regarding bird distribution which were not available from the historic data supplied by the RSPB. The Applicant states that one year of distributional data is sufficient to inform the assessment:

"14.5.7 The RSPB/SWT Written Representations also state that "the lack of longer-term distributional data (following a standard repeated visit methodology and usually for a minimum of two years) represents a significant limitation to the Applicant's impact assessment." However, although distributional information on the relevant SPA qualifying features derives from a single year (i.e. 2020), it is important to note that the recorded distributions are consistent with what would be expected, given that they are broadly coincident with that of the main pool systems (and hence likely preferred habitats of the relevant species) within the Minsmere South Levels. Furthermore, as outlined and explained Section 11.21 of this report in response to the Natural England Written Representations [REP2-153], the conclusions of no adverse effects on the relevant SPA qualifying features are not dependent on this distributional information."

2.4. We disagree with the assertion that one year of distributional data is sufficient based on bird distributions coinciding with the pool systems as expected. Whilst the main pool areas are permanent features and we agree that these are regularly used by waders and wildfowl, breeding waterfowl will also use ditches and long vegetation which are found throughout the South Levels and distribution may vary year on year.

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²⁴ Figure 1 in Additional Ecology Baseline Survey Reports Part 1 [AS-021]

2.5. For this reason, we also disagree with the statement that distributional information does not affect the conclusions of potential adverse effects on the integrity of the Minsmere-Walberswick SPA and its qualifying features. Whilst we agree that the Applicant's assessments do assume an even distribution of breeding birds across the South Levels, the Applicant does state that this is likely to overestimate impacts as birds are mainly present in the north-eastern pool system where they are not likely to be significantly affected by noise and visual disturbance. However, as stated above, breeding waterbirds are also likely to use ditches and long vegetation in other parts of the South Levels, including areas likely to be affected by noise and visual disturbance, and we therefore consider the assumption of an even distribution a reasonable approach and not an overestimation.

14.5 b) v Assessment methodology

Definitions of daytime and night-time

2.6. We welcome the Applicant's intention (stated in paragraph 14.5.9) to provide an update on the impacts of 'daytime' noise levels during hours of darkness at Deadline 5.

Requirement to have the acoustic fence in place at the start of Phase 1 construction (to ensure that the Phase 1 predicted noise levels are not underestimated)

2.7. Paragraph 14.5.16 states that:

"The construction of the acoustic barriers will be an early priority during Phase 1 of the construction works"

2.8. We consider that to ensure effective mitigation, a commitment to commence the construction of these barriers at the beginning of construction Phase 1 (and before other significantly noisy activity occurs) should be secured.

Uncertainty regarding noise impacts during construction Phase 5

2.9. We are grateful for the clarification that noise levels during construction Phase 5 will be similar to those during Phase 1. However, due to this, our concerns around the ecological impacts of this Phase (set out in paragraph 3.284 of our Written Representation²⁵) remain.

Modelling of chronic noise levels

2.10. Paragraph 14.5.22 states that:

"Chronic noise is modelled for Phases 3 and 4 because these phases will extend over a considerably longer period than Phases 1, 2 and 5 (i.e. 7-8 years as opposed to approximately 4.5 years for Phases 1 and 2, or approximately 2 years for Phase 5). As such, the outputs of the modelling for Phases 3 and 4 will be more representative of the 'typical' chronic noise levels that birds will be exposed to during the construction period."

2.11. The durations of construction Phases 1, 2 and 5 are therefore still significant enough to result in significant ecological effects and we remain of the view that chronic noise during these phases should be modelled and assessed.

²⁵ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

14.5 b) vi. Noise and visual disturbance evidence base

Lack of sensitivity threshold for chronic noise

2.12. We acknowledge the difficulty of deriving a robust threshold for chronic noise disturbance to breeding waterbirds given the limited research-based evidence available. However, we are still of the view that the predicted noise levels should be assessed in relation to the available evidence and that this evidence should be used to inform the assessment of significance.

Visual disturbance

2.13. We remain of the view that the Applicant's approach of reducing the visual disturbance buffer from 300m to 150m where some screening exists has not been adequately justified. The amount of construction infrastructure visible above such screening is likely in many areas to be significant.

14.5 b) vii. Summary of extent of noise and visual disturbance impacts on birds during construction

Daytime impulsive noise

- 2.14. We apologise that, based on a comparison of the updated noise modelling for Phase 2 of the construction period presented in Figure 8A.9 of the Shadow HRA Report Addendum Appendices Part 5²⁶ with the original modelling in Figure 8.4 of the Shadow HRA Report Vol. 1 Part 3²⁷, we appear to have made an error in the interpretation of the 65dB noise contour in paragraph 3.300 of our Written Representations.
- 2.15. However, the Applicant goes on to state that our concerns about noise levels throughout the construction period derive from this error. This is incorrect as our concerns apply throughout Phases 1 to 4 of the construction period (and into Phase 5 due to uncertainty around predictions see below), rather than solely in Phase 2. In paragraph 3.299 of our Written Representations, we quoted the Applicant's own summary of the original noise modelling outputs from the Shadow HRA Report Vol. 1 Part 1²⁸ (our underlining):

"Encroachment of the 64dB Lamax footprint onto both areas [South Levels and Sizewell Marshes] is <u>substantive</u> during Phases 1 and 2... <u>A large part</u> of the Sizewell Marshes continues to be encompassed by the 65dB_{LAmax} contour during Phases 3 and 4, but by Phase 5 there is little encroachment..."

2.16. In the Shadow HRA Report Addendum²⁹, the Applicant summarises the changes arising from the updated modelling:

"The areas encompassed by the 65dB LAmax contour and 70dB LAmax contour... in the updated daytime noise modelling for Phases 1 to 4 are essentially unchanged compared to the modelling outputs used in Shadow HRA, except for Phase 1 in the vicinity of the flood compensation area and wetland..."

²⁶ Shadow HRA Report Addendum Appendices 1A-10A Part 5 (AS-178)

²⁷ Shadow HRA Report Volume 1: Screening and Appropriate Assessment Part 3 (APP-147)

²⁸ Paragraph 8.8.76 of the Shadow HRA Report Volume 1: Screening and Appropriate Assessment Part 1 of 5 (APP-145)

²⁹ Page 10 (no paragraph number) of the Shadow HRA Report Addendum (AS-173)

2.17. This supports our concerns, despite the Applicant's statement (in paragraph 14.5.31 of their Response) that the revised modelling does not lead to conclusions of *adverse effects on integrity* on breeding waterbirds (gadwall, shoveler, teal) of the Minsmere-Walberswick SPA. In paragraph 3.302 of our Written Representations, we explained that:

"Based on the noise impacts of Phases 1 to 4 only (given the uncertainty regarding Phase 5), this equates to potentially significant noise impacts on breeding birds of the Minsmere South Levels for the first 4-5 years of construction and to those of Sizewell Marshes for first 10-11 years. Should impacts during construction Phase 5 also be significant then breeding birds on Sizewell Marshes would be affected throughout the entire construction period of 12 years and on the Minsmere South Levels for up to 9 ½ years ..."

- 2.18. Given that both Sizewell Marshes and the Minsmere South Levels are functionally linked to the Minsmere-Walberswick SPA with regard usage by breeding waterbirds, our conclusion that adverse effects on the integrity of these features cannot be ruled out remains.
- 2.19. We welcome the Applicant's response to our concerns about the clarity of the original noise modelling outputs for Phase 5 (in Figure 8.6 in Shadow HRA Report Vol. 1 Part 3) and look forward to further clarification of this issue, noting that this should include whether any changes to the original modelling would arise from the updated modelling (as no updated outputs for construction Phase 5 were provided).
- 2.20. We also request that, in relation to the updated noise modelling maps for construction Phase 2, the Applicant clarifies why the 65dB contour within the Minsmere South Levels in Figure 8A.2 (which also shows noise modelling for Phase 2) differs significantly to that in Figure 8A.9 (which shows construction Phase 2 with the construction of the second BLF). Whilst we assume that this could relate to changes in transportation should the second BLF be built, we would welcome clarification of this issue.

Daytime chronic noise

- 2.21. We accept that the assessment of noise impacts based on impulsive noise is supported by a greater level of research evidence compared to that of chronic noise and that it is difficult to derive a threshold for chronic noise impacts. However, as stated above, we consider that the predicted chronic noise levels should be assessed in relation to the evidence that is available, and as discussed in paragraphs 3.296 and 3.306-3.307 of our Written Representation, we are concerned that this evidence indicates that effects on breeding birds could arise.
- 2.22. Our concerns that that chronic noise modelling for Phases 1, 2 and 5 has not been provided also remain³⁰.

Night-time chronic and impulsive noise

2.23. We are grateful for the Applicant's explanation for the restriction of night-time noise modelling to construction Phases 3 and 4, although we note that ES Vol. 2 Ch. 11 Noise and Vibration Appendix 11B Construction Noise Assessment indicates that significant night-time noise could also occur in construction Phase 2.

See paragraphs 3.286 and 3.307 of the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

2.24. We also continue to request clarification as to whether the modelling of night-time noise incorporates the additional freight trains proposed as part of the Change Application (see paragraph 3.310 of our Written Representation).

14.5 b) viii. Impacts on breeding birds of the Minsmere-Walberswick SPA

Impacts on breeding gadwall and shoveler

- 2.25. With regard the assertion that the assessment of noise disturbance effects on breeding gadwall and shoveler is highly precautionary, being based on the WCS of construction Phase 1 and an assumed even distribution of birds across the Minsmere South Levels, we wish to raise the following points:
 - The assumed even distribution of breeding birds across the South Levels is stated to be highly precautionary based on the assumption that birds are found primarily on the northeastern pools. As stated above, we consider that birds using ditches may be more widely distributed and may not have been fully recorded on the Applicant's surveys
 - We also note that the WCS is likely to apply not only to phase 1, but also Phase 5, as noted
 in the Applicant's comments in paragraph 14.5.20 of their Response, hence application of
 the WCS to these 6.5 years of the construction period is in our view a reasonable approach
 and not highly precautionary.
- 2.26. We welcome the commitment in paragraph 14.5.44 that works on the flood compensation area will only be carried out in winter and that in the event that works are not completed in the first winter, that they would be continued in a second winter. We agree that this will avoid the additional noise disturbance of these works on breeding birds of concern (shoveler, gadwall, bittern). We request that this commitment is adequately secured.

Impacts on breeding bittern

2.27. We welcome the Applicant's statement in paragraph 14.5.50 (and 14.5.44 as discussed above) that they:

"...would be prepared to commit to carry out these excavation works within a defined winter period of October – February inclusive, to minimise the potential for impacts on breeding bitterns."

2.28. We confirm that securing this commitment would resolve our concerns on this issue.

14.5 b) ix. Impacts on non-breeding birds of the Minsmere-Walberswick SPA

Impacts on non-breeding gadwall

2.29. We maintain our position that displacement of non-breeding gadwall, primarily from Sizewell Marshes, could (in the absence of mitigation) result in *adverse effects on the integrity* of the Minsmere-Walberswick SPA through a reduction in the area of functionally-linked habitat available and the potential for the overall species population of the SPA to decline as a result.

Impacts on non-breeding shoveler

2.30. As above for non-breeding gadwall, we maintain our position that displacement of non-breeding shoveler, primarily from Sizewell Marshes, could (in the absence of mitigation) result in adverse effects on the integrity of the Minsmere-Walberswick SPA through a reduction in the area of functionally-linked habitat available and the potential for the overall species population of the SPA to decline as a result.

Impacts on non-breeding white-fronted goose

2.31. We welcome the intent to provide survey results for white-fronted goose at Deadline 5 and will comment further on this issue following their submission.

14.5 b) xi. Impacts on breeding birds of the Sandlings SPA

2.32. We note that only part of the northern block of the Sandlings SPA is affected by the visual disturbance buffer, as explained by the Applicant, but request that further detail regarding the numbers of woodlark and nightjar within this affected area is provided, as at present it is not clear what the level of impact would be. We also note that our point³¹ around the need to consider the combined effects of visual disturbance and recreational displacement from this Application remains.

14.5 b) xii. Monitoring

2.33. We continue to recommend that the monitoring programme includes monitoring of noise levels during construction on the Minsmere South Levels and Sizewell Marshes to verify the noise modelling predictions and monitor likely impact levels.

14.5 b) xiii. In-combination impacts

Offshore windfarm cable routes

2.34. We maintain our point³² that this assessment should include the potential for displacement due to the construction of this Application to increase/change the predicted impacts of the Scottish Power Renewables offshore wind cable routes, although we acknowledge that the submission of the Minsmere Monitoring and Mitigation Plan³³ (since preparation of our Written Representations) proposes mitigation for recreational impacts from this Application.

Sizewell B relocated facilities

2.35. We welcome the Applicant's intention to provide further comment on the in-combination noise impacts of the relocated facilities works with this Application at Deadline 5.

³¹ See paragraph 3.349 of the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

See paragraph 3.357 of the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

³³ Minsmere Monitoring and Mitigation Plan [REP2-118]