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Sizewell C NNB
EDF Energy

By e-mail only

02/02/2017

Dear Mr Crawford,

RE: Sizewell C Nuclear Power Station Stage 2 Pre-Application Consultation

Thank you for consulting us on the Stage 2 Pre-Application consultation 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 proposal at the Stage 1 consultation in 2013. At that time, we expressed our disappointment and concern about the lack of information presented in the Stage 1 consultation documents. Whilst we acknowledge that some areas of additional detail and clarification are provided as part of this Stage 2 consultation, we retain our serious disappointment and concern about the continued lack of information presented within the current consultation documents. Insufficient detail on the scope and scale of the development has severely hampered the making of a robust consideration of the proposal. Notwithstanding this, the Trust wishes to make the following comments on the proposals and information included within the Stage 2 consultation:

1. 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 consider that it is essential that the issues raised in the impact assessment, as well as others identified below, are satisfactorily resolved in order to justify any development of a new nuclear power station in this area.

Whilst section 2.2 of the Stage 2 consultation document, 'Project Vision', recognises that the site is within an environmentally sensitive location, we are concerned by 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 is reasonably practical*". 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 is 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 document.

Table 7.1 in the consultation document sets out the Design Principles and Brief for the project. We are concerned that Principle 8 (Environmental Legislation) 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, it should be the minimum level which is met. We are also concerned by the wording of Design Principle 10 (Biodiversity) which states that “*where likely significant effects cannot be avoided or reduced then mitigation measures will be applied, as necessary*”. Whilst this recognises the first two steps of the mitigation hierarchy (avoidance and mitigation), no reference is made to the use of compensation measures where mitigation is not possible. This is contrary to NPS EN-6 which recognises that the compensation step in the hierarchy forms part of the assessment of residual impacts from the proposal (e.g. section C.8.63), particularly in relation to non-creatable habitats. Principles relating to this approach were set out in the Joint Local Authority Group (JLAG) Sizewell C Ecology Principles (January 2014).

In addition to the above, we note that point 10d in Table 7.1 states that the Design Brief will seek to minimise land take from the SSSI. It appears that the proposed SSSI land take has increased from 4.6Ha at Stage 1, to between 5.04Ha and 5.55Ha at Stage 2 (paragraph 7.4.39). 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. Whilst Figures 7.10 and 7.11 show the changes in SSSI loss to platform construction between Stage 1 and Stage 2, and paragraph 7.4.17 states that the changes to the layout are essential, there does not appear to be any justification for either the changes in the areas to be lost or for the overall loss. Please find further detailed comments relating to this in section 3 below.

1.1 Imperative Reasons of Overriding Public Interest (IROPI)

With regard to paragraph 3.3.8 of the consultation document 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 (2010) (as amended), 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.

2. Presentation of the Stage 2 Consultation

Paragraphs 1.5.2 and 1.5.3 of the Stage 2 consultation document make reference to the importance of pre-application consultation and environmental assessment as part of the Nationally Significant Infrastructure Project (NSIP) process. We therefore find the amount of environmental assessment information provided in this Stage 2 consultation very disappointing. 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 interested parties ahead of any Development Consent Order (DCO) submission.

The use of language in the consultation document is also of concern. As set out above, the use of phrases such as “*as far as reasonably practical*” and “*will be taken into account*” does not suggest that this development will seek to be an environmental exemplar (as set out in the JLAG ecological principles). Environmental best practice should not be an aspiration for this project, it should be the minimum level which is met. The lack of keys on maps also makes interpretation more difficult.

In addition to the above, we note that section 3.6 (b) (paragraph 3.6.4) of the Stage 2 consultation document refers to the Suffolk coast and Heaths AONB as a ‘local designation’. This is incorrect, the AONB is a national designation and should be recognised as such.

3. Main Development Site (permanent development and construction and temporary development)

3.1 Marine and Coastal Impacts

The proposed main development site outlined in the Stage 2 consultation document includes a number of elements which could result in adverse impacts on marine and coastal ecology, however insufficient information and assessment is provided in the consultation to enable detailed comments to be made on these impacts. In the absence of such information we have the following significant concerns relating to potential impacts on the marine environment.

3.1.1 Offshore Statutory Designated Sites (SPA and cSAC)

The sea off Sizewell is designated as part of the Outer Thames Estuary Special Protection Area (SPA), it also forms part of the proposed Southern North Sea Special Area of Conservation (cSAC). The SPA is currently designated for wintering red-throated diver, with an extension to cover little tern and common tern currently being considered by the Government. The cSAC for harbour porpoise has been approved by UK Ministers and is currently being considered for approval by the European Commission. UK Government policy indicates that sites proposed for designation should receive the same level of consideration in the planning process as those which are designated.

Section 7 (ii) of the consultation document sets out the environmental considerations for the cooling water infrastructure; section 7 (v) sets out the environmental considerations for the sea defences and Beach Landing Facility and section 7.5 (g) sets out details of the Marine Facilities. However, none of these sections make any reference to the presence of the SPA or cSAC or demonstrate that any consideration has been given to the potential impacts of these structures or uses on the designated sites.

The cooling water infrastructure will cross both designated sites and could have significant adverse impacts both during construction and operation. The Beach Landing Facility and temporary jetty could also have significant adverse impacts, particularly during construction. We are also concerned about the reference to the use of acoustic deterrents, and the apparent lack of consideration of the potential impacts of these on harbour porpoise.

All potential impacts on the SPA and cSAC must be fully assessed through the Habitats Regulations Assessment (HRA) process.

3.1.2 Sea Defences

Paragraph 7.4.57 identifies that new sea defences will be required to safeguard the power station against flooding, including a permanent embankment along the eastern boundary of the site. This would involve the loss of part of the Suffolk Shingle Beaches County Wildlife Site (CWS). Paragraph 7.4.60 recognises that this area is of high value for flora and invertebrates. Given the ecological value of this area, we are concerned that no details of this survey work or assessment of the overall impacts of the defences are provided in the consultation document. We also disagree with the statement in paragraph 7.4.60 that this high value will be *“taken into account in the landscape scheme as far as possible”*. This area is of national ecological value and therefore any likely impacts must be fully assessed and quantified and the mitigation hierarchy must then be applied in full when considering the impacts of the proposed development. We consider that taking account of this loss in the landscaping scheme *“as far as possible”* is a totally inadequate approach.

3.1.3 Coastal Processes

Both the Beach Landing Facility and the temporary jetty have the potential to significantly alter coastal processes along this stretch of coast, which in turn could have significant adverse impacts on a range of statutory and non-statutory designated sites. Of particular concern is the potential for impact on the Minsmere-Walberswick SPA; the Minsmere-Walberswick Heaths SAC and the Minsmere-Walberswick Ramsar site which lie directly to the north of Sizewell. Whilst the consultation document (paragraphs 7.4.68 and 7.5.29) suggests that these structures would utilise construction techniques which would limit the impact on coastal process, no evidence or assessment is provided to demonstrate that this is the case. The future trajectory of the coastal designated sites should not be dictated by the design of Sizewell C.

As with the proposed sea defence, the beach landing facility will also result in the loss of part of the Suffolk Shingle Beaches CWS. As identified in paragraph 7.4.60, this area is of high value for flora and

invertebrates. Given the ecological value of this area, we are concerned that no details of this survey work or assessment of the overall impacts of the beach landing facility, either alone or in-combination with the sea defences, are included in the consultation document. Whilst paragraph 7.4.66 makes reference to the restoration of the sea frontage of Sizewell B, it must be noted that this work did not restore exactly what was destroyed by the building of Sizewell B and it cannot therefore be assumed that similar methods would directly restore what would be lost from the frontage of Sizewell C.

3.2 Terrestrial Ecological Impacts

Table 7.4 of the Stage 2 consultation document sets out the total area of land at Sizewell required for the construction of the proposed power station, excluding land required for associated developments away from Sizewell. Approximately 300Ha of land is stated as required for the build (paragraph 7.5.8). Section 7.5 (e) describes the main power station platform development and sections 7.5 (i) to 7.5 (k) describe other terrestrial works required as part of the proposed construction. The proposed development has the potential to result in a range of significant adverse ecological impacts which must be fully assessed and publicly consulted on ahead of the submission of any Development Consent Order (DCO).

3.2.1 Habitats Regulations Assessment (HRA)

To the north and south of the proposed site of Sizewell C lie areas designated for their international nature conservation value. These include the Minsmere-Walberswick SPA; Minsmere Walberswick Heaths SAC and Minsmere-Walberswick Ramsar site to the north and the Sandlings SPA to the south. Paragraph 7.9.1 of the Stage 2 consultation document identifies the sites to the north but not the Sandlings SPA to the south. Paragraph 7.9.4 of the consultation document identifies that the proposed development has the potential to have adverse impacts on the bird species for which the Minsmere-Walberswick SPA is designated (particularly marsh harrier) and that mitigation measures for these impacts are being designed. However, no further detail on the assessment of likely impacts or the proposed mitigation measures is provided and therefore it is not possible for interested parties to comment further on the acceptability of such measures. A comprehensive Habitats Regulations Assessment (HRA), in accordance with the published HRA Evidence Plan¹, is required to assess the full impacts of the proposed development on sites designated for their international nature conservation importance and determine whether suitable mitigation measures are available.

In addition to impacts on the identified designated sites from construction activities, we also consider that there is the potential for existing recreational uses on the Sizewell Estate to be displaced as a result of the development (particularly during the construction period). It is therefore essential that the HRA includes full assessment of the likely impacts of such displacement on both the identified designated sites and those further afield. Significantly increased recreational disturbance pressure at other designated sites has the potential have a significant adverse effect on such sites and it is therefore essential that full assessment of this is undertaken as part of the HRA.

3.2.2 Sizewell Marshes Site of Special Scientific Interest (SSSI)

Sizewell Marshes Site of Special Scientific Interest (SSSI) lies to the west and north of the proposed platform and separates that area from the proposed construction lay-down areas (including common user facilities and contractor's compound areas). From the information provided in the consultation we are very concerned about the potential direct and indirect impacts of the proposed development on the SSSI.

Figure 7.11 identifies that part of the SSSI will be lost to the proposed development. In principle, we object to any loss of SSSI to development. Whilst we appreciate 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*

¹ EDF Energy. (October 2014). Sizewell C Proposed Nuclear Development HRA Evidence Plan.

enhancement of the site's biodiversity or geological interest".

This makes it 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.

The Stage 2 consultation document sets out a range of amounts of SSSI loss, however 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. In addition to our concern about the principle of SSSI, loss the sections below set out our concerns regarding the information provided in the Stage 2 consultation.

3.2.2.1 Direct SSSI Loss

Figure 7.11 of the Stage 2 consultation document identifies the proposed development would result in the loss of part of the SSSI on the western and northern sides of the platform. The amount of loss is dependent on the SSSI crossing options presented, however it is stated that it will be between 5.04Ha and 5.55Ha (paragraph 7.4.39). As recognised in paragraph 7.4.39, this would result in the loss of areas of reedbed; wet woodland; ditches and fen meadow from within the SSSI boundary. It is noted that EDF Energy consider that the Aldhurst Farm Habitat Creation Scheme will form compensation for the loss of a number of these habitats. However, we consider that the Stage 2 consultation document does 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 loss.

Whilst 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 at Aldhurst Farm and the existing habitats within the SSSI areas to be lost, it is impossible to be able 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.

Also, whilst we note that paragraph 7.4.39 states that *"studies are ongoing to also compensate for the loss of a small area of fen meadow"*, we consider that it is not possible to compensate for the loss of fen meadow habitat, such as will be lost along the western edge of the proposed platform, through creation of new habitat. This type of habitat requires complex geological and hydrological conditions, alongside long term suitable management, which cannot be recreated.

In relation to the area of SSSI proposed to be lost, paragraph 7.4.39 states that the 5.04Ha to 5.55Ha lies within the construction sheet piling area. However, it is unclear if the proposed loss also factors in the area that will be damaged by the re-routing of Sizewell Drain. We consider that 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.

In addition to the above, the consultation document does not include a clear plan identifying the exact areas of SSSI which would be lost to the proposal. Such a plan should be provided to enable more detailed consideration to be undertaken by interested parties.

3.2.2.2 Indirect Impacts on the SSSI

In addition to the direct loss of SSSI, paragraph 7.4.41 of the Stage 2 consultation document identifies that considerable engineering activities (including excavations; installation of a sheet piling and a cut-off wall and dewatering) will be required to enable construction of the power station. Whilst paragraph 7.4.41 states that *"the potential effects of this cut-off wall and the Sizewell C platform on surrounding land, including the SSSI, is currently being modelled"* and that *"initial results indicate that there would be no adverse impact on the hydrology of the SSSI"*, no evidence to support this claim is provided. We have significant concerns that the proposed development could raise the groundwater levels enough to have a

catastrophic impact on the habitats for which the SSSI is designated, in particular the fen meadow communities are vulnerable to such hydrological changes. Raising of the water levels will also impact on the ability to manage the site to maintain its favourable condition. Dependent on the scale of the rise in groundwater levels, a significant proportion of the SSSI could be irreversibly damaged by the proposed development.

As recognised in paragraph 7.5.17, there is an observed continuity between the groundwater and surface water regimes within the SSSI. Given this connection, we are also concerned that changes in the surface water regime arising from the proposed development could significantly adversely impact on the habitats within SSSI which would be sensitive to such changes. Increases in surface water may also impact on the existing management practices of the SSSI and make it impossible to maintain water levels at their optimum. Paragraph 7.5.19 states that *“an assessment is being carried out to consider the potential effects of the development on both groundwater and surface water levels, flows and quality and consequential effects on the hydro-ecology of Sizewell Marshes SSSI and the designated sites to the north”* and that *“preliminary indications are that with appropriate mitigation, relating primarily to the design of the diverted Sizewell Drain, there should be no adverse effects on hydro-ecology”*. However, as no details are provided within the consultation document, we therefore have no confidence in this statement.

3.2.3 SSSI Crossing Options

Section 7 (vi) and Table 7.2 present four options for crossing the SSSI. It is noted that the location of the proposed crossings has been amended since the Stage 1 consultation to consolidate them on the north-eastern corner of the proposed power station platform (paragraphs 7.4.70 and 7.4.71). Table 7.3 presents the preliminary environmental information for the four SSSI crossing options. However, we are concerned that this table provides an inaccurate summary of the potential environmental impacts as it only lists impacts where they differ between options (paragraph 7.4.72) and does not include adverse impacts that are common between all four options. We consider that there is the potential for a number of such impacts:

3.2.3.1 Loss of SSSI

From the information provided in Table 7.2, it appears that between approximately 0.78Ha and 1.29Ha of SSSI will be lost to the proposed crossing options, with Option 4 resulting in the greatest loss and Option 3 the least loss. However, no detailed information is provided on the habitat types which will be lost to each option and how these are represented throughout the wider SSSI area. Paragraph 7.4.78 states that EDF consider that *“the affected habitats would be compensated for at the Aldhurst Farm Habitat Creation Scheme”*. As with the loss of the area of SSSI to the west of the proposed platform, we do not consider that any SSSI loss as been adequately justified in accordance with the requirements of NPS EN-1 (see section 3.2.2 above. Nor do we consider that adequate assessment has been made of the habitats within the SSSI area to be lost and the potential for their successful recreation at Aldhurst Farm. Whilst the Aldhurst Farm scheme may offer the opportunity to create some habitats similar to those present within the SSSI, not all of them can be compensated for in this way. Also, whilst we acknowledge that the habitat creation at Aldhurst Farm is underway, there is a significant difference in the age of habitats within the SSSI and the habitat creation area which impacts on their respective ecological values.

We also query whether the land take identified for Options 2 and 3 (bridges) will be reduced during the operation of the station if the temporary parts are removed?

3.2.3.2 Hydrological Impacts

As with the construction of the main platform (section 3.2.2.2 above), from the information provided it appears that there is the potential for a crossing to result in changes to the hydrological regime (groundwater and surface water) which could in turn result in significant adverse impacts on the SSSI. In particular, it appears that this could occur from the use of a causeway and culvert option. Table 7.3 states that for Options 1 and 4 (causeway options) *“there would be a localised, but very limited, increase in groundwater levels in the immediate vicinity of the crossing”*. However, no evidence is provided to support this statement and it is unclear what is defined as *“localised”* and *“very limited”*. There is therefore no demonstration that the causeway options will not result in a significant adverse impact on the hydrology of the SSSI.

3.2.3.3 Ecological Connectivity

The crossings are proposed to be located in an area where the existing SSSI narrows between the man-made ground north of Sizewell B and the higher ground of Goose Hill, the Sizewell Drain and Leiston Beck both run through this area. The area is likely to provide an important ecological corridor for a range of species, linking the Sizewell Marshes SSSI to the designated sites around Minsmere to the north. The Stage 2 consultation document presents very little assessment of the likely impacts of any the proposed crossing options on this corridor, other than recognising that there is the potential for barrier effects on water voles; otters; bats and fish. In addition, we consider that there is also the potential for barrier effects on birds and invertebrates, both of which form part of the designations for surrounding sites of nature conservation importance. All crossing options must be subject to a robust ecological functionality appraisal before any decision can be made on a preferred option. Such an appraisal must be made available for comment ahead of any selection of a preferred option.

In addition to the physical barrier effect of a crossing in this location, the impact of noise; light and vibration on the functionality of the corridor must also be assessed. A crossing option which compromises the function of this ecological corridor should not be preferred simply on the basis of cost or ease of construction (as suggested by paragraph 7.4.74).

3.2.3.4 Future Uses

We note that paragraph 7.4.77 of the Stage 2 consultation document makes reference to the potential future use of the crossing as part of the flood defences for the new power station. This, in part, appears to be driving EDF Energy's preference for Option 1 (paragraph 7.4.78). However, no further detail on the likelihood of the need for the use of the crossing as a flood defence is included in the consultation document and it is therefore unclear on what basis this need has been established. If there is an identified requirement for the SSSI crossing to also play a flood defence role, then this should be clearly set out to enable interested parties to form an informed opinion on the merits and validities of the different options available. This should also include the provision of alternative flood defence options which would be required in the event that crossing options 2 or 3 are taken forward.

3.2.4 Additional Land Take

Figure 7.27 sets out the areas currently considered to be required for construction activities (including common user facilities, contractors' areas, stockpiling areas and the accommodation campus and main access area). Table 7.4 suggests that the land take for these areas will be in the region of 240Ha. Despite the size of this area, very little information on its ecological value is provided in the consultation document. Whilst various sections of the document (e.g. paragraph 7.5.59) make reference to the use of the mitigation hierarchy to address ecological impacts, in the absence of detailed ecological survey and assessment information and detail on the exact measures proposed, it is not possible to determine or comment on the likely impacts of the proposal. As recognised in paragraph 7.5.58, the area is known to support an important assemblage of species of high conservation value. The proposed development has the potential to have significant adverse impacts on this assemblage and on the ecological value of the area.

Figure 7.27 also shows several parts of the site where proposed construction areas encroach into designated sites, beyond that identified for the main platform and SSSI crossings. North of the Beach Landing Facility (BLF) there appears to be encroachment into the Minsmere-Walberswick SPA and the north-east Water Management Zone (WMZ) encroaches into the Minsmere-Walberswick Heaths and Marshes SSSI and the Southern Minsmere Levels CWS. No reference is made to these encroachments elsewhere in the Stage 2 consultation document and no detailed information is available on the nature of the proposed works or the impacts that they may have. We therefore have significant concerns about the potential for these works to adversely impact on the designated sites and the species that they support.

3.2.5 Rail

We note that two rail options for the construction of the power station are now proposed (reduced from the four presented at Stage 1). Tables 8.1 (Green route) and 8.2 (Land to the east of Eastlands Industrial Estate) set out the preliminary environmental information relating to each option, however no background ecological survey or assessment information is provided in the consultation.

With regard to Table 8.1, the mitigation measures identified under terrestrial ecology and ornithology are

limited to “those embedded in the design of the proposed development”. However, Table 8.4 states that ecological surveys for areas outside the main development site are still to be completed. Without detailed ecological survey information, it is impossible to determine whether such embedded mitigation measures are likely to be acceptable in mitigating the potential impacts of the proposed rail route. If adequate mitigation cannot be achieved, selection of the route as a preferred option is consequently not acceptable. Also, in relation to operational impacts, the impacts of vibration on roosting bats must be assessed.

With regard to the Land to the east of Eastlands Industrial Estate option, Table 8.2 states that no significant construction or operational ecological impacts are anticipated and therefore no mitigation measures are required. In the absence of any ecological survey or assessment information, we can find no evidence to support this claim. We also query whether consideration has been given to the potential impact of vehicle movements (particularly HGVs) on habitats and species in Fiscal Policy woodland, in particular the impact of noise; vibration and lighting on roosting and foraging bats.

3.2.6 Spoil Management and Borrow Pits

Section 7 (k) of the Stage 2 consultation document sets out the current proposals for the winning, stockpiling and disposal of materials as part of the project. We note that two options are presented for the management of unsuitable materials (section 7 (k) (ii)), the placement of material into onsite borrow pits or the shipment of material to RSPB Wallasea Island. We also note that the borrow pit option is EDF Energy’s preferred option (paragraph 7.5.72).

In relation to the borrow pit option, there is little information provided in the consultation document regarding the ecological or hydrological impacts of borrow pits in any of the of the proposed locations (Fields 1 to 4) and ecology and hydrology are not included in Table 7.7 (Preliminary environmental information for the borrow pit locations). In the absence of such information, there is no evidence to support the claim in paragraph 7.5.72 that there will be “no impact on water resources”. Given the proximity of the proposed borrow pit areas to Sizewell Marshes SSSI we are concerned that the removal of material and infilling with material extracted from the main platform area could have a significant adverse impact on the SSSI. It is understood that the material to be excavated from the main platform area is highly acidic and we therefore query how this would be contained within the proposed borrow pits. The proposed stockpiling area is also close to the SSSI and again no information is provided in relation to the potential adverse impacts that this could have, nor is any information provided how it is intended for the stockpile area to be managed (e.g. will vegetation control be required and if so how will this be achieved?).

With regard to the locations of the proposed borrow pits (Figure 7.39), no ecological survey information is available to allow for more detailed comments to be made. However, from the plan provided we are concerned about the potential for adverse impacts on Ash Wood and the species it supports resulting from the use of Fields 3 and 4. Field 3 is also the closest to the Minsmere-Walberswick SPA and Minsmere-Walberswick Heaths and Marshes SSSI and its use could therefore have a significant adverse impact on the species for which those sites are designated.

We also note that a topsoil and subsoil storage area is proposed west of the woodland known as Fiscal Policy (Figure 7.35). Fiscal Policy is part of the Sizewell Levels and Associated Areas CWS and is known to be an important area for foraging and roosting bats. We are concerned about the lack of detail provided on this stockpiling area and the potential that this has to impact on the woodland; the species it supports and ecological connectivity from the Sizewell Belts out into the wider countryside.

3.2.7 Hydrology

In addition to comments made elsewhere in this response regarding potential hydrological impacts from the proposed development, particularly on Sizewell Marshes SSSI, we note that Figure 7.27 and section 7.8 (b) make reference to the use of WMZs to control surface water run-off. No details on the existing ecological value of the areas proposed for WMZs is provided in the consultation document, nor is any information on the form that the proposed WMZs will take or on the potential for the use of WMZs to affect the existing hydrology of the Sizewell Marshes SSSI provided. In the absence of sufficient information and assessment of the likely impacts of these features, it cannot be concluded that they will not result in an adverse impact on designated sites or protected and/or UK and Suffolk Priority species.

As detailed in 3.2.3 (above) one of these WMZs appears to encroach into the Minsmere-Walberswick Heaths and Marshes SSSI and the Southern Minsmere Levels CWS. One also appears to be located within the Aldhurst Farm habitat creation scheme area.

From the Stage 2 consultation document it is unclear what the demand for potable water will be. From the construction methods required, it appears likely that a significant volume of non-saline water will be needed. It must therefore be established that the required quantities are available without having adverse impacts on sensitive sites both within the immediate catchment and elsewhere in the country. It is also unclear how much non-saline water is required for the operation of the power plant. Again, it must therefore be established that the required quantities are available without having adverse impacts on sensitive sites both within the immediate catchment and elsewhere in the country.

3.2.8 Construction Disturbance (Noise; Vibration and Lighting)

Sections 7.8 (c) (lighting) and 7.9 (f) (noise and vibration) identify that construction of the proposed development will result in significant increases in lighting; noise and vibration for the duration of the build.

With regard to lighting, whilst we note that a lighting strategy is being developed (paragraph 7.8.6), this is not included in the consultation document and therefore it is not possible for consultees to comment on the likely success of this in mitigating adverse ecological impacts arising from lighting. We are also concerned by the statement in paragraph 7.8.6 that “*any lighting scheme would endeavour to minimise the effect on potential light sensitive areas and/or features*”. The design of the site and the lighting strategy must minimise the effect on sensitive features to ensure that there is no adverse impact on ecological receptors.

In relation to noise and vibration, whilst paragraph 7.9.27 states that work is being carried out to assess potential impacts of noise and vibration on sensitive receptors, no further information is provided in the consultation document. In the absence of more detailed information on the likely noise and vibration sources and levels, it is not possible to determine whether appropriate mitigation can be achieved through the measures outline in paragraph 7.9.30.

Also, we note from paragraph 7.4.92 that the proposed helipad has been relocated to “*the southern part of the EDF Energy Estate in the Sizewell Gap area*”. However, this location is not marked on Figure 7.27 and does not appear to be on any of the other plans in the consultation document. Helicopters have the potential to have a significant adverse effect on a range of ecological receptors and we therefore request that more detail on the location and levels of proposed use is made available to fully inform the required Environmental Impact Assessment.

3.2.9 Protected and/or UK and Suffolk Priority Species

In addition to the comments made throughout this letter regarding potential impacts on protected and/or UK and Suffolk Priority species, we note that chapter 7.9 (a) of the Stage 2 consultation document includes some preliminary environmental information on such species. Whilst this chapter includes some reference to impacts on Sizewell Marshes SSSI; Minsmere-Walberswick SPA and reptiles, we are disappointed that little emphasis appears to be being placed on other protected and/or UK and Suffolk Priority species. The Sizewell Estate is known to be of considerable importance for a range of such species, including (but not limited to) bats, birds, otters, water voles and invertebrates and the proposed development could result in significant adverse impacts on these species assemblages. It is essential that a full assessment of all likely impacts is undertaken as part of this project, and this should be used to inform the required avoidance; mitigation and compensation measures for the project.

3.2.10 Management of Existing Habitats

Suffolk Wildlife Trust manages the Sizewell Marshes SSSI and part of the Sizewell Levels and Associated Marshes CWS and part of the Southern Minsmere Levels 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.

3.3 Estate Vision and Permanent Masterplan

Section 7 (c) (ii) and Figure 7.7 of the consultation document make reference to a masterplan for the post construction uses of the Sizewell Estate. Whilst, in principle, it may be possible to restore areas of the wider estate to the habitat mosaic described in paragraph 7.4.7, we disagree with the statement in paragraph 7.4.6 that this will deliver “*ecological mitigation*”. As creation of these additional habitats will occur after construction is complete we do not consider that they will form mitigation for impacts caused by construction, instead they should be considered as enhancements. Any such habitat creation must be phased to occur as early as possible in the construction timetable in order to maximise the potential ecological benefits.

In addition, the restored habitats must ensure that existing areas of connectivity for bats are retained and enhanced and integrated within the habitat mosaic. The main access road will continue to pass through this area and it is essential that it must be unlit. It is strongly recommended that the road is subject to speed restrictions as it will be passing through areas of semi-natural habitat. The establishment of the semi natural habitat as part of the restoration of the site should be subject to a management plan and should be monitored to evaluate its success. Provision must be made to maintain and manage these semi-natural areas in perpetuity.

The Masterplan should also incorporate a recreational strategy for the whole estate to ensure that the potential nature conservation benefits are not constrained by inappropriate public access. Such a strategy should also incorporate access Aldhurst Farm to ensure that a holistic approach to this issue is taken.

4. Associated Development Sites

In addition to the proposed developments around the main site, the Stage 2 consultation includes a range of offsite associated developments. In particular, significant developments are proposed related to the northern park and ride facility; the southern park and ride facility and highways improvements in the villages Farnham and Stratford St Andrew. No ecological survey information is provided in relation to these parts of the proposed development, it is therefore not possible for interested parties to provide detailed comments. However, we have the following comments on the information provided.

4.1 Northern and Southern Park and Ride Facilities

Tables 9.2 and 10.2 identify the preliminary environmental information for the northern and southern park and ride areas, however as no ecological survey information is provided in the consultation it is not possible to provide detailed comments on these options or the impacts and mitigation measures which have been identified in the tables.

Notwithstanding the above, we note that Table 10.2 identifies that construction and operation noise and lighting at the southern park and ride may have an adverse impact on roosting and foraging bats. However, no reference is made to mitigating these impacts in the mitigation measures section.

4.2 Highways Improvements

The Stage 2 consultation document presents four options for highways improvements around the village of Farnham. Option 1 is no a ‘no change’ scenario; Option 2 is road widening on Farnham Bend; Option 3 (a and b) is a Farnham bypass and Option 4 is a bypass of Farnham and Stratford St Andrew.

The preliminary environmental information for Option 2 is presented in Table 11.2. Although it states that road widening at Farnham Bend would not result in any key ecological considerations, we query whether the building proposed for demolition has been assessed for its suitability to support roosting bats.

Options 3a and 3b are for a bypass to the north-west of Farnham village, crossing the River Alde. This area primarily comprises of flood plain grazing marsh, which is a UK Priority Habitat (Coastal and Flood Plain Grazing Marsh) and a Suffolk Priority Habitat and therefore should be protected from damage or destruction. Although no ecological survey work is provided in the consultation document, Table 11.3 identifies that these Options could have an adverse impact on bats; great crested newts; reptiles and birds, and that further assessment on the likely impacts is still to be undertaken. As well as those listed in Table 11.3, the site is likely to support a range of protected and Priority species including otter and water vole. Based on the available information we consider it likely that this option will have significant adverse

ecological impacts.

In common with the other Options, Option 4 is not supported by any ecological survey work in the consultation document, although it is noted that this option has previously been assessed by Suffolk County Council (paragraph 11.8.2). This Option also crosses the River Alde (south of Farnham) and runs in close proximity to other potentially sensitive habitats, including ancient woodland designated as a County Wildlife Site (Foxburrow Wood CWS). Although a small amount of consideration of ecological impacts is provided in the consultation document (paragraphs 11.8.19 to 11.8.223), there is insufficient detail available to allow interested parties to make detailed comments. However, based on the limited information available we consider it likely that this option will have significant adverse ecological impacts.

5. Conclusion

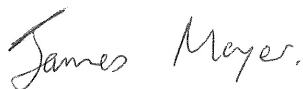
We understand that a significant amount of work has been undertaken on this project since the Stage 1 public consultation, including that which has gone into the first stages of the Evidence Plan process. However, given its scale and location, it is unquestionable that the proposed development has the potential to have significant adverse ecological impacts which it will be very difficult to adequately address. It is therefore disappointing that such limited information on these matters is contained within the Stage 2 consultation and we consider that this shows a lack of acknowledgement of the difficulties associated with the project.

As set out in full above, we maintain significant concerns about the potential ecological impacts of the proposed development which are summarised under the following topics:

- Principle of the proposed development and national policies;
- Main development – coastal and marine impacts (impacts on designated sites and protected and Priority species);
- Main development – terrestrial impacts (impacts on designated sites; SSSI loss; impacts on protected and Priority species);
- Hydrology – raising of groundwater and surface water levels, impacts on water availability in the catchment;
- Associated development – park and ride facilities (impacts on protected and Priority species);
- Associated development – highways improvements (impacts on protected and Priority species and habitats).

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



James Meyer
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