

The Sizewell C Project

6.14 Environmental Statement Addendum
Volume 3 Environmental Statement Addendum Appendices
Chapter 2 Main Development Site

Appendix 2.9.D: Fen Meadow Strategy - Tracked Changes Version

Revision: 2.0

Applicable Regulation: Regulation 5(2)(a)

PINS Reference Number: EN010012

September 2021

Planning Act 2008 Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009



Sizewell C Doing the power of good for Britain SEPT GOCGN

SIZEWELL C PROJECT – FEN MEADOW STRATEGY

NOT PROTECTIVELY MARKED

CONTENTS

APPENDICES

None provided.

1	BACKGROUND1				
2	SCOPE				
3	THE NEED FOR COMPENSATORY FEN MEADOW HABITAT				
4	STUDIES TO DATE6				
5	ESTABLISHING NEW FEN MEADOW HABITATS				
6	THE TEST OF SUCCESS14				
7	CONTINGENCY PROVISIONS				
REFERENCES					
TABLI	ES				
Table 2	Table 2.1: References to fen meadow impacts in the ES				
	3.1: Topic requirements within National Policy Statements EN-1 and EN-				
Table 7.1: Phased release of funding for fen meadow					
Plates					
None provided.					
FIGUR	RES				
None provided.					



NOT PROTECTIVELY MARKED

1 BACKGROUND

- 1.1.1 The Sizewell C (SZC) proposals would lead to the permanent loss of approximately <u>0.5ha_0.46ha_0</u> of 'fen meadow' habitat from the Sizewell Marshes SSSI. This permanent loss arises from the size and location of the SZC main platform to the north of the existing Sizewell B station. The platform location is constrained to the west and north by the SSSI and to the east by the coast and the appropriate coastal defence alignment such that the loss of this area of fen meadow is unavoidable.
- 1.1.2 Sizewell Marshes SSSI is designated in part for its fen meadow habitats and the loss of the fen meadow habitat from the SSSI leads to a need to provide compensatory habitat for this loss. SZC Co. is therefore proposing to deliver substantially larger areas of compensatory habitat at a series of off-site locations and has undertaken an extensive series of studies to define these. These studies are summarised in **section 4**.
- 1.1.3 The Development Consent Order (DCO) application submitted in May 2020 included two fen meadow compensation sites at Benhall and Halesworth. As a result of further engagement with stakeholders, a third site at Pakenham is also included to provide further compensatory fen meadow habitat. The application for development consent [now as amended with a recent change application] includes within the draft order limits, the three sites identified as follows:
 - Works no.7: Fen Meadow compensation site at Benhall.
 - Works no.6: Fen Meadow compensation site at Halesworth.
 - Works no. 18: Fen Meadow compensation site at Pakenham.
- 1.1.4 This document has been prepared to define SZC Co's commitment to provide appropriate compensation measures to mitigate the loss of fen meadow habitat through the creation of compensatory fen meadow habitats, and the provision of a contingency fund. SZC Co. proposes that a 'Fen Meadow Plan' be prepared in accordance with this Fen Meadow Strategy and be subject to a DCO Requirement 14A, in the following form: has prepared the Draft Fen Meadow Plan (Doc Ref. 9.64(A)) which, in its final form, will be submitted to East Suffolk Council for approval pursuant to Requirement 14A before any vegetation clearance works within the Sizewell Marshes SSSI can be carried out. Level 1 control documents will either be certified under the DCO at grant or annexed to the Deed of Obligation (DoO). All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when



NOT PROTECTIVELY MARKED

certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and DoO set out the status of each Level 1 document.

Main development site: Fen meadow

- above, pursuant to Requirement 14A of the dDCO, prior to any vegetation clearance within the Sizewell Marshes SSSI, pursuant to Work No. 1A must not be commenced until a fen meadow plan for the development of fen meadow has been submitted to and approved a Fen Meadow Plan (a Level 2 document) will be submitted for approval by East Suffolk Council and Suffolk Council, in consultation with West Suffolk Council, and the relevant Statutory Nature Conservation Body. The fen meadow and such plan must be developed in general accordance with the Fen Meadow Strategy and include details of proposed works, including—this strategy and the draft Fen Meadow Plan.
- Where further documents or details require approval, this strategy states which body or governance group is responsible for the approval and/or must be consulted. Any approvals by East Suffolk Council, Suffolk County Council or the MMO will be carried out in accordance with the procedure in Schedule 23 of the dDCO. The DoO establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made. Any updates to these further documents or details must be approved by the same body or governance group and through the same consultation and procedure as the original document or details.
- 1.1.7 Where separate Level 1 or Level 2 control documents include measures
 that are relevant to the measures within this document, those measures
 have not been duplicated in this document, but cross-references have been
 included for context. Where separate legislation, consents, permits and
 licences are described in this document they are set out in the Schedule of
 Other Consents, Licences and Agreements (Doc Ref. 5.11) [REP3-011].
- 1.1.8 For the purposes of this document the term 'SZC Co.' refers to NNB

 Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.
 - (i) landscape and planting details;
 - (ii) water management measures; and

edf Øcgn

NOT PROTECTIVELY MARKED



(2) Work No. 6, Work No. 7 and Work No. 18 must be carried out in accordance with the approved fen meadow plan.

2 SCOPE

- 2.1.1 The document addresses the compensatory habitats required for the permanent loss of fen meadow habitats from the Sizewell Marshes SSSI, associated with the construction of the Sizewell C nuclear power station. This impact is assessed in **Volume 2**, **Chapter 14** of the **ES** (Doc Ref. 6.3) [AS-033].
- 2.1.2 This document does **not** address other potential impacts on the fen meadow habitats which are included in the ES. These other impacts are assessed in the **Volume 2, Chapter 14** of the **ES** (Doc Ref. 6.3) [AS-033], as summarised in table below.

Table 2.1: References to fen meadow impacts in the ES

Impact	Paragraph References
Temporary 'landtake' or other use of land associated with installation of replacement overhead lines	14.3.34, 14.4.16, 14.7.125, 14.7.131-136
Air Quality impacts	14,7,149-160
Hydrological impacts	14.7.139-148

2.1.3 Mitigation measures for these impacts are defined within the **ES** as relevant and secured within the **Code of Construction Practice (CoCP)** (Doc Ref. 8.11(A8.11(E)) and the Water Level management Plan (in prep) (Requirement 2) and the Main Development Site Water Monitoring and Response Strategy (Doc Ref. 6.14 2.14.A(A)) and the **Draft Water** Monitoring and Management Plan (Doc Ref. 9.87(A)) (Requirement 7) and are not considered further in this strategy.

THE NEED FOR COMPENSATORY FEN MEADOW HABITAT

3.1.1 The overarching NPS for Energy (EN-1) and NPS for Nuclear Power Generation (EN-6) (Ref 1) provide the primary policy framework within which the application for development consent will be considered. Several paragraphs within NPS EN-1 are directed towards the issue of impacts to biodiversity interests and specifically landtake from SSSIs. Two paragraphs within NPS EN-6 directly address the issue of landtake from the



Sizewell Marshes SSSI and specifically in respect of 'wet meadows', as follows

Table 3.1: Topic requirements within National Policy Statements EN-1 and EN-6

Ref.	NPS topic requirement
EN-1 5.3.7	'As a general principle, and subject to the specific policies below, development should aim to avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives []; where significant harm cannot be avoided, then appropriate compensation measures should be sought.'
EN-1 5.3.11	'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] should use requirements and/or planning obligations to mitigate the harmful aspects of the development and, where possible, to ensure the conservation and enhancement of the site's biodiversity or geological interest.'
EN-6 C.8.60	'Some responses focused on designated sites including Sizewell Marshes Site of Special Scientific Interest (SSSI) and Leiston-Aldeburgh SSSI, and potential effects on Minsmere-Walberswick Heaths and Marshes SSSI, from which the site boundary includes some land-take. Some responses questioned how direct land take could be mitigated.'
EN-6 C.8.63	'The Appraisal of Sustainability identified the potential for the mitigation of biodiversity effects on sites of UK wide conservation importance (Sizewell Marshes SSSI), including the creation of replacement habitat. The Appraisal of Sustainability notes that developers could avoid or minimise losses and disturbance to protected species through careful site layout, design, routing, location of the development, associated infrastructure, and construction management and timings. The Appraisal of Sustainability finds that there is

Ref.	NPS topic requirement	
	potential for habitat creation within the wider area in order to replace lost "wet meadows" habitats of the Sizewell Marshes SSSI, but also finds that it may not be possible to fully compensate for losses of this habitat. The applicant will need to develop an ecological mitigation and management plan to minimise the impacts."	

- 3.1.2 The provision of compensatory fen meadow habitats using the approach outlined in this strategy directly addresses the requirement for compensation set out in EN-1 5.3.7 and aligns with the specific direction in EN-6 C.8.63 to develop 'an ecological mitigation and management plan' to replace the 'lost "wet meadows".
- 3.1.3 Irrespective of the requirements outlined in EN-1 and EN-6, it is acknowledged by SZC Co that landtake from a SSSI should be fully addressed so far as is possible in order to compensate for the adverse effect on the SSSI. [HP1]SZC Co. is therefore proposing [HP2]Natural England has applied a multiplier to the landtake of fen meadow lost and in response to this requirement, SZC Co. is committed to deliver substantially larger areas of compensatory habitat at a series of off-site locations. The issue of quantum is dealt with in Section 4 below. The conclusion reached in the ESVolume 2, Chapter 14 of the ES [AS-033] (and subsequent ES Addenda), in relation to landtake of fen meadow from the SSSI, is that there would be no significant residual effect, provided that the fen meadow strategy is successfully delivered.
- In the ESVolume 2, Chapter 14 of the ES [AS-033], rush pasture and fen meadow within the Sizewell Marshes SSSI was assigned National/High importance under CIEEEM/EIA methodology criteria respectively given that fen meadow within Sizewell Marshes SSSI would be subject to direct habitat loss. This habitat is listed in the citation for the Sizewell Marshes SSSI. This habitat is nationally scarce and listed on both Section 41 of the NERC Act [Ref 2] and the Suffolk Local BAP [Ref 3].
- 3.1.5 Detailed survey work and an ecohydrological assessment of the fen meadow vegetation present within Sizewell Marshes SSSI presented in the ES has shown that there is a strong relationship between the most diverse areas of fen meadow and wet ground conditions, low fertility and a neutral-to-basic pH. Details of the ecohydrological assessment are presented within the Plants and Habitats Synthesis Report (Volume 2, Appendix 14B1 of ES Volume 2 the ES [APP-250]). Based on National Vegetation Classification (NVC) survey data the fen meadow habitat can be placed



within the M22 *Juncus subnodulosus* – *Cirsium palustre* fen meadow category. The defining characteristic, in what can be a habitat of relatively low floral diversity, is the presence of *Juncus subnodulosus* (blunt-flowered rush) and this species is used as the key indicator of fen meadow establishment within this strategy (section 6).

- 3.1.6 In order to compensate for the loss of fen meadow habitats, SZC Co. has undertaken an extensive series of studies to identify sites where the development of compensatory fen meadow habitats would be possible.

 These studies are summarised briefly in the next section and the relevant study reports appended to this strategy.
- 3.1.7 Whilst SZC Co is confident that it will be able to create the appropriate quantum of compensatory fen meadow habitats, given the suitability of the sites, however—in order to provide further ensure is curity that the loss is the provide of SZC's control, contingency provisions have also been introduced and are defined in **Section 7**.

4 STUDIES TO DATE

- a) Potential for on-site compensatory habitats
- 4.1.1 Where habitats are lost, it is normally preferable to create compensatory habitats as close to the lost habitats as possible. In 2015 it was concluded that there were no suitable areas within the EDF Energy estate | Estate | immediately adjacent to the Sizewell Marshes SSSI which could be used to create fen meadow habitats. This is predominantly a function of the topography and soil types and that there are no low-lying areas within the small Leiston drain catchment, but outside the SSSI, which might be suitable for such a habitat creation approach.
 - b) Off-site compensatory habitats Phase 1 and Phase 2 studies
- 4.1.2 Two initial studies focussed on the provision of compensatory fen meadow habitat, and were presented as Phase 1 of the study, which covered a search of the whole of Suffolk and were reported in Wood [REF 4⁴](Ref. 4¹ [REP4-007]). This report provides the attributes required for selection.
- 4.1.3 Five sites were identified for further investigation as they appeared best suited to the potential for creation of fen meadow habitats, being close to existing fen meadow habitats and in river valleys where topography and soil

⁴-Wood (2018). Sizewell C. Fen Meadow Compensation Study — Approach and Initial Site Screen Report 2018. EDF Energy
¹ Wood (2018). Sizewell C. Fen Meadow Compensation Study — Approach and Initial Site Screen Report 2018. EDF Energy



conditions were likely to be suitable. 17 further sites were put on hold subject to further assessment of the initial five sites.

- 4.1.4 The five sites identified for further investigation were:
 - Site No. 10 Aldecar Lane (Benhall site, in part);
 - Site No. 11 Watering Lane (Benhall site in part);
 - Site No. 28 Blyth Road (Halesworth site);
 - Site No. 33 Stratford St Andrew; and
 - Site No. 54 Pakenham Fen (Pakenham site).
- 4.1.5 Phase 2 [(Ref 5]- [APP-258]) of the study involved a one-day site visit to each potential site comprising (except Site No. 33 for which access had not been agreed at the time of the visits and following further evaluation was considered unsuitable):
 - A walkabout survey to identify areas where (1) the peat is currently influenced by groundwater or near-surface seepage; and (2) fen meadow species are present within or close to the site margins; and
 - A reconnaissance hand augering survey to identify general peat quality (substrate condition), sub-surface geological materials, presence of water table and areas of upwelling groundwater; and consideration of broad options for water management and potential for changes to land management.
- 4.1.6 The Benhall sites (sites 10 and 11) and Halesworth site (site 28) were visited on 9 and 10 April 2019, with two accessible areas of the Pakenham site (site 54) visited on 30 April and 1 May 2019. The results of Phase 2 of the study were reported in Wood (2019)². Based on the results of these studies, it is considered that the sites that were visited all have good potential for the development of fen meadow. The Pakenham site (site 54) was initially excluded as it was further away from Sizewell C and the area of fen meadow loss and the Benhall sites (sites 10 and11) and the Halesworth site (site 28) were initially considered by SZC Co. as likely to be sufficient to deliver an acceptable quantum of compensatory habitat. The However the Pakenham site (site 54) has been was subsequently introduced to increase the quantum of fen meadow delivered in response to stakeholder concerns. The sites Natural England's requirement for a 9x multiplier on the 0.46ha of habitat lost from the SSSI. The application of the

² Wood (2019). Sizewell C. Fen Meadow Compensation Study – Report of Visits to Target Sites 2019. EDF Energy

SizewellC Doing the power of good for Britain

SIZEWELL C PROJECT - FEN MEADOW STRATEGY

NOT PROTECTIVELY MARKED

<u>9x multiplier means that 4.14ha of habitat needs to be created. The sites within the strategy</u> are therefore as follows:

- Works no.7: Fen Meadow compensation site at Benhall (which comprises both sites 10 and 11 combined)
- Works no.6: Fen Meadow compensation site at Halesworth (site 28)
- Works no. 18: Fen Meadow compensation site at Pakenham (site 54)
- 4.1.7 Within the boundaries of each site, there are areas which hold the greatest potential for fen meadow creation, based on the Phase 2 studies. These are termed the 'primary foci'. Other areas which hold less potential are also defined within the overall site areas. The Prior to the preparation of the Draft Fen Meadow Plan (Doc Ref. 9.64(A))) the potential for fen meadow habitat creation at these sites is was considered to be as follows:
 - Benhall: primary locus of habitat creation opportunity of 1.5ha2.0ha, further area of potential 0.7ha1.9ha;
 - Halesworth: primary locus of habitat creation opportunity of 1.2ha, further area of potential 1.3ha; and
 - Pakenham Fen: primary locus of habitat creation opportunity of 4.9ha, further area of potential 10.5ha.
- 4.1.8 These sites were selected on the basis that they best fulfilled the criteria defined below, giving confidence that fen meadow establishment is achievable:
 - Underlying peat is currently influenced by groundwater or near-surface seepage and likely to be of suitable quality;
 - The water table is near surface and likely to be influenced by areas of upwelling groundwater;
 - Fen meadow species are present within or close to the site margins; and
 - There are broad options for water management and potential for changes to land management.
- 4.1.9 Detailed site investigations are underway at all three sites to monitor ground and surface water level flows and determine the management actions which will be described in the final Fen Meadow Plan (Requirement



edf Øcon

SIZEWELL C PROJECT - FEN MEADOW STRATEGY

NOT PROTECTIVELY MARKED

<u>14A</u>). These investigations and the measures <u>subsequently which will be</u> set out in the <u>final</u> Fen Meadow Plan will seek to maximise the extent of the establishment of fen meadow at each site. These investigations are outlined below.

c) Fen Meadow Plan

- 4.1.10 The <u>final</u> Fen Meadow Plan will include conceptual models for the three compensation sites based on detailed data review and investigations and including:
 - Detailed ecological survey, including survey of existing fen meadow adjacent/local to the three compensation sites, including Pakenham Meadows SSSI, to identify species, including plants and invertebrates, which would will then enable measures to be targeted to encourage their colonisation of newly created fen meadow habitat;
 - Review of available groundwater level data (including output from the Environment Agency model for high, low and average groundwater level conditions) and the seasonal variation in groundwater levels. Also effects of groundwater abstraction on groundwater levels below the site;
 - Collection of topographic data;
 - Collection of surface water level and groundwater level data to determine the relationship between groundwater and surface water levels on site. Also detailed study of the existing and wider ditch network to determine potential for water management without risk to upstream receptors;
 - Collection of hydrochemical data; and
 - Preliminary conceptual design to define:
 - Most appropriate restoration methods;
 - How water levels could will be managed (if needed); and
 - To what extent earthworks will be required.
- 4.1.11 A series of three reports-, two of which have already been prepared, will lead to the establishment of the final Fen Meadow Plan will be prepared to further to define the approaches to maximise the extent deliver 4.14ha of fen meadow habitats at the three sites. The reports will be delivered in order to provide updates to the planning process, as follows:

Sizewell**C** ""

PEDF PCGN

SIZEWELL C PROJECT - FEN MEADOW STRATEGY

NOT PROTECTIVELY MARKED

- Fen Meadow Plan Report 1 will be prepared for submission in Q1 2021, to provide was prepared and submitted to the Examination at Deadline 3 [REP3-051 and REP3-052] and provided the baseline reports for the sites and water data available to that period (May 2021), timed to inform stakeholders and the commencement of the examination;
- The <u>Draft Fen Meadow Plan Draft 1 will provide was submitted to the Examination at Deadline 6 [REP6-026] and provided further interim data and define defines in draft the management interventions required to create fen meadow habitats. The measures will include draft monitoring and remedial measures to maximise the extent of the establishment of fen meadow at each site and will describe describes any interventions that may be required to ensure the successfully delivery of fen meadow of SSSI quality at each site. This draft will be submitted later in the examination process. An updated <u>Draft Fen Meadow Plan is submitted to the Examination at Deadline 8 (Doc Ref. 9.64(A)).</u></u>
- Fen Meadow Plan Draft 2 A Draft Fen Meadow Plan for Consultation will provide the full scope of the plan after 12 months of water data collection at each site and will be submitted to the Ecology Working Group for review by the environment panel. Upon finalisation it will be submitted for approval by East Suffolk Council pursuant to Requirement 14A of the dDCO and become the Fen Meadow Plan and will be submitted to East Suffolk Council for approval in consultation with West Suffolk Council and the relevant Statutory Nature Conservation Body[HP8] pursuant to the DCO Requirement 14A.
- 4.1.12 SZC Co will then take forward the establishment of the fen meadow in accordance with the approach set out in the approved Fen Meadow Plan, under the direction of a Review Group (see below) and will seek to maximise the extent of fen meadow habitats at the three sites. Further details of the proposed approach are provided in Section 5 below.
- 4.1.12 SZC Co must then implement the Fen Meadow Plan as approved pursuant to Requirement 14A working with the Ecology Working Group as set out below.

5 ESTABLISHING NEW FEN MEADOW HABITATS

5.1.1 This section outlines the approach for delivering compensatory fen meadow habitats, the interfaces with stakeholders and the monitoring and remedial



NOT PROTECTIVELY MARKED

- actions which will be deployed to maximise the chances of successfully establishing the habitat.
- 5.1.2 Fen meadow establishment is likely to be a relatively long-term endeavour and a ten-year programme of works is outlined below.
 - a) Review Ecology Working Group
- 5.1.3 A Review The Ecology Working Group would will be established under the terms of the Section 106 Agreement and would Schedule 11 of the Deed of Obligation and will be responsible for overseeing the establishment of the compensatory habitat works including the delivery of the Fen Meadow Plan. Specifically the role of the Ecology Working Group includes:
- 5.1.4 Further details of the role of the Review Group will be included in the Section 106 Agreement and is likely to include:
 - Reviewing the draft Fen Meadow Plan to enable it to be finalised;
 - Approving or amending the actions required for the capital works in the first year of the habitat creation at the fen meadow sites;
 - On an annual basis, reviewing progress against the success criteria outlined below; and
 - Reviewing and approving the long-term management plans for each site and
 - In the event of failure to meet the success criteria, to determine how the contingency measures are then deployed.
 - b) SZC Co / Ecological Contractor
- 5.1.5 SZC Co, or an ecological contractor appointed by SZC Co, will be responsible for delivering the works outlined below at the compensation sites, and which will be defined further in the Fen Meadow Plan.
- 5.1.6 As noted above, in the event of a failure to meet the success criteria (see section 6), the Review Group would determine how the contingency approach (see section 7), to develop alternative sites, should be taken forward.

Sizewell C Doing the power of good for Britain

SIZEWELL C PROJECT - FEN MEADOW STRATEGY

NOT PROTECTIVELY MARKED

c)b) Site Establishment

- 5.1.7 SZC Co is taking steps to acquire the land at each of the three sites by agreement. In the event such an agreement is secured for any given site, the fen meadow proposals would be taken forward once the relevant measures for habitat creation are defined, subject to any consents that may be required. The DCO application includes powers to compulsorily acquire the land required to undertake the required habitat compensation works, so that the fen meadow proposals can still be delivered in the event the land cannot be acquired by agreement. In that case, the habitat creation works would be taken forward once the DCO is made.
- 5.1.85.1.4 Once the land for the three fen meadow locations has been secured, either by agreement or by compulsory acquisition powers in the DCO as made, Prior to any vegetation clearance works within the Sizewell Marshes SSSI being carried out and following the acquisition of the three sites SZC Co will undertake the relevant 'Year 1 works' to be defined in the final Fen Meadow Plan and as detailed below at 5.1.9 onwards, within a period to be as defined within the plan and linked to the commencement of works in the DCO as made.
- 5.1.95.1.5 The Year 1 works, at each of the three sites, will include, but not be limited to the following:
 - Any further ecological surveys required³ to further inform final design proposals and or protected species mitigation or monitoring requirements.
 - Making applications for any <u>additional</u> necessary consents <u>not secured</u> <u>pursuant to the dDCO (e.g. protected species licences).</u>
 - Site acquisition and establishment <u>Establishment</u> of any required access or works compound.
 - Any required ground works, such as reworking of ground levels, removal of field drains or re-alignment of surface drains or ditches, preparation of substrate if required.
 - Any required installation of monitoring equipment, such as boreholes or gauge boards.

³ Noting that ecological surveys have been or are being undertaken in the period 2019-2021 at each site in any event to inform the proposed **Fen Meadow Plan**

SizewellC Doing the power of good for Britain CEPF 92CGN

SIZEWELL C PROJECT - FEN MEADOW STRATEGY

NOT PROTECTIVELY MARKED

- Translocation of 'seed turves' from the impacted areas within the fen meadow landtake from the SSSI, subject to programme.
- Green hay transfers from the Sizewell Marshes SSSI.
- 5.1.105.1.6 No habitat creation of the target habitat per se is expected in Year 1.
 - d)c) Management Years 2-5
- 5.1.115.1.7 The Year 2-5 works, at each of the three sites, will be set out in the final Fen Meadow Plan (approved under Requirement 14A), and will include, but not be limited to the following:
 - Annual green hay transfers from the Sizewell Marshes SSSI, or in the case of the Pakenham site, from the adjacent SSSI, if this is viable acceptable to Natural England.
 - Monitoring and remedial works to any of the infrastructure installed in year 1 and any ongoing required management actions identified to optimise the water levels and ground conditions for the establishment of the target habitat.
 - Habitat monitoring.
 - e)d) Management Years 6-10
- 5.1.125.1.8 Year 6-10 works at each of the three sites, will be set out in the final Fen Meadow Plan (approved under Requirement 14A), and will include, but not be limited to the following:
 - Supplementary green hay transfers from the Sizewell Marshes SSSI, as necessary, or in the case of the Pakenham site, from the adjacent SSSI, if this is viable acceptable to Natural England.
 - Any ongoing required management actions identified to optimise the water levels and ground conditions for the establishment of the target habitat.
 - Habitat monitoring.
- 5.1.135.1.9 Success at any given site would will be determined in consultation with the Ecology Working Group in Year 10, as follows, for each site, as follows,:



NOT PROTECTIVELY MARKED

- Completion of works defined above for Years 1-10.
- Establishment of the target water levels, in accordance with the <u>final</u> Fen Meadow Plan.
- Establishment of M22 habitat, as determined by quadrat survey, at the relevant site.
- Establishment of a long-term management plan <u>for each site, agreed</u> <u>with the Ecology Working Group'</u> to maintain the newly established fen meadow habitat for the operational lifetime of the Sizewell C Project.

5.1.14 These criteria will determine whether M22 is established at the relevant site. The spatial extent of M22 establishment will be mapped and the area of M22 habitat calculated.

f)e) Management - Year 10 onwards

5.1.155.1.10 Year 10 and onwards works at each of the three sites will comprise management in accordance with the long-term management plan.

6 THE TEST OF SUCCESS

- 6.1.1 The critical metric is the successful establishment, by Year 10, of at least 4.5ha 4.14ha of M22 fen meadow habitat, [HP13]under the NVC across any combination of the three sites. Providing that is achieved, with long term management plans in place to secure this compensatory habitat in the long term, then the Fen Meadow Plan will have been successful.
- 6.1.2 In Year 10, the Review sufficient information will be provided to the Ecology Working Group will to allow the Group to confirm, or otherwise, whether the target quantum of 4.5ha 4.14ha of fen meadow has been achieved.
- 6.1.3 If 4.14ha of M22 habitat has not been established by this time, the contingency provisions detailed in section 7 below and secured in the Section 106 Agreement Schedule 11 of the Deed of Obligation will be triggered.
- 6.1.4 In Year 10, the Review Group will also review and approve as relevant the long-term management plan for each site where fen meadow habitat has been successfully established.



7 CONTINGENCY PROVISIONS

- 7.1.1 As stated above, SZC Co is confident that it will be able to create the appropriate quantum of compensatory fen meadow habitats, given the suitability of the sites. However, in order to provide further ensure security that the loss is will be adequately compensated for and to recognise the risks which might arise outside of SZC's control, contingency provisions have also been introduced.
- 7.1.2 The continency provisions will provide funding for another party or parties, contingency provisions are set out and secured in Schedule 11 of the Deed Of Obligation (Doc Ref. 8.17(G)). This provides for funding to be made available to create new fen meadow habitats or undertake improvements to existing fen meadow habitats across East Anglia (defined as comprising Norfolk, Suffolk, Cambridgeshire and Essex), to deliver SSSI quality fen meadow habitats based upon a material shortfall in delivering M22 fen meadow habitats at the three fen meadow compensation sites. A phased release of funding is proposed to align with the quantum of any shortfall in The reduction of the value of the Fen Meadow Contingency Fund (defined in the Deed of Obligation) is related to the delivery of M22 fen meadow habitats that may occur, as follows (as set out in Schedule 11 of the Deed of Obligation (Doc Ref. 8.17(G))):

Table 7.1: Phased release of funding for fen meadow Fen Meadow Contingency Fund calculation

Fen Meadow delivered (Year 10)	Fen Meadow Shortfall (Year 10)	Fund released
Greater than 4.5ha	None	0%
3.0-4.5ha	0.5-1.5ha	40%
2.0-3.0ha	1.5-2.5ha	60%
1.0-2.0ha	2.5-3.5ha	80%
0.0-1.0ha	3.5-4.5ha	100%

<u>Column A: M22 fen meadow</u>
<u>habitat delivered</u>

<u>Column B: Percentage</u>
<u>reduction of Fen Meadow</u>
<u>Contingency Fund</u>



NOT PROTECTIVELY MARKED

4.14ha or greater	<u>100%</u>
<u>3.5-4.14ha</u>	<u>80%</u>
<u>2.5-3.49ha</u>	<u>60%</u>
<u>1.5-2.49ha</u>	<u>40%</u>
<u>0.75-1.49ha</u>	<u>20%</u>
<u>0.0-0.74ha</u>	<u>0%</u>

The Review Group would determine the most productive way forward to deliver new or enhance existing fen meadow habitats in appropriate locations, drawing on input

- 7.1.3 In the event that at Year 10, a site supports 0.5ha or less of new M22 fen meadow habitat, this would be regarded as potentially unsustainable in the long-term and would not count towards the total quantum delivered.
- The statutory and non-statutory sectors and use the funding released to that end. Successfully established as determined by the Ecology Working Group, and subject to the caveat above, the reduction in the fund will be 100% and no funding will be payable as the contingency is not required. However if less than 4.14ha of fen meadow habitat has been established at year 10 as determined by the Ecology Working Group, the contingency provisions set out in Schedule 11 of the Deed of Obligation (Doc Ref. 8.17(G)) will be triggered. The Ecology Working Group will evaluate applications to the fund, drawing on advice from the statutory and non-statutory sectors. It is anticipated that nature conservation organisations or interested landowners, who already manage fen meadow habitats, will bid to the fund to extend or enhance the existing fen meadows on land within their control.

SizewellC

PEDF PCGN

SIZEWELL C PROJECT - FEN MEADOW STRATEGY

NOT PROTECTIVELY MARKED

REFERENCES

- National Policy Statements for energy infrastructure: National Policy Statement for Energy (EN-1) and National Policy Statement for Nuclear Power Generation (EN-6). July 2011. Available from: https://www.gov.uk/government/publications/national-policy-statements-for-energy-infrastructure (Accessed 12 March 2019).
- 2. Natural Environment and Rural Communities Act. 2006. (Online). Available at: http://www.legislation.gov.uk/ukpga/2006/16/contents (Accessed 1 March 2019).
- 3. Suffolk Biodiversity Partnership. Suffolk Local Biodiversity Action Plan. May 2012. (Online). Available from: https://www.suffolkbis.org.uk/sites/default/files/biodiversity/priorityspeciesha bitats/actionplans/Planning_BAP_Final%2018%20May%202012.pdf (Accessed 7 February 2019).
- 4. Fen Meadow Phase 1 report
- Fen Meadow Phase 2 report
- 6. Fen Meadow Phase 3 scope
- 7. Fen Meadow Phase 3 interim report (in prep)
- 8. ES Volume 2 Appendix 14C4 Fen Meadow Phase 2 Report
- Sizewell Marshes SSSI citation