Date: 14 June 2022

Our ref: Size-SP004 (NE Internal ref: 394226b)

Your ref: EN010012



Customer Services Hornbeam House Crewe Business Park Electra Way Crewe Cheshire CW1 6GJ

T 0300 060 3900

Gareth Leigh

Head of Energy Infrastructure Planning
Department for Business, Energy & Industrial Strategy
1 Victoria Street
London
SW1H 0ET

SizewellC@planninginspectorate.gov.uk

BY EMAIL ONLY

Dear Mr Leigh

Planning Act 2008 and The Infrastructure Planning (Examination Procedure) Rules 2010

Application by NNB Generation Company (SZC) Limited ("the Applicant") for an Order granting Development Consent for the proposed Sizewell C Nuclear Power Station ("the proposed Development")

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

The following constitutes Natural England's statutory response to paragraphs 3, 4, 5 and 6 of the Secretary of State for Business, Energy, and Industrial Strategy's request for information, dated 16th May 2022.

1. Natural England's response

- 1.1. Secretary of State request: Paragraph 3, 4 and 5 Marsh Harrier:
 - '3. The Secretary of State received information on 5 May 2022 from the Applicant regarding a pair of breeding marsh harriers recently located within the Sizewell Marshes SSSI.
 - 4. The Secretary of State now invites Natural England, the Royal Society for the Protection of Birds, and Suffolk Wildlife Trust to comment on the information

submitted by the Applicant.

5. The information submitted by the Applicant has been uploaded to the Planning Inspectorate's project page for the proposed Development, and can also be found at Annex A of this letter.'

1.2. Natural England's response -

- 1.2.1. Having reviewed the Applicant's Shadow Habitats Regulations Assessment (HRA) Addendum (May 2022) shown in Annex A in response to the pair of breeding marsh harriers recently located within the Sizewell Marshes SSSI, we agree that the conclusions of the shadow Habitats Regulations Assessment with regards to marsh harrier remain unaffected by this new information.
- **1.2.2.** Also, in relation to marsh harrier, we provide the below advice at this stage on the Applicant's response¹ to the Secretary of State's question 7.1 in their letter dated 18th March 2022 which asked:

"In relation to noise and visual disturbance effects during the construction of the proposed Development upon the breeding marsh harrier feature of the Minsmere-Walberswick Special Protection Area ("SPA") and Ramsar site, the Applicant is requested to provide information to demonstrate how the wetland habitat element of the proposed marsh harrier compensatory habitat area could be in place and functioning prior to the onset of disturbance to marsh harrier from construction activities"

- 1.2.3. The Applicant's shadow HRA concludes at the appropriate assessment stage it is not able to ascertain that the proposal will not result in adverse effects on the integrity of any of Minsmere-Walberswick Special Protection Area (SPA) and Ramsar site. Having considered the assessment, and the measures proposed to mitigate for any adverse effects, Natural England agrees with the conclusion that it is not possible to ascertain that the proposal will not result in adverse effects on site integrity.
- 1.2.4. Regulation 63 of the Conservation of Species and Habitats Regulations 2017 (as amended) states that a competent authority may agree to a plan or project only after having ascertained that it will not adversely affect the integrity of European sites, subject to the exceptional tests set out in regulation 64 of the Conservation of Habitats and Species Regulations 2017 (as amended). Where it cannot be ascertained that the proposal will not adversely affect the integrity of the European site, your authority cannot permit the proposal unless it passes the tests of regulation 64; that is that there are no alternatives, and the proposal must be carried out for imperative reasons of overriding public interest (IROPI). Your authority should therefore consider the exceptional tests set out within regulation

¹ SZC Co.'s Response to the Secretary of State's Request for Further Information dated 18 March 2022 (Revision 1, dated April 2022)

- 64. Specific guidance about these tests can be found at: <u>Habitats regulations</u> assessments: <u>protecting a European site GOV.UK (www.gov.uk)</u>
- **1.2.5.** Our advice on this issue is therefore provided for the eventuality that the Secretary of State identifies imperative reasons of overriding public interest that justify the project being consented despite the environmental damage it will cause to Minsmere-Walberswick SPA and Ramsar site.
- 1.2.6. As we have previously outlined, we very much welcome the proposed creation of wetland habitat as part of the proposed marsh harrier compensation package. We also welcome the earlier confirmation from the Applicant that such habitat creation is feasible given their justification for not including it in their initial proposals (i.e. unsuitable ground levels, geology and ground and surface water regimes).
- 1.2.7. We advise that creating the wetland habitat between mid August 2022 and February 2023, as outlined and considered achievable by the Applicant in paragraphs 6.1.4 and 6.1.5 of their response, would give the best possible chance of the habitat being in place and functioning as far as possible as part of the wider compensatory terrestrial dry habitats; which have already been created to maximise abundance and availability of marsh harrier prey (small mammals and breeding birds), prior to the onset of significant disturbance to marsh harrier from construction activities (March 2024 as outlined in paragraph 6.1.13).
- 1.2.8. This considers that, while there will likely be a pulse of invertebrates that will quickly attract other bird species which marsh harrier can prey upon during early establishment of the wetland habitat, it would unlikely be functioning to its full extent for foraging marsh harrier after one year as colonisation by the full range of prey species is likely to take longer.

1.3. Secretary of State request: Paragraph 6 – Habitat Regulations Assessment: Air Quality:

'With regards to the Applicant's updated air quality assessment (see Annex B), which presents the results of modelling the combined emissions from diesel generators for the temporary desalination plant and other sources¹, Natural England is invited to provide advice on whether an adverse effect on site integrity due to the impacts of changes in air quality can be excluded for the qualifying features of the following sites:

- Sandlings SPA; and
- Minsmere-Walberswick SPA, SAC and Ramsar.'

1.4. Natural England's response:

1.4.1. Summary of advice - Natural England welcomes that a cumulative 'alone' assessment² (i.e. of all elements of the project with the potential to result in air quality impacts to the above sites considered together) has now been undertaken

by the Applicant and submitted for review. Please note that this is the first opportunity we have been given to review and comment on this key information despite advising that such an assessment is required since the pre-application stage.

- **1.4.2.** Having reviewed the assessment Natural England advise that there will be no adverse effects on site integrity of Minsmere-Walberswick Special Protected Area (SPA) and Sandlings SPA arising from changes in air quality.
- 1.4.3. However, Natural England advise that, based on the information provided, adverse effects on site integrity at Minsmere-Walberswick Special Areas of Conservation (SAC) and Ramsar site arising from changes in air quality cannot be ruled out at this stage due to the sensitivity of the qualifying features associated with the site in relation to potential airborne pollutants and nitrogen and acid deposition from activities relating from the Project. We therefore advise that further assessment is required.
- 1.4.4. Furthermore, the Habitat Regulations and subsequent published Natural England guidance require an air quality assessment to assess the effect of new projects and plans on air quality near a European site both alone and/or incombination with other projects and plans in the surrounding area as part of the shadow Habitat Regulations Assessment (HRA) produced by the Applicant. This is to ensure that the project 'alone' will not have an adverse effect on site integrity but also to ensure that the project in-combination with other sources of emissions and deposition from nearby projects and plans do not create an additive or culminative adverse effect on site integrity arising from changes in air quality. An 'in-combination' air quality assessment is therefore required at the screening stage of the Applicants shadow HRA for Natural England to fully assess whether an adverse effect on site integrity due to the impacts of changes in air quality can be excluded for the qualifying features of Minsmere-Walberswick SAC and Ramsar. However, an in-combination air quality assessment has yet to be provided by the Applicant.
- 1.4.5. Detailed advice The assessment, described as an "indicative air impact assessment", includes a lot of assumptions and averages (e.g. in paragraphs 1.1.7 and 2.1.4 in terms of control measures and emission parameters) which we believe does not provide the necessary level of certainty required under the Habitat Regulations to reach a robust, evidence-based conclusion at this time. Assumptions must be clearly presented and justified as part of the assessment.
- 1.4.6. Published Natural England guidance³ explains that when emissions and/or deposition at a European designated site exceed 1% of the relevant critical level (CLe) or load (CLo), a likely significant effect on a designated site cannot be screened out and must proceed to an appropriate assessment at Stage 2 of the HRA. At the appropriate assessment stage, we ask that a case specific approach is taken using the list of appropriate evidence sources provided in NEA001³ (pages 25-39). A conclusion of adverse effect must be justified by relevant and robust evidence. This will typically include detailed modelling based upon realistic

parameters. If the subsequent emissions and case or site specifics of the project do not rule out an adverse effect, mitigation will need to be proposed. Mitigation must meet the requirements of the Habitats Regulations. Failing that, the HRA would need to progress to Stage 3 of the process.

- 1.4.7. The assessment's inference appears to be that the impact on European sites is negligible and that there will be no likely significant effect on Minsmere-Walberswick SAC and Ramsar site. Section 3.2.2 states that predicted concentration during phases 1 and 2 are insignificant at all of the habitat sites, however Tables 15 and 16 show multiple exceedances of the annual NOx CLe threshold. Table 24 clearly indicates that the threshold is also exceeded for nitrogen deposition at several designated features. These features are sensitive to direct effects from NOx toxicity as well as indirect effects as a result of nitrogen deposition. In accordance with the precautionary approach required at screening, this exceedance of the threshold triggers the need for an appropriate assessment. No evidenced justification is given as to why the process required under the Habitat Regulations would not be relevant in this case. It is also not clear if the Applicant has included other project-wide emission sources that could also contribute such as Heavy Goods Vehicles and associated increases in annual average daily traffic.
- 1.4.8. Potential impacts of excess airborne pollutants and subsequent deposition on the European dry heathland qualifying feature of Minsmere-Walberswick SAC include, but are not limited to, changes in species composition from ericoid species (heather) to grass species, increased risk of heather beetle attacks on Calluna vulgaris and general increased nitrogen inputs due to initial nitrogen stimulated growth for Calluna species, increased litter, nitrogen return and mineralization. Similarly, the annual vegetation of drift lines qualifying feature can be very variable, with similarities with grasslands, heaths, wetlands, and scrub with many locations being important for lichen heath vegetation and is therefore sensitive to aerial concentrations of pollutants and subsequent nitrogen deposition.
- **1.4.9.** The uncertainties and omissions in the air quality assessment mean Natural England cannot yet advise upon the presence or absence of adverse effects on site integrity at Minsmere-Walberswick SAC and Ramsar as no appropriate assessment has been carried out in the shadow HRA by the Applicant.
- 1.4.10. Furthermore, the Applicant has not assessed ammonia emissions as part of the updated air quality report. There is growing evidence to support the significance of ammonia as a source of pollution from vehicle emissions. Ammonia is a source of nitrogen deposition and can act in-combination with NOx to increase deposition experienced on a designated site. Ammonia also has direct toxic effects upon sensitive species. Natural England has advised that the impacts of ammonia from vehicle emissions should be considered at the appropriate assessment stage, particularly where case specific circumstances would benefit from such an analysis (for example, where there are significant exceedances of the critical load).

- 1.4.11. Furthermore, the Applicants air quality assessment is a culminative assessment of project-wide emissions and not an in-combination assessment, which is what is required at the appropriate assessment stage of the HRA to comprehensively assess potential impacts on designated sites. The alone assessment should include the current background pollution and any live plans or projects since the data was last updated. The in-combination assessment should include all relevant sources of air pollution (from across sectors) which are 'live' at the time of assessment. The need for in-combination assessment arises at both the screening stage for LSE (likely significant effects) and the appropriate assessment stage. The need for appropriate assessment arises when the project is found to have a likely significant effect on a European site either alone or incombination with other plans or projects at the screening stage.
- 1.4.12. Finally, Natural England recognise that at the Minsmere-Walberswick SAC and Ramsar site the background levels of Nitrogen and sulphur already exceed the CLe. Whilst it is not the Applicant's responsibility to get concentrations and loadings to below the threshold, they must not undermine Natural England's ability to reach the conservation objectives of the site and is not a justification to allowing further deposition, especially when they have been found to be significant (> 1% of the CLe and CLo) as the potential for restoration risks being undermined which is a conservation objective of the site.
- 1.4.13. Natural England have been consulted on the Habitats Regulations Assessment (HRA) undertaken by the Environment Agency in their role as competent authority, to inform conclusions on the operational Combustion Activity (CA) permit. However, this CA HRA remains draft at this time, pending editorial checks. It is then due to undergo a planned public consultation, associated with their proposed decision for this CA permit. The advice provided above is consistent with the advice we have provided to the EA's CA HRA but does not pre-judge the outcome of the CA HRA.
- 1.4.14. Natural England also highlight that emissions from the desalination plant generators will require an environmental permit from the EA. The permit process for this combustion activity will require a further comprehensive assessment of air quality impacts at that time.

This concludes Natural England's advice at this time, which we hope you will find helpful.

For any queries relating to the content of this letter <u>only</u>, please contact Jack Haynes on 020802 64857.

Yours sincerely,

Jack Haynes Senior Adviser Norfolk & Suffolk Area Team

² SZC Co.'s Response to the Secretary of State's Request for Further Information dated 18 March 2022: Appendix 7 – Project Air Quality Assessment, dated April 2022

³ Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations - NEA001