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By e-mail only

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RE: Sizewell C Nuclear Power Station Stage 4 Pre-Application Consultation

Dear Mr Crawford,

Thank you for consulting us on the Stage 4 Pre-Application for the proposed Sizewell C nuclear power station. Suffolk Wildlife Trust is the county's leading nature conservation organisation. We are a registered charity, set up in 1961 to safeguard the wildlife of Suffolk by managing nature reserves, influencing the management of land and water, recording sites of wildlife value, campaigning on wildlife issues and inspiring people to take action for wildlife.

We previously commented on this development proposal at the Stage 1 consultation in 2013, Stage 2 consultation in 2017 and Stage 3 in early 2019. During the previous consultations we expressed our disappointment and concern about the lack of information made available. Whilst we acknowledge that some areas of additional detail and clarification are provided as part of this Stage 4 consultation and the format has been updated to reflect that the consultation presents Preliminary Environmental Information (PEI), we retain our serious disappointment and concern about the continued limited nature of the information. The piecemeal nature of the information, in particular regarding the ecological information, has severely hampered the making of a robust consideration of the proposal.

The principle of new nuclear development at Sizewell

The National Policy Statement (NPS) for Nuclear Power Generation (EN-6) identifies that Sizewell is a potentially suitable location for the deployment of a new nuclear power station. The impact assessment (NPS for Nuclear Power Generation (EN-6) Volume II – Annexe C) which supported the inclusion of this site within the NPS (EN-6) identified a number of potentially significant environmental issues, including significant adverse impacts on sites designated for their European and UK nature conservation importance, which must be addressed and resolved in advance of any decision on the proposed power station. We do not consider that the information included within the Stage 4, or any of the three previous consultations, justifies the design of the proposed nuclear power station at Sizewell or adequately addresses the issues raised in the impact assessment.

Previous Consultations

We would like to refer back to previous consultation documentation where the Vision recognises that the site is within an environmentally sensitive location. However, the statement that *“EDF Energy will ensure that the power station is designed and delivered in such a way as to limit any adverse effects on the environment and on local communities as far as is reasonably practical”* remains of significant concern. Given the environmental importance of the area, significant impacts must be avoided, mitigated, or as a last

resort compensated. We consider that it is not acceptable to only follow these steps “*as far as reasonably practical*”. The NPS identifies the broad ecological difficulties associated with this scheme, however we do not consider that these difficulties are adequately reflected in the consultation documents.

We also remain concerned over the stated Design Principles, in particular Principle 8 (Environmental Legislation) which states that the “*development will be designed having regard to best practice*” and that “*best environmental practice will be taken into account*”. We do not consider that following best practice should be an aspiration for this project’s design and assessment, rather, it should be the minimum level which is met. Further, whilst we recognise the principle of Net Gain does not currently apply directly to Nationally Significant Infrastructure Projects (NSIPs), we consider that EDF should adopt this approach given the sensitive location of the development near European and nationally protected sites and within an AONB. The Net Gain approach is particularly pertinent to the wider development sites contained within the Stage 4 consultation.

We remain unconvinced that any loss of SSSI has been adequately justified in any of the consultation documents to date and remain extremely concerned about the direct and indirect impacts that would arise from the development which would result in the proposed loss. **Therefore, our previous responses and inherent concerns in Stages 1-3 still stand.**

Imperative Reasons of Overriding Public Interest (IROPI)

Again, we refer back to the Stage 3 consultation, with regard to paragraph 3.3.8 of consultation document Volume 1 which states that the case for IROPI is made in section C.8.57 of NPS EN-6 Annex C. It must be noted that EN-6 Annex A (section 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.”

It is therefore essential that this proposal is fully assessed under the requirements the Conservation of Habitats and Species Regulations (2017), which transpose the requirements of the Habitats Directive into UK law. The proposed development cannot be considered to meet the requirements of IROPI based on the conclusions of the NPS alone.

Whilst this consultation is in accordance with the Statement of Community Consultation agreed with Suffolk Coastal District Council and Suffolk County Council, as we set out in our Stage 2 and Stage 3 consultation responses, we have significant concerns that all four of the public consultations undertaken to date lack sufficient information to make them worthwhile. We are again very disappointed with the level of ecological information and assessment included with this consultation and feel that this significantly hampers stakeholders and interested parties in making their responses.

To make robust and accurate assessments of the likely environmental impacts of this proposal a much greater level of detail must be made available to the public. Additionally, it is critical that assessments are presented **in their entirety**, so that the full scale of impact across the development, including cumulative and synergistic impacts, can be accounted for.

We consider that leaving significant amounts of detail until the Development Consent Order (DCO) submission with no pre-application consultation is contrary to the advice provided by the Planning Inspectorate (PINS)¹ and means that adequate pre-application consultation has not been undertaken. Paragraph 93 of the guidance issued by PINS also states that at the PEI pre-application consultation (this consultation) “*the key issue is that the information presented must provide clarity to all consultees*”. We do not consider that the documents forming this consultation do that.

¹ Department for Communities and Local Government. (March 2015). Planning Act 2008: Guidance on the pre-application process. Accessed 11/02/2019 (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/418009/150326_Pre-Application_Guidance.pdf)

Ecological Information within the Stage 4 Consultation

Whilst we understand that the Stage 4 consultation is required to be presented in a Preliminary Environmental Information (PEI) format, we are concerned that yet again there is a significant amount of environmental assessment and information missing from the documents. The consultation documents state that this information will be presented in full as part of the Environmental Statement which will accompany the DCO application. However, given how the project has changed between the Stage 2 and Stage 3 consultations, we are concerned that by taking this approach of presenting significant volumes of new or updated information at the time of the DCO it will make it very difficult for consultees and the public to respond effectively. The piecemeal presentation of ecological information is of great concern.

General comments on Protected Sites

The site proposed for SZC sits within a network of sites designated for their international nature conservation importance, this includes the Minsmere-Walberswick Special Protection Area (SPA); Minsmere-Walberswick Heaths Special Area of Conservation (SAC) and Minsmere-Walberswick Ramsar site to the north, the Sandlings SPA to the south and the Outer Thames Estuary SPA and Southern North Sea cSAC offshore.

These sites and the species that they support are potentially vulnerable to impacts arising from the construction and operation of the power station. Details of the assessment of the full range of these impacts, as required under the Conservation of Habitats and Species Regulations (2017), is not included as part of the Stage 4 consultation and therefore there is no certainty that the likely impacts have been fully assessed or that acceptable avoidance or mitigation measures can be implemented as part of the proposed development.

We are also concerned that the supposed 'temporary' impact will in fact be permanent and therefore over 9 hectares of the SSSI will be lost (of a site that is only 105 hectares in total). In addition to the permanent loss of parts of the site, we are also concerned that the construction of the main platform and SSSI crossing structure will result in significant hydrological changes within the SSSI. The value of the SSSI is reliant on carefully controlled water levels and anything that creates significant unmanageable level changes, or shifts from a groundwater to surface water dominated system, resulting in changes in water chemistry, will damage a large part of the site.

General Comments on Protected and UK Priority Species

The Sizewell Estate and the wider area around it is known to support a range of species, including some protected species and some of conservation importance (under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006)). While it may be possible for EDF to mitigate impacts on many of these, we consider that the Stage 4 consultation (or any of the previous consultations), contains insufficient ecological survey and assessment information to be able to conclude this with certainty.

Across the entire development site, including ancillary developments, we believe there will be significant adverse impacts on great crested newts and bats, even after the inclusion of embedded mitigation. However, without detailed ecological survey information it is impossible to determine whether the embedded mitigation measures identified are likely to be acceptable in mitigating impacts. Furthermore, it is imperative the effects are assessed across the landscape of the development. Currently, little appears to have been done to fully determine the cumulative effects of the main development and all the ancillary development sites together. It is very likely that the overall impact of the scheme will be significantly greater than the sum of the parts, as determined on an individual basis.

We are particularly concerned about the impact that the construction phase of the development could have on the bat populations which use the estate and the wider AONB. As with many of the other ecological receptors, survey and assessment information on bats is severely lacking. It is known that the Sizewell Estate supports an important assemblage of bats, with at least 10 species recorded. Historic data recognises that the site supports a nationally important population of barbastelle bat (*Barbastella barbastellus*) and a population of Natterer's bat (*Myotis nattereri*) of at least county importance. We do not consider that sufficient information has been provided on mitigation for the impact on roosting habitat to be able for it to be concluded that the residual effects will be not significant, the EIA must include this detail in order to demonstrate that it has been fully assessed.

The large construction laydown area, stretching from the coast to Abbey Road and down to Leiston, could fragment the barbastelle population, which rely on being able to move relatively long distances through the landscape. The lighting and noise disturbance created by construction activities is likely to create a barrier to such movement. The development would also result in both the loss of roosting opportunities through tree removal and foraging areas, especially during the construction period when areas of currently suitable habitat, such as at Goose Hill, are converted to construction laydown areas. It is also important to understand that avoiding trees that hold bat roosts is only partial mitigation. Surrounding trees can be vital, creating a suitable micro-climate around the roost. Leaving a roost trees exposed can effectively destroy a roost even if the tree remains standing. There is no evidence that this is being taken into account at all.

The woodland at Fiscal Policy is part of Sizewell Levels and Associated Areas CWS and is known to support a range of species, including bats such as barbastelle. Currently, from what we can tell, the impacts of vibration on bat roosts at this location has not been assessed. We consider that the impact of vibration on bat roosts must be assessed as part of the EIA as the primary cause of these impacts is likely to be disturbance and displacement caused by noise and visual impacts. In particular, the road and rail (under the rail-led strategy) routes through Fiscal Policy have the potential to result in significant adverse impacts on bats. Whilst there is reference to noise and lighting as having the potential to significantly impact on bats, the impacts of vibration do not appear to be considered.

With regard to disturbance impacts arising from construction noise and lighting, it appears that the conclusion is that this will result in medium term significant residual effects. Given the importance of the bat assemblage present we do not consider that this is outcome is acceptable and it is contrary to the requirements of NPS EN-1 (Section 5.3) and NPS EN-6 (Section 3.9). We believe it will have a significant adverse impact on this assemblage, of national importance.

Given all the above, **it is probable that the construction will have a catastrophic impact on this species group.**

Finally, we urge EDF to consider very carefully the latest research in respect of lighting and the impact on bats, including the use of modern lighting techniques to reduce the impact on populations, such as low glare and re lighting techniques. Currently we can see very little evidence that these techniques are currently even being considered.

Specific Comments

2.3.18 Helipad - we note that the location of the helipad now appears to be located at Upper Abbey Farm. We request further information on the anticipated impacts on protected species and nearby designated sites.

2.3.25 SSSI crossing – we refer to our comments and concerns raised in Stage 3, which still stand.

Figure 2.8 Off-site sports facility – we request that the off-site sports facilities development area is planted wherever possible with native, mixed species hedging and scrub to supplement the existing hedges and scrub around the site, with cutting on a rotational and bi-annual (once in two years) basis.

2.4 Green Rail Route – we request a full suite of protected species surveys with interpretation to include the evaluation of impact on functionality and wildlife corridors. We are concerned about the proximity to Buckle's Wood County Wildlife Site (CWS), which contains ancient woodland. There is a high potential for impact from the contractor's compound during construction, as a result of noise and lighting and request more information and clarity on proposed mitigation, if required. We also believe it is highly likely the rail route will impact on a number of trees which will have high value for bats and request more information on avoidance measures, mitigation and if necessary, compensation for loss. There is a high chance of disturbance to badgers and ponds that might contain great crested newts. Again, we require more information on what avoidance measures have been planned and how to mitigate any impacts. The route will create a significant barrier to wildlife across the locality and through the AONB and request that the impact on biodiversity functionality is considered further.

2.6 Sizewell Link Road – not withstanding our overall concerns regarding the project, in principle we support the rail led transport strategy over the other strategies (this does not mean we support the project itself), not only in broader environmental considerations but also because it will avoid a road cutting across the AONB and the resulting additional impacts on wildlife and ecological function across the landscape. However, we recognise local concerns surrounding traffic in other locations and if this option were to progress, we would request a full suite of protected species surveys and proposals for mitigation and compensation if required and can be justified through the mitigation hierarchy. In line with proposals and recommendations currently proposed in the Environment Plan, we would also expect proposals for Net Gain. For example, Figures 2.19, 2.20, 2.21 indicate extensive grassed areas; these could be managed sensitively.

Specifically, it is likely the link road proposal will affect numerous species rich hedges, trees with high bat potential, great-crested newt ponds including complete loss and the loss of some broad-leaved woodland, we therefore expect the ecological impact of this road to be considerable. In particular, we note on Figure 2.20 the severance of the wide woodland/scrub belt running north east of Dovehouse Farm and request suitable mitigation and replacement to a level that achieves Net Gain. In Figure 2.21, wooded areas around Theberton Grange to Brown's Plantation are likely to be lost and although this area is already crossed the the B1122, it will lead to further and significant separation. Again, we request mitigation planting and seeking to achieve Net Gain at nearby locations.

2.7 Theberton Bypass – there is a significant severance of a wooded corridor north west of Theberton Hall. We would like to see an overall strengthening of scrub, wood and hedge corridors either within the red line boundary, or that EDF look for opportunities close by to help mitigate this severance. It would be preferable to do this at a scale that can achieve Net Gain. We also consider this is an opportunity to include a faunal underpass at this location.

2.8 Two Villages By-Pass – we are concerned about the proximity of Foxburrow Wood CWS. Whilst it is difficult to determine from the map, we assume there will be no net loss from the site. Even so, in our view the likely impact would require mitigation. A cut through, with ancillary footbridge for the public footpath would, in our view, not be enough to mitigate impact and the loss of ecological functionality across the landscape. Therefore, we strongly advise the construction of a green bridge at this location to help retain connectivity with several locally important hedge lines. The drainage infiltration basins will need habitat surveys and protected species surveys prior to works. However, we believe these basins could be designed in such a way as to provide opportunities for Net Gain and request that careful thought is given to this. The areas of grass could be planted with wildflower and/or pollen and nectar mixes and managed in a sensitive way. There are also options to include skylark plots. Again, careful thought over the long-term management of these areas could contribute to Net Gain. We also have significant concerns on the loss of ecological connectivity along the river corridor as a result of the crossing. More detail is required to determine this and we expect mitigation in terms of mammal passes and related protected species surveys. Furthermore, more evidence is required to understand how the by-pass might affect hydrology and the relationship between the river and its floodplain and consequently, the local wet meadows. If there is an effect, considerable effort will be needed to meet Net Gain, over and above what is currently being proposed.

2.9 Northern Park and Ride, Darsham – we suggest the significant areas of grassland are managed to maximise nesting opportunities for skylark, to help mitigate the inevitable loss of skylark territories across the site. We also strongly recommend hedge and scrub planting with native species to strengthen corridors and around the perimeter of the site. Verges and other suitable grass areas should be planted with wildflower mixes suitable for the soil type and managed with one late season cut. There are ponds nearby which may contain great-crested newts and so require surveys. It is important no car park runoff is directed into these ponds. It is also likely that the ability of great-crested newt to migrate between the ponds will be impacted. The suggested hedge planting will go some way to mitigate these impacts, however, we would also strongly recommend further pond creation wherever possible. It is likely that Little Nursery Wood contains bat roots and so a buffer and embedded mitigation will be required. We assume lighting will be 24 hours and so it is important that low glare, directional lighting is used throughout, to avoid light spill where possible.

2.10 Southern Park and Ride, Wickham Market – as at Darsham, we suggest the significant areas of

grassland are managed to maximise nesting opportunities for skylark, to help mitigate the inevitable loss of skylark territories across the site. We also strongly recommend hedge and scrub planting with native species to strengthen corridors and around the perimeter of the site. Verges and other suitable grass areas should be planted with wildflower mixes suitable for the soil type and managed with one late season cut.

2.11 Freight Management - we understand space might be at a premium at this location, however, hedge and scrub planting with native species to strengthen corridors and around the perimeter of the site would help toward Net Gain. Verges and other suitable grass areas should be planted with wildflower mixes suitable for the soil type and managed with one late season cut, again aiming for Net Gain.

2.12 Yoxford Roundabout – we request that the infiltration pond is designed as sensitively as possible to maximise its wildlife value. Areas of grassland could be planted with wildflower meadow mixes to benefit pollinators with a late season cut.

2.13 Other highway improvements – there will need to be a full consideration of protected species with surveys as appropriate to enable avoidance and mitigation strategies. We request, wherever possible, consideration of Net Gain is given. Figure 2.35, the infiltration basin at Friday Street, gives the opportunity for sensitive design to maximise its value for wildlife.

3.1 – Freight Management Strategy - on balance we favour the rail led strategy, as overall, this would be less damaging to wildlife across the wider landscape. This is because an integrated approach would lead to more fragmentation as a result of both rail and road routes, whilst providing only marginally fewer HGV movements. However, we recognise local concerns over local traffic and the desire for the relief road. It is imperative that proposed surveys for protected species are carried out with avoidance and full mitigation.

5.3 National Grid Pylons

5.3.2 – we note the change of the red line boundary and works area regarding the pylons at 0.37 hectares. We request full details of botanical surveys and habitat type. Areas of sensitive fen habitat can be irrevocably damaged by machinery and therefore we contend it could be permanent loss.

5.3.3 – we are pleased to see the efforts to reduce SSSI impacts at this location. However, it is not clear in reference to Figure 5.3 where this change is.

5.3.4 – we note that whilst there is no net increase in the pylons, we request details of where exactly the new pylon will be and if it is in the SSSI. If it is, this may not only result in further damage (see 5.3.2 comments) but invariably lead to some permanent loss and potential hydrological impacts. We also refer to the response of the AONB partnership questioning the need and justification of the pylons.

5.3.6 – we do not agree with the assumption that the nature of the works will result in temporary impact. The works themselves might be temporary, but the impact may well be long term and perhaps permanent. Uncertainty over recovery must be further compounded when potential changes in groundwater and surface water are also considered. We ask for clear evidence as to why EDF think sensitive parts of the SSSI will recover. There will remain considerable uncertainty and therefore we would like to see ongoing quantitative botanical monitoring in all these areas to assess recovery. If there are signs that recovery is slower than expected, or even that the damage appears to be irreversible despite predictions, then we would expect consideration of how to compensate for loss.

Figure 5.10 – it is not entirely clear how close Pylon 5 will be to the SSSI. We assume there will be no additional impact on the SSSI from Pylon 5, permanent or otherwise.

5.5 Rail Spur at Eastlands Industrial Estate – the areas under the new option require protected species surveys and proposals presented on any mitigation. We also note the addition of a helipad in this area. Helicopters can be extremely impactful and therefore we request more information on how often the helipad will be used and the direction of travel proposed to avoid sensitive protected areas in relation to birds.

5.9 Kenton Hills Car Park

5.9.3 – with regard the selective tree removal, we are concerned over the extent of removal and we request clarification on what ‘selective’ actually means. This is an important bat roost area and a bat survey is required on all medium and high potential trees. Any impacts on these category trees should be avoided unless proven there are no roosting bats. Where impact occurs, this should be justified and will require corresponding mitigation. Furthermore, mitigating impact on bats is more than simply avoiding trees that hold bat roosts. Surrounding trees are also critical given they create a suitable micro-climate around the roost. Leaving a roost tree exposed effectively destroys the roost even if the tree remains standing and it is vital this is taken into account.

5.10 Marsh Harrier Compensation Land – we have had concerns for some time that the extent of the original marsh harrier compensation was not extensive enough and that these areas were also at risk from noise and visual disturbance and so we welcome these proposals. However, whilst we welcome the new proposal in addition to the current land proposed, we dispute the assertion in 5.10.4 that, ‘existing arable land is preferable for the compensation land’. Whilst it is true that marsh harrier will forage over the drier areas, it is very likely that foraging preference will be in wetter areas generally. Despite this, given the location and proximity to Minsmere, it is likely all three areas proposed will be beneficial. We note it is considered unlikely the full extent of the three sites would be required, but again we point out, that we expect there will be impacts on the original site that has been proposed and earmarked, not only from noise and visual disturbance emanating from the original design plan but now also from the flood attenuation work. We would also advocate that EDF should consider Net Gain in relation to foraging areas. So, when all these factors are considered, we would expect all three areas will be required to compensate impacts on marsh harrier and to achieve wider Net Gain.

5.10.5 – Suffolk Wildlife Trust would welcome input into detailed design and option development.

5.10.6 – as previously outlined, we are concerned about the initial proposed area not being enough but now note that a significant area within the compensation site is now being put down to flood attenuation. We request more details on how EDF consider this will impact on the effectiveness of the original area during its construction and functional lifetime. We also request its design is given careful thought to maximise its value for wider biodiversity benefits.

5.11 Fen Meadow Compensation Land – parts of the SSSI will be lost to the proposed development. In principle, we object to any loss of SSSI to development. Whilst we recognise that this is a Nationally Significant Infrastructure Project (NSIP), NPS EN-1 paragraph 5.3.11 states that,

“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 both 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 makes it very clear that SSSIs can only be damaged where there is no alternative location for the development, and the benefits of development at the site clearly outweigh both the impacts on the features of the SSSI itself and any broader impacts on the national network of SSSIs. The paragraph also clearly states that compensation is a last resort which should only be considered when it has been proven that no alternatives to the proposal exist, and that the benefits outweigh the harm to the SSSI and the national network of SSSIs.

Whilst the Stage 3 consultation documents set out the broad range of SSSI loss, we do not consider that it adequately justifies that any loss meets the tests set out in paragraph 5.3.11 of NPS EN-1. The Stage 3 or Stage 4 consultation documents do not demonstrate that the first two steps in the mitigation hierarchy, avoidance and mitigation, have been applied in considering the current design of the proposed development. Instead the design has moved straight to step three and is seeking to find compensation for

the proposed losses.

It may be possible to provide a degree of compensation for some of the habitat losses within the SSSI. However, without the provision of significant detail on the condition of the new habitats expected (or indeed at Aldhurst Farm in relation to other SSSI habitat loss) and the existing habitats within the SSSI areas to be lost, it is impossible to be able to determine whether what has been provided is in any way comparable to what is required. The absence of a plan showing, in detail, the proposed losses further hampers accurate assessment.

We consider that, whilst bringing areas of derelict fen back into conservation management is beneficial, this does not constitute true compensation as there is still likely to be a net loss of this nationally rare habitat type. Nor do we believe it is possible to compensate for the loss of M22 fen meadow through creation of new habitat. This type of habitat requires complex geological and hydrological conditions, alongside long-term suitable management, which we believe cannot be recreated.

Furthermore, we do not consider that any of the loss will be temporary. The works described for these areas, particularly for land reinforcing along the northern edge of the SSSI, all appear likely to have a permanent damaging impact on the SSSI and should therefore be assessed as such. In our view, the area between the eastern bank of the re-routed drain and the sheet piling is unlikely to form a functional part of the SSSI once the replacement drain is constructed. This area should therefore be included within the calculation of the total area of the SSSI to be lost. The proposed development will therefore have a much greater impact on the SSSI than is currently considered, particularly on habitats such as fen meadow where identified losses will more than double from 0.5 hectares to 1.11 hectares.

Ecological receptors for which the SSSI is designated are vulnerable to changes in both groundwater and surface water. We have significant concerns that the introduction of the proposed sheet piling and cut-off wall, along with the realignment of the Sizewell Drain will dramatically and adversely, change the hydrological conditions within the SSSI.

Firstly, dewatering during construction will reduce water levels within the SSSI, drying out the sensitive fen habitats which are present closest to the main platform site. Secondly, the presence of a completed cut-off wall and SSSI crossing structure could radically change the pathways that groundwater currently moves through the site. Permanently raised water levels across a large part of the SSSI could irreversibly damage many of the sensitive habitats for which it is designated, especially fen meadow which is particularly sensitive to hydrological change. Even very small levels of change over the long term, could have a damaging effect. Whilst the consultation documents make reference to mitigation for these impacts, no further detail or modelling is provided that offers any certainty of success.

Additionally, we are concerned about changes not only to water levels, but also water chemistry. Altering influences between groundwater and surface water could have very significant impact on the botanical value of the SSSI, changing from a rich M22 fen site, to a *Juncus ssp* dominated community. There is no evidence that we can see, that fully captures and assesses this risk.

Given the potential for cumulative impacts through changes to the groundwater and surface water regime we do not consider that it can yet be demonstrated that embedded measures will mitigate impacts on the SSSI and therefore we consider that there remains the potential for significant adverse effects on the SSSI.

With regard to wet woodland, whilst it is acknowledged that this type of habitat is not specifically included on the SSSI citation, it is part of the habitat mosaic of the site and helps support a number of the species assemblages (such as invertebrates) for which the SSSI is designated. Wet woodland is also a UK Priority habitat under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). The plans and assessments available to date do not adequately consider the loss of wet woodland or make any proposals for compensation. The Environmental Statement must recognise this when assessing the significance of this impact.

In summary, whilst we welcome attempts to create new habitat, we remain sceptical whether it is possible to recreate the botanical richness of the nationally rare, M22 fen habitat type. We believe the

compensation proposed will fall short in both quantity and quality. Long term management plans, including monitoring both of the SSSI and the compensation sites, will be needed to maximise chances of success.

5.12 Flood Compensation Land – We are concerned about the impact during construction on the effectiveness of the marsh harrier mitigation areas and request clarity on whether the overall mitigation plan for marsh harrier is effective across all construction periods. We are especially concerned because these areas will be created at the start of the development when marsh harrier will not have yet habituated (if they ever do). We are also concerned about the proximity to RSPB Minsmere and adjacent, functionally important habitats and question how this might be assessed. However, we recognise in the longer term, these areas could, if designed sensitively, provide valuable wetland habitats. We request further detail over the precise design and also where the 90,000 cubic metres of spoil will go.

Table 5.1 – we note the revised proposals will result in the loss of established trees and hedges. We request these impacts are minimised where possible and assessments for potential bat roosts are made, with a full survey for any determined to be of medium or high potential. The loss of 0.49 hectares at Aldhurst Farm Compensation Area due to the PROW Strategy potentially has a significant impact as a result of disturbance. Careful thought should be made to limit access impacts on areas of acid grassland. Selective native scrub planting using a diverse mix of species, would help to define desire lines. We are also concerned about the loss of a potential barbastelle bat roost and require further survey information, justification relating to any loss and details of mitigation and if it can be justified, compensatory measures. We strongly urge avoidance where possible with full consideration of planned mitigation. We would welcome efforts to restore historic hedgerows, not just along the northside of Lover's Lane, but throughout the development site. A sympathetic cutting regime, such as on a three-year rotation where possible and outside of the bird breeding season, re-planting, gapping up and thickening bases, establishing a better gradation into long grass habitats, should all be part of wider environmental best across the site. If done well, this approach potentially could form part of an enlightened Net Gain package.

5.13.6 – For trees with medium and high potential for bat roosts, it is critical these are surveyed in advance of proposed works to determine avoidance and required mitigation if necessary.

Table 5.2 – We welcome the assumption of presence of bats and the retention of perimeter vegetation and trees. Further opportunities to plant native hedges and scrub should be considered.

Table 5.4 – We are concerned about the comment, assuming the provision of the off-site fen meadow habitats is successful, that the loss of fen meadow habitat from the SSSI on the main development site is considered to be 'not significant'. For this statement to hold true the compensation site will need to be as botanically diverse as the part of the SSSI fen that will be lost. We believe this will be highly unlikely in the medium to long term. Additionally, it also assumes that what is considered 'temporary' loss is indeed temporary. We consider it highly likely that the impact from the development, such as vehicles tracking over the SSSI, and changes in the groundwater and surface water levels, will result in irreversible damage. Finally, it also assumes that hydrological changes predicted, will be accurate both in terms of water levels and the botanical changes that then result. When all these variables are considered, the uncertainty is significant. Therefore, we consider that the proposed compensation sites for the fen meadow will not only not be enough in terms of spatial area to fully compensate but are also very unlikely to specifically compensate for M22 fen. Rather the likely outcome will be a more generic, common habitat type. We believe the compensation proposed will fall short in both quantity and quality.

Management of Existing Habitats

Suffolk Wildlife Trust manages Sizewell Marshes SSSI, part of the Minsmere-Walberswick Heaths & Marshes SSSI, the Southern Minsmere Levels CWS and part of the Sizewell Levels and Associated Marshes CWS, on behalf of the owners, EDF Energy. The management operations are conducted from Upper Abbey Farm. We therefore request that the requirement for ongoing management of wildlife habitats is taken into account during the construction period. In particular, safe access to the Sizewell Marshes will need to be arranged for livestock and agricultural machinery along with provision of suitable workshops, welfare facilities and storage. Failure to achieve this could result in the required management of the designated sites not being able to be undertaken, with an adverse impact on their condition being the outcome.

In-combination Impacts

Whilst it is acknowledged that the proposed Sizewell C development is a Nationally Significant Infrastructure Project (NSIP), it is essential that its impacts are not considered in isolation. A range of other NSIPs are in various stages of the planning process along the Suffolk coast, including a number of offshore wind farm schemes, and there are also a range of other residential and commercial developments being undertaken in the area. The combined construction and operational impacts of all of these proposals must be assessed to ensure that they are adequately understood, ahead of a decision being made on the Sizewell C DCO. Failure to do this will result in long term adverse impacts arising, with insufficient mitigation and compensation measures secured to prevent them.

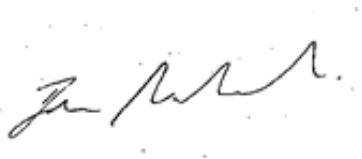
Conclusion

It is unquestionable that the proposed development will have significant adverse ecological impacts which will be very difficult to adequately address. We have particular concerns over the impacts on bats and the hydrological and direct impacts on the SSSI.

We remain disappointed that there is still limited information available on a range of key ecological matters and are concerned that this shows a lack of acknowledgement of the difficulties associated with the project. In our view, the piecemeal presentation of effects is leading to the underestimation of synergistic impacts. In order for a robust and accurate consideration of the Sizewell C project to be undertaken, it is essential that these matters are addressed ahead of the submission of any Development Consent Order for the project.

We are happy to engage with EDF Energy on the assessment of the ecological impacts of this proposal and would be happy to discuss any of the issues raised above in more detail.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Ben McFarland', is written over a light grey dotted grid background.

Ben McFarland
Head of Conservation