

The Sizewell C Project

9.81 Written Summaries of Oral Submissions made at Issue Specific Hearing 10: Biodiversity, Ecology and HRA (27 August 2021)

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1 ISSUE SPECIFIC HEARING 10: BIODIVERSITY, ECOLOGY AND HRA

1.1 Introduction

- 1.1.1 This document contains the Applicant's written summaries of the oral submissions made at Issue Specific Hearing 10 (ISH10) on biodiversity, ecology and HRA matters, including protected species, designated sites and SSSI crossing update, held on 27 August 2021.
- 1.1.2 In attendance at ISH10 on behalf of the Applicant was:
 - Hereward Phillpot QC of Francis Taylor Building (HPQC);
 - Stephen Trowmans QC of 39 Essex Chambers (STQC);
 - John Rhodes of Quod (Planning Manager (Strategic));
 - Alan Lewis of AECOM (Technical Lead (Ecology));
 - Dr Stephen Roast of SZC Co. (Planning Manager (Marine)); and
 - Dr Mark Breckels of CEFAS (Marine Ecology Lead).
- 1.1.3 Where further information was requested by the Examining Authority (ExA), this is contained separately in the Applicant's **Written Submissions Responding to Actions Arising from ISH10** (Doc Ref. 9.85).
- 1.2 Agenda Item 2: Ecology general and policy
 - a) To understand and explore compliance (or otherwise) with EN-1 (applied by para 3.9.5 of EN-6), in particular: (i) para 5.3.5 (and Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System
- 1.2.1 The ExA raised three questions:
 - In relation to that policy document, is that still the relevant policy document?
 - Document called 'working with the grain of nature referenced at 5.3.5
 can you assist me with the status?



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- One of the policy requirements is that the Applicant should halt and reverse decline of habitats and species. Can you comment on how the application does or does not achieve that.
- 1.2.2 HPQC confirmed that as far as SZC Co. is aware the ODPM Circular is still a live Government Circular. He confirmed that the Applicant will check the extent to which it has been updated, because it represents a summary of the law as it stood at that time so it is useful to check. At Deadline 2, the Applicant put in an **Appendix 7B** [REP2-109, electronic page 161] to some of the bio questions which set out matters relating to legal compliance. HPQC confirmed that there is going to be an updated version of the Appendix submitted at Deadline 7 by reference to **ExQ2 Bio 2.11** (Doc Ref. 9.71) and stated that hopefully that document will be comprehensive.
- 1.2.3 In response to a query on the purpose of the reference to the Circular within the NPS, HPQC referred to paragraph 5.3.2 of NPS EN-1 and footnote 97. The purpose of paragraph 5.3.2 is simply to identify that there is a wide range of legislative provisions that can impact on decisions, and pointing to a helpful place where they are set out. It is not in itself policy, it is saying that in addition to the policy there are legal obligations and duties which the Circular helpfully brings together in one place. The key thing is to make sure that one is aware of and complies with the duties.
- 1.2.4 So far as working with Grain of Nature is concerned, the Applicant does not believe that has been archived and is still live. It was published in 2011 and is said to set a programme for 5 years therefore the Applicant will check to see if there is any update as to its ongoing status and role and will advise the ExA on this matter at Deadline 8.
- 1.2.5 HPQC explained that paragraph 5.3.5 of NPS EN-1 identifies the aims of the Government's biodiversity strategy. It is not setting a development control test. The strategy needs to be taken into account when assessing the merits of an application, and so the aims are relevant. However, the policy does not say that an individual proposed development must achieve those aims in order to be judged acceptable. Those aims are relevant but EN-1 sets out in policy how they are to be applied in guiding decision-making in this context. That can be seen from the opening words of paragraph , 5.3.6: 'In having regard to the aim...'. Through the guidance given in 5.3.6 to 5.3.8 of EN-1, the government is providing guidance as to what that should mean in terms of decision-making in this context. The aims are then reflected in the policy guidance and tests set out in the remaining parts of the section. HPQC then invited Mr Lewis to speak to the application of those aims here.



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- 1.2.6 Mr Lewis confirmed that through the biodiversity net gain ('BNG') assessment the Applicant has demonstrated that it can deliver a 19% BNG across the project using Defra Metric 2.0. There is one qualification in relation to that which is that the Applicant must fully compensate for the land take to the Sizewell Marshes SSSI. The Applicant has already created 6ha of wetland habitat at Aldhurst Farm and that shows a net gain in the quantum of wetland. The second strand is the fen meadow strategy covered later in the hearing. The third strand is in relation to wet woodland habitats and Natural England has given us a multiplier of 1 which reflects the relative ease of creating this habitat. In summary in relation to the SSSI, the Applicant is confident that there will be some gains and we can explore other species and habitats as the ExA sees fit but the BNG of 19% is powerful evidence on this particular point (i.e. how Applicant should halt and reverse decline of habitats and species).
 - i. para 5.3.13 and County Wildlife Sites
- 1.2.7 HPQC confirmed that the Applicant's understanding was that paragraph 5.3.13, which refers to 'local sites', applied to County Wildlife Sites, and its position in this respect was therefore aligned with that of ESC and SCC.
 - ii. para 5.3.14 and deterioration in relation to Foxburrow Wood
- 1.2.8 HPQC welcomed the fact that the additional information at Deadline 6 had alleviated ESC's concerns with regards to groundwater at Foxburrow Wood.
- 1.2.9 Mr Rhodes responded to ESC's concern about the five veteran trees.
- 1.2.10 Mr Rhodes confirmed that the Applicant had submitted information in the Response to the ExA's request at Deadline 4 [REP4-006]. There are three veteran trees which the Applicant thinks would be lost as a result on the two village bypass. The District Council has expressed concern about that today but it also supports the route of the two village bypass and the Applicant has supported and explained the selection of the route of the bypass and the consequent loss of trees in earlier submissions [REP2-108]. In terms of woodlands generally, the two village bypass would result in the loss of c.0.38ha but there are substantial mitigation proposals in the landscape plans and the Landscape and Ecological Management Plan (LEMP) [REP5-077], which include the planting of 1.59ha of woodland and the planting of specimen trees to address the loss of veteran trees. The Applicant has identified the loss of two veteran trees in relation to the SLR which was explained in response to **ExQ1 HE1.24** [REP2-100]. Mr Rhodes confirmed that the Applicant will set out its justification and make reference to the policy requirement in response to this agenda item. Mr Rhodes



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further confirmed that there would be no loss of ancient woodland from any part of the project.

- iii. para 5.3.5 and beneficial biodiversity; para 5.3.18 and opportunities for enhancement of habitats where practicable
- 1.2.11 Mr Lewis stated that in relation to building beneficial biodiversity, during the site inspections the ExA was able to see the extensive landscape scale switch from arable fields to grasslands and heathlands which have been carefully planned. Sizewell C (SZC) is unique in relation to this. It does not depend on future promises but one can currently see these newly established (and establishing habitats (e.g. Aldhurst Farm, reptile area and marshland)). The final piece in the jigsaw are those remaining arable fields which will be used for the temporary construction area and then when the Applicant removes this, the former arable fields will be replaced with grasslands, heathland, woodlands and scrub areas. Those woodlands will provide greater connectivity for species like bats than are currently present. The Applicant believes that the opportunities have been maximised within the EDF estate and that the tests in 5.3.5 has been met by the securing mechanisms.
- 1.2.12 In response to the ExA, Mr Lewis confirmed further that after the temporary construction compound is removed it would be replaced by grassland, heathland, woodland, scrub planting and additional hedgerow planting. HPQC confirmed that the Estate Wide Management Plan (in draft) and a draft requirement to secure its implementation will go in at Deadline 7. Therefore, there will be an opportunity for ESC and others to comment.
- 1.2.13 HPQC responded to two points made by other parties. First, SCC's response was subject to a caveat concerning the timing of some of the habitat creation and when habitats will be available, and the fact there will be a long period of construction. HPQC submitted that this did not give rise to any conflict with the policy, and it was obvious when looking paragraphs 5.3.15 and 5.3.18 they are concerned with opportunities which arise with development proposals. None of these opportunities would exist, and none of the proposed benefits would be realised unless SZC builds the proposed nuclear power station. In addition, so far as the timing of the opportunities is concerned, the Applicant does need to build the NSIP. Thus the Applicant will need to use the temporary construction area for the purposes of construction before the opportunity arises to restore it in a way that is beneficial for wildlife. At the moment, much of it is in use for intensive arable production and is not providing those benefits. So far as that land is concerned, it is not therefore a situation in which the Applicant is taking a valuable habitat out of commission, rather at the end of the temporary



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construction period there is an opportunity to achieve a benefit and that will be taken.

- 1.2.14 HPQC invited Mr Lewis to address two further points addressing biodiversity net gain.
- 1.2.15 Mr Lewis further addressed enhancement. He responded to the RSPB who suggested mitigation works for bats and marsh harriers should not be included as enhancements. Mr Lewis highlighted that the BNG assessment methodology is really clear and that the SSSI and their compensatory habitats are not included. However, the guidance is clear that in relation to the other habitats, they can and should be included. He highlighted that in relation to bats and marsh harriers, the habitat works which are for those species do not negate the benefits that those habitats will provide for other species even if one could say that you should discount the enhancements to bats there will be enhancements for other species, which is obviously a positive gain.
- 1.2.16 Mr Lewis further highlighted that the assessments submitted at Deadline 1 include a Phase 1 habitat map which includes a landscape and ecology masterplan. Therefore, it is possible for interested parties to calculate the relevant areas and undertaken their own BNG assessments. All of the assumptions which the Applicant has made are set out in the **updated BNG reports** provided at Deadlines 1 and 5 [REP1-004, REP5-090, REP5-091 and REP5-092]. The work was peer reviewed by a BNG team at Aecom to provide reassurance. He also refuted claims that the habitats being created were of low quality. He further acknowledged (in response to Rachel Fulcher) that there are some arable fields of good quality in the Brecklands of West Suffolk where rare weed species have been recorded. However, that is not the case here.
 - b) To understand and explore compliance (or otherwise) with EN-6 Part II Annex A paras Sizewell C.8.59, C.8.63 and C.8.67 (pages 207 and following) and whether the Applicant's proposals have sufficiently taken into account the issues identified in the Appraisal of Sustainability
- 1.2.17 In response to a request for a systematic list of issues identified in the AOS and HRA referencing where they have been addressed in the application documentation and a brief summary of conclusions, HPQC confirmed that the Applicant would assist. It is likely to be deadline 8 to undertake the cross-referencing. The Applicant has satisfied itself that it has done that but what it has not done is a systematic account of where. The Applicant is conscious that would be very helpful for the ExA's purposes.



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- c) To be clear where the matters in a) and b) are addressed, brought together and discussed in the Application documentation
- 1.2.18 HPQC made three points. The first is that there is an NPS Tracker [REP6-022] which goes through the relevant parts of the NPS and identifies where a response is provided to them and records compliance with the NPS policies. The second point is that having looked at the most recent version, the Applicant recognises that some of the references which are on the agenda are not dealt with, normally because it is not clear that the relevant NPS paragraphs actually set a policy test. Nevertheless, the Applicant will update the NPS Tracker to make sure it is comprehensive at Deadline 8. The third point is that the Applicant has in mind that where the Planning Statement [APP-590] deals with these policy matters it does so from the point of time of its drafting on submission of the Application. It should hopefully be helpful to the ExA to see what the Applicant says at the end of the Examination taking into account the additional mitigation, controls and so on that have been developed in discussion with interested parties and in response to ExAQs. The Planning Statement, therefore, will be updated.
- 1.2.19 In Response to the RSPB, HPQC confirmed that **Appendix 7B** [REP2-109, electronic page 161] already covers 28G of the WCA. The Applicant will check the position in terms of Regulation 10 of the Habitat Regulations. The Applicant can let the RSPB and SWT know directly once we have checked those. Post-hearing Note: Appendix 7B does not cover Regulation 10 of the Habitat Regulations. This is because Appendix 7B was prepared in response to a question in ExAQs in relation to the WCA and the NERC Act 2006.
- 1.3 Agenda Item 3: Marine Ecology
 - a) Sabellaria spinulosa, in general and progress with a Sabellaria mitigation and monitoring plan which is awaited from the Applicant – see also Natural England's position set out in their post-ISH7 submission [REP5-160] what DML conditions are proposed for mitigation and comments on likelihood of presence and need for compensation (see also MMO's REP6-039) paras 1.3.6.6 and 1.3.7.6)
- 1.3.1 Mr Tromans confirmed that a draft Saballeria Spinulosa management and monitoring plan has been prepared it will be submitted at Deadline 7. In terms of NE and the MMO's position, a meeting took place on the 18 August which is referred to in NE's submission. From the Applicant's perspective that was a positive meeting. The points which NE would want to make were they here was that the plan should focus on avoidance and then mitigation. In terms of the deemed marine licence ('DML'), condition 45 deals with cooling water intakes and outfalls; 45(i) currently provides that relevant



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works should not commence until a Saballeria Monitoring Plan has been approved by the MMO. That is not satisfactory in terms of wording as far as NE and MMO are concerned. The Applicant accepts that needs to be reworded to reflect the scope of the plan, not simply monitoring but also mitigation. That will be done for Deadline 7.

- 1.3.2 Mr Tromans handed over to Dr Roast in relation to what has been said by Natural England about the 'third location'.
- 1.3.3 Dr Roast confirmed that there were two intakes, an intake tunnel for each unit. Each intake tunnel will have two intake heads. For the detailed engineering phase the Applicant looked at three different options to choose the head locations. The Applicant is keeping the options open but it is the case that the preferred options from a geotechnical perspective are also the two which avoid the area where the Sabellaria is most concentrated.
- 1.3.4 In response to a question from the ExA as to whether the Applicant needed to keep three options, Mr Roast confirmed that the Applicant would take that one away as the engineers are looking into the issue.
- 1.3.5 In response to a question about there being two intake heads per tunnel, Dr Roast confirmed that there were two elements which were relevant. One is redundancy which is linked to safety. The second is that the EPR™s are much bigger than the existing stations and that by separating the flow into two separate intakes it is necessary to reduce the current speed. Therefore, the water draws in from the two locations. If the proposal had just one intake, it would need to be much larger.
- 1.3.6 In response to the ExA's point that if one intake was out of action the rate of water at the other head would be doubled, Dr Roast stated that was the case if abstraction were to be continued at the same rate. However, to lose an entire intake head would be a significant issue and that, in practice, that unit would be downrated.
- 1.3.7 Dr Roast stated that to lose an entire intake head would not be normal operating procedure and therefore the effect of redundancy had not been fully assessed in the ES.
- 1.3.8 Mr Tromans confirmed that the Applicant would reply to points made by third parties as necessary.



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- b) To understand which issues considered at the Hinkley Point C water discharge permit acoustic fish deterrent appeal and in dispute are common to the Sizewell DCO application
- Mr Tromans confirmed that the Examination is addressing different 1.3.9 locations and species at the two sites. The important distinction to bring out is that the Hinkley Point C (HPC) appeal turned entirely on HRA and adverse effect on integrity. The only relevance of impingement was that the EA said that it meant that an adverse effect on integrity couldn't be excluded beyond reasonable scientific doubt. The EA did not try to defend the requirement for an AFD to be installed on any other ground. At HPC the issues related to some species of migratory fish which were qualifying interest features of the European Sites. The EA's case was that impingement would directly impact the spawning populations of those rivers. The important distinction is that the location of SZC could not have that direct impact on any spawning migratory fish. The fish in issue spawn on the other side of the North Sea and North Sea River Systems. Also at HPC at issue was some species forming part of the fish assemblage which was a feature of the Severn Estuary Ramsar Site. The EA's case was that on HRA assessment impingement would threaten the relevant populations and affect integrity. That doesn't arise in the same stark way in this case. The implications of fish numbers for sprat, herring etc. are not really relevant for HRA purposes for their own sake. They are relevant as prey for marine mammals or bird species such as little tern. It is important to make that distinction.
- 1.3.10 Taking the common issues to both sites. First, the effectiveness of the LVSE heads as mitigation. That was at issue at HPC. However, it is important that here the issue has been rendered academic by the Applicant agreeing to adopt, for the purposes of the application a factor of 1.0. That means there is no comparative advantage for SZC vs SZB in terms of number of fish abstracted. We do not claim that SZC intake heads will have any advantage for the purpose of calculating the impinged fish. Plainly in reality they will but we are not claiming that. The argument over the LVSE heads probably falls away.
- 1.3.11 Mr Tromans confirmed that the assessment had been conducted with the assumption of no benefit from the LVSE heads for the purposes of calculation and scaling impingement from what we know of records at SZC vs SPB. The CIMP data that the Applicant has from SZB has been drawn across without making any assumption that fewer fish will be impinged as a result of the LVSE heads.
- 1.3.12 Mr Tromans stated that it was worth noting that the MMO has dealt with the LVSE point in response to ExQ1 Bio.1.245 [REP2-140]. They say that whilst



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it is feasible that the LVSE design will provide some benefit even if the benefit was zero that would not materially change the conclusions of the fish entrapment assessment. They are saying it is feasible that there will be some advantage but that won't change the conclusions.

- 1.3.13 The second of the three points relates to population sizes. In other words you have your impingement assessment, you know how many will be impinged, what do you compare that against? That was acutely in issue at HPC because the EA put forward much smaller baseline populations. The Applicant relied upon stock areas formulated by ICES and took their stock areas. It may be noted in relation to the MMO who dealt with this in their Deadline 2 submission [REP2-140], they conclude that the use of ICES Stock areas represents the best scientific evidence available and no robust information to support local stock areas.
- 1.3.14 In relation to the food-web effects and the effects on birds of depletion of fish, the Applicant has undertaken a local assessment in the context of prey species. The Applicant has looked at local level impacts in Sizewell bay to satisfy itself there won't be an impact on Little Tern or Marine Mammals which use those food as prey. Those arguments over population size are not relevant in relation to that local assessment. There is still an argument in relation to Twaite Shad (a migratory species) and what population should be assumed in Belgian and German rivers. We have an item dealing with HRA migratory fish. The assessment was extended to cover very small fish. The Applicant has addressed both impingement and entrainment in that regard.
- 1.3.15 The third point at issue is EAV. This is the dispute over principle. This was explored exhaustively at HPC. Mr Tromans noted that much of the written material put in by both sides reflects evidence at HPC. Mr Tromans made two points. First is that in relation to the local effects, EAV is not a relevant factor for that. It does not feature in those calculations. We are assuming they are little fish which get eaten the issue is not whether they will grow up and spawn. The final point to make is that RR-0744 of the MMO agree with the Applicant that the CEFAS EAV method is better than the EA's method. It is more realistic in the context of fish and the extension method has conceptual challenges. That is where we stand.
- 1.3.16 The points are not so acute here in relation to HRA.
- 1.3.17 Mr Tromans invited Dr Roast to comment on the intake heads as a reef and Dr Breckels to address the change in area for cod, seabass and smelt and also Mr Wilkinson's point about the Blackwater estuary and entrainment.



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- 1.3.18 Dr Roast confirmed that there was no justification for the suggestion that the intake heads could act as a reef. The low velocity element is only at the intake face, it has a very limited impact in terms of the velocity which is very localised. It cannot act as a reef. He confirmed that the Applicant would provide a written response on this. He further confirmed that SZB has a large intake head and there is no evidence of it acting as a reef. Dr Mark Breckels disputes the EA's suggestion that a comparison between HPC and SZC is an 'apples and oranges' comparison, as the principles of fish biology are fundamentally the same irrespective of location. The determinants of what is an appropriate stock area at HPC also apply to SZC, and similar types of evidence have been worked with at both sites.
- 1.3.19 Dr Mark Breckels also disputed the EA's suggestion that the recent change in how ICES defines stock areas for North Sea cod constitutes a drawback to using ICES benchmarks (which have been used to assess population-level effects on fish species). To the contrary, the fact that ICES benchmarks are continually reassessed and adjusted based on all the available evidence means that they are appropriate and reflect the current science. Questions relating to the stock areas for species of concern from Natural England have been addressed within **Appendix P** of REP5-120.
- 1.3.20 The following summaries were provided in ISH10 by Dr Breckels:
 - Cod: ICES now believes the North Sea stock may now be made up of two populations: a southern (Dogger) population and a northern (Viking) population. ICES is currently working with all the available evidence to come up with the spawning stock biomass to determine the population size (of the southern population that is of relevance to the assessment). In lieu of that, a very precautionary estimates based on landings has been used (i.e., a small proportion of spawning stock biomass). Based on this, the mean annual effect of SZC on cod is very small (0.14% of landings). This assessment is laid out in detail in REP6-016.
 - Smelt: Genetics of smelt have been assessed from the Thames up to the River Ouse, and it is a homogenous genetic population. The population estimate used in the impact assessment is based on the EA landings for the Anglian stock (see SPP103 in AS-238, REP6-016 and SPP116 in REP6-208). In REP6-028, a full uncertainty analysis including smelt has been provided, and the mean effect on a precautionarily estimated SSB based on Environment Agency landings data is approximately 0.5%.
 - Sea bass: Dr Breckels confirmed that seabass was one of the key species considered at the HPC) Inquiry. Furthermore, that this is one



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of the few species where the stock area at HPC and Sizewell is the same. He further explained that the biology of seabass is very well studied, and there's lots of tracking information available. In REP6-016, maps of spawning migratory movements of sea bass are shown on page 39. The ICES evidence suggests that the current area is correct but the current debate has been whether it should be extended to the Biscay population. The adults make large migrations to offshore spawning sites, and the eggs and larvae drift long distances with oceanic currents to reach nursery areas. The concern from the Environment Agency, which comes from HPC Inquiry, is that there is evidence of site fidelity with respect to the areas where adult sea bass feed during summer. However, the full life cycle of the fish needs to be considered to understand what the stock area should be. This is the ICES approach, and is consistent with the use and application of equivalent adult values (EAV) and therefore the ICES areas used in the assessment are appropriate.

- 1.3.21 In response to comments from Together Against Sizewell C (Pete Wilkinson) regarding the entrainment of small fish and whether the equivalent adult value (EAV) for herring is based on the stock in the southern North Sea or the smaller Blackwater Estuary stock, Dr Breckels stated that EAV is a technical point to be discussed in writing. Similar concerns from Natural England have been responded to previously in **Appendix P** of REP5-120. The Blackwater point was about a mixture of EAV's and stock areas, both are dealt with in **Appendix P** of REP5-120. The Blackwater herring is a separately managed small stock which spawns during a period where we see the highest impingement rates at SZC so it's unlikely that the herring are from the Blackwater. This has been assessed in detail and it's a comment that the MMO have picked up on (see paragraph 5.8.11, page 37 of REP2-144) and agreed that on a pro-rated basis, the probability of effects on the Blackwater stock are minimal.
 - c) Eels Regulations; to understand the positions of the Environment Agency and Applicant in relation to compliance and entrainment monitoring see the responses and exchanges on ExQ.Ma.1.0 and the Environment Agency's position generally on this
- 1.3.22 Mr Tromans confirmed that discussions are ongoing with regards to eel passes at Snape Maltings where eels are currently obstructed. If agreed, then the Applicant would provide funding to the EA through the DOO. Work is ongoing to draft a proposal to submit to the EA.
- 1.3.23 With regards to the Eel Regulations, SI 2009/3344. Regulation 17 deals with eel screens. Regulation 17(4) places an obligation on a responsible person to ensure an eel screen is placed in a diversion structure. Not to do



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so is a criminal offence but the EA may exempt the person from that requirement. The EA understands the reason why the Applicant cannot fit the 2mm screen. They are explained in the **Eels Regulations Compliance Assessment** [APP-322]. It is to prevent a dangerous situation of the intakes getting clogged up.

- 1.3.24 Mr Tromans then handed over to Dr Roast and Dr Breckels.
- Dr Roast confirmed that the Applicant has looked at the possibility of doing entrainment monitoring and believes that it can do it. At Deadline 7 the Applicant will be submitting an in principle fish monitoring plan for SZC in response to Condition 50 of the DML and that there will be detail of entrainment monitoring. Although there are logistical issues in terms of conducting entrainment monitoring at the EPR™ sites the Applicant does not believe that they are insurmountable.
- 1.3.26 Dr Breckels confirmed there are two primary questions, there's one about the entrainment monitoring and one about the wider monitoring. Regarding the query about possibility for eels to escape the entrainment or clogging, he explained that the entrainment monitoring was completed at Sizewell B for over a year between 2010 and 2011 by PISCES, from which Dr Henderson was directly involved and was obviously fully familiar with the process. There were out of 40 samples, a small number of occasions or where the samples clogged up with mud and this has all been documented in the Entrainment Report [APP-324], so it's not new information. Dr Breckels did not agree with Mr Markham when he suggested that Cefas thinks that the sampling is not sufficient. To run through the type of sampling that has occurred at Sizewell, between April and May 2015, Dr Breckels explained that there were 105 valid glass eel tows. They were not completed at night but knowledge from other sites indicates that it is an acceptable method and that it catches them during the day including at the Bristol Channel where the same equipment has been deployed and had high capture rates. In 105 glass eel surveys, one glass eel was recorded at Sizewell, however with similar sampling intensities in the Bristol Channel, hundreds of glass eels were captured and that's all documented as part of the Hinkley Point DCO process. Those surveys at Hinkley were undertaken in collaboration with the Environment Agency. Therefore, Dr Breckels emphasised that the methods work, and that eels are caught during the day if they are there in appreciable numbers. The Environment Agency have suggested the peak of the glass eel run for that particular year has been missed and its possible that the surveys were not conducted during the peak periods. The Environment Agency contest that it was too early in the season based on migratory movements up river, Dr Breckels highlighted that it is equally possible that it was a month beforehand in March rather than when the sampling was conducted in April and May in 2015. The key



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point here is that if there were eels in appreciable numbers, the survey would have caught them and one was caught. Secondly, Dr Breckels elaborated that over the course of 2008 to 2017, 620 plankton trawls have been conducted, and that this isn't a specific method targeted at glass eels, is not very effective at targeting glass eels, but in 620 plankton tows if they are there in appreciable numbers they would have been caught, but none were. There are glass eels in the area, there are glass eels and elvers in the estuaries but they are just simply not there in appreciable numbers and that is the key point. In terms of the full entrainment assessment Dr Breckels explained that a worst case glass eels assessment has been completed in **SPP104** [AS-238]. There is also in the same document TR406, Section 6.6, a detailed consideration of each of the points raised by Dr Markham.

- d) Smelt the Environment Agency's position in their Written Representation [REP2-135], summarised at Annex B, page 74
- 1.3.27 Mr Tromans confirmed that the Applicant is not in agreement with the EA with regards to the impact on smelt. The real issue is the barrier at Snape Maltings which prevents smelt getting to the freshwater to spawn. The Applicant is in discussions with the EA to improve the passage of fish and a monitoring system for smelt in addition to the Water Framework Directive (WFD) monitoring to see if there are fish with eggs above the tidal limit and check for presence of newly hatched eggs and larvae. Once agreed they would be secured by DCO requirement and funded by the DoO. The Applicant hopes that we are moving towards de facto agreement on this.
 - e) Alde & Ore reduction in numbers of fish entering to understand the Environment Agency's position in their written representations [REP2-135] summarised at Annex B epage 74
- 1.3.28 Stephen Tromans confirmed that there was a wider discussion on fish monitoring which is being submitted at Deadline 7.
 - f) Environmental permitting and the DCO; to understand the positions of the Environment Agenct and Applicant in relation to the need for protective measures in the DCO – paragraph 11.5 of the Environment Agency's Relevant Representation [RR-0373]
- 1.3.29 Mr Tromans stated that the Applicant finds the position of the EA difficult to understand and grapple with, given the EA is unable to say what measures it would be talking about in general terms. The Applicant cannot understand that why the EA's ability to impose requirements would be more constrained in permitting regime than in the DCO regime, Schedule 5 Part 1 paragraph 12 the regulator can impose any conditions it sees fit.



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- 1.3.30 The Applicant cannot understand what it is the EA wants and if they want it why it cannot be imposed in the permit anyway.
- 1.3.31 The ExA requested written submissions on why would the EA need the DCO process to regulate something which is the subject of an environmental permit.
 - g) Impacts of bromoform and hydrazine on birds, both direct and indirect are raised by RSPB and in their response to Ma.1.8. The Applicant's reply only addresses indirect effects. To understand the Applicant's position.
- 1.3.32 Mr Tromans confirmed that the Applicant did not regard this as being a feasible pathway for an effect on birds. We are talking about birds which stay on the water the other is birds which dive into the water like terms. They would, if they dived in or were on the water in sufficient vicinity of the plumes they would be exposed to those chemicals at very low concentrations. They are not bio-accumulative. They dissipate rapidly in the environment. There is no reason to believe they could represent a feasible pathway for harm. We will put something in at Deadline 7 to close that point off. It is the case that the effects have not been addressed the reason they have not is that they are not feasible. We will deal with them at Deadline 7.
- 1.4 Agenda Item 4: Terrestrial Ecology
 - a) Fen meadow proposals, including Pakenham to understand in particular Natural England's position on need, quantum and the likelihood of success
- 1.4.1 HPQC referred to Natural England's Deadline 6 representations, paragraphs 2.2 and 2.3:
 - "2.2 Having reviewed these documents, Natural England advise that in principle the creation of Fen Meadow M22 within the sites investigated appears feasible. However, there remain many issues that may arise during further investigation and groundworks that have potential to challenge the fundamental viability of habitat creation. Aiming to restore as natural a system as possible is likely to have the greatest chance of success. Consequently, sites where there are multiple constraints to achieving this offer a limited chance of success.
 - 2.3 As outlined throughout our engagement on this issue, recreating Fen Meadow M22 is incredibly difficult with only a handful of examples of it be being done



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successfully. While the baseline reports do much to improve our understanding of the suitability of the proposed locations, there remains a significant amount of uncertainty regarding the potential success of the fen meadow habitat recreation. To progress this issue and reduce residual uncertainty the applicant should provide further detailed information in the form of the Fen Meadow Plan which we understand will be submitted at a later deadline. Given the limited evidence of successful re-creation strategies we advise securing a robust contingency strategy should the habitat creation fail at the proposed sites. We advise that potential compensation sites further afield (i.e. not restricted to Suffolk) should be investigated. The SSSI habitat to be lost is important at a national level and, if necessary, the compensation options should therefore be explored at that scale to ensure the overall amount of this habitat type is not reduced nationally."

- 1.4.2 The Deadline 6 representation suggests that Natural England has clearly moved on from what it said before because it acknowledges in principle feasibility.
- 1.4.3 HPQC then referred to Natural England's document put in on 25 August in which Natural England effectively says the same thing in slightly different language. The Applicant does not understand there to be any effective change there, and nothing had happened in the interim that might have led to a different conclusion. HPQC referred to item 4 in terms of the likelihood of success where Natural England states:

"In terms of the likelihood of success, the Applicant submitted some compensation site feasibility studies (643 pages) at Deadline 3 (24th June 2021) which we are in the process of reviewing with our specialists alongside the Fen Meadow Plan (231 pages) which was submitted by the Applicant at Deadline 6 (6th August 2021). Once we have completed this review, we will provide our updated position using best endeavours."

- 1.4.4 HPQC suggested that it seems to be something of a holding position pending review of the documents.
- 1.4.5 HPQC passed over to Mr Lewis to add to that and pick up the other points identified.



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- 1.4.6 Mr Lewis stated that at the time of the application in May 2020 the Applicant only included Halesworth and Benhall at that time as it had not agreed a multiplier with Natural England. He confirmed that the Applicant understands that there needs to be some form of multiplier. During autumn 2020 the Applicant held a number of workshops and it became clear that it would need to satisfy a higher multiplier. It was for that reason that the Applicant brought in the Pakenham site in the changes application in January 2021. He confirmed the Applicant considers that the multiplier of around 9 times is about right. However it might be that NE would like to confirm how it got to 9 times precisely. The Applicant confirmed that it would be presenting a note at Deadline 7 regarding the identification of the additional habitat. Mr Lewis confirmed that he contacted Natural England immediately after the compulsory acquisition hearing but they were unable to respond in time and indicated that they believed that they had already highlighted their reasons for a 9x multiplier.
- In response to the ExA's question about the AoS and what it said in respect 1.4.7 of recreation of this habitat, HPQC stated that if one looks to Annex C to EN6 the same thing is said in paragraph C.8.63. The fact that it identifies the potential for habitat creation in the wider area is helpful. The Government plainly regarded habitat creation in the wider area as being appropriate in principle. It recognised that in principle that was an appropriate form of mitigation. It also recognised, however, that this may not enable the Applicant to fully compensate for the loss. In the knowledge of that it may not be possible to fully compensate for the losses of this habitat, Sizewell was nevertheless identified as being a potentially suitable site, and the NPS did not identify full compensation for the losses as a development control test. There is nothing in the NPS that suggests in the absence of full compensation the Sizewell site would no longer be appropriate or consent would have to be refused. That is significant because it is very clear throughout the Energy NPS that where it is felt that refusal is potentially appropriate it clearly says so. It also identifies where there might be an exception to that general principle, where appropriate. In conclusion, paragraph C.8.63 says that the Applicant will need to minimise the impact through a management plan. It is not talking about a need to ensure no residual impacts rather it is looking to a mitigation and management plan. That is encompassed by the measures here to create the replacement fen meadow habitat, which comply with that expectation.
- 1.4.8 In the knowledge of that site-specific issue, paragraph 5.3.11 of EN-1 identifies the presumption in terms of adverse effects on SSSI but then sets out where an exception can be justified, namely where the benefits including need outweigh the relevant impacts. Thus even if an adverse effect remains likely after mitigation, that can be outweighed and development consent can still be granted. The decision-maker should use



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requirements and/or planning obligations to mitigate the (significant) harmful aspects of the development and, where possible, to ensure the conservation and enhancement of the site's biodiversity or geological interest. That is consistent with the approach the Applicant has taken and is taking through the inclusion of the Pakenham Site. The Applicant is seeking to do what it can to avoid, and if not, minimise the impacts.

- 1.4.9 HPQC confirmed the Applicant's position was that even if Halesworth, Benhall and Pakenham are not successful then the policy allows for the development to be permitted. He stated that the approach adopted by the Applicant to cater for that possibility included a contingency provision which will deliver compensatory habitat on another site within the East Anglia region. Recognising that habitat enhancement further afield is not as good as delivering mitigation as close as possible, the approach focuses in the first instance on the Applicant delivering suitable habitat on sites that are closer to where the loss would occur. Even if after all of that there is still the possibility of residual adverse effect, then consent should still be granted because the Applicant will have done what it reasonably can to minimise the loss and the residual loss would clearly be outweighed by the benefits associated with the proposed development.
- 1.4.10 In response to a query from the ExA, HPQC clarified that the purpose of the contingency funds is not to spend money on sites in the immediate area which are less suitable than those which had been selected for inclusion within the Order Limits. Rather, it takes in a wider East Anglian area including areas where re-creation of this habitat is underway. It would be used to improve areas where there is good confidence that it would be successful. It is not choosing less suitable sites locally.
- 1.4.11 Mr Lewis confirmed that the current contingency figure is £3 million. The context to this is that the estimate for the capital and management works in relation of the fen meadow habitat compensation works, to Year 10, is £1.5 million (over and above land acquisition costs).
- 1.4.12 HPQC confirmed that the Applicant would address points made by Ms Scott and Ms Collins in writing. [Post Hearing Note: These points will be addressed in writing at Deadline 8.]
 - b) Wet woodland
- 1.4.13 HPQC asked Mr Lewis to address: (a) the FoE points with regards to whether we know enough about what is there at the moment; (b) the question of time lag which was identified by both ESC and Mr McFarland; and (c) the issue of fungi.



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- 1.4.14 Mr Lewis stated that in relation to invertebrates he had read the SSSI citation sheet and the word appears three times and the Sizewell Marshes are important for their invertebrates in respect of lowland meadows. The variety of ditches together with their fringing vegetation provides an important contribution to invertebrate habitats. Sizewell Marshes are noted as having an important assemblage of invertebrates. Despite wet woodlands not being specifically mentioned in relation to invertebrates, we agree that wet woodlands are important but it forms one part of a complex of habitats that provides the overarching interest and the wet woodland strategy which we are doing will co-locate Wet woodland with fen meadow areas. This recreates the complex of habitats which are seen in the Sizewell Marshes SSSI. The invertebrates of wet woodland are assessed in the ES, in parts 4 and 4A. In terms of the importance of the age profile of the trees, we agree and part of our strategy as agreed with NE is to enhance the age profile of the trees. You effectively use 'veteranisation' (i.e. accelerate the ageing of the trees) to provide dead wood habitats and this is recorded in the wet woodland strategy. The Applicant will be coming forward with more details in the Wet Woodland Plan to be submitted at Deadline 8. The existing Fen Meadow Draft Plan defines the two areas of offsite wet woodland which the Applicant is proposing (which total 2.36ha). In relation to the creation of the 0.7ha of onsite wet woodland, is not the case that there will be a 10 year time lag to commence this. The Applicant will be creating the wetland at the northern end of the first winter of construction and that corridor that extends south of this, which includes the new wet woodland, will also be starting development in year one.
- 1.4.15 Mr Lewis confirmed that whilst these new wet woodland habitats are becoming established they will be of value to different invertebrates. It may be a decade or more before one gets standing dead wood. He clarified that the desk study report for fungi was submitted at Deadline 7 and that the Applicant will be submitting the field survey report at Deadline 10 which will address the fungi point.
- 1.4.16 HPQC responded to the comments of ESC on the floodplain grazing. He confirmed that the Applicant understands from ESC's comments that its ultimate conclusion is that it would use some of the natural environment fund to address this matter. The size of the natural environment fund is understood to have been agreed with ESC, and so if they chose to use some of the money for that purpose that is a matter for them. HPQC asked Mr Lewis to address the various points in relation to shingle including: (a) the recharge events; (b) the question of the profile and uncertainty; and (c) BNG and the suggestion that the Applicant's assessment showed the proposal was inappropriate.



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- c) Designated sites including County Wildlife Sites, Foxburrow Wood and veteran trees
- 1.4.17 The Applicant responded to the following questions from the ExA:
 - Where are you with the Sizewell Estate Wide Management Plan which is not secured in the DCO?
 - Could you set out position on time lag between losses and creation?
 - Where are you on achievability of soft coastal defence feature?
 - Hydrogeological changes at Foxburrow wood?
 - When is the revised mitigation for the loss of veteran trees coming forward?
- 1.4.18 HPQC confirmed that the Estate Wide Management Plan is due to be submitted at Deadline 7 alongside a new requirement in the version of the draft DCO which secures its implementation. HPQC passed over to Mr Lewis to address the other points raised.
- 1.4.19 With regards to shingle recharge Mr Lewis stated that most parties accept that the Applicant will be able to re-create shingle habitats across the reestablished coastal defences. The key point was made in the East Suffolk Council representation which was that recharge of the beach will mimic natural processes (e.g. erosion and redeposition). In relation to a point about the size of the material to be used in the recharge, Mr Lewis confirmed that in the **Coastal Processes Monitoring and Mitigation Plan** [REP5-059], the Applicant will be committing to use the same modal size of existing material. There was a concern from East Suffolk that the Applicant would be using a different type of material but Mr Lewis believes that the Applicant was able to reassure people that would not be the case.
- 1.4.20 Mr Lewis addressed land take from the River Alde valley on the route of the Two Village Bypass. He stated that there would be a quantum of land take of floodplain grassland. The Applicant has always argued that the habitat, although it does qualify as grass plain grasslands it is of poor quality. It is a commercial MG7 in the national vegetation classification and the loss of that quantum did not generate a significant adverse effect. The Applicant did agree in the January 2021 changes application to enhance the quality of the retained floodplain grassland with new wetland channels. The Applicant disputes the fact that the loss of the quantum is still important.
- 1.4.21 HPQC stated that it was understood that ESC's ultimate position regarding the loss of a quantum of flood plain grassland in the River Alde valley, on



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the route of the Two Village Bypass, was that they would look to the NE fund to deal with that.

- 1.4.22 Mr Rhodes addressed the issue of veteran trees. He stated that the Applicant hoped that through a more detailed assessment it may be able to reduce the loss count of the trees. There is also a 'notable tree' close to Farnham Hall that has been assumed to be lost but where closer investigation may show that it can be saved. That work is ongoing but should be available for Deadline 8.
- 1.4.23 Mr Lewis addressed a number of points in relation to recharge to the shingle beach. In relation to the frequency of recharge, the Applicant replied to this at Deadline 3 and the modelling shows that 7 recharge events are needed over the lifetime of SZC. On average that is something like every 8-10 years. Recharge would not happen along all sections of the frontage at the same time. The idea that this would be stripped away in its entirety would not be the case. Furthermore, most species are adapted to what is a naturally very dynamic beachfront environment. Recharge events of this type and subsequent recolonization are similar to a natural succession process.
- 1.4.24 He confirmed that there would be erosion and re-deposition. In relation to the issue of the profile, in the Applicant's plan it is looking at sea based recharge but noted that he would confirm the position. He stated that from recollection, areas of the two habitat types and the vegetated shingle are similar in the future case as they are in the baseline case.
- 1.4.25 In relation to a point made by Mr Collins on apparent losses in the foreshore, Mr Lewis said he did not recognise the numbers quoted and stated there may be some sort of position in the BNG calculations where one gets a discount over time but Mr Lewis confirmed that he did not think that is the case.
- 1.4.26 Mr Lewis confirmed that the Applicant would meet with Mr Collins to resolve any misunderstandings and to create a short SoCG with him.
 - d) Protected species including bats and progress with draft licence submissions to Natural England – see also their response in their post-ISH7 submission [REP5-160]
- 1.4.27 HPQC stated that there were two written questions in the next round (ExQ2 Bio.2.4 and Bio.2.6) where the Applicant would be providing the information required by the ExA. For the purposes of the hearing, therefore, an overview would be provided.



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- 1.4.28 HPQC confirmed that the project wide bat method statement will be submitted at Deadline 7.
- 1.4.29 Dr Davidson-Watts confirmed that a workshop had been held with key stakeholders and detailed discussions with ESC both in early August and this week. He expressed his belief that the Applicant had come to a lot of agreement with matters of principle about securing controls. A lot of the original assessments and concerns raised have been addressed. The Applicant has provided further data since the ES and as part of the more recent bat assessment work which has been done notwithstanding comments about the SSSI area. In relation to the key points we believe we will satisfy the concerns of ESC in full.
- 1.4.30 First in relation to roost resource, the Applicant has taken an approach which has been approved by Natural England on other major infrastructure schemes. This is where with woodland bats and bats like barbastelles may only use the roost for a few days a year. It is a dynamic situation. Particularly with regards to barbastelle. To isolate a particular tree you need to look wider. As part of the package coming forward in the draft bat licence next week, the approach would be to quantify the affected roosts and replace them with mitigation roosts bat boxes, reclaimed features etc. Those are well established practices and would be subject to a Natural England bat licence. The Applicant would provide that resource within the licensed landscape. Also, where the Applicant takes a tree down and finds a roost in it that would be replaced. Our understanding is that ESC are satisfied with that approach.
- 1.4.31 The Applicant is increasing the size of the roost resource as a result of the development. We are saying there will be roosts lost and we are replacing them and some. There will be different ratios as a part of that licence. Where we see evidence of a maternity roost or a hibernation roost we will replace that with a ratio of 4:1. That wider appreciation of the roost resource, that is not being affected. We recognise that bats select roosts for certain reasons and that is why we are doubling the roosts lost in many cases. We do have information on the wider resource from the radio tracking work we have done. It includes wider areas such as Minsmere and Kenton Hills.
- 1.4.32 In relation to foraging habitat loss, we have taken a similar approach. We have done some work on looking at suitability of foraging habitat. One of the instant creation approaches we are creating 5km of new rides and glades for bats as habitats within the estate management plan and additional linear features. That will provide instant habitat for bats and combine this with other habitats like Aldhurst Farm. Those habitats will produce a lot more moths and a bit of structure to assist the bats feeding on them. ESC will want to see the plans when those are forthcoming.



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- The fragmentation issue for barbastelles is significant. We highlighted this 1.4.33 in the ES. To address this we have created three major dark corridors for the bats. We recognise that there are some concerns about the width. The SSSI crossing is a wide corridor. The one in the centre, which uses the water management zones is very wide – over 70 m. It will provide a major artery for bats to use. The bridleway is not very wide but the key issue is not width it is the impact of lighting. What we have managed to achieve in all those corridors are light levels which exceed the low level lighting requirements which are recommended by the Bat Conservation Trust and the relevant guidance. We are achieving 0.1 LuX in these dark corridors which is below the 0.2Lux in the guidance. I am confident with that mitigation in place we can address fragmentation. Also, Barbastelles are a landscape level bat. They travel very far. Colonies often have home ranges of 60-70sgkm. That is not uncommon, depending on availability of habitat. That doesn't negate the requirement to mitigate, we are. We have maintained linkage to Kenton Hills.
- 1.4.34 We believe we are close to agreement with ESC on dark corridors and lighting.
- 1.4.35 Noise is a significant issue, we have done some noise contours to look at where that overlaps, there are some pinch points but the noise is mobile and we can have control over this. The agreement we have in principle with ESC is that as part of the construction plans we can ensure that a protocol is established to look at noise levels, locations and temporal side. A lot of the noise will be during the day and that won't affect commuting routes as much. Where noise sources are close to existing roosts then we can look to avoid these activities in summer. We can then look to reduce the noise to specific thresholds. We are working towards achieving that.
- 1.4.36 The issue between the potential for cumulative ('project-wide') effects between the main development site and the SLR has been raised by ESC—Dr Davidson-Watts stated that we have treated the population as a whole throughout the scheme because we know it has pockets of use within the main development site. With barbastelle being wide-ranging bats, the evidence shows that these small single lane roads such as the SLR do not really create a barrier from a fragmentation point of view. We have highlighted collision risk and that is where the hop overs are coming in and we need to provide more detail on those. We want to use the natural environment to help with that. Dark areas to get from Kenton Hills, transplanting mature trees will act as canopy level subject to highways issues to maintain corridors. Dr Davidson-Watts confirmed that from the plans he had seen there was a wider buffer from the footpath.



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- 1.4.37 HPQC stated that it was important to understand that this is an area where good progress is being made, and continues to be made. The hearing allows for the ExA to understand the position at a point in time, but the position continues to evolve in a positive and constructive way and there are further documents to come. HPQC suggested that as part of the notes from today the Appellant can identify which pieces of material are with you and anything which is not, and when it is going to come in. Some of the information may go to Interested Parties before it goes to the Examination.
- 1.4.38 Mr Lewis confirmed he had not measured the bridleway. Mr Lewis estimated 3-4m for the track itself but when one gets to the outer edge of the hedges and treeline on either side, this is probably around 20m. Mr Lewis confirmed he could provide some more detailed information on the effective width of the bridleway.
 - e) District licensing changes and effects
- 1.4.39 Mr Lewis confirmed that district licensing for great created newts has become available for East Suffolk. It gives the opportunity to provide mitigation ponds in other locations which are funded by a developer contribution which enhance existing habitats. The Applicant made an inquiry to Natural England on Monday 23 August to inquire as to the fee which would be payable for the SLR. The Applicant had to submit a large number of plans including CAD files for Natural England to make an estimate of the contribution if we follow the district licensing approach. The Applicant has been following a traditional licensing approach and will be submitting the protected species licence application for great crested newts next week. Mr Lewis explained that SZC Co. is still twin tracking the two approaches and will get back to the examination, if that is within the examination time frame, and will make the ExA aware of which route is taken.
- 1.4.40 In response to a question from the ExA as to what difference it would make, Mr Lewis stated that it would be neutral from a policy perspective. From a developer's perspective the district level license is preferable because of the time constraints of constructing ponds.
 - f) SSSI crossing (including landscape and visual aspects)
- 1.4.41 Mr Lewis stated that there would not be additional information in relation to noise as a result of the SSSI crossing at Deadline 7. There would be additional information in relation to light because the dark corridors plan would be submitted as an appendix to the Lighting Management Plan. There would be information which is relevant to the SSSI Crossing, in



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relation to the dark corridor in this location, but no specific study addressing the SSSI crossing.

- 1.4.42 Mr Lewis confirmed that if the issues raised by ESC, which he understands relate to the possible use for a short period, of a bailey bridge in this area, were not addressed at Deadline 7 they would be addressed at Deadline 8.
 - g) Biodiversity net gain the effect of the new metric and assessment of SSSIs
- 1.4.43 HPQC highlighted that this will be addressed in response to ExQ2 but the short answer is that the new metric 3c will not be used in line with what the guidance states.
- 1.4.44 Mr Lewis confirmed that Natural England had stated it was not appropriate to use the new metric unless specifically directed to do so by a client or a decision maker. He also noted that RSPB and SWT considered that additional work using metric 3 should not be undertaken since there was no guidance yet in place.
- 1.5 Agenda Item 5: HRA issues
 - a) The Applicant's HRA screening assessment to seek clarification on specific European sites and qualifying features, with views also sought from Natural England and IPs to understand any outstanding differences between the Applicant and Natural England/IPs with regards to the conclusions of no likely significant effects
- 1.5.1 Mr Tromans confirmed that the Applicant would complete any table which the ExA issues with regards to screening.
- 1.5.2 Mr Tromans confirmed that the Conservation Objectives to the Plymouth Sound SAC would be submitted at Deadline 7.
 - b) Summary or list of those European sites and qualifying features that Natural England do not currently agree with the Applicant's conclusion of no adverse effects on integrity
- 1.5.3 The ExA confirmed that this could be dealt with in writing and was a matter for Natural England. A site by site list which sets out the qualifying features.
 - c) HRA and recreational pressure on European sites to understand the position of the Applicant and IPs, including Natural England, with regards to the proposed mitigation to avoid adverse effects on the integrity of European sites arising from recreational pressure,



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including progress on the two Management and Monitoring Plans and the securing of such measures

- 1.5.4 Mr Tromans confirmed that discussions are being had with Natural England and other Interested Parties and SZC Co. will address issues raised by other parties (at Deadline 6) in its Deadline 7 submissions. This included reporting on current discussions relating to some limited detailed feedback on the draft monitoring plans.
- 1.5.5 There are differences about whether a further SANG should be provided. The Applicant is apart from NE on that.
 - d) Outer Thames Estuary SPA and red throated divers to explore the assumptions made by the Applicant in their assessment and the Outline Vessel Management Plan with regards to the timings of vessel movements and how timing restrictions are secured. To seek comments from Natural England, the MMO, RSPB/SWT and IPs on the Outline Vessel Management Plan
- 1.5.6 The ExA noted that the Applicant's assessment assumed majority of vessel movements would be between 31 March and 31 October. However there would be up to 200 landings to the BLF during the winter. Could the Applicant explain how this has been taken account of in the displacement and disturbance of the RTD. The wider question is in relation to outline vessel management plan, do NE, the MMO and RSPB/SWT have any comments on content of the plan. Does it alleviate concerns as to adverse effects on integrity.
- 1.5.7 ST confirmed that the Shadow HRA [AS-173, pp96-7] that there would be no deliveries to permanent BLF but there would be deliveries to the temporary BLF of up to 200 per year. That was assessed as part of the sHRA. Those assumptions are converted into provisions in the outline vessel management plan paras 3.1.2 giving those numbers and the relevant periods. It also states at paragraph 3.1.6 that will be secured by DML condition (wording to be submitted at Deadline 7). Any questions on the plan itself can be dealt with by Dr Roast.
- 1.5.8 Mr Tromans confirmed that the Applicant would respond to the RSPB in writing. He asked if it were possible to let the Applicant have those comments early in the coming week it might mean we can take them into account in the outline Vessel Management Plan at Deadline 7. We are getting very close to publication of the RIES and this goes to integrity. It may not be possible, but if it is then it would be good to have engagement on these points.



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- e) HRA and marine mammals
- i. Mitigation to explore whether the draft Marine Mammal Monitoring Plan (MMMP) should be a certified document that the final MMMP should be based upon and therefore referred to in Condition 40 of the DML and certified. To seek the views of NE and MMO on the contents of the draft MMMP on the contents of the draft MMMP and the Applicant's 'Underwater noise effect assessment for the Sizewell C revised marine freight options' submitted at Deadline 5
- 1.5.9 Mr Tromans confirmed that the MMMP should be a certified document and referred to it in the Condition.
 - ii. Seals to obtain an update on the discussions between the MMO, Natural England and the Applicant with regards to mitigation proposed for seals; for which European Sites is this relevant?
- 1.5.10 Mr Tromans confirmed that the ExA had referred to the correct sites. He stated this probably related to the need to reduce auditory impacts generally. The Applicant will give an update in writing.
 - iii. Noise, light and visual disturbance To understand NE's view with regard to the information requested in respect of noise, light and visual disturbance of grey seals, harbour porpoise and common seals of the Humber Estuary SAC, Southern North Sea SAC and The Wash and North Norfolk Coast SAC utilising the MDS as functionally linked land
- 1.5.11 No comments submitted orally.
 - iv. Southern North Sea SAC to seek the views of NE further to the Applicant's updated assessment of prey species impingement [AS-173], [AS-238] [REP6-016]
- 1.5.12 No comments submitted orally.
 - v. Draft Site Integrity Plans (SIP) to seek the views of NE, MMO and IPs on the draft SIP and to explore how secured and whether this should be certified document
- 1.5.13 Mr Tromans confirmed that the draft SIP will be a certified document and will consider the wording of Condition 40.
 - f) Marsh harrier compensatory measures to explore the proposed compensatory measures, including the additional habitat proposed at Westleton and how these are secured through the DCO with reference



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to the certification of documents, and to explore Natural England's reasons leading to Westleton being proposed

- 1.5.14 Mr Tromans confirmed that the Applicant would amend Requirement 14C. It would refer to both of the plans, and will find some way of making the nomenclature less confusing. The condition would be designed with square brackets and if there was no need for Abbey Farm then that part could be deleted. It would require an implementation plan for the compensation, whether one site or both, and that would have to be in general accordance with those two reports.
- In response to the enquiry from the ExA regarding the position of Natural England, Mr Tromans confirmed that he was puzzled as to what Natural England is saying. It could be interpreted as meaning Westleton was not needed. It is a matter for Natural England. Mr Tromans invited Mr Lewis to address how the wetland matter evolved. We do not accept that this is an experimental approach, these are well tried and tested ways of habitat creation. The Applicant will be submitting at Deadline 7 a note which assesses the Marsh Harrier provision both at the EDF estate land and at Westleton against the criteria in the NPS and in the DEFRA guidance. We hope that will help in establishing why we say that the compensation meets those tests including the necessary test of certainty.
- 1.5.16 Mr Lewis addressed the development of the wetland component. Historically the Applicant had considered that creating a wetland at the north of the estate was unsustainable because of the topography. However, the Applicant came to the view that it needed to do something in terms of flood compensation and to enhance the onsite marsh harrier area and took a look at this in 2020. The proposals will require the excavation of 120,000 cubic metres of material to create in excess of 3ha of wetlands which is immediately adjacent to the Minsmere South levels where the harriers have the highest hunting densities. The Applicant introduced the new wetlands in the January 2021 change application. It has been in the proposals since then and all relevant reports since then. We are producing a number of other notes on the marsh harrier habitats at Deadline 7 (see above).
- 1.5.17 Mr Lewis confirmed that Westleton could not be used to create wetland habitats as it is a high sandy ridge. It will be optimised for dry marsh harrier habitats. He confirmed that the note would confirm the chronology between the identification of the potential need for the additional habitat and the HRA process and also do our best to elucidate what Natural England are trying to say.
- 1.5.18 Mr Tromans confirmed that the Applicant would enter into dialogue with Natural England as to the acceptability of the timing of the wetland provision



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in year 1. Mr Tromans confirmed that there would consider the level of commitment with the necessary legal, technical and monitoring arrangements. He confirmed that Requirement 14C requires implementation and is an absolute commitment that the plan will be implemented.

- 1.5.19 Mr Tromans confirmed that whether or not on site, Abbey Farm habitat area provided adequate compensation was a matter of judgment for the Secretary of State and applying the tests in the NPS and DEFRA Guidance. The Deadline 7 note will assist with that.
- 1.5.20 Mr Tromans posited that some of NE's comments are historic. A lot of it reflects comments at earlier stages in the process. It was presumed that the highly technical work was presumably the habitat recreation. However, NE would need to explain what they meant by the relevant part of their written representations.
- 1.5.21 Mr Tromans confirmed that there was no technical work which should have been undertaken but which has not been undertaken.
- 1.5.22 Mr Lewis confirmed the same. He stated there was nothing which had not been done which could have been done.
- 1.5.23 Mr Tromans confirmed that the reference to the technical work referred to by NE could refer to the technical work undertaken to exclude an adverse impact on integrity. On a precautionary basis the applicant proceeded to stages 3 and 4. The Applicant did not attempt to demonstrate no adverse impact they assumed there could be one and then looked to alternatives, compensation and IROPI. They did not go down the route of trying to establish no adverse impact on integrity. Had they demonstrated it then there would have been no need for the compensatory habitats at Abbey Farm. Westleton is a contingency site in case the Secretary of State disagrees with us on the sufficiency to the on-site provision.
- 1.5.24 HPQC confirmed that nothing had been said that is in any way different to the case which has been presented throughout in terms of compulsory acquisition. In line with the precautionary approach it was necessary to move to stages 3 and 4 thus triggering the need for the habitat.
- 1.5.25 Mr Tromans reassured Ms Sutherland for the RSPB with regards to the wording. Condition 14C will say that the MHIP must be in general accordance with the two reports and must include details of the proposed works which will include landscape and planting details and an implementation timetable for the works'. The applicant is pinned down on matters such as timing. It goes on to say that the MHIP must be implemented as approved. No qualification to that.



NOT PROTECTIVELY MARKED

- 1.5.26 With regards to the Theberton alternative proposed by the future landowner of the Westleton site, the Compulsory Acquisition hearing had addressed this. It was said that in terms of the alternative site it had only been put forward very recently. It was noted that the objector's criteria for suitability were introduced for the first time at the compulsory acquisition hearing. The objector would be able to consider the suitability of the site then. The Applicant looks forward to seeing the criteria mentioned and will respond in due course.
- 1.5.27 HPQC stated that having regard to the timing and circumstances of the identification of this potential alternative, and the context he had described in the compulsory acquisition hearing, it was a matter for the objector to show how Theberton could provide suitable compensation and that the alternative is an important and relevant consideration. They have to grapple with the points that had been highlighted in the compulsory acquisition hearing about the timing and certainty of delivery, the steps that would be needed to change the application, and the impact of that on the timing of the project overall. The Applicant has put these points squarely to the objector in the compulsory acquisition hearing, and at this late stage it does not see how a switch to this alternative site could be achieved without delay. The ball is now in the objector's court to respond to those matters.
- 1.5.28 Mr Lewis responded to points made by the RSPB in relation to the new onsite wetland component. He stated that for such a large excavation (120,000 cubic metres) the Applicant is dependent upon the Order powers. The Applicant has brought it as far forward in the programme as possible. It will be the first winter of construction so as not to impact the Marsh Harriers, which breed in the summer. The Applicant can undertake the works in the winter without the need to disturb the marsh harrier. In relation to the point about whether there was a need to exclude geese or deer (e.g. using fencing or netting), Mr Lewis said there may be a need to have some exclusions but the margins we create will still be excellent habitat for Marsh Harrier. In relation to the suitability of dry habitats, the Applicant has already provided a good amount of evidence in previous responses. In relation to detailed management plans for the new wetlands, that is something the Applicant would do in due course. Detailed management measures for the wetlands would be included in the approved plans, notably the LEMP.
 - g) HRA and migratory fish
 - i. Prey species to seek clarification regarding the relationship between the fish entrapment calculations and indirect impacts of prey



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availability to SPA and SAC qualifying features; to explore which European sites and qualifying features this applies

- 1.5.29 No comments submitted orally.
 - ii. Equivalent Adult Values (EAV) and stock size to seek views on the Applicant's Technical Note on EAV and stock size (Appendix F of [REP6-024]; and to explore the EA's response at Deadline 5 [REP5-150] with regards to an updated impingement assessment to include repeat spawning in the EAV calculations
- 1.5.30 No comments submitted orally.
 - iii. Entrapment uncertainty report to seek the views of the EA and NE on the Applicant's report entitled 'Quantifying uncertainty in entrapment predictions for Sizewell C' [REP6-028] and in particular on whether without the LVSE heads effects are below thresholds which would trigger further investigation for potential population level effects
- 1.5.31 No comments submitted orally.
- 1.6 Agenda Item 6: Timescale for the submission of further documents and the use of the Examination Library
 - a) What further documents (not revisions) are envisaged?
 - b) What further revisions are envisaged?
 - c) When will they be submitted?
 - d) The importance of using Examination Library references
- 1.6.1 HPQC confirmed that a list of additional documents to be provided after Deadline 7 will be provided at Deadline 7.