



EDF Energy

By email only

25th January 2017

Dear Sir/Madam

SIZEWELL C STAGE 2 PRE-APPLICATION CONSULTATION

Thank you for consulting the RSPB regarding the Stage 2 pre-application consultation for Sizewell C. We have previously set out our concerns regarding the proposed development in our Stage 1 consultation response of 5th February 2013. At that stage, our overarching concern was the lack of detail and evidence provided to support the proposals within the scope of the consultation.

Given this, it was difficult for us to comment fully, and we considered that a significant amount of additional information would be required to provide sufficient detail on which to base the necessary assessments of impacts and to draw robust conclusions. Unfortunately, we have the same concerns with many aspects of the current Stage 2 consultation. We are particularly concerned about the potential for coastal defences and other infrastructure to affect coastal processes operating on the RSPB Minsmere coastal frontage, and if increased erosion should result, potential effects on the reserve's current or future habitats.

Both as part of this consultation and as a neighbouring landowner, we would expect to see a much greater level of detail about the proposals and the evidence relied on to support the assertions of minimal impact within the consultation documents.

Please note that all references below are to the main Stage 2 Consultation Document unless stated otherwise.

1. The RSPB's Interest in the Sizewell C Proposals

1.1 The Importance of Minsmere and the Suffolk Coast Designated Sites

RSPB Minsmere is located immediately to the north of the proposed Sizewell C development site. Over 5000 species have been recorded at Minsmere, including over 1000 moths and butterflies (more than 40% of the British total), and half of our native vascular plants. Its habitats include four national conservation priorities: reedbeds, lowland wet grassland, shingle vegetation and lowland heath. These habitats support a range of bird, plant and invertebrate populations of international conservation importance.

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RSPB Minsmere receives over 120,000 visitors each year, attracted to the area by the beautiful wide open spaces and wildlife experiences the landscape offers. It plays a vital role in the local community contributing around £3 million to the economy and supporting over 100 local jobs¹.

The reserve forms part of a wider area found within the Suffolk Coast, recognised for its value for wildlife, and protected by a range of national and international nature conservation designations including SSSI, SPA, SAC and Ramsar site.

- The Minsmere-Walberswick Heaths and Marshes Site of Special Scientific Interest (SSSI) contains a complex of habitats, notably mudflats, shingle beach, reedbeds, heathland and grazing marsh and populations of important birds, including breeding wetland and heathland species and wintering wildfowl and waders. It also supports scarce plants such as whorled water milfoil and a number of rare wetland moths.
- The Minsmere to Walberswick Special Protection Area (SPA) is designated for its breeding and wintering bird populations, including bittern, marsh harrier, avocet, nightjar, woodlark and several wildfowl species.
- The Minsmere-Walberswick Heaths and Marshes Special Area of Conservation (SAC) is designated for its coastal and heathland habitats.
- The Minsmere-Walberswick Heaths and Marshes Ramsar site is designated for its variety of marine, freshwater, marshland and associated habitats. It also supports a number of rare plants, such as red-tipped cudweed and invertebrates including the narrow-mouthed whorl snail. It holds important populations of breeding birds including marsh harrier and Mediterranean gull, passage waders and wintering wildfowl and waders.

1.2 RSPB Position on the Principle of New Nuclear Build at Sizewell

The RSPB does not see a role for new nuclear electricity generation. Whilst nuclear power potentially offers a low carbon source of generation, there are many others which offer better prospects. In our view, investment in nuclear power is a costly distraction from the investment urgently needed in technologies which we already know can deliver a sustainable energy system.

The RSPB made substantial comment during the preparation of the new National Policy Statements (NPS) on Energy Infrastructure in 2010. It highlighted numerous deficiencies in the Government's analysis and approach. The RSPB did not support the principle of new nuclear build and openly disagreed with the Government during their policy development.

However, the new Nuclear NPS (EN-6) was published in 2011 with a Government decision supporting both the principle of expanding nuclear generation and identifying specific sites following a strategic site assessment process. Sizewell was one of eight sites that were identified by the Government as appropriate locations to construct new nuclear power stations.

The RSPB's key aim in engaging with this project is to ensure that the proposals for Sizewell C are suitably underpinned by environmental evidence and robustly assessed such that any new nuclear development does not adversely affect designated sites or important wildlife populations.

¹ RSPB (2011) Natural Foundations, Conservation and local employment in the UK.
https://www.rspb.org.uk/Images/naturalfoundations_tcm9-291148.pdf

2. Policy Context and Project Vision

Paragraph 1.3.3 of the main consultation document states that NPS EN-1 *'makes it clear that in the event of any conflict between any other guidance and an NPS, the NPS prevails for the purposes of decision making, given the national significance of the infrastructure.'* It should be clear that this applies to guidance only, and that the NPS cannot override the requirements of legislation.

Paragraphs 1.5.2 and 1.5.3 explain the benefits to the Applicant of pre-application consultation and environmental assessment in terms of resolving issues, reducing risk, obtaining information and identifying mitigation. For these benefits to be realised, we consider that consultations need to include a greater level of detail, evidence and environmental information, rather than leaving this until the DCO application.

'The Vision for the Project' (paragraph 2.2.1) states that any adverse effects will be mitigated as far as practical and appropriate. This does not go far enough; given the environmental importance of the surrounding area, adverse impacts must be avoided or mitigated, or as a last resort, compensated (if the necessary legal and/or policy requirements are met). These principles were set out in the Joint Local Authorities Group Suffolk Sizewell C Ecology Principles of January 2014.

Paragraph 3.3.8 states that a case for IROPI (Imperative Reasons of Overriding Public Interest) is made in C.8.57 of NPS EN-6 Annex C. Note, however, that Annex A. 6.7 states that;

'The Government's findings in respect of Article 6(4) of the Habitats Directive and this NPS do not automatically transfer directly to individual projects and the Nuclear NPS does not in any way reduce the duty on the IPC [now PINS] to fulfil the legal requirements of the Habitats Directive.'

In our response to the draft National Policy Statements for Energy Infrastructure in February 2010, we stated that;

'Consequently, the RSPB considers that any development consent application coming forward on any of the ten listed sites will have to undergo full consideration under the Habitats Regulations, and that consideration of alternative solutions and IROPI will have to be undertaken for each application that cannot demonstrate that it will not have an adverse impact. This is the responsibility of the IPC [now PINS] as competent authority.'

This remains our position with regard to the Sizewell C proposals.

Principle 8 'Environmental Legislation' on Table 7.1 states that the development will be designed to *'...have regard to best practice'* and *'best environmental practice will be taken into account.'* We are disappointed to note that this stops short of a commitment to follow best environmental practice in the design of the project, which would be expected given the international importance of the surrounding environment.

Paragraph 3.6.4 refers to the AONB as a local designation. This is incorrect. This is a national designation with its corresponding level of importance and relevance. In general, we feel there is not enough clarity in the document over the location of and impacts on sites with statutory designations. We expect to see a map clearly defining the designation boundaries and showing where potential impacts may occur.

3. Coastal Infrastructure

As stated in the introduction, we are concerned at the lack of detail provided with regard the design of the proposed coastal infrastructure and the lack of evidence regarding potential environmental impacts. We raised similar concerns in our Stage 1 consultation response and are disappointed that limited additional information has been provided in the current consultation. Impacts of the development on coastal processes and on flooding remain some of our most serious concerns around the proposed development due to the international nature conservation importance of the neighbouring frontage and the proximity of our flagship nature reserve, RSPB Minsmere. The RSPB will be working with partners to seek the best outcomes for RSPB Minsmere and the surrounding area given the changing environment into the future. We need to understand how Sizewell C might place additional pressures on this coastline and its underlying processes, and influence our ability to manage the site to ensure it continues to meet its statutory nature conservation objectives. Given that, at this stage, there is insufficient detail available to enable this understanding, we request further dialogue with EDF to understand the implications for the reserve and its environs and to discuss potential mitigation options. Prior to the development consent application, we expect to see a significantly greater level of detail underpinned by robust evidence to inform the necessary assessments (including Habitats Regulation Assessment (HRA)) of potential impacts and design of any required mitigation to ensure that adverse effects on the integrity of designated sites are avoided.

3.1 Coastal and Flood Defence

Our primary concern relates to the location and potential impacts of the proposed Beach Landing Facility (BLF), as described in paragraphs 7.4.63-64 and 7.4.68-69. This indicates that the BLF could form an important part of the coastal defences should the shoreline to the north retreat. We are concerned that no details have been provided regarding the form or design of this facility, and only a brief description of potential impacts is included. Paragraph 7.9.60 indicates that the primary concerns would be effects on shape and geomorphology of Sizewell Bay and longshore sediment transport, with paragraph 7.4.69 indicating that the BLF could act as a foreland should the shoreline to the north retreat. However, paragraph 7.4.68 states that the BLF will have minimal impacts on sediment processes and monitoring will be in place to ensure impacts are detected and managed. Given the potential seriousness of any effect on coastal processes, and particularly, changes to erosion rates or patterns in this area, the RSPB requests that further details and evidence are provided as soon as possible (and well before the Stage 3 consultation) as to the form and function of the BLF, its potential impacts on coastal processes and the Minsmere frontage, and the proposed monitoring scheme.

We understand that the primary coastal defence is to be an embankment with a crest height of 10m AOD, with a layer of rock armour embedded within it (paragraphs 7.4.57-58). This will entail the removal of County Wildlife Site (CWS) grassland along the length of the frontage. This grassland is of high value for plants and invertebrates (as noted in paragraph 7.4.60) and a landscaping scheme is proposed to reinstate coastal dune grassland following construction. It is also stated that the defence could be raised to a crest height of 14m AOD at a later stage if monitoring suggests further improvements to defences are necessary. We are concerned not only that planting following construction may not produce habitat of similar quality to that lost, but also that repeated disturbance (if defences require upgrading) would cause further damage to any recovering vegetation/invertebrate populations. Given the importance of this dune grassland and the specialist species it will support, our view is that consideration should be given to providing compensatory habitat.

Paragraph 7.4.12 notes that the new Sizewell C sea defence embankment would be positioned further to the east than that of Sizewell B. Whilst we acknowledge that this reduces land take from Sizewell

Marshes SSSI, we are concerned that this defence line could act as a hard point and exacerbate erosion elsewhere along the frontage. We therefore request that further detail, supported by evidence, is provided to show that these potential impacts have been considered and, if necessary, mitigated.

We note the statement in paragraph 7.4.59 that '*Coastal protection elements would also be embedded within the Northern Mound itself*' and that no further information is provided with regard design, function or potential impacts. Evidence should be provided to enable understanding of the potential construction impacts, the scenarios under which these coastal protection elements would come into play, and the likely effects of this defence on ecological receptors and designated sites.

We understand that the causeway options for the SSSI crossing are viewed as having the potential to be adapted for flood defence. We expect to see greater detail regarding the potential environmental impacts of this, and are particularly concerned about effects on flood risk (in terms of frequency, severity, extent or duration) to the Minsmere-Walberswick SSSI or European sites (as set out in Section 1.1 of this response). It should be noted that modelling of effects of the crossing and any additional flood defence barrier on flood risk to the Minsmere-Walberswick European sites will be required to inform the HRA. We also consider that any potential requirement for an additional flood barrier during the lifetime of the project that is foreseeable now and may be required as part of the safety case, should form part of the DCO application and be subject to the necessary assessment, including HRA.

During construction of the sea defences, it is noted that significant erosion along the frontage could result if works coincided with heavy seas and a storm surge (paragraph 7.5.36). It is stated that monitoring and mitigation are to be developed and, as a neighbouring landowner, we would expect to see further details to provide comfort that these measures will be sufficient.

We understand that interim sea defences are to be in place during construction. Paragraph 7.5.3 notes that construction of these will involve excavation of Bent Hills along the foreshore. Further details are required as to the types of defence to be constructed, the methods involved and the likely environmental impacts.

3.2 Marine Delivery

The RSPB understands that three options are proposed for marine delivery during construction (paragraphs 7.5.26 – 7.5.32); a wide jetty, a narrow jetty or a construction phase BLF. It is noted that piled jetties have the potential to modify the local wave regime and therefore to impact on sediment dynamics. Also with regard the temporary jetties, we query whether the piling will be removed following construction. If it is not, these structures would still have the potential to affect coastal processes. We also note that 'appropriate contingency plans based on monitoring' are proposed to counteract these effects. It is also stated that the use of the BLF during construction would require the dredging of a navigation channel, and that again, impacts would be managed through monitoring and contingency plans.

Other than these brief points, very little information is given regarding the potential environmental effects of these options. Hence it is not possible for the RSPB to comment on preferred options at this stage. We are however, very concerned about the potential for any of these structures to affect coastal processes within Sizewell Bay, and in particular on the Minsmere frontage. As a neighbouring landowner, we would therefore expect to see much greater detail regarding the potential effects and proposed mitigation for these options. In particular, we would like thresholds of impact at which mitigation must be deployed to be agreed by all relevant stakeholders.

3.3 Cooling Water Outfalls

Paragraphs 7.4.49-56 indicates that the cooling water outfalls are now to be located c.3km offshore (rather than inshore of Sizewell Bank). It is stated that this will reduce the in-combination effect of the thermal plume with that of Sizewell B, however, no evidence is provided to support this. Additional information is also required to understand whether there is potential for impacts on red-throated divers (or the proposed additional common tern and little tern features) of the extended Outer Thames Estuary pSPA.

3.4 Other Points

Paragraph 7.5.48 states that both engineering structures and dredging could have an effect on sediment movement and that the policy will be to conserve sediment volumes within the appropriate sediment transport systems. It is noted that this is to be approved by the Marine Management Organisation, and the RSPB also request consultation on this.

4. Loss of Part of Sizewell Marshes SSSI

4.1 RSPB Position on SSSI Loss

The Sizewell C proposals incorporate part of Sizewell Marshes SSSI within the development site. The RSPB consider that information will be required at the project level to demonstrate that there is no alternative location for the development and that the benefits of the development outweigh the harm to the SSSI (and the national network of SSSIs).

The Site Assessment for Sizewell C in Vol. II of EN-6 (Annexes to the National Policy Statement for Nuclear Power Generation) states in paragraph C.8.65 that:

'The Government has also noted that there will be further assessment of any proposal for the site at project level and that EN-1 sets out detailed consideration that must be given to issues related to nationally designated sites, should an application for development consent come forward.'

This refers to policies set out in EN-1 (Overarching National Policy Statement for Energy). Paragraph 5.3.11 of EN-1 states:

'Where a proposed development on land within or outside an SSSI is likely to have an adverse effect on an SSSI (either individually or in combination with other developments), development consent should not normally be granted. Where an adverse effect, after mitigation, on the site's notified special interest features is likely, an exception should only be made where the benefits (including need) of the development at this site, clearly outweigh the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs. The IPC [now PINS] should use requirements and/or planning obligations to mitigate the harmful aspects of the development and, where possible, to ensure the conservation and enhancement of the site's biodiversity or geological interest.'

This is essentially consistent with the policy set out in the National Planning Policy Framework with regard to SSSIs. The tests set out in paragraph 5.3.11 of EN-1 are intended to ensure that SSSIs are only damaged (i) where there is no alternative location for the development and (ii) where the benefits of development at that site clearly outweigh both the impacts on the features of the SSSI itself and any broader impacts on the national network of SSSIs. Compensation should be considered as a last resort only when it has been proven that no alternatives to the proposal exist, and that the benefits outweigh the

harm to the SSSI in its notified state without the development and any broader impacts on the national SSSI network. As noted in paragraph C.8.65 of EN-6, evidence must therefore be provided at the project level to show that the proposed development meets those tests set out in paragraph 5.3.11 of EN-1.

Paragraph 7.4.39 of the consultation document states that the proposed development will involve the loss of 5.04-5.55ha of Sizewell Marshes SSSI (with loss defined as land falling within the sheet piled area). We are concerned at this increase on the loss projected at the Stage 1 consultation (from 4.6ha at Stage 1 to 5.04-5.55 in the current consultation) and consider that this will require full justification, as outlined above. To aid this, we request that a clear map (with a key) is provided showing the SSSI boundary, and the parts of the proposed development falling within this.

Paragraph 7.9.3 explains that EDF are developing a habitat creation scheme at Aldhurst Farm, near Leiston. These works are designed to provide partial compensation for the proposed loss of part of Sizewell Marshes SSSI. The RSPB is concerned that the proposed 6ha of compensatory habitat at Aldhurst Farm, plus the as yet unknown proposals for fen meadow compensation, may be inadequate to compensate for the current proposed level of loss, plus any additional damage that may be caused during construction. Based on the RSPB's considerable experience of working on habitat compensation schemes we consider that habitat compensation should adhere to the following principles to ensure that provision is capable of securely addressing the predicted residual nature conservation impacts:

- (i) **Targeted** at completely compensating for the damage caused by the development (so-called "like for like" or "within type");
- (ii) **Effective** in both ecological and legal terms so that it supports the ecological functions of the species affected over the long-term, is legally secured, adequately protected, financially secure and subject to regular monitoring and review;
- (iii) **Well-located** through compensation measures realised as close as practicable to the location where the damage will be caused (but not vulnerable to the same pressures – see Effective);
- (iv) **Well-timed** so that the compensation measures are fully functional before the damage is caused;
- (v) **Sufficient** in extent to meet the ecological needs of the affected species and habitats. This should address risks associated with effectiveness, location and timing.

4.2 Additional Loss of and Damage to Sizewell Marshes SSSI

As well as direct loss to Sizewell Marshes SSSI from the development footprint within the sheet piling, we are concerned about potential damage/loss to SSSI habitats outside the sheet piling resulting from other aspects of construction work.

For example, paragraph 7.5.11 and Fig. 7.28 indicate that there will be a perimeter access corridor (for, *inter alia*, movement of construction vehicles and unloading of cranes) outside the cut-off wall. We would be very concerned if this was excluded from the calculation of loss to the SSSI and hence was not part of the compensation calculation. In addition, Fig. 7.11 appears to show a perimeter embankment outside the fence line. Whilst we assume the footprint of this embankment has been included in the total SSSI loss, we request that this is clarified.

Paragraph 7.4.18 explains that Sizewell Drain, which runs along the western edge of the platform, will be diverted and that its confluence with the drain along the northern edge will be moved further west. We query whether the realigned ditch and the land between the ditch and sheet piling has been included in the calculation of SSSI loss, as we consider it unlikely that this engineered ditch will retain features of SSSI quality. The RSPB also consider that these operations have the potential to adversely impact

Sizewell Marshes SSSI through damage caused during construction and altered hydrological functioning and that mitigation will be required to minimise this. Should any residual impacts result in long-term or permanent effects, we consider that further compensation will be required (subject to the tests outlined above).

We note also that paragraph 12.4.14 states that the height of the main development site platform is now 7.3m AOD, compared to 6.4m AOD in the Stage 1 consultation. We again request clarity to understand whether this accounts for the increase in projected SSSI land take since the Stage 1 consultation and whether any future changes to design could result in further land take. As stated above, subject to overall acceptability of the principle of SSSI loss (to be determined following the DCO application), it must be ensured that any proposed compensatory habitat is adequate in terms of area, quality and habitat types provided.

4.3 Sizewell Marshes SSSI Crossing

We note the revised location of the SSSI crossing which is further east than that presented in the Stage 1 consultation. We acknowledge that this reduces SSSI land take in the vicinity of the crossing, but note the increased land take of SSSI on the western side of the main construction area. It is acknowledged in paragraph 7.4.39 that compensation will need to be provided for the loss of a small area of fen meadow, however, we advise that a small stand-alone area of fen meadow is not likely to be ecologically functional (see principles above), and that serious consideration should be given to providing a larger area of habitat to ensure that it is of high enough quality.

The four bridge/causeway SSSI crossing options are outlined in paragraphs 7.4.70 – 7.4.78, with comparisons of impacts provided in Tables 7.2 and 7.3. The details provided do not cover impacts common to all four crossing options, only those which distinguish between options. At this stage, we cannot comment on the overall acceptability, or otherwise, of the designs until we are made aware of the full suite of potential impacts and interrelationships with other elements of the construction (e.g. flood defences). For all crossing options, we query how functionality of the SSSI corridor will be maintained during the construction period, given the impacts of crossing construction, noise and lighting.

We understand that the culvert options will result in the highest land take from the SSSI and that these options may also be adapted in future to act as a flood defence. If this were to occur we query whether this would result in further land take from the SSSI that will require compensation (subject to the tests outlined above). Given these statements about the culvert options, we also query whether additional flood defence works would be required should a bridge option be chosen, and what form and location these would take. As stated in Section 3.1 above, any proposals for flood defence adaptation that are foreseeable now and relied on as part of the safety case should be considered through current assessments with full details provided in the DCO application.

We also seek assurance that the causeway options would not result in hydrological effects on the Minsmere Levels (part of the Minsmere-Walberswick Heaths and Marshes SSSI) or the Minsmere-Walberswick European sites, particularly through effects on water quality during construction and flood flows, extents and durations once in operation.

5. Main Site Layout

The following comments relate to elements of the proposals for the main construction site and power station platform.

5.1 Additional Land Take

Fig. 7.56 appears to show a small amount of land take (c.0.06ha) from the Minsmere-Walberswick SPA next to the proposed location of the BLF. Figs. 7.33 and 7.56 also appear to show land take from the Minsmere-Walberswick Heaths and Marshes SSSI of c.0.7ha near the north eastern water management zone. The purposes of these are not clear, but it should be noted that, if damage to or loss of part of the European sites is proposed, an Appropriate Assessment will be required under the Habitats Regulations 2010 (as amended) and any land take from a SSSI should be assessed as described earlier in this response. This is so that the acceptability or otherwise of such losses can be determined.

5.2 Location of Borrow Pit

The RSPB understands that three options are proposed for the borrow pit(s), located to the north west of the site. We are concerned at the potential for landscape, noise and groundwater impacts. Paragraph 7.5.72 states that studies have been carried out and that there will be no impacts on groundwater or surface water, and no impacts from release of ground gas. However, no further details are given. We request that evidence is provided to support these assertions.

Paragraph 7.5.82 notes proximity of Field 3 to the proposed marsh harrier mitigation area. This raises the need for further noise assessment of the fields proposed as options for the borrow pit(s) and for marsh harrier usage of the mitigation area to be monitored to determine the success of the mitigation strategy.

The use of Fields 3 and 4 would also result in the 'boxing in' of Ash Wood, reducing the connectivity of this habitat to the surrounding landscape. This could have implications for bat and bird species using this area.

On the basis of the information provided at present, our preference would be for borrow pit Fields 1 and 2 as they are the furthest from Minsmere and furthest from the marsh harrier mitigation area. However, we need to see the evidence regarding hydrological impacts before we are able to confirm our preference. A well planned and efficient programme of works that limits the time of impact within the AONB should also be provided to demonstrate the efforts taken to minimise impacts. If it is deemed possible to move the sports facilities away from the campus site, this may allow more space to relocate the borrow pits away from the marsh harrier mitigation area. See also section 5.6 below.

5.3 General Construction Noise and Lighting

We note that the helipad is now proposed to be in the Sizewell Gap area rather than to the north of the SSSI crossing as proposed in the Stage 1 consultation. Whilst we acknowledge that the new location is preferable due to the increased distance from sensitive sites and ecological receptors, we still expect to see details including regularity of use and proposed flight lines and an assessment of potential disturbance impacts.

No detail has been provided as yet on noise impacts from the construction area, and paragraph 7.5.65 indicates that further analysis is still to be undertaken. Paragraph 7.8.11 also states that buffer zones to limit disturbance will be consulted on. The RSPB requests consultation on these details due to the potential for effects on the Minsmere Levels (part of the Minsmere-Walberswick Heaths and Marshes SSSI) and sensitive receptors from the Minsmere-Walberswick European sites, which may be using functionally linked land close to the construction area. Please also note our comments regarding assessment of noise from the borrow pit(s), above.

Paragraph 7.8.6 notes that the platform, compounds and common user facilities will be lit at all times (up to 200 lux), and that the stockpile and borrow pits will have lighting of up to 50 lux. We query whether lighting impacts on the potential marsh harrier mitigation area close to the Field 3 borrow pit option (referred to in paragraph 7.5.83) have been fully assessed and request that consideration is also given to any mitigation required for bird and bat species using the southern part of the Minsmere Levels.

Paragraph 7.5.60 states that potential noise and lighting disturbance effects of the contractor's compound and common user facilities will be mitigated through measures to minimise disturbance and inclusion of ecological buffers. Again, no details are provided regarding the form of these measures and no evidence is given as to their effectiveness.

We also note that no information is provided regarding lighting impacts from the worker campus on Minsmere or the AONB. This could be of particular concern if buildings of up to five storeys are chosen. We recommend investigating moving the sports facilities to another site, which could allow more space to reduce the height of the campus buildings to three storeys.

5.4 Other Hydrological Effects

Paragraph 7.4.41 states that initial modelling results show that there will be no adverse impact of the cut-off wall on the hydrology of Sizewell Marshes SSSI, yet paragraph 7.5.17 acknowledges that the cut-off wall could lead to a rise in groundwater levels immediately outside it, and that surface water impacts could also result. We note that paragraphs 7.9.49-7.9.52 indicate that further modelling will be needed to determine whether additional mitigation will be required. Details of the results of the modelling and any further mitigation required should be provided for consultation and will be required as part of the environmental assessments.

Paragraphs 7.5.67 and 7.8.4-5 state that during construction, treated surface water will be either infiltrated to groundwater or discharged to water courses at greenfield run-off rates. We request that further details are provided regarding volumes of flow likely to be discharged to watercourses feeding into the Minsmere Sluice, and whether this could compromise our ability to drain parts of the Minsmere reserve through drains which also flow into the Sluice. We also expect to see details of checks that will be required in order to ensure that discharges will not affect water quality within the groundwater or water courses.

Please also note our comments above regarding the need to provide evidence to show that no hydrological impacts from the borrow pit(s) or SSSI crossing are likely.

5.6 Other Comments

With regard site restoration after construction (as shown in the site masterplan, Fig. 7.7), we welcome the proposed creation of woodland, heath, scrub and acid grassland across the EDF estate, providing connectivity at the landscape scale between existing habitats. We are also pleased to see the increase in extent of the habitat creation proposed when compared to that outlined in the Stage 1 consultation. We also recommend that a recreational strategy is developed for the site post-restoration.

Fig. 7.27 indicates that the retained corridor of woodland connecting Great Mount Wood to Kenton Hills proposed in the Stage 1 consultation has been lost. This could have provided an important ecological corridor, particularly for bats. It is unclear how connectivity is to be maintained and impacts on bats mitigated in its absence.

The proposed caravan accommodation for construction workers is adjacent to the Aldhurst Farm habitat creation site. We query how access will be managed to avoid detrimental impacts from disturbance.

We note that paragraph 5.5.18 indicates that Goose Hill is the preferred option for the location of a visitor centre, but that no further details are provided within the current consultation. We request that further details are provided as soon as they are available regarding the form the visitor centre will take and the vision for its operation.

In the Summary Document, Section 3, Introduction, it is stated that construction of the power station is expected to take 10-12 years, while in the main Consultation Document, paragraph 7.5.3 states that construction would take 7-9 years. Whilst we understand that there is some uncertainty around timescales, this should be clarified as the length of the construction period will affect the significance of construction impacts, particularly relating to disturbance and fragmentation of ecological features.

Figure 7.9 indicates that the hedge and tree line along the road towards Eastbridge will be planted during the final restoration. We assume this indicates that the original feature will be lost. This is an excellent example of old hedging with larger oak trees and we consider that this should be retained if possible to aid connectivity for a range of mammal and invertebrate species, and to retain habitat for nesting birds.

We note that the design of the reactor buildings is effectively an 'off the peg' design, despite being located within an AONB. As a result, there is likely to be a greater level of residual impact that needs to be accounted for than if there had been a design that accounted for the local sensitivities.

6. Transport

6.1 Rail

We understand that EDF have excluded the red and blue rail routes from further consideration, retaining only the green route, and including the possibility of a terminal at Eastlands, with onward transfer of materials by HGV.

Fig. 3.10 in the Summary Document indicates that the rail route (if chosen) may be extended into the batching plant works. Given the proximity of this area to the Minsmere South Levels, we expect to see details of frequency and timing of use and an assessment of potential noise disturbance impacts on birds (including those from the adjoining SPA) using the Levels.

Paragraph 6.4.43 indicates that some night time rail movements cannot be ruled out. Further detail is required as to frequency of occurrence and whether this would occur throughout the full construction period. Any night time movements should be incorporated into assessments of noise and lighting impacts.

Paragraph 7.5.108 indicates that the terminal would expect to receive around 20 container trains in a typical month, but paragraphs 8.1.4 and 8.2.5 state an assumption of five rail deliveries a day during the main construction phase. This is a significant difference which requires clarification.

Paragraph 8.4.7 notes the potential for lighting and noise disturbance effects on bats in Kenton Woods from the green rail route. This will require assessment and consideration of mitigation options.

If the Eastlands rail terminal option is chosen, it is stated that there will be an additional 500 HGV movements per day to transfer freight from the terminal to the construction site along Lover's Lane (paragraph 8.6.11). Impacts of this additional noise and vibration disturbance on Sizewell Marshes SSSI and the proposed SSSI compensation at Aldhurst Farm should be fully assessed.

6.2 Road Freight Movements

Paragraph 6.4.46 states that there will be an average of 450 HGV movements per day during peak construction, but that up to twice this number may occur at times. Paragraph 6.4.65 states there would also be 700 LGV movements per day at peak construction along with 400 bus movements per day (Table 6.2). Impacts of noise and vibration on designated sites and ecological features will require assessment, and consideration should be given to potential mitigation. It will also be necessary to consider impacts of runoff on water courses and mitigation to maintain water quality. The measures proposed should be fully detailed and supported by evidence.

7. Off-site Development

The proposals for a Farnham bypass would appear to affect some wetland habitat along the River Alde. Paragraph 11.7.5 states that this would comprise at least one marshy field, potential bird and bat habitat, ponds, ditches and part of the River Alde. The alternative two villages bypass could affect grazing marsh, part of the River Alde, ditches, and would involve the loss of some ancient woodland. If either of these options is chosen, we recommend that an assessment of ecological impacts is carried out and that measures are sought to avoid, reduce and mitigate impacts.

8. Tourism

Paragraph 5.3.20 states that tourism provides 10-12% of all jobs in Suffolk, which it says is similar to the UK as a whole. However, it would be more relevant to consider the percentage of employment within the Suffolk Coast and Heaths AONB that is provided by tourism, rather than Suffolk as a whole.

Fig. 7.18 shows the view of the proposed development from Minsmere. We also note that paragraph 7.5.15 states that the platform area during construction will be characterised by cranes of 100-120m rising above buildings and that paragraph 7.5.76 states that the construction stockpiles may reach 35m high. We are concerned that the effects on the view from Minsmere (particularly during the construction period) may affect reserve visitors' perceptions of the tranquillity and wildness of the reserve.

Paragraph 5.11.17 describes potential worker use of tourist bedspaces. We note that the reduction in bedspaces available to tourists due to the use of these bedspaces by Sizewell C workers may reduce the numbers of potential visitors to tourist attractions, such as RSPB Minsmere, and query how these effects will be assessed.

Visitors to RSPB Minsmere generally access the reserve using satellite navigation via Eastbridge, using AA signs via the B1122 through Middleton and using brown tourist signs via Ennerdale Farm shop into Westleton. Referring to Table 6.3, using these different approaches reserve visitors will generally go past Location F (13% increase in traffic during weekdays), location Q (37%) and Location R (33%). In addition, Location R will have a 722% increase in HGV and bus flow. These changes will have a profound impact on the attractiveness of Minsmere and the 'sense of place' within the landscape, for an attraction that places great emphasis on 'wildness' and 'restfulness'.

We are also concerned at the effect that the worker campus could have on visitors travelling to Minsmere. Even with sensitive design, we consider that the visitor experience, and possibly visitor numbers could be negatively affected; hence we would like the campus to be located further from Minsmere.

We recommend a tranquillity mapping exercise, which will help to provide the level of detail to properly ascertain these impacts. We also recommend a further analysis to determine the potential overall impact

on Minsmere using the visitor displacement data already collected and would welcome discussion of measures to address impacts.

Conclusions

The RSPB recognises that a significant amount of work with regard site survey, modelling and impact assessment has been undertaken by EDF since the Stage 1 consultation and is ongoing. We also acknowledge the constructive Evidence Plan process, which is also ongoing, to identify the evidence necessary for the HRA. However, we are disappointed with the level of detail provided in this consultation, and have the following headline concerns:

- Overall, more information and detailed assessment will be required to:
 - ascertain the full extent of the impacts on national and international nature conservation sites
 - identify the necessary mitigation measures to avoid/reduce those impacts
 - to describe fully the residual adverse impacts and thereby the nature and scale of compensation measures required, subject to the satisfaction of other legal and policy tests
- Policy and vision
 - need for the project to undergo full consideration under the Habitats Regulations
 - lack of commitment to best environmental practice
- Coastal infrastructure
 - potential impacts of the BLF and other coastal defences on coastal processes and hence the Minsmere frontage
 - lack of detail about design and impact assessment of coastal and flood defences
 - loss of high value dune grassland
- Loss of part of Sizewell Marshes SSSI
 - increased area of loss since the Stage 1 consultation
 - need to assess this loss against the tests set out in EN-1 (Overarching NPS for Energy)
 - potential for additional loss and/or damage during construction
 - adequacy of the proposed compensation
- Main site layout
 - apparent land take from Minsmere-Walberswick SPA and SSSI
 - potential noise and lighting disturbance during construction
 - possible hydrological impacts from borrow pits
 - the cut-off wall and surface water discharge
- Transport
 - noise and vibration disturbance from rail and road transport onto the construction site
 - impacts of highway runoff on water quality
- Off-site development
 - potential for habitat loss resulting from bypass proposals
- Tourism
 - effects of reduction in available bedspaces for tourists
 - changes to character of area surrounding Minsmere on RSPB reserve visitors

The RSPB are keen to continue to work with EDF on these issues, and request that we are fully updated with regard to further developments with these assessments.

If you have any queries regarding our comments, please do not hesitate to contact us

Yours sincerely



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