

# SP MANWEB

## Reinforcement to the North Shropshire Electricity Distribution Network



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Environmental Statement Chapter 7  
Ecology and Biodiversity

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November 2018



**SP MANWEB**

**Reinforcement to the North Shropshire  
Electricity Distribution Network**

**CHAPTER 7  
ECOLOGY AND BIODIVERSITY**

**Environmental Statement**

**DCO Document 6.7  
November 2018  
PINS Reference EN020021**

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**The Planning Act 2008**

**The Infrastructure Planning (Applications: Prescribed Forms and Procedure)  
Regulations 2009**

**Regulation 5(2)(a)**

**Reinforcement to the North Shropshire Electricity Distribution Network**

**Environmental Statement: Chapter 7 – Ecology and Biodiversity**

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Environmental Statement Documents

<b>ENVIRONMENTAL STATEMENT</b>		
<b>DCO Document</b>	<b>Chapter</b>	<b>Document</b>
6.1	1	Introduction
6.2	2	Alternatives and Design Evolution
6.3	3	Proposed Development
6.4	4	Approach and General Methodology
6.5	5	Planning Considerations
6.6	6	Landscape and Visual
6.7	7	Ecology and Biodiversity
6.8	8	Historic Environment
6.9	9	Flood Risk, Water Quality and Water Resources
6.10	10	Socio-Economics
6.11	11	Land Use and Agriculture
6.12	12	Cumulative Effects
6.13	13	Summary of Environmental Effects
6.14		Environmental Statement Figures
6.15		Non-Technical Summary
6.16		Glossary

Reference is also made to the following DCO documents:

<b>DCO Document</b>	<b>Document</b>
2.5	Schedule of Important Hedgerows
2.6	Plan of Nature Conservation Sites
5.1	Consultation Report
5.4	No Significant Effects Report
6.3.2	Draft Construction Environmental Management Plan (CEMP)
7.5	The Strategic Options Report (May 2016)
7.6	Updated Strategic Options Report (November 2017)



## CHAPTER 7: ECOLOGY AND BIODIVERSITY

### 7.1 INTRODUCTION

7.1.1 This chapter assesses the likely significant environmental effects on the ecological features, which could result from the Proposed Development described in Chapter 3 'The Proposed Development' (**DCO Document 6.3**).

In particular the objectives of this chapter are to:

- Establish and outline baseline ecology conditions;
- Identify, describe and evaluate impacts leading to potentially significant effects, including direct, indirect and cumulative effects upon ecological features;
- Identify and describe any mitigation measures required to address potentially significant effects;
- Identify any residual effects; and
- Outline enhancement measures, where opportunities arise, to result in net biodiversity gains.

7.1.2 This chapter describes the methodology used to assess the ecological effects and the baseline conditions that currently exist. Baseline ecological information has been compiled through desk study, consultation and detailed field surveys undertaken between 2016 and 2018.

7.1.3 Further details on this chapter including methodology, baseline information and assessment findings are presented in the following appendices and figures:

- Appendix 7.1: Ecology Assessment Methodology (**DCO Document 6.7.1**);
- Appendix 7.2: Ecology Baseline (**DCO Document 6.7.2**);
- Appendix 7.3: Extended Phase 1 Habitat Survey (**DCO Document 6.7.3**);

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- Appendix 7.4: Arboricultural Survey (**DCO Document 6.7.4**);
  - Appendix 7.5: Ornithology Surveys (**DCO Document 6.7.5**);
  - Appendix 7.6: Amphibian Surveys(**DCO Document 6.7.6**);
  - Appendix 7.7: Bat Surveys (**DCO Document 6.7.7**);
  - Appendix 7.8: Otter and Water Vole Surveys (**DCO Document 6.7.8**);
  - Appendix 7.9: ████████ Surveys (*CONFIDENTIAL*) (including Figure 7.9.1: ████████ Survey) (**DCO Document 6.7.9**).
  - Appendix 7.10: Response to the Scoping Opinion<sup>1</sup> (**DCO Document 6.7.10**);
  - Figure 7.1: Ecological Study Area (**DCO Document 6.14**);
  - Figure 7.2: Phase 1 Habitat Survey (**DCO Document 6.14**);
  - Figure 7.3: Arboricultural Survey (**DCO Document 6.14**);
  - Figure 7.4: Breeding Bird Survey (**DCO Document 6.14**);
  - Figure 7.5: Winter Bird Survey (**DCO Document 6.14**);
  - Figure 7.6: Heron, Lapwing and Kingfisher Survey Locations (**DCO Document 6.14**);
  - Figure 7.7: Great Crested Newt (GCN) Survey (**DCO Document 6.14**);
  - Figure 7.8: Bat Activity Survey (**DCO Document 6.14**);
  - Figure 7.9: Water Vole Survey (**DCO Document 6.14**); and
  - Figure 7.10: Reptile Habitat Suitability (**DCO Document 6.14**).

## 7.2 LEGISLATION AND POLICY BACKGROUND

7.2.1 Planning policy considerations are presented in Chapter 5 ‘Planning Considerations’ (**DCO Document 6.5**) and include UK-wide, national and

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<sup>1</sup> <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN020021/EN020021-000012-Scoping%20Opinion.pdf>

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local development plan policies. The following text refers to the key pieces of planning policy and guidance relevant to ecological concerns which provide the context for and are considered relevant to the ecological assessment of the Proposed Development.

- 7.2.2 Reference has been made to the following key pieces of legislation, planning policy and guidance as summarised below.

### **European Directives and Conventions**

*Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (hereafter referred to as the 'Habitats Directive')*

- 7.2.3 The Directive requires Member States to take measures to maintain or restore natural habitats and wild species listed on the Annexes to the Directive at a favourable conservation status, introducing protection for those habitats and species of European importance.

- 7.2.4 The Directive underpins the European ecological network of protected sites comprising Special Areas of Conservation (SACs) for habitats listed on Annex I and for species listed on Annex II. These measures are also applied to Special Protection Areas (SPAs) classified under Article 4 of the Birds Directive. Together SACs and SPAs (and also wetlands of international importance identified in the Ramsar Convention) make up the Natura 2000 network.

*Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds (codified version of Directive 79/409/EEC as amended) (hereafter referred to as the 'Birds Directive')*

- 7.2.5 The identification and classification of SPAs for rare or vulnerable species listed in Annex I of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance (Article 4).
- 7.2.6 The Wild Birds Directive provides wide ranging protection for Europe's wild birds. It lists species requiring special conservation measures and requires

Member states to create SPAs to protect endangered wild bird species and the places where they live.

- 7.2.7 In England the provisions of the Birds Directive are implemented through the Wildlife & Countryside Act 1981 (as amended), and the Habitats Regulations 2017.

*The Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1979)*

- 7.2.8 The Convention aims to ensure the conservation and protection of wild plant and animal species and their natural habitats (listed in Appendices I and II of the Convention). The obligations of the Convention are transposed into European law through the Birds Directive and the Habitats Directive, and into UK law through the Wildlife and Countryside Act (1981 as amended).

- 7.2.9 The potential impact of the Proposed Development on the conservation of protected wild flora and fauna is addressed during the planning and development stages.

**National Legislation and Regulations**

*The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations)*

- 7.2.10 The Regulations transpose the Habitats Directive and elements of the Birds Directive to law in England and Wales. The Regulations provide for the designation and protection of 'European sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites (SACs and SPAs).

*The Wildlife and Countryside Act 1981 (as amended)*

- 7.2.11 The Act consolidates and amends existing national legislation to implement international and European Conventions and Directives, and makes provision for the conservation and protection of habitats and species. Specific protection is given to birds and animals listed in Schedule 5 of the Act and plants listed in Schedule 8.

*Countryside and Rights of Way Act 2000*

7.2.12 The Act places a duty on Government Departments and the National Assembly for Wales to have regard for the conservation of biodiversity and maintain lists of species and habitats for which conservation steps should be taken or promoted, in accordance with the Convention on Biological Diversity. The Act strengthens wildlife enforcement legislation. Schedule 9 of the Act amends the Sites of Special Scientific Interest (SSSI) provisions of the Wildlife and Countryside Act 1981, including increased powers for the protection and management of SSSIs.

*Protection of [REDACTED] Act 1992*

7.2.13 [REDACTED] (*Meles meles*) and their setts are protected under the Act primarily from baiting and deliberate disturbance, harm or injury.

*Hedgerow Regulations 1997*

7.2.14 'Important' hedgerows (as defined in the Regulations) are protected from removal (up-rooting or otherwise destroying). Various criteria specified in the Regulations are used to identify 'important' hedgerows for wildlife, landscape or historical reasons. Under the Regulations it is illegal to remove or destroy certain hedgerows without permission from the local planning authority.

*Natural Environment and Rural Communities (NERC) Act (2006)*

7.2.15 Section 41 (S41) of the Act requires the Secretary of State (SoS) to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the Act, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

*NPS EN-1 and NPS EN-5*

7.2.16 National Policy Statements (NPS) set out Government policy for the delivery of major energy infrastructure and are material considerations in decision

making for Nationally Significant Infrastructure Projects (NSIPs). NPS EN-1<sup>2</sup> and NPS EN-5<sup>3</sup> are relevant to both the Proposed Development and ecological and biodiversity considerations.

7.2.17 Relevant sections of the Policies, and how they have been addressed in relation to ecology and biodiversity in the ES are summarised in Tables 7.1 and 7.2.

Table 7.1 – Compliance with NPS EN-1	
NPS EN-1 Paragraph	Location in ES
Para 4.2.1 All proposals for projects that are subject to the European Environmental Impact Assessment Directive must be accompanied by an Environmental Statement (ES) describing the aspects of the environment likely to be significantly affected by the project.	This is addressed through the ES and includes an assessment of ecology and biodiversity effects.
Para 4.3.1 Prior to granting a development consent order the IPC must, under the Habitats and Species Regulations...consider where the project may have a significant effect on a European site....Applicants should also refer to Section 5.3 of this NPS on biodiversity and geological conservation’.	This chapter of the ES identifies European sites in relation to the Proposed Development, including in this also Ramsar sites (wetlands or international importance identified under the Ramsar Convention). A screening assessment (no likely significant effects) has been undertaken and is presented in a No Significant Effects Report (Stage 1 Screening) which accompanies the ES ( <b>DCO Document 5.4</b> ).
Para 5.3.3 ...the applicant should ensure that the ES clearly sets out any effects on internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species and on habitats	Baseline studies including desk study, consultations and field surveys have been used to identify designated sites and the presence/likely presence of protected species and habitats and other species identified as being of

<sup>2</sup> Department for Energy and Climate Change (July 2011), Overarching Energy National Policy Statement (EN-1)

<sup>3</sup> Department for Energy and Climate Change (July 2011), National Policy Statement for Electricity Energy Infrastructure (EN-5)

**Table 7.1 – Compliance with NPS EN-1**

NPS EN-1 Paragraph	Location in ES
and other species identified as being of principal importance for the conservation of biodiversity.	principal importance.  This baseline information has been used to inform the assessment in this chapter of potential effects on such sites, habitats and species.
Para 5.3.4 The applicant should show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests.	This chapter includes a description of measures to conserve and enhance biodiversity in co-operation with other nature conservation organisations.

**Table 7.2 – Compliance with NPS EN-5**

NPS EN-5 Paragraph	Location in ES
<b>Para 2.2.6</b> ...developers will be influenced by Schedule 9 to the Electricity Act 1989, which places a duty on all transmission and distribution licence holders, in formulating proposals for new electricity networks infrastructure, to 'have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting any sites, buildings and objects of architectural, historic or archaeological interest; and do what [they] reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside'.	The design and routing of the Proposed Development has sought to avoid such features. The design evolution and how it demonstrates good practice in terms of avoiding and protecting designated sites, protected species and habitats and other species of principal importance is described in this chapter.
<b>Para 2.7.1</b> ...large birds such as swans and geese may collide with	Ornithological surveys were undertaken to establish a baseline

**Table 7.2 – Compliance with NPS EN-5**

NPS EN-5 Paragraph	Location in ES
<p>overhead lines associated with power infrastructure, particularly in poor visibility. Large birds in particular may also be electrocuted when landing or taking off by completing an electric circuit between live and ground wires.... and</p> <p><b>Para 2.7.2</b> The applicant will need to consider whether the proposed line will cause such problems at any point along its length and take this into consideration in the preparation of the Environmental Impact Assessment'</p>	<p>of flight activity of 'target' species including swans and geese in the vicinity of the Proposed Development.</p> <p>The potential for the Proposed Development to result in a significant increased likelihood of collision affecting local bird populations has been assessed in this chapter.</p>

*The National Planning Policy Framework (NPPF)*

7.2.18 The revised National Planning Policy Framework (NPPF<sup>4</sup>), published in July 2018, provides national planning policies to be used in the preparation of development plan documents and determining planning applications. The NPPF does not contain specific policies for NSIPs. However, matters that the decision maker considers 'important and relevant' when making decisions on NSIP applications (which is equivalent to a material consideration in the Town and Country Planning Act) may include the NPPF itself. When promoting an NSIP, it should be considered, whether the project is compatible with what is set out in the NPPF. The NPPF is relevant in terms of shaping and guiding the environmental topic assessments and provides guidance for preserving and enhancing the natural environment.

*The United Kingdom Biodiversity Action Plan (UK BAP)*

7.2.19 The UK BAP formed the UK's response to the Convention on Biological

<sup>4</sup> Revised National Planning Policy Framework, Ministry of Housing, Communities & Local Government (July 2018)



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Diversity (CBD) and described the biological resources of the UK and provided detailed plans for conservation of these resources. Action plans for the most threatened species and habitats were set out to aid recovery, and progress towards the significant reduction of biodiversity loss.

- 7.2.20 The 'UK Post-2010 Biodiversity Framework'<sup>5</sup> succeeds the UK BAP and 'Conserving Biodiversity – the UK Approach'. The lists of priority species and habitats agreed under UK BAP still form the basis of much biodiversity work and are therefore considered within this report in the context of the objectives of the Biodiversity Framework. BAPs identify habitats and species of nature conservation priority on a UK (UK BAP) and Local (LBAP) scale. UK BAPs formed the basis for statutory lists of priority species and habitats in England under Section 41 (England) of the NERC Act 2006, and so are also relevant in the context of this legislation.

### Local Planning Policy

#### *Shropshire Biodiversity Action Plan<sup>6</sup>*

- 7.2.21 Originally published in 2002, 34 species and 15 habitats were identified as being of biodiversity importance in Shropshire; now referred to as Species and Habitats of Principal Importance or Local Species of Principal Importance and Local Habitats of Principal Importance.

#### *Shropshire Local Plan*

- 7.2.22 The Plan sets out the strategic planning policy for Shropshire and contains policies to ensure development protects and enhances Shropshire's environment.

- 7.2.23 Policy CS17: Environmental Networks states that:

*'...development will identify, protect, enhance, expand and connect Shropshire's environmental assets, to create a multifunctional network of natural and historic resources'*

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<sup>5</sup> <http://jncc.defra.gov.uk/page-6583>

<sup>6</sup> <https://shropshire.gov.uk/environment/biodiversity-ecology-and-planning/biodiversity-action-plan/>

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*Shropshire Council Site Allocations and Management of Development  
(SAMDev) Plan December 2015*

7.2.24 The Site Allocations and Development Management (SAMDev) Plan sets out proposals for the use of land and policies to guide future development in order to help to deliver the Vision and Objectives of the Core Strategy for the period up to 2026.

7.2.25 Policy MD12 (The Natural Environment Policy) sets out in detail the level of protection offered to Shropshire's natural assets, seeking to avoid harm and to achieve their conservation, enhancement and restoration through a range of measures. These include requiring a project-level Habitats Regulations Assessment for all proposals where the Local Planning Authority identifies a likely significant effect on an internationally designated site, ensuring that proposals which are likely to have a significant adverse effect on locally designated biodiversity and geological sites, priority species and habitats, important woodlands, trees and hedges, and ecological networks, will only be permitted if it can be clearly demonstrated that:

*'a) there is no satisfactory alternative means of avoiding such impacts through re-design or by re-locating on an alternative site and;*

*b) the social or economic benefits of the proposal outweigh the harm to the asset.'*

7.2.26 Policy MD12 also encourages development which appropriately conserves, enhances, connects, restores or recreates natural assets, particularly where this improves the extent or value of those assets which are recognised as being in poor condition.

*Shropshire Council Natural Environment Supplementary Planning  
Document: Consultation Draft March 2016*

7.2.27 The Natural Environment Supplementary Planning Document expands on the requirements of Core Strategy policies:

- CS6 (Sustainable Design and Development Principles);

- 
- CS17 (Environmental Networks); and
  - SAMDev policy MD12 (Natural Environment).

7.2.28 These policies safeguard Shropshire’s high quality environment and encourage positive actions to enhance existing features. The SPD provides detailed advice to applicants on assessing the effect a proposal may have on these natural assets with specific reference to the level and type of information needed to support a planning application.

### 7.3 METHODOLOGY, SCOPE, ASSUMPTIONS AND LIMITATIONS

#### Methodology

7.3.1 The assessment presented in this chapter has been undertaken with reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) (2018) guidance<sup>7</sup> and in line with Chapter 3 ‘Approach and Methodology’ (**DCO Document 6.3**), and focuses on those activities that could potentially generate significant environmental effects on ecological receptors. The detailed approach and methodology for the ecological assessment is presented within Appendix 7.1 (**DCO Document 6.7.1**).

#### Scope – desk study and survey areas

7.3.2 The findings of this assessment have been informed by desk study and a programme of habitat and species surveys undertaken between October 2016 and May 2018. The desk study and survey areas take into consideration the entire Proposed Development, including underground cable route, overhead line and low voltage line diversions, as well as temporary accesses and laydown areas.

#### Zones of Influence

7.3.3 The ‘zone of influence’ for a project is the area over which ecological features

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<sup>7</sup> Chartered Institute of Ecology and Environmental Management *Guidelines for Ecological Impact Assessment in the UK and Ireland, Terrestrial, Freshwater, Coastal and Marine*. CIEEM (2018). Updated from the 2016 Guidelines and combines *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal*, 2nd edition (2016) and the *Guidelines for Ecological Impact Assessment in Britain and Ireland: Marine and Coastal* (2010).

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may be affected by biophysical changes as a result of the proposed project and associated activities.

7.3.4 In relation to the Proposed Development, the zones of influence that extend beyond the direct land-take required within the Order Limits have been identified based upon the nature of the completed project and the construction activities to be undertaken, informed by the consultation process undertaken with nature conservation representative and organisations including Shropshire Council, Natural England, Shropshire Wildlife Trust and RSPB. This information was used to understand and establish suitable zones of influence, informed by professional judgement and available information about the behaviours, life cycle and habitat requirements of ecological features and their likely sensitivity to effects arising from the Proposed Development.

7.3.5 The zones of influence were used to establish the scope of baseline ecological surveys and the extent of survey area and desk study (summarised in Table 7.3).

#### *Ecological Study and Survey Areas*

7.3.6 The survey areas for different habitats/species for ecological assessment were discussed with Shropshire Council, Natural England and the RSPB, and agreed in the Scoping Opinion. An initial broad-scale Phase 1 habitat survey was undertaken of a 500m wide corridor to inform the design evolution of the route options. Subsequently a more detailed extended Phase 1 habitat and vegetation survey and a series of species-specific surveys were undertaken along a corridor extending approximately 50m either side of the Order Limits as defined in Chapter 3 'The Proposed Development' (**DCO Document 6.3**). This survey corridor was considered suitable to encompass the zone of influence of the construction and operation phases of the Proposed Development, beyond which habitats and most species would be unlikely to experience any discernible effects.

7.3.7 Within the Order Limits, the proposed routes for the temporary access tracks

were generally surveyed within narrower study areas extending to approximately 25m beyond the boundaries of the accesses, reflecting the temporary and restricted nature of works along existing roadways and farm tracks. Some survey areas extended well beyond their indicative corridors to reflect potential zones of influence relating to particular species (for example certain bird species) or where suitable habitat connectivity existed between the Order Limits and higher value habitat nearby (potentially extending the zone of influence). The need or otherwise for targeted surveys at specific locations was reviewed alongside the evolving detailed design and as baseline habitat and species information was gathered. This ensured that all potentially significant ecological effects would be captured within the assessment.

7.3.8 Ecological study and survey areas were established which reflected the ecological receptors identified during the broad scale Phase 1 habitat survey and desk study and zones of influence for the Proposed Development. These areas are detailed in Table 7.3 below and in Chapter 4 ‘Approach and Methodology’ (DCO Document 6.4), but were extended as required for target species or habitats. Further information on the study areas and how they were established is presented within Appendices 7.1 – 7.9 (DCO Documents 6.7.1 - 6.7.9).

Table 7.3 – Ecological Study and Survey Areas	
Desk and field survey study areas	Distance from edge of the Order Limits
Desk Based Study Area Statutory Designated Sites and associated Protected Species	5km (extended to 10km for European designated sites with mobile qualifying interest species)
Desk Based Study Area Non-Statutory Designated Sites and Protected Species	2km

**Table 7.3 – Ecological Study and Survey Areas**

Desk and field survey study areas	Distance from edge of the Order Limits
Phase 1 Habitat Survey <sup>8</sup>	250m
Species-rich Vegetation <sup>9</sup>	50m
Habitats	50m
Hedgerows	50m
Arboricultural	25m
Breeding Birds	100m
Non-breeding Birds	500m
Otter and water vole	100m
██████ and bats	50m
All other species	25m

### Assumptions and Limitations

- 7.3.9 This chapter makes an assessment of whether or not a potential effect is likely to be significant in relation to the EIA Regulations and is based on an assessment of the design of the Proposed Development which is included within the application for an Order granting Development Consent.
- 7.3.10 Limitations to individual surveys (if any) are described in the relevant Appendices; however none are considered to represent a constraint to the objectives or robustness of the assessment.

### Determining the Significance of Effects

- 7.3.11 To determine the overall significance of each ecological effect, judgements on the sensitivity of the receptor(s) and the magnitude of impact from the

<sup>8</sup> Initial broad scale Phase 1 habitat survey of a 500m corridor for the early route options, which subsequently narrowed to 50m either side of the Order Limits during the evolution of the Proposed Development.

<sup>9</sup> Along entire route and selected locations with higher botanical potential

Proposed Development are considered together in order to determine whether or not an effect is likely to be significant. This involves a combination of quantitative and qualitative assessment and the application of professional judgement. The rationale in support of the assessment is set out for each receptor so that it is clear how each judgement has been made.

- 7.3.12 For the purposes of this preliminary assessment, effects are categorised as significant or not significant in line with the EIA Regulations. Further information is provided in Appendix 7.1 and Appendix 7.2 (**DCO Document 6.7.1** and **6.7.2**) on the assessment of effects at different geographic scales i.e. where effects may be discernible at a local scale but are not considered significant in the context of the EIA Regulations. Effects are categorised as negligible, minor, moderate or major and justified and quantified as far as possible. Each of these four categories covers a broad range of effects and represents a continuum or sliding scale. For the purpose of the assessment, moderate and major effects are deemed to be ‘significant’ in EIA terms unless stated otherwise.
- 7.3.13 A ‘significant effect’ is an effect that either supports or undermines biodiversity conservation objectives for ‘important ecological features’ or for biodiversity in general.
- 7.3.14 CIEEM guidelines on ecological impact assessment note that:
- 7.2.29 ‘A significant effect does not necessarily equate to an effect so severe that consent for the project should be refused planning permission. For example, many projects with significant negative ecological effects can be lawfully permitted following EIA procedures.’
- 7.3.15 For ease of reference, Table 7.4 below sets out adapted CIEEM terminology, which also shows the equivalent EIA terms as set out in Chapter 4 ‘Approach and General Methodology’ (**DCO Document 6.4**).

**Table 7.4 – Effects Significance**

Effect (EIA terminology and significance)		Equivalent CIEEM terminology used for Ecological Assessment
Neutral	Negligible	No significant impact on ecological integrity or conservation status (e.g. species or habitat).
Not Significant	Minor Adverse	Significant impact on ecological integrity or conservation status, but discernible only at a Local geographic scale.
Significant	Moderate – Major Adverse	Significant impact on ecological integrity or conservation status at a County, National or International geographic scale.

**7.4 CONSULTATION**

7.4.1 To inform the preparation of the application for an order granting development consent, SP Manweb has undertaken a thorough pre-application consultation process, which has included the following key documents / stages:

- Scoping Report<sup>10</sup> submitted to the Planning Inspectorate (PINS) (9<sup>th</sup> March 2017);
- Scoping Opinion received from the Secretary of State (25<sup>th</sup> April 2017); and
- Statutory consultation (in accordance with sections 42, 47 and 48 of the Planning Act 2008 and the EIA Regs 2009) on a Preliminary Environmental Information Report<sup>11</sup> (PEIR) (November 2017).

7.4.2 Further information on the statutory and non-statutory consultation is provided in the Consultation Report (**DCO Document 5.1**).

7.4.3 A summary of responses of relevance to ecology and biodiversity and how they have been addressed is provided in Table 7.5 below.

<sup>10</sup> <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN020021/EN020021-000027-Scoping%20Report.pdf>

<sup>11</sup> [https://www.spenergynetworks.co.uk/userfiles/file/SPM\\_NSRP\\_PEIR.pdf](https://www.spenergynetworks.co.uk/userfiles/file/SPM_NSRP_PEIR.pdf)



**Table 7.5 – Summary of Consultation Responses**

Date	Summary of Contact	Response
Natural England		
<p>16/09/2016 Consultation response from local Natural England officer</p>	<ol style="list-style-type: none"> <li>1. The proposed route options have taken into account statutory designated sites in the area and are not considered likely to have direct effects. Indirect effects can be readily managed and avoided through the implementation of standard pollution prevention and control measures during the construction phase. Risks to designated sites and associated protected species are considered low due to the nature of the project.</li> <li>2. The project should ensure that due reference is made to the Midlands Meres and Mosses Ramsar/SAC/SSSI designated areas however it is agreed that effects on these areas are unlikely due to the nature of the project and low risk of indirect pathways for effects. The assessment process should however reference and confirm this.</li> <li>3. Consideration should be given in the normal way to protected species in line with the legislation, through survey and suitable mitigation where required. Natural England has no specific comments with regard to particular concerns or issues in relation to this project</li> <li>4. There are no designated landscapes affected by the project.</li> <li>5. Natural England has no other comments or issues to raise at this stage.</li> </ol>	<p>Designated sites taken into consideration as part of the ecological impact assessment and discussed in this chapter of the ES and in the No Significant Effects Report (NSER) (<b>DCO Document 5.4</b>). No significant effects identified on the Midlands Meres and Mosses or any other designated areas.</p> <p>Protected species and habitats and species of principal importance taken into consideration as part of the ecological impact assessment and discussed in this chapter of the ES.</p>

**Table 7.5 – Summary of Consultation Responses**

Date	Summary of Contact	Response
<p>April 2017 Scoping Opinion</p>	<p>The ES should thoroughly assess the potential for the proposal to affect designated sites. European sites (e.g. designated Special Areas of Conservation and Special Protection Areas) fall within the scope of the Conservation of Habitats and Species Regulations 2010 (<i>sic</i>). In addition paragraph 118 of the National Planning Policy Framework requires that potential Special Protection Areas, possible Special Areas of Conservation, listed or proposed Ramsar sites, and any site identified as being necessary to compensate for adverse impacts on classified, potential or possible SPAs, SACs and Ramsar sites be treated in the same way as classified sites.</p> <p>Under Regulation 61 of the Conservation of Habitats and Species Regulations 2010 (<i>sic</i>) an appropriate assessment needs to be undertaken in respect of any plan or project which is (a) likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and (b) not directly connected with or necessary to the management of the site.</p> <p>Should a Likely Significant Effect on a European/Internationally designated site be identified or be uncertain, the competent authority (in this case the Local Planning Authority) may need to prepare an Appropriate Assessment, in addition to consideration of impacts through the EIA process.</p> <p>The development site will be within the vicinity of the following designated nature conservation sites (excluding SSSI):</p>	<p>No significant effects have been identified on any such sites.</p> <p>Note that the Scoping Opinion to the LPA as the competent authority, when it should refer here to the SoS.</p>

**Table 7.5 – Summary of Consultation Responses**

Date	Summary of Contact	Response
	<p>Midlands Meres and Mosses Ramsar Phase 2.</p> <p>In this case the proposal is not directly connected with, or necessary to, the management of a European site. We recommend that there should be a separate section of the Environmental Statement to address impacts upon European and Ramsar sites entitled 'Information for Habitats Regulations Assessment'. We welcome the intention stated in the Scoping Report to provide suitable information to allow a Habitats Regulations Assessment to be undertaken.</p>	
<p>02/02/2018 email from Natural England local office as part of the Preliminary Information Report (PEIR) S42 Consultation</p>	<p>Email states, "<i>Natural England advises that the proposed development is unlikely to have significant direct impacts on internationally and nationally designated sites.</i>"</p>	<p>No significant effects have been identified on any such sites.</p>
<p>20/07/2017 meeting between SP Manweb and NE</p> <p>Notes from follow up email from SP Manweb to NE dated 01/08/2017</p>	<p>Following a consultation meeting between SP Manweb and Natural England the following was recorded with respect to the Midlands Meres and Mosses. It was, "<i>agreed that given the separation distance, there would be no direct effects on designated site and qualifying habitats. Dust, noise and any air pollution arising from the proposed development would be localised and fully mitigated against and addressed in a construction and environment management plan (CEMP). Therefore, there would also be no</i></p>	<p>A draft Construction Environmental Management Plan (CEMP) has been produced and is included with the application (<b>DCO Document 6.3.2</b>).</p>

**Table 7.5 – Summary of Consultation Responses**

Date	Summary of Contact	Response
	<i>indirect effects. Therefore there would be no likely significant effects on the qualifying interest features of the Midlands Meres and Mosses sites, and as such, you [NE] agree we can screen out the need for HRA and should instead address matters through a ‘stage one screening report – no likely significant effects’.</i>	
Email from Natural England to SP Manweb 11/01/2018	In response Natural England confirmed, <i>“With regard to the Meres and Mosses and the HRA, the stage one screening report would be a Habitats Regulations Assessment. As you’ll know it is a process where the first stage is screening i.e. the Likely Significant Effect test where sites potentially affected alongside mitigation to remove effects are considered, the second is Appropriate Assessment if effects can’t be ruled out at stage one. Followed by assessment of alternatives and consideration of Imperative Reasons of Overriding Public Interest (IROPI) if adverse effects in the Integrity of the International sites are identified. From what I have seen so far, the proposal seems to avoid the designated sites themselves and should the final route of the line be within the catchment of some of the designated sites then due to the nature of the proposals it likely mitigation such as pollution prevention measures and a CEMP explaining measures to be employed to protect the environment would probably suffice.”</i>	A draft CEMP has been produced and is included with the application ( <b>DCO Document 6.3.2</b> ).
Email from Natural England to SP Manweb 11/01/2018	Natural England continued, <i>“It would be acceptable for this report to be an addendum to the ES. Although, it would be more helpfully titled “Information to Inform a Habitats Regulations Assessment” as</i>	The NSER ( <b>DCO Document 5.4</b> ) provides information to inform the Competent Authority when

**Table 7.5 – Summary of Consultation Responses**

Date	Summary of Contact	Response
	<i>the competent authority will undertake the assessment based on the information you provide to them.”</i>	undertaking Habitats Regulations Assessment.
SP Manweb to Natural England 09/07/2018	Further consultation has been undertaken with NE specifically in relation to the People Over Wind (POW) European Court of Justice judgement on Habitats Regulations Assessments. NE had not provided any update to its previous comments at the time of finalising this chapter of the ES and the NSER ( <b>DCO Document 5.4</b> ).	Response awaited.
Shropshire Council		
03/05/2016 Telephone call with Shropshire Council Ecologist	Initial contact. Overview of approach to identifying ecological features of importance and Phase 1 habitat mapping to help inform routeing. Requested sufficient information to be provided on protected species especially bats, trees and great crested newts. Access routes should be included in the assessment. Midlands Meres and Mosses Ramsar constituent sites considered a key feature to be considered – where the potential effects from localised changes in drainage/hydrology (even some distance away) should be considered.	Protected species and habitats considered within the ecological impact assessment and reported in this chapter. Potential effects on Ramsar constituent sites considered in the ES and the NSER ( <b>DCO Document 5.4</b> ). No likely significant effects have been identified on the Midlands Meres and Mosses European Sites.  Confirmed ongoing liaison with Shropshire Council would take place.

**Table 7.5 – Summary of Consultation Responses**

Date	Summary of Contact	Response
11.05.2016 Meeting Shropshire Council Ecologist	Consultation meeting with project overview and discussion of option appraisal, identification of broad-scale ecological constraints and sensitive receptors including designated sites.	Information sharing. No specific issues raised.
24.01.2017 and 02.03.2017 Meeting Shropshire Council Ecologist  06.03.2017 Email Shropshire council ecologist	Outline scope of ecological surveys discussed and agreed. Specific information on protected species and survey extents covered. Meeting notes covered in following emails with draft Scoping Chapter provided for comment.	Discussion and feedback comments from Shropshire Council fed into Scoping Report.
April 2017 Scoping Opinion	The Council commented on the likely impact on the local wildlife and surveys undertaken.	None required.
30.05.2017 Meeting Shropshire Council Ecologist	Further discussion and updates on ongoing surveys. Reptile surveys agreed as needed only if the Phase 1 habitat survey identified high value habitats well-connected in landscape.	Phase 1 habitat survey identified only limited areas of habitat potentially suitable for reptiles, such that no effects on local populations would be anticipated from proposed development. Effects on reptiles and other species are addressed in this chapter of the ES.

**Table 7.5 – Summary of Consultation Responses**

Date	Summary of Contact	Response
31.07.2017 Meeting Shropshire Council Ecologist	Update on progress and scope of surveys and discussion of evolving preferred line route options. Confirmed that reptile surveys would not be required unless specific area of suitable habitat affected that could adversely affect a population. Agreed that suitable method statement /avoidance measures could protect reptiles during construction.	Response incorporated into ongoing ecological impact assessment.
SP Manweb to Shropshire Council 09/07/2017	Further consultation has been undertaken with SC specifically in relation to the People Over Wind (POW) European Court of Justice judgement on Habitats Regulations Assessments. SC confirmed no change to previous position that there would be no likely significant effects on European Sites.	SC confirmation of ‘no likely significant effects’ recorded in the NSER ( <b>DCO Document 5.4</b> ) and in the ES.
The Royal Society for the Protection of Birds (RSPB)		
26/08/2016 Email	Stated “no serious concerns” and identified area of potential sensitivity for lapwing/breeding waders in land north of Baggy Moor. Requested if any breeding bird information from the area and information on habitat and land use to identify whether these fields were still suitable for breeding (with reference to agricultural management practices).	Ornithology surveys were undertaken and the findings used as part of the ecological baseline. No concerns were raised about any other sensitive bird species, including those noteworthy bird species associated with the European Sites.
SP Manweb to RSPB 09/07/2018	Further consultation has been undertaken with RSPB specifically in relation to the People Over Wind (POW) European Court of	RSPB confirmation of ‘no likely significant effects’ recorded in the

**Table 7.5 – Summary of Consultation Responses**

Date	Summary of Contact	Response
Email response 23/07/2018	Justice judgement on Habitats Regulations Assessments. The RSPB responded as follows:  Thank you for your email. We have reviewed the revised draft HRA report and concluded that based on our understanding of this case, SP Manweb has avoided causing any likely significant effect on the Midlands Meres and Mosses Phase 1 and Phase 2 Special Area of Conservation and Ramsar site through careful route planning, and therefore the need to consider mitigation measures within an Appropriate Assessment has not arisen.	NSER ( <b>DCO Document 5.4</b> ) and in the ES.
Shropshire Wildlife Trust (SWT)		
12.06.2017 and 21/08/2017  Email	Exchange of information on botanical surveys in the vicinity of Ruewood Pastures SSSI.	No action required.
07/09/2017  Email	Comments on records for great crested newts in area and reference to ornithological interest around River Perry and Baggy Moor and ancient woodland at Gravenhall and Big Wood and heronry at Halston Hall. SWT state “The route passes close to the ‘Moor-fields Loppington’ Local Wildlife Site but no significant impacts would be expected as long as the fields were not affected during the construction phase... The route passes close to Ruewood Pastures which is both a SSSI and SWT Reserve. Again we would anticipate that impacts should be minimal, but you may wish to consult with Natural England in regard to proximity of SSSIs	The presence/potential presence of protected and notable species and habitats has been taken into consideration when scoping baseline surveys, addressed in the Scoping Report and in this chapter of the ES.  SP Energy Networks is a member of the Meres and Mosses Business



**Table 7.5 – Summary of Consultation Responses**

Date	Summary of Contact	Response
	<p>and other designated sites.</p> <p>Overall the preferred route would appear to be unlikely to cause a significant environmental impact in any one location. However detailed local knowledge of the route gained through the consultation process should be given due regard and followed up to ensure that species and habitats are adequately taken into account.</p> <p>The construction phase may generate a range of impacts associated with storage of vehicles and material, works to enable access to the route (tree clearance and hedge removal?), disturbance of species, etc. that will need to be taken into account.</p> <p>As a means of compensating for the overall impact of the scheme Shropshire Wildlife Trust would recommend that contact is made with the Meres &amp; Mosses Landscape Partnership Scheme. The Partnership has a number of schemes in proximity to the preferred route that have been developed in consultation with local businesses and communities that would benefit from support”.</p>	<p>Environment Partnership actively supporting local enhancement initiatives.</p>
Environment Agency (EA)		
EA to SP Manweb 26/09/2018	The EA noted additional provisions to be added to the draft CEMP ( <b>DCO Document 6.3.2</b> ) to protect otter, including that construction sites and access roads should be left unlit between dawn and dusk and that any open pits must be securely fenced or fitted with escape planks. The EA confirmed that: <i>“we are satisfied that as</i>	Suitable provisions for the protection of otter and water vole (along with other protected and notable species) are set out in the draft CEMP ( <b>DCO Document</b>

**Table 7.5 – Summary of Consultation Responses**

Date	Summary of Contact	Response
	<p><i>long as additional searches for water voles prior to the commencement of construction and implementation of mitigation measures if water voles are found, as has been stated in paragraph 3.3.8, will protect existing populations from harm”.</i></p> <p>Regarding biodiversity enhancement the EA stated, <i>“We would expect therefore to see some measures proposed to enhance wildlife as part of this large scale infrastructure scheme. Enhancement measures could include, reseeding the construction areas with native wild grasses and flowers, the erection of bat and bird boxes and the creation of pools, particularly for water voles. We would be happy to discuss possible enhancement options. Alternatively a donation could be made to on-going or future biodiversity projects in the area via Shropshire Wildlife Trust”.</i></p>	<p><b>6.3.2).</b></p> <p>Biodiversity enhancements are addressed in this chapter of the ES, including a joint collaboration with Shropshire Wildlife Trust to deliver enhancements targeting habitat connectivity and local populations of nationally significant invertebrates along with linked research and educational initiatives.</p>

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## 7.5 BASELINE DESCRIPTION

- 7.5.1 The existing ecological baseline forms the basis for the identification and description of the changes that may result from the Proposed Development. The baseline includes survey information set out in Appendices 7.3 to 7.9 (**DCO Document 6.7.3 – 6.7.9**).

### Existing Ecological Baseline

#### *Designated sites*

- 7.5.2 The Proposed Development does not cross or directly affect any statutory or non-statutory designated site. Designated sites in the wider area are described in Appendix 7.2 (**DCO Document 6.7.2**) and illustrated on **DCO Document 2.6**. Part of the Midland Meres and Mosses Phase 2 Ramsar and Brownheath Moss component SSSI site (considered as European sites) lies approximately 1.7km north of the Proposed Development. The nearest nationally important designated sites, comprising Ruewood Pasture SSSI and Montgomery Canal SSSI lie approximately 220m and 840m from the Proposed Development respectively. Locally important (non-statutory) designated sites, Moor-Fields Loppington Local Wildlife Site (LWS) lies 90m north of the route of the overhead line, and Ruewood Pool LWS is approximately 1.22km distant.
- 7.5.3 No areas of ancient woodland are crossed by the Proposed Development. The nearest area of ancient woodland lies at Gravenall, approximately 750m to the north of the overhead line route. No trees protected under Tree Preservation Orders (TPOs) lie within or adjacent to the Order Limits.
- 7.5.4 Ruewood Pasture SSSI and Moor-Fields Loppington LWS are designated for their habitat interests, and to ascertain whether the species interests of these sites extended beyond their designation boundaries, the ecological study area in the vicinity of these sites was extended beyond the Extended Phase 1 habitat survey corridor to include a more detailed vegetation/botanical survey around the LWS as described in Appendix 7.3 (**DCO Document 6.7.3**). The botanical surveys confirmed that the habitat and species interests of the

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designated sites did not extend into or across land within or adjoining the Order Limits, and that the habitats within the survey corridor of the Proposed Development in the locality were limited to improved grasslands or arable fields and subject to agricultural management. Such habitats did not provide the same habitat or vegetation community features as those present within the designated sites. The botanical survey did however locate scattered individual specimens of meadow rue *Thalictrum flavum*, a characteristic plant species associated with Ruewood Meadows SSSI, near ditches on the opposite side of the River Roden to the SSSI, suggesting that remnant populations of this plant persist outside the SSSI where suitable damp conditions exist.

### *Habitats*

- 7.5.5 The habitats along the survey corridor for the Proposed Development are overwhelmingly dominated by agricultural land supporting a mixture of arable and (largely improved) grassland fields. There is a network of scattered ponds across the area. The proposed route crosses the Montgomery Canal, River Perry and River Roden, and land to either side of these waterways includes ditch-lined fields within the floodplain.
- 7.5.6 Field boundaries contain mature hedgerows (both species rich and species poor), many with trees. Some hedgerows qualify as important under the Hedgerows Regulations 1997 due to their ecological features or historic context (described in Appendix 7.3 Section 3, paragraphs 3.3.9 and 3.3.10 (**DCO Document 6.7.3**) and illustrated in **DCO Document 2.5**). Other field boundaries comprise post-and-wire fences. Tree lines, scattered mature trees and a number of broadleaved woodland copses are present along the route of the Proposed Development along with scattered individual mature trees within fields, often associated with ponds. Although predominantly within a rural landscape, the proposed route passes a range of built features including roads, a railway line, farm complexes, and residential and commercial buildings.

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*Protected and notable species*

- 7.5.7 Protected species are present along the survey corridor of the Proposed Development, including great crested newt, water vole, [REDACTED] bats, barn owl, kingfisher (and other bird species in the breeding and winter seasons) as described in Appendices 7.3 to 7.9 (**DCO Documents 6.7.3 – 6.7.9**).

**Future Baseline**

- 7.5.8 The ecological conditions along the route of the Proposed Development are mainly influenced by established agricultural management practices within the predominantly rural farmland. Farming activities influence patterns of land use, cover and habitat diversity over time. The effects of climate change (for example potentially affecting species distribution, productivity and breeding ranges) and natural succession (for example the gradual silting up of unmanaged ponds, or encroachment of scrub) may also occur over the longer term.
- 7.5.9 As the Proposed Development crosses land that is almost entirely under established agricultural management regimes, it is considered that the current baseline is unlikely to experience notable change in the short or medium term. In the absence of the proposed scheme, or assuming a significant gap between baseline surveys and the commencement of construction, changes in baseline ecology conditions are most likely to result from habitat modifications within or surrounding the land within the Order Limits due to land management practices. In the absence of development, the habitats within the Order Limits are considered to largely remain under the existing management regimes.
- 7.5.10 Whilst short-term and small-scale variability in populations and distributions may occur, and revisions to conservation status and designations possible, such changes would be highly unlikely to qualitatively alter the conclusion of the assessment presented within the ES and have been accounted for through application of a precautionary approach and appropriate mitigation.

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## 7.6 ASSESSMENT OF POTENTIAL EFFECTS

- 7.6.1 This section presents the likely significant ecological effects based on the Proposed Development as described in Chapter 3 'The Proposed Development' (**DCO Document 6.3**). It describes the likely impacts and potential significant effects on ecological receptors that may arise during the construction, operation and maintenance phases.
- 7.6.2 An assessment of all identified ecological effects (significant and non-significant) is provided in Appendix 7.2 (**DCO Documents 6.7.2**).
- 7.6.3 As the Proposed Development is required for network reinforcement purposes it will be permanent infrastructure and therefore decommissioning has not been considered further. In the unlikely event that decommissioning was required the activities would be very similar to those for construction, i.e. creation of construction access tracks and temporary working areas, traffic movements, and working hours.
- 7.6.4 The Order Limits define the extent of activities associated with construction, operation and maintenance of the Proposed Development. Indirect effects on ecological receptors beyond the Order Limits are also assessed as appropriate. Details of the ecological receptors that have been identified and scoped in to the assessment are provided and described in Appendix 7.2 (**DCO Document 6.7.2**).

### Effects during Construction

- 7.6.5 Construction of the Proposed Development would take approximately 12 months, but this would be phased across the length of the route, with works in any one pole location taking approximately 1 - 2 days (see Chapter 3 'The Proposed Development' (**DCO Document 6.3**)).

### Sources of Construction Effects

- 7.6.6 Possible effects arising as a result of the construction phase of the Proposed Development have been identified as follows:
- Direct land take leading to permanent or temporary habitat loss;

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- Indirect habitat damage or alteration to habitats (and the species they may support) through:
    - changes to surface or ground waters (hydrological alteration): alterations to the physical regime, typically water levels/availability to wetland species or habitats;
    - pollution: release of pollutants (for example silt-laden runoff from working areas and fuel spills) into habitats inside or outside the Order Limits including watercourses or ditches which provide pathways to affect downstream habitats and species; and,
    - introduction or spread of invasive non-native species; and
  - Direct or indirect harm or disturbance to or displacement of protected or notable species from machinery, equipment and human activities during construction works along the Proposed Development, including noise and visual disruption.

### Effects during Operation

#### Sources of Operational Effects

- 7.6.7 The impacts of the Proposed Development during its operational life would be associated with the presence of wood pole structures and the overhead line. Once constructed, there would be no moving parts or lighting and the line would only require very occasional maintenance visits. No additional land take or habitat loss or disturbance would therefore result additional to that covered above under construction.
- 7.6.8 The wood poles, once installed, would have negligible ongoing ecological effects, occupying a small footprint and with natural vegetation reinstated on all sides. The poles, being located within farmland, will not create new barrier or habitat fragmentation effects. The habitats crossed by underground sections of the Proposed Development (including the proposed cable route connecting to Oswestry Substation and proposed undergrounding of six

sections of low voltage lines) would be re-instated after construction is completed. Temporary features associated with the construction phase e.g. temporary laydown areas would no longer be present during the operation phase.

7.6.9 The potential for impacts on ecological receptors during operation and maintenance of the Proposed Development is therefore restricted to the presence of a new overhead line in the landscape, and the possible effects of collision of vulnerable bird species.

**Assessment of Effects**

7.6.10 No significant ecological effects have been identified on habitats, or protected or notable species, during the construction, operation or maintenance of the Proposed Development. Full details of the assessment have been provided in Appendix 7.2 (**DCO Document 6.7.2**).

7.6.11 As detailed in Appendix 7.2 (**DCO Document 6.7.2**) the inclusion of standard best practice construction measures as set out in the draft CEMP (**DCO Document 6.3.2**) would help to avoid and minimize potential effects to habitats and species present within the zones of influence, largely within 50m of the Order Limits, extended for certain ecological receptors. A summary of the receptors included in the assessment and the overall likely effects is provided in Table 7.6 below.

Table 7.6 – Summary of ecological effects	
Receptor and susceptibility / sensitivity	Summary description and overall effect
Statutory Designated Sites (described in Appendix 7.2 ‘Ecology Baseline’ ( <b>DCO Document 6.7.2</b> ))	
Midlands Meres and Mosses Phases 1 and 2 Ramsar <i>Internationally important statutory designated site with open water and</i>	The nearest component site of the Midlands Meres and Mosses Phase 2, Brownheath Moss lies approximately 1.7km distant. There will be no direct land take or potential for habitat loss. There are no direct functional ecological links between the land within the Order limits and the



Table 7.6 – Summary of ecological effects	
Receptor and susceptibility / sensitivity	Summary description and overall effect
<p><i>peatland sites supporting rare wetland plant species and invertebrates. Notable bird species are northern shoveler <i>Anas Clypeata</i>, great cormorant <i>Phalacrocorax carbo carbo</i>, great bittern <i>Botaurus stellaris stellaris</i> and water rail <i>Rallus aquaticus</i></i></p>	<p>Ramsar sites.</p> <p>The Proposed Development does not cross core non designated habitat for notable bird species associated with the Ramsar Site (namely Northern shoveler <i>Anas clypeata</i>, Great cormorant <i>Phalacrocorax carbo carbo</i>, Great bittern <i>Botaurus stellaris stellaris</i>, Water rail <i>Rallus aquaticus</i>).</p> <p>Natural England when consulted has stated that it does not consider that there would be any discernable effects on European Sites (a definition which includes the Ramsar sites). A No Significant Effects Report (NSER) or Stage 1 Screening Assessment of the likely significant effects of the Proposed Development in relation to European sites, as required under Council Directive 92/43/EEC of the Conservation of European I Habitats and of Wild Fauna and Flora (Habitats Directive) and the transposing regulations, is provided as <b>DCO Document 5.4</b> to the Environmental Statement which provides further detail in respect of European designated sites.</p> <p><b>It is considered that there would be no likely significant effects upon any European designated site or qualifying habitats or species interests during the construction or operational phases.</b></p>
<p>Ruewood Pasture SSSI designated for its botanical interest (meadow grassland)</p> <p><i>Nationally important Statutory designated site</i></p>	<p>This SSSI lies approximately 220m from the Proposed Development and will experience no direct effects. There will be no loss of functionally linked or associated habitat outside the SSSI as a result of construction. Habitat and botanical surveys of land around the SSSI did not identify any notable flora or species assemblages which are characteristic of the habitats within the SSSI. Individual plants of meadow rue <i>Thalictrum flavum</i>, a characteristic species of the damp meadow habitat within the SSSI was identified around ditches on the</p>

Table 7.6 – Summary of ecological effects	
Receptor and susceptibility / sensitivity	Summary description and overall effect
	<p>eastern side of the River Roden, but located outside the 100m survey corridor and hence not affected by the Proposed Development.</p> <p>Construction will result in negligible change to existing land drainage/groundwater drainage (see Chapter 9 'Flood Risk, Water Quality and Water Resources' (<b>DCO Document 6.9</b>)) and there will be no potential for indirect habitat effects within designated sites.</p> <p>The SSSI is not designated for mobile qualifying interests (e.g. birds) that could be affected by the operational phase of the proposed development.</p> <p><b>It is considered that there would be no significant effects upon this statutory designated site during the construction or operational phase.</b></p>
<p>Montgomery Canal SSSI <i>Nationally important Statutory designated site</i></p>	<p>The section of the canal that is designated as SSSI lies approximately 840m from the proposed crossing point of the Proposed Development.</p> <p>There will be no in-canal works. All works will be set back at least 8m from canal banks and pollution prevention, and specific canal protection measures (set out in the draft CEMP (<b>DCO Document 6.3.2</b>) and agreed with the Canal and Rivers Trust) will protect the waterway and its associated species from indirect effects.</p> <p><b>It is considered that there would be no significant effects upon this statutory designated site during the construction or operational phase.</b></p>
<p>Non-Statutory Designated Sites (described in Appendix 7.2 'Ecology Baseline' (<b>DCO Document 6.7.2</b>))</p>	
<p>Moor-Fields Loppington</p>	<p>The LWS lies approximately 100m from the Proposed Development. Habitat and botanical</p>

Table 7.6 – Summary of ecological effects	
Receptor and susceptibility / sensitivity	Summary description and overall effect
<p>LWS</p> <p><i>County important non-statutory designated site</i></p>	<p>surveys of land around the designated site did not identify any notable flora or species assemblage characteristic of the habitats within the LWS.</p> <p>Construction will result in negligible change to existing land drainage/groundwater drainage (see Chapter 9 ‘Flood Risk, Water Quality and Water Resources’ (DCO Document 6.9)) and hence no potential for indirect habitat effects.</p> <p><b>It is considered that there would be no significant effects upon this non-statutory designated site during the construction or operational phase</b></p>
<p>Ruewood Pool LWS</p> <p><i>County important non-statutory designated site</i></p>	<p>The LWS lies approximately 1.22km from the Proposed Development and is not considered at risk from indirect effects due to the separation distance involved and the mitigation provided through the draft CEMP (DCO Document 6.3.2) to avoid any risk of effects from runoff and siltation effects during construction.</p> <p><b>It is considered that there would be no significant effects upon this non-statutory designated site during the construction or operational phase.</b></p>
<p>Habitats</p> <p>Described in Appendix 7.3 (DCO Document 6.7.3)</p>	
<p>Arable and grassland habitats</p>	<p>Low ecological value habitat forms the majority of the habitat crossed by the Proposed Development. Extended Phase 1 habitat survey and botanical surveys did not record any areas containing arable weed species (which would have been considered notable habitat). Fields were largely cultivated right up to the margins, and hedgerow bases and uncultivated field were frequently narrow and relatively species-poor.</p> <p><b>It is considered that there would be no significant effects upon farmland habitats</b></p>

Table 7.6 – Summary of ecological effects	
Receptor and susceptibility / sensitivity	Summary description and overall effect
	<b>along the Proposed Development during the construction or operational phases.</b>
Hedgerows <i>Priority habitat</i>	<p>Hedgerows are generally retained and protected within the Proposed Development, with accesses specifically designed to utilise existing gaps and farm gates instead of direct routes which would require substantially more hedgerow crossings.</p> <p>Construction near hedgerows will follow the draft CEMP (<b>DCO Document 6.3.2</b>) method statement for the protection of retained trees and hedgerows in line with BS 5837: <i>Trees in Relation to Design, Demolition and Construction - Recommendations. 2012.</i></p> <p>Where work affecting hedgerows cannot be avoided through design, hedgerows will be lifted and replaced following an approved method set out in the draft CEMP (<b>DCO Document 6.3.2</b>). Short sections of hedgerow (each approximately 3-5 m wide) at 22 locations along the Proposed Development would need to be lifted and replaced to accommodate double wood poles. All of the affected hedgerows are species-poor apart from one which has been identified from survey as being species rich. Affected hedgerows have also been assessed in terms of their importance under the Hedgerows Regulations (illustrated in <b>DCO Document 2.5</b>). As the affected sections will be lifted and replaced as a single operation during pole erection, there will be no net loss of hedgerow habitat or fragmentation or loss of connectivity for the hedgerow network in the wider landscape. Hedgerow habitat affected during temporary construction works would experience negligible effects.</p> <p><b>It is considered that there would be no significant effects upon hedgerow habitats along the Proposed Development during the</b></p>

Table 7.6 – Summary of ecological effects	
Receptor and susceptibility / sensitivity	Summary description and overall effect
	<b>construction or operational phases.</b>
Watercourses <i>Priority habitat</i>	<p>Watercourses will be crossed by the Proposed Development at several locations, including across the Montgomery Canal, River Perry (3 crossing points due to river meanders) and River Roden. Work on pole erection will take place without the requirement for any bankside or in-river works. A minimum 8m stand-off distance will be maintained from main rivers during works, thereby protecting the watercourses and riparian habitats as well as the species they support.</p> <p>Overhead lines will be connected and brought across the watercourses without the need for in-stream works.</p> <p><b>It is considered that there would be no significant effects upon watercourse habitats along the Proposed Development during the construction or operational phases.</b></p>
Ponds <i>Priority habitat</i>	<p>A total of 34 ponds were subject to habitat survey. Approximately half of these ponds lay outside the study area but were considered in the context of their relationship to connecting habitat and other ponds. 18 ponds lie within or adjacent to the study area and some are in close proximity to proposed pole locations. No ponds will be lost to the Proposed Development and no construction works within ponds are proposed. All of the undergrounding works and the majority of pole positions will maintain a minimum 8m buffer from ponds. Works that are unavoidable in close proximity to pond habitats will be controlled through implementation of the draft CEMP (<b>DCO Document 6.3.2</b>), to ensure appropriate pollution prevention measures and physical safeguards are in place. This will include maintaining a stand-off zone around the pond margins, and ensuring works are</p>

Table 7.6 – Summary of ecological effects	
Receptor and susceptibility / sensitivity	Summary description and overall effect
	<p>undertaken following appropriate method statements. Specific measures will be set in place for amphibians (great crested newts) within a Species Protection Plan in the draft CEMP (<b>DCO Document 6.3.2</b>).</p> <p>No operational phase effects are anticipated on ponds once construction is complete.</p> <p><b>It is considered that there would be no significant effects upon pond habitats along the Proposed Development during the construction or operational phases.</b></p>
<p>Trees and woodlands <i>Priority habitat</i> See Arboricultural Survey Appendix 7.4 (<b>DCO Document 6.7.4</b>)</p>	<p>No ancient woodland are present within the survey corridor. Several veteran or mature/veteran trees are present. Existing farm gates and tracks will be used and accesses will largely cross arable/grassland habitat, thereby avoiding trees and woodland or minimizing removal. Some tree removal and pruning back for construction and to maintain safety distances from the overhead line will be required. Based on the Proposed Development presented in this ES, approximately 42 trees would require felling along the length of the overhead line alignment (shown on Figure 6.9 'Locations of Anticipated Tree Works' (<b>DCO Document 6.1.4</b>)). Two of these trees have been identified as veteran oak trees in Appendix 7.4 (<b>DCO Document 6.7.4</b>). In addition, seven trees have been identified for 'felling as low as reasonably practicable (FALARP)', and two of these are veteran oaks.</p> <p>Retained trees in proximity to the overhead line would be protected in accordance with BS 5837: <i>Trees in Relation to Design, Demolition and Construction - Recommendations. 2012.</i></p> <p><b>It is considered that there would be no significant effects upon tree cover or the extent of woodland habitats along the Proposed Development during the construction or operational phases.</b></p>

Table 7.6 – Summary of ecological effects	
Receptor and susceptibility / sensitivity	Summary description and overall effect
Species – see individual Appendices where indicated	
<p>Birds (breeding and overwintering)</p> <p>Target species including lapwing and grey heron</p> <p>See Ornithology Surveys Appendix 7.5 (<b>DCO Document 6.7.5</b>)</p>	<p>Overwintering and breeding bird surveys were undertaken as part of baseline ecological surveys, and ornithological records were obtained from the RSPB and BTO to identify possible areas of sensitivity for target bird species (such as Schedule 1 species, species considered vulnerable to collision risk, bird species during the breeding season). Overall the Proposed Development does not constitute a particularly sensitive area for target species of birds and does not support large numbers of vulnerable species such as geese or other waterfowl. Small numbers (1-2 pairs) of lapwing were observed attempting to breed in a small number of the numerous large open fields present across the survey area, however agricultural management and ploughing of fields meant that little or no successful breeding was noted. Numerous heron flights were recorded in winter passing north-south and intersecting the Proposed Development. Flights were however all above the height of the proposed overhead line. Few intersecting flights were recorded in the spring/early summer, suggesting that heron movements changes seasonally in the area.</p> <p>During the construction phase, the potential for disturbance/ displacement effects on target species of birds (those more vulnerable to collision risk or other effects from a linear development such as this) were considered. Breeding birds may be affected by the proposed development if works are carried out during the breeding season, but this risk can be addressed through appropriate timing of construction, or pre-works nest checks by an ecologist and associated avoidance measures if required. This will form part of the draft CEMP (<b>DCO Document 6.3.2</b>) which will include measures to protect breeding and overwintering birds and</p>



Table 7.6 – Summary of ecological effects	
Receptor and susceptibility / sensitivity	Summary description and overall effect
	<p>the habitats they utilise. The detailed design of the Proposed Development has also avoided more sensitive locations where practicable and has sought to minimize habitat loss for breeding birds overall through the embedded design.</p> <p>Construction works are anticipated to have low/negligible potential for effects on bird species outside the breeding season.</p> <p>During the operational phase, the potential for collision and localized displacement of target bird species has been considered along with potential for increased predation by raptors and other species on vulnerable ground-nesting birds, caused by the use of poles and lines as hunting perches. The survey results indicate that bird activity across the Proposed Development is relatively low and, while occasional collisions of individuals will inevitably occur as they already do for existing lines, this would not have significant effects on local populations of any species.</p> <p>Negligible effects on predation are anticipated due to the presence of new poles in the landscape, as the area already provides an abundance of suitable hunting perches for raptors in the form of trees, hedgerows and other vertical features.</p> <p><b>It is considered that there would be no significant effects upon populations of any bird species along the Proposed Development during the construction or operational phases and that there would be no significant effects on individuals of specific target species.</b></p>
<p>Amphibians including great crested newt <i>Triturus cristatus</i> See Amphibian Survey Appendix 7.6 (DCO)</p>	<p>The construction of the Proposed Development will not result in any loss of ponds. Several ponds within 100m of the Proposed Development support great crested newts.</p> <p>The construction phase may result in localised</p>



Table 7.6 – Summary of ecological effects	
Receptor and susceptibility / sensitivity	Summary description and overall effect
Document 6.7.6)	<p>habitat loss and disturbance to terrestrial habitat used for foraging or commuting within 250m of ponds during construction (temporary).</p> <p>Indirect effects can be avoided through implementation of the draft CEMP (<b>DCO Document 6.3.2</b>) and a specific working method statement will be in place to protect great crested newts in line with the guidance provided by Natural England in relation to Low Impact Class licence WML-CL33 (Annex B) or as applicable at the time of works commencing. If necessary, specific works may require to be undertaken under the appropriate licensing regime applicable at the time.</p> <p><b>It is considered that there would be no significant effects upon the conservation status of great crested newts during the construction or operational phase.</b></p>
Reptiles	<p>The Extended Phase 1 habitat survey was reviewed to identify areas which could be considered suitable or high value habitat for reptile species. The habitats present along the Proposed Development are dominated by arable or improved grassland fields subject to regular agricultural management and of limited value to reptile species. The habitats along the route provide very limited extents of higher quality/suitable habitat for reptiles, generally restricted to narrow strips of refuge and foraging habitat along hedgerow bases, and in and around scattered woodland copses, and narrow lengths of scrub and ruderal vegetation along watercourses. See Figure 8.11 (<b>DCO Document 6.14</b>) for suitable reptile habitats. The most suitable habitats for reptiles, generally accepted to be connected areas of heathland and marshy grassland are effectively absent. High value suitable and connected habitat in the wider landscape is also limited. During a suite of surveys undertaken between October 2016</p>

Table 7.6 – Summary of ecological effects	
Receptor and susceptibility / sensitivity	Summary description and overall effect
	<p>and August 2017, careful checks were also undertaken for reptiles (including checking under natural refuges) no observations were made of any reptile species. It is considered that, while small numbers of common reptile species are likely to be present along the Proposed Development, notable populations or concentrations are not considered likely along the Order Limits of the overhead line, which runs through an arable/pastoral area which is also subject to regular agricultural management and disturbance. The nature of the proposed development entails a restricted construction footprint and construction proceeds in a largely linear way, meaning that habitat disturbance will be temporary and short term at any given location along the route. There will be inconsequential loss of suitable reptile habitat and hence negligible fragmentation effects on reptiles (if present near the construction area). The risk of direct harm to individuals present within the Order Limits can be suitably addressed and avoided through implementation species protection measures as part of the draft CEMP (<b>DCO Document 6.3.2</b>).</p> <p><b>It is considered that there would be no significant effects upon the conservation status of any reptile species during the construction or operational phases.</b></p>
<p>Bats See Bat Survey Appendix 7.7 (<b>DCO Document 6.7.7</b>)</p>	<p>The Proposed Development has avoided affecting trees as far as possible through a process of iterative design and alignment. The route passes through a relatively open landscape with scattered trees, treelines and small woodland copses identified along the surveyed corridor within areas dominated by arable and improved grassland fields under agricultural management. Trees within 25m either side of the Proposed Development (and hence having potential to be removed or cut back to facilitate works and maintain safety</p>

Table 7.6 – Summary of ecological effects	
Receptor and susceptibility / sensitivity	Summary description and overall effect
	<p>distances from the overhead line) were assessed for their potential to support bat roosts.</p> <p>Trees considered to have moderate-high roost potential which require pruning back or removal to facilitate the Proposed Development will be subject to further survey (climbing inspection or emergence/re-entry survey) to confirm whether or not they support bat roosts. Trees with low roost potential requiring removal will be subject to ‘soft felling’ techniques under ecological supervision whereby the tree is felled in sections with branches carefully lowered to the ground and left overnight (not stacked) before removal from site. No works on trees supporting bat roosts will take place unless under a European Protected Species derogation licence issued by Natural England. Species protection measures in relation to bats and tree roosts will be set out in detail in the draft CEMP (<b>DCO Document 6.3.2</b>).</p> <p>Bat activity transects were undertaken at representative locations along the Proposed Development but did not suggest the presence of any roosts in close proximity to the line. Activity levels overall were not high and reflected the open, largely arable/improved grassland habitats crossed by the proposed development. As would be expected, bat activity was higher in the vicinity of woodlands, along watercourses and where the hedgerow network provided commuting routes and connected suitable foraging and roosting habitats. Overall much of the surveyed areas were considered to be of low value for foraging or roosting, comprising exposed open fields often lacking trees suitable for roosting, with more valuable habitat confined to the hedgerow margins. Areas of higher value to bats were considered to be along the watercourse corridors of the River Perry, where tree and hedgerows linked to</p>

Table 7.6 – Summary of ecological effects	
Receptor and susceptibility / sensitivity	Summary description and overall effect
	<p>woodlands in the wider landscape and where clusters of ponds, trees and woodland were well connected and associated with potential roost locations such as farm complexes containing barns and other potentially suitable roost structures.</p> <p>Bat species recorded during surveys comprised soprano and common pipistrelle, <i>noctule</i>, <i>Myotis</i> species, and <i>Nyctalus</i> species. The most commonly recorded species was soprano pipistrelle (over 60% of all activity).</p> <p>Effects on bat commuting and foraging habitats are considered to be negligible, with minimal loss of suitable foraging habitat (primarily small areas of arable or grassland pasture around each pole location) and negligible effects on bat commuting routes. There is very restricted requirement to affect hedgerows for construction, with any such effects being temporary. The small lengths involved (approximately 3-5m) are readily crossed by bats and would not represent a barrier to flight lines or connectivity.</p> <p>On currently available evidence no bat roosts are likely to be directly (through tree removal) or indirectly (through disturbance, e.g. from lighting) affected by the Proposed Development. The draft CEMP (<b>DCO Document 6.3.2</b>) will include a requirement for pre-construction checks on trees with identified moderate/high bat roost potential affected by the proposed works, and a specific working method statement for bats that will be in place during construction to ensure no disturbance occurs during the construction phase.</p> <p>Once operational, negligible effects are anticipated on bat species. Routine maintenance will be required, involving periodic cutting back or trimming (of branch ends) of the encroaching trees to maintain safety</p>

Table 7.6 – Summary of ecological effects	
Receptor and susceptibility / sensitivity	Summary description and overall effect
	<p>clearances, which would be undertaken by suitably experienced contractors. This would not be expected to affect features with roost potential, being designed to address new growth, and would have negligible effects on commuting or foraging resources. However as a matter of standard good practice, tree maintenance would involve advance checks for bat roost potential before works are undertaken.</p> <p><b>It is considered that there would be no significant effects upon the conservation status of any bat species during the construction or operational phases.</b></p>
<p>Water Vole/Otter See Otter and Water Vole Survey Appendix 7.8 (DCO Document 6.7.8)</p>	<p>Otter and water vole surveys were conducted up and down stream of proposed crossing points of watercourses and ditches, where water was present. Signs of presence were also searched for around ponds lying along the survey corridor. No evidence of otter was recorded, however it is considered this species is likely to be present in the area move along the main watercourses as part of wider territories. Water vole presence was recorded at the River Perry and along ditches east of the Rover Roden. No culverting or watercourse re-alignment or other intrusive bankside works are required and construction (including accesses, laydown areas and compounds) will maintain a stand-off of 8m from banksides, thereby protecting both areas of confirmed presence and other sections considered potentially suitable for these species, but where presence was not confirmed. Measures to safeguard otters and watervoles potentially present and/or moving through the area are set out in the draft CEMP (DCO Document 6.3.2)</p> <p><b>It is considered that there would be no significant effects upon the conservation status of otters or water voles during the construction or operational phases.</b></p>

Table 7.6 – Summary of ecological effects	
Receptor and susceptibility / sensitivity	Summary description and overall effect
Dormouse	<p>A desk study search and consultation with the County Ecologist indicated that dormice are not currently recorded in this part of Shropshire. The Extended Phase 1 habitat survey showed that the majority of hedgerows along the survey corridor were species poor and offered low suitability foraging or shelter for dormice, and while some were connected to habitats of greater potential for this species in the wider landscape, the likelihood of dormouse being present in sections of hedgerow or woodland copses in the vicinity of the Proposed Development was considered to be extremely low. No impacts on dormice are considered likely to occur.</p> <p><b>It is considered that there would be no significant effects upon the conservation status of dormice during the construction or operational phases.</b></p>
<p>██████ as described in the Confidential ██████ Survey Appendix 7.9 (DCO Document 6.7.9)</p>	<p>██████ are present along the survey corridor and approximately 29 active and inactive setts were located during surveys. Several setts lie in close proximity to the Proposed Development and specific mitigation measures will be required to safeguard individuals and ensure compliance with the legislation. However, ██████ are common and widespread in Shropshire and the Proposed Development will have no discernable effects on local population levels arising from the limited ██████ mitigation measures likely to be required during construction. There will be negligible operational effects on ██████ setts.</p> <p>Much of the habitat crossed by the Proposed Development comprises arable fields of lower value for foraging, but hedgerow and woodland margins, and grassland pastures all have the potential to be used by ██████. However the extent of temporary habitat loss during the construction phase will have negligible effect on</p>

Table 7.6 – Summary of ecological effects	
Receptor and susceptibility / sensitivity	Summary description and overall effect
	<p>the availability of foraging resources for [REDACTED]. Similarly given the nature of the construction and narrow width of the Order Limits, [REDACTED] present in the area will be likely to experience very low levels of disturbance and for short periods of time only. Indirect effects can be avoided through implementation of the draft CEMP (DCO Document 6.3.2) and a specific working method statement will be in place to ensure no disturbance to [REDACTED] and the protection of setts or suitable mitigation during construction where setts lie in close proximity (within approximately 50m) of potential working areas. No significant adverse effects are likely during the construction phase either on local [REDACTED] populations or individuals that may be locally present during construction works with these measures in place. Pre-construction surveys will be undertaken to identify any new sett construction/[REDACTED] presence within 50m of potential working areas, and if found to be present, suitable avoidance, protection or mitigation measures will be set in place before works commence at such locations. Where necessary, works in close proximity to setts will be undertaken under a [REDACTED] disturbance licence issued by Natural England.</p> <p><b>It is considered that there would be no significant effects upon the conservation status of [REDACTED] during the construction or operational phases.</b></p>

**7.7 CUMULATIVE ASSESSMENT**

7.7.1 Potentially significant cumulative effects can result from individually insignificant but collectively significant actions taking place over a period of time or concentrated in a location. The potential for cumulative effects have therefore been assessed in-combination with:



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- Existing developments, either built or under construction;
  - Approved developments, awaiting implementation; and
  - Proposals awaiting determination within the planning process with design information in the public domain.

7.7.2 A list of other developments to be considered within the cumulative assessment sections of the ES has been agreed in consultation with Shropshire Council (see Chapter 4 'Approach and General Methodology' **(DCO Document 6.4)**).

7.7.3 In accordance with CIEEM guidelines, only ecological features that are considered to be important and potentially significantly affected by the proposed scheme require a detailed assessment, however non-significant effects may become significant when considered in combination with other projects or other impacts, and this has been addressed in the cumulative assessment.

- Cumulative ecological effects may relate to:
- Effects on designated sites or their qualifying interest features (habitats and species);
- Direct or indirect habitat loss or degradation, including habitats of Principal Importance listed under S41 of the Natural Environment and Rural Communities (NERC) Act 2006; and
- Disturbance, habitat loss or displacement affecting the favourable conservation status of populations of protected species or accidental injury or killing of individuals.

7.7.4 The assessment considered how the effects of the Proposed Development would combine and interact with the effects of other developments. Section 1.5 of Appendix 7.2 **(DCO Document 6.7.2)** describes the cumulative assessment undertaken. Ecological information available on the Planning Portal for these developments was reviewed and any significant residual ecological effects identified. The nature and extent of any ecological effects



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were also considered in the context of how they, in combination with the identified ecological effects of the Proposed Development, could potentially result in additional and significant adverse effects. Where no significant ecological effects or in-combination effects are identified, it can be concluded that the Proposed Development will not result in a significant cumulative ecological effect.

- 7.7.5 There are no developments (as identified in Chapter 4 'Approach and General Methodology' (**DCO Document 6.4**)) which would give rise to significant cumulative ecological effects during the construction or operational phase of the Proposed Development. This is primarily due to the separation distances between the Proposed Development and other projects, and the nature of these projects, being unlikely to have significant adverse effects on ecological receptors, as discussed within the cumulative assessment set out in Appendix 7.2 (**DCO Document 6.7.2**).

## 7.8 MITIGATION AND RESIDUAL EFFECTS

- 7.8.1 No significant effects requiring specific mitigation have been identified in accordance with the assessment approach described in Appendix 7.1 (**DCO Document 6.7.1**). The potential for localised/site-level effects during the construction period would be reduced by ensuring standard good practice construction and environmental working as outlined in the draft CEMP (Appendix 6.3.2 (**DCO Document 6.3.2**)).
- 7.8.2 As explained in Chapter 3 'The Proposed Development' (**DCO Document 6.3**) and Section 4.6 of Chapter 4 'Approach and General Methodology' (**DCO Document 6.4**), the main strategy adopted to prevent adverse environmental effects of the Proposed Development has been avoidance through careful planning, design and routeing in accordance with the Holford Rules. This has led to the Proposed Development which is the subject of this ES and the application for an Order granting Development Consent.
- 7.8.3 Given the level of work undertaken to identify the final route of the Proposed Development and number and level of identified significant effects, SP

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Manweb do not consider that any further mitigation measures, for example new planting, are necessary to mitigate effects of the Proposed Development. No mitigation is required to reduce any identified 'significant' effect to 'not significant'.

- 7.8.4 Therefore, residual effects are as per the effects reported above in Section 7.6 of this chapter, and are not significant.

### Enhancements

- 7.8.5 National planning policy principles and the NPPF and Shropshire Council Core Strategy CS17 (Environmental Networks) and SAMDev policy MD12 (Natural Environment) encourage proposed developments to identify opportunities to improve biodiversity and geodiversity in proportion to the potential opportunities available and the scale of a development.
- 7.8.6 In line with these principles and to ensure that ecology and biodiversity is considered throughout the planning, design and implementation of its projects, SP Manweb has worked to avoid or minimise potential adverse effects and to include compatible enhancement measures. Suitable opportunities to deliver biodiversity benefits have been identified. The retention and protection of hedgerows is one of the key elements of the project, recognising their importance for biodiversity and habitat connectivity.
- 7.8.7 A Habitat Improvement Strategy is being developed between SP Manweb and Shropshire Wildlife Trust (SWT) to deliver biodiversity enhancements allied with the Proposed Development. This Initiative, funded by SP Manweb, will help to increase habitat connectivity in the local area (strengthening ecological networks) and gather important data on threatened invertebrate species to inform further conservation work.
- 7.8.8 Good connectivity between habitats allows species to move more easily between locations, making them more resilient to localised (e.g. flash flooding) and landscape-scale (e.g. climate change) disturbance. The importance of improving connectivity was highlighted in the 'Making Space for

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Nature' review of 2010<sup>12</sup> as one of the key interventions to reverse the UK's trend of biodiversity loss. In addition to biodiversity benefits from improved habitat connectivity, the Habitat Improvement Strategy will target six nationally significant invertebrate species with actions to benefit 'macro-level' connectivity interventions as part of the collaborative partnership between SP Energy Networks and SWT.

## 7.9 SUMMARY

- 7.9.1 This ecological impact assessment concludes that there will be no significant ecological effects at a local, regional or national scale and no significant ecological effects are predicted during the construction, operation or maintenance of the Proposed Development.

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<http://webarchive.nationalarchives.gov.uk/20130402202740/http://archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf>