

SP MANWEB

Reinforcement to the North Shropshire Electricity Distribution Network



Document Reference: 6.11
Environmental Statement Chapter 11
Land Use and Agriculture

PINS Reference: EN020021
Regulation Reference: 5(2)(a)
November 2018

SP MANWEB

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

CHAPTER 11

LAND USE AND AGRICULTURE

Environmental Statement

DCO Document 6.11

November 2018

PINS Reference EN020021

This page is intentionally blank

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 11 – Land Use and Agriculture

Document Reference No.	6.11
Regulation No.	Regulation (5)(2)(a)
Author	Laurence Gould Partnership
Date	09 November 2018
Version	V1
Planning Inspectorate Reference No.	EN020021

SP Manweb plc, Registered Office: 3 Prenton Way, Prenton, CH43 3ET. Registered in England No. 02366937

This page is intentionally blank

CONTENTS

11.1 INTRODUCTION	1
11.2 LEGISLATION AND POLICY BACKGROUND	1
National Planning Policy	2
11.3 METHODOLOGY, SCOPE, ASSUMPTIONS AND LIMITATIONS	4
Methodology	4
Scope – Study Area.....	6
11.4 CONSULTATION	6
11.5 BASELINE DESCRIPTION	8
Land Use	8
Topography	8
Agriculture	8
Agri-environment Schemes	11
11.6 ASSESSMENT OF POTENTIAL EFFECTS	12
Effects during Construction.....	12
Assessment of Effects during Construction	13
Effects during Operation	15
Assessment of Effects during Operation.....	16
11.7 CUMULATIVE EFFECTS.....	18
11.8 MITIGATION AND RESIDUAL EFFECTS	18
11.9 SUMMARY	18

Environmental Statement Documents

VOLUME 6: ENVIRONMENTAL STATEMENT		
Document	Chapter	Document
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:

DCO Document	Document
2.4	Access and Right of Way Plans
6.3.2	Draft Construction Environmental Management Plan
7.2	Construction Report

CHAPTER 11: LAND USE AND AGRICULTURE

11.1 INTRODUCTION

11.1.1 This chapter assesses the likely significant environmental effects of the Proposed Development arising from the construction and operation on land use and agriculture. The chapter also identifies the standard construction practices as set out in the draft Construction Environmental Management Plan (CEMP (**DCO Document 6.3.2**)) which are of relevance to this topic.

11.1.2 This chapter does not consider the effects of the works at the existing substation at Oswestry and Wem as these works are completely within the existing operational site boundaries and would therefore have no effect on land use or agriculture.

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

- Appendix 11.1: Scoping Opinion Response (**DCO Document 6.11.1**);
- Figure 11.1: Agricultural Land Classification (**DCO Document 6.14**);
and
- Figure 11.2: Environmental Stewardship Schemes (**DCO Document 6.14**).

11.2 LEGISLATION AND POLICY BACKGROUND

11.2.1 Planning policy considerations are presented in Chapter 5 'Planning Considerations' (**DCO Document 6.5**) and include European, national and local development plan policies. The following text refers to the key pieces of planning policy relevant to agriculture which provide the context for assessment of the potential effects on land use and agriculture from the Proposed Development.

National Planning Policy

NPS EN-1 and NPS EN-5

- 11.2.2 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-1¹ and NPS EN-5² are relevant to both the Proposed Development and landscape and visual considerations.
- 11.2.3 The Overarching National Policy Statement for Energy (EN-1) makes reference to Land Use. Compliance with this document is summarised in Table 11.1.
- 11.2.4 The National Policy Statement for Electricity Networks (EN-5) does not identify ‘Land Use’ as a specific consideration, identifying that *‘all of the generic impacts covered in EN-1 are likely to be relevant’* (Para 2.6.1).

Table 11.1 – Compliance with NPS (EN-1) Requirements	
NPS EN-1 Section	Covered in ES Section
<p>Para 5.10.5 The ES should identify existing and proposed land uses near the project, any effects of replacing an existing development or use of the site with the proposed project or preventing the development or use on a neighbouring site from continuing.</p>	<p>Existing land uses within the Study Area (1km) are identified in ‘Baseline Description’ below.</p> <p>No planned or existing uses are prevented on neighbouring sites.</p>

¹ Department for Energy and Climate Change (July 2011), Overarching Energy National Policy Statement (EN-1)

² Department for Energy and Climate Change (July 2011), National Policy Statement for Electricity Energy Infrastructure (EN-5)

Table 11.1 – Compliance with NPS (EN-1) Requirements	
NPS EN-1 Section	Covered in ES Section
<p>Para 5.10.8</p> <p>Applicants should seek to minimise impacts on the best and most versatile agricultural land (defined as grades 1, 2 and 3a of the Agricultural Land Classification)...Applicants should also identify any effects and seek to minimise impacts on soil quality taking into account any mitigation measures proposed.</p>	<p>The Agricultural Land Classification (ALC) within the Order Limits is described below (Baseline Description) together with the standard construction practices which will be adopted to minimise impacts.</p>
<p>Para 5.10.15</p> <p>The IPC should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification. It should give little weight to the loss of poorer quality agricultural land (in grades 3b, 4 and 5), except in areas (such as uplands) where particular agricultural practices may themselves contribute to the quality and character of the environment or the local economy.</p>	<p>The agricultural area within the Order Limits for the Proposed Development would be approximately 1.5 hectares which represents a very minor permanent land take. In reality, as the local farming systems are predominately managed as grazed grassland units the actual footprint of the Proposed Development which may affect agricultural practices would be significantly less. See section 11.6.19 of this Chapter for further information.</p>

National Planning Policy Framework

11.2.5 The National Planning Policy Framework (July 2018) sets out government's planning policies for England and how these are expected to be applied.

11.2.6 The NPPF states (Paragraph 170 (b)) that:

'recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland'.

11.2.7 The NPPF states the 'best and most versatile' agricultural land is Grades 1, 2 and 3a of the Agricultural Land Classification. Guidance is provided in the Guidelines for Agricultural Land Classification of England and Wales³, which also refers to the 'best and most versatile' land as Grades 1 to 3a.

11.2.8 Natural England's 'Guide to Assessing Development Proposals on Agricultural Land'⁴ (January 2018) refers to the NPPF noting that:

'LPAs should make decisions that contribute to and enhance the natural and local environment by: ...

- considering the economic and other benefits of BMV agricultural land, and try to use areas of poorer quality land instead of higher quality land'.*

11.3 METHODOLOGY, SCOPE, ASSUMPTIONS AND LIMITATIONS

Methodology

11.3.1 The methodology presented in this chapter builds upon the general assessment methodology summarised in Chapter 4 'Approach and General Methodology' (**DCO Document 6.4**). It has been developed to take account

³ MAFF (Revised 1988), Guidelines for Agricultural Land Classification of England and Wales

⁴ <https://www.gov.uk/government/publications/agricultural-land-assess-proposals-for-development/guide-to-assessing-development-proposals-on-agricultural-land>

of any likely significant impacts on agriculture and other land uses arising during the construction and operation phases of the Proposed Development.

11.3.2 The potential impacts of the Proposed Development on agriculture, relate to the effects upon farming practices. In particular the following areas are considered:

- Permanent land impacts: which is assessed in terms of quality and quantity, and the impacts evaluated against national and local criteria;
- Farming practices: the farming methods are described and the impact of the Proposed Development on these assessed. Where alternative methods of working are possible, these are described. Losses in terms of cropping are described;
- Drainage and water supply: any disruption to field drains and water supplies is identified; and
- Agri-environment schemes: details of the schemes are identified and any impacts described.

11.3.3 There are a number of factors which influence the value and sensitivity ascribed to various land use and agricultural receptors. These include the quality of agricultural land and land under environmental stewardship schemes. The magnitude of any effect reflects physical extent and duration. The significance of the effects can be identified by considering the sensitivity of the land and magnitude of any impacts on that land and how it can be used. The assessment therefore uses professional judgement rather than formal guidelines for a methodology and assesses impacts on a case by case basis.

11.3.4 The assessment has been undertaken largely by means of a desk study, utilising information from published sources (including information available through the DEFRA website) and from specific liaison and consultation, including information that is being obtained from farmers and farm tenants, via consultations between them and SP Manweb's land agents. More

detailed information on agri-environment schemes and organic land will be obtained via discussions with farmers pre-construction.

- 11.3.5 Permanent impacts of the Proposed Development will only be the footprint of the Trident wood poles (and area of land covered by the stays on angle poles). No new permanent access tracks are required, although permanent access rights are being sought.

Scope – Study Area

- 11.3.6 The 1km study area extends from the boundary of Order Limits for the 132kV cable route and overhead line. This study area recognises that the Proposed Development has the potential to affect land beyond the Order Limits (e.g. if land drainage is impacted and flows into land drainage beyond the Order Limits). The 1km study area is adequate to ascertain any likely direct environmental impacts, on land use and agriculture, caused by the lower voltage diversions.
- 11.3.7 Planning applications within the study area have also been reviewed for any potential changes to land use. This is reported in Chapter 5 ‘Planning Considerations’ (**DCO Document 6.5**).

11.4 CONSULTATION

- 11.4.1 The relevant consultation responses relating to the EIA Land Use and Agriculture are detailed in Table 11.2 below.

Table 11.2 – Summary of EIA Consultation Responses		
Organisation	Comment	Response
National Farmers Union	That the proposed design is clearly communicated to and shared with farmers: <ul style="list-style-type: none"> • Consideration is given to any 	Throughout the design process SP Manweb has ensured that the proposals have been communicated with both the local community and

Table 11.2 – Summary of EIA Consultation Responses

Organisation	Comment	Response
	<p>deviations of existing overhead lines being placed underground;</p> <ul style="list-style-type: none"> • In addition to the engagement already taking place with landowners and occupiers, they encourage this to continue, in particular, where new accesses are required and how this can be provided whilst respecting the ongoing farming and domestic operations; • SP Manweb to maintain dialogue with landowners and occupiers regarding compensation procedures. 	<p>the general public, via both non-statutory and statutory consultation.</p> <p>The Proposed Development would be constructed to SP Manweb's specifications as derived from Energy Networks Association guidelines. Safety advice on working in proximity to overhead lines is available for view on the SP Manweb's website.</p> <p>SP Manweb have been in discussions with landowners and farmers to ensure the route and construction of the Proposed Development will minimise disruption and potential impacts on agriculture and land use, whenever possible.</p>

11.4.2 SP Manweb have had ongoing liaison with landowners and tenants and will arrange pre-entry meetings with owners and occupiers of land or their agents

to ensure that disruption to farming activities is kept, where possible, to a minimum. Liaison with farmers and/or their agents will continue throughout the construction and operation of the Proposed Development.

11.5 BASELINE DESCRIPTION

Land Use

- 11.5.1 The predominant land use within the Study Area is agriculture. Arable and pastoral farmland is interspersed with small settlements including Lower Hordley, Bagley, Cockshutt, Noneley and Loppington.
- 11.5.2 There are number of other small-scale land uses in keeping to its rural nature including residential properties, recreational uses, Public Rights of Way (PRoW) and businesses. Effects on these receptors are considered in Chapter 6 'Landscape and Visual' (**DCO Document 6.6**) and Chapter 10 Socio Economic (**DCO Document 6.10**).

Topography

- 11.5.3 The topography of the area, is typical of the Shropshire Plain, being low lying and relatively flat or gently undulating. There are some areas of higher ground (between 110 - 120m AOD) to the west of Oswestry. The topography of the study area is illustrated in Figure 6.5 (**DCO Document 6.14**).

Agriculture

- 11.5.4 Details of agricultural land classification in the study area are illustrated in Figure 11.1 (**DCO Document 6.14**).
- 11.5.5 The predominant land use, and therefore the focus of this chapter is agriculture. Farming is generally medium scale arable and dairying, with some larger scale fields set aside for arable farming in proximity to some of the low-lying areas associated with the River Perry, Wackley and Sleep Brook, and the River Roden.
- 11.5.6 There are circa 40 farms affected by the Proposed Development and at least 1 farm produces organic produce. Consultation feedback identified the

presence of large centre point irrigation facilities used for the growing of quinoa near Lower Hordley and the River Perry, as shown on Figure 11.1 (DCO Document 6.14). This facility has been avoided by the Proposed Development.

- 11.5.7 The quality of agricultural land is assessed using the Agricultural Land Classification (ALC) scheme established by the Ministry for Agriculture, Fisheries and Food (now the Department for the Environment, Food and Rural Affairs (DEFRA)). There are five classifications of agricultural land (six with a subsequent subdivision of Grade 3) with Grades 1, 2 and 3a land currently defined as ‘best and most versatile’ (BMV).
- 11.5.8 The classification is based on the long-term physical limitations of land for agricultural use. Factors affecting the grade are climate, site and soil characteristics. The ALC system is used by DEFRA and others to give advice to local planning authorities, developers and the public if development is proposed on agricultural land or other ‘greenfield’ sites that could grow crops.
- 11.5.9 The grades of agricultural land are described in Table 11.3 below.

Table 11.3 – Definitions of Agricultural Land Classification Grades	
Grade	Definition
Grade 1 – Excellent Quality Agricultural Land	Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.
Grade 2 – Very Good Quality Agricultural Land	Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding

Table 11.3 – Definitions of Agricultural Land Classification Grades	
Grade	Definition
	<p>crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.</p>
<p>Grade 3 – Good to Moderate Quality Agricultural Land</p>	<p>Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.</p> <p>The grade is subdivided in to 3a and 3b:</p> <p>3a: Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of crops including:</p> <ul style="list-style-type: none"> • cereals • grass • oilseed rape • potatoes • sugar beet • less demanding horticultural crops <p>3b: Land capable of producing moderate yields of a narrow range of crops, principally:</p> <ul style="list-style-type: none"> • cereals and grass • lower yields of a wider range of crops • high yields of grass which can be grazed or harvested over most of the year

Table 11.3 – Definitions of Agricultural Land Classification Grades	
Grade	Definition
Grade 4 – Poor Quality Agricultural Land	Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops, the yields of which are variable. The grade includes very droughty arable land.
Grade 5 – Very Poor Quality Agricultural Land	Land with very severe limitations, which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

11.5.10 The Proposed Development passes through predominantly Grade 3 (good to moderate quality) agricultural land (approximately 60% of the area within the Order limits) with some areas of Grade 2 (very good quality) agricultural land (approximately 5%) and Grade 4 (poor quality) agricultural land (approximately 35%). Much of the land within the area is classified as Grade 3, with smaller pockets of Grade 2 near Lower Hordley, Cockshutt, Loppington, Noneley and just west of Wem, and small pockets of Grade 4 particularly near the Montgomery Canal and the River Perry, and in the area south of Loppington (see Figure 11.1 (**DCO Document 6.14**)).

11.5.11 Due to there being no data available on the sub categories of 3a and 3b, it has been assumed all land classified as Grade 3 is assumed to be of 3a grade (BMV).

Agri-environment Schemes

11.5.12 Countryside Stewardship (CS) provides financial incentives for land managers to look after their environment through activities such as:

- Conserving and restoring wildlife habitats;

-
- Flood risk management;
 - Woodland creation and management;
 - Reducing widespread water pollution from agriculture;
 - Keeping the character of the countryside;
 - Preserving features important to the history of the rural landscape; and
 - Encouraging educational access.

11.5.13 There is a New Environmental Land Management Scheme (NELMS) countryside stewardship (middle tier) area scheme to the south of Lower Hordley.

11.5.14 Environmental schemes within the Order Limits have been identified through discussions between S P Manweb and landowners and tenants. Many have Countryside Stewardship Schemes, mostly NELMS. These are mapped within Figure 11.2 (**DCO Document 6.14**). As the environmental schemes are generally 5-year contract periods, the area under environmental schemes will be updated annually through liaison between SP Manweb and the landowners and tenants.

11.6 ASSESSMENT OF POTENTIAL EFFECTS

11.6.1 The following section of this chapter presents the assessment of likely significant land use and agricultural effects, based on the Proposed Development as described in Chapter 3 'The Proposed Development' (**DCO Document 6.3**) and the construction methods as set out in the Construction Report (**DCO Document 7.2**). It describes the likely impacts and potential significant effects that may arise during construction and operation (including maintenance) on land use and agriculture.

Effects during Construction

11.6.2 The majority of effects on farming operations would arise during the construction phase. Potential temporary effects identified through the

assessment and discussions with landowners and tenants include:

- Loss of grazing and cropping area. The temporary loss of limited areas of cropping and grazing will occur within temporary laydown areas, along access tracks, within working areas surrounding pole locations and along the route of the 132kV underground cable and the lower voltage diversions. This will be during the construction phase and for a short period following reinstatement as the ground settles and re-establishes;
- Timings of construction works. This may impact on seasonally dependent agricultural operations such as harvesting, sowing, lambing and calving;
- Disruption to field drainage and water supplies, which may require diversion or repair;
- Compaction of soil due to tracking by vehicles;
- Impact on the commitments made by the farmers/landowners, etc. with regard to agri-environmental schemes; and
- Increased risk of disease transmission and transfer of invasive weeds associated with vehicle movements along the access tracks and within the Order Limits.

Assessment of Effects during Construction

- 11.6.3 Potential effects can be avoided or reduced through careful management and standard good practice construction techniques as set out in the draft CEMP (**DCO Document 6.3.2**) and discussed in advance with the landowner/tenant.
- 11.6.4 With the implementation of good practice throughout the construction phase, residual effects are likely to be of negligible or minor impact, and of a temporary and reversible nature and are therefore not significant.
- 11.6.5 The majority of pole positions would be accessed by existing farm access arrangements and field gates. The access arrangements are shown on the

Access and Right of Way Plans (**DCO Document 2.4**).

- 11.6.6 SP Manweb will arrange pre-entry meetings with owners and occupiers of land or their agents to ensure that disruption to farming activities and Agri environmental schemes are kept, where possible, to a minimum and there will be liaison with farmers and / or their agents throughout. In this regard, a programme of works in particular locations will be mutually agreed where possible with landowners and tenants.
- 11.6.7 SP Manweb will ascertain, with the assistance of the landowner/occupier, the location of any field drains which could potentially be damaged by the construction works. These drains may be diverted at pole sites and protected elsewhere. Any damage to land drainage caused by the construction works will be reinstated as appropriate.
- 11.6.8 Any area damaged by the works will be reinstated and/or reseeded, to bring it back into agricultural use. Care will be taken to prevent the disturbance and straying of livestock. In the interests of security, all field gates will be kept shut unless otherwise requested.
- 11.6.9 If any fences are removed they will be replaced, as appropriate.
- 11.6.10 Care will be taken in the detailed location of the temporary lay down areas, and in storing soil away from water courses and standing water should any of these areas need to be stripped.
- 11.6.11 Wood pole erection sites and other work areas will be demarcated where necessary.
- 11.6.12 Topsoil and subsoil from the pole foundations and cable trench will be stored separately. Any surplus subsoil or rock following backfilling, will be removed to a licensed tip or otherwise disposed of as agreed in consultation with the landowner/occupier and/or agent.
- 11.6.13 Any timber cut will remain the landowner's property and will be stacked at a convenient location in accordance with the landowner/occupiers reasonable requirements unless removal is requested.
-

11.6.14 Prior to work commencing, the land will be inspected and a detailed record of its condition noted, including private roads, gateways and fences along the route of the line and access tracks.

11.6.15 Biosecurity measures will be implemented if required and are included within the draft CEMP (**DCO Document 6.3.2**).

11.6.16 SP Manweb will continue to liaise with landowners, farmers and farm tenants to identify further opportunities to reduce potential effects through sensitive siting and construction practices including:

- Micro-siting individual pole positions and their associated infrastructure;
- Temporary access arrangements; and
- Construction areas, techniques and programme.

11.6.17 As such, through the implementation of good construction working practices and on-going pre-entry meetings with owners and occupiers of land or their agents, none of the potential temporary effects are considered to be significant in terms of land take, farming practices, drainage and water supplies and agri-environmental schemes, due to their short-term and confined impacts.

Effects during Operation

11.6.18 Longer term potential operational effects on agriculture as a result of the Proposed Development are associated with the permanent loss of small areas of operational agricultural land associated with the footprints of the wood poles and stays; and the presence of wood poles and the overhead line within the fields causing inconvenience to agricultural operations, for example during grass cutting, spraying and irrigation operations.

11.6.19 The estimated permanent land impact area of the Proposed Development is calculated in Table 11.4 below. The area represents the footprint of the wooden poles and associated stays. The 'uncropped areas' have been

calculated using a precautionary approach of not cropping (using agricultural machinery) within 2m of a pole or stay. The ‘uncropped’ area created by the Proposed Development is estimated to be a total of 1.5 hectares.

11.6.20 It has been assumed all the structures are situated in arable fields which therefore assumes a ‘worst case’ scenario.

Table 11.4 – Estimated permanent land take from the Proposed Development						
Structure Design	Total Number of Structures	% of Total Structures	Estimated Dimensions of uncropped area around structure	Area around pole to be uncropped (m2)	Total Area (m2)	Total Area (Hectares)
Terminal H-Pole	1	0.5%	25m x 10m	250	250	0.025
Section Single	6	3.4%	4m x 4m	16	96	0.0096
Inter H-Pole	9	5.1%	8m x 5m	40	360	0.036
Inter 2.5m Arm	120	68.2%	8m x 5m	40	4800	0.48
Angle Single	4	2.3%	8m x 5m	40	160	0.016
Angle H-Pole	33	18.8%	14m x 20m	280	9240	0.924
Section H-Pole	3	1.7%	8m x 5m	40	120	0.012
TOTAL	176	100.0%			15236	1.5026

Assessment of Effects during Operation

11.6.21 The permanent land take area relates to the area which will be ‘uncropped’ as a result of the Proposed Development.

-
- 11.6.22 It has been assumed all the structures are situated in arable fields which assumes 'worst case'. The 'uncropped' area created by the Proposed Development would be a total of 1.5 hectares which represents a **very minor** permanent land impact. In reality, the actual footprint would be significantly less, as 111 out of 176 wood poles are sited adjacent to field boundaries and hedgerows and therefore are currently uncropped anyway. Furthermore, the farming systems where the overhead line is located, are predominantly managed as grazed grassland units and as such the unutilised area is limited only to the wooden pole footprint.
- 11.6.23 The diversions of six sections of lower voltage overhead lines will result in the removal of a number of wood poles which will have a small beneficial effect as small areas of land associated with the pole footprints will be returned to agricultural use.
- 11.6.24 Overhead lines present a potential hazard of contact or flashover between tall agricultural equipment and the conductors. Once an overhead power line is operational, it is necessary to maintain safety clearances. The proposed 132kV overhead line will have a minimum height of 6.7m above ground level. This is compared to an 11kV line which is common place around the U.K which has a minimum height of 5.2m above ground. Therefore, this pole design gives an additional 1.5m of clearance meaning common farming operations such as ploughing, sowing, spraying and combining will be unaffected by the 132kV overhead line.
- 11.6.25 The proposed underground cables (132kV and lower voltage) will be laid at a depth of 1.4m in order to not impact on agricultural activities such as ploughing.
- 11.6.26 Therefore, longer term effects are not considered to be significant in terms of land take, farming practices, drainage and water supplies and agri-environmental schemes, due to the very limited land requirement for the Proposed Development.

11.7 CUMULATIVE EFFECTS

11.7.1 The Proposed Development is located primarily within agricultural land and the majority of both potential construction and operational effects identified are likely to be localised in nature. There are not expected to be any cumulative effects on land use and agriculture as a result of the Proposed Development.

11.8 MITIGATION AND RESIDUAL EFFECTS

11.8.1 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 for minimising any 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.

11.8.2 Given the level of work undertaken to identify the final route of the Proposed Development and number and level of identified effects (i.e. not significant), it is not considered that any further mitigation measures are necessary.

11.8.3 Effects during the construction period would be reduced by ensuring good construction and environmental working practices as outlined in the draft CEMP (Appendix 3.2 (**DCO Document 6.3.2**)).

11.8.4 The residual effects are as per the effects reported above in Section 11.6 of this chapter, i.e. there would be no residual significant effects on land use and agriculture.

11.9 SUMMARY

11.9.1 Assessment has identified a range of potential temporary effects as a result of the Proposed Development including the temporary loss and disruption to agricultural land use practices during the construction of the overhead line and underground cabling. However, none of these effects would be significant.

-
- 11.9.2 No potentially significant effects on land use and agriculture have been identified during the operational phase of the Proposed Development.
- 11.9.3 Through the implementation of good working construction practices and on-going pre-entry meetings with owners and occupiers of land or their agents, any potential adverse effects on 'Land Use and Agriculture' would be reduced to a level that means that there would be no significant effects from the Proposed Development.