

## VOLUME 5: CHAPTER 3: THE PROPOSED DEVELOPMENT - ALTERNATIVE ALIGNMENT

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### 3. THE PROPOSED DEVELOPMENT - ALTERNATIVE ALIGNMENT

#### 3.1 Introduction

3.1.1 This Chapter describes the various elements of the works that constitute the Proposed Development with the Alternative Alignment for the construction and operation of a 132 kV double circuit overhead line (OHL) supported by steel lattice towers from Strathy North 'T' (near Dallangwell) to a new cable sealing end (CSE) compound, prior to connecting into Connagill 275/132 kV substation via two short sections of single circuit 132 kV underground cable (UGC). To allow for futureproofing, it is proposed that a section of the Alternative Alignment would be capable of operating at 275 kV in the future, if required.

3.1.2 Given that many of the elements of the Alternative Alignment would be similar to the Proposed Development with the Proposed Alignment, this Chapter is structured in accordance with **Volume 1: Chapter 3: The Proposed Development** and a number of cross references to that Chapter and supporting appendices are made where relevant.

#### 3.2 Development for which Section 37 Consent is sought

3.2.1 This is described in **Section 3.3 of Volume 1: Chapter 3: The Proposed Development** in relation to the Proposed Alignment.

3.2.2 The Applicant's preference is to construct and operate the Proposed Alignment, as presented in **Volume 2: Figure V1-1.1: Overview of the Proposed Development**. However, due to the Proposed Alignment passing through the footprint of the proposed Melvich Wind Energy Hub, should the Scottish Ministers grant consent for that development, an alternative alignment for the 132 kV double circuit OHL<sup>1</sup> would be required. The Applicant requests that the Scottish Ministers consider both the Proposed Alignment and the Alternative Alignment whilst noting that only one of the options would be built.

3.2.3 The Alternative Alignment would comprise:

- The installation and operation of approximately 13.5 km of double circuit 132 kV OHL supported by steel lattice towers. This is an increase of approximately 3 km of OHL compared to the Proposed Alignment to enable the Alternative Alignment to circumnavigate the wind turbines of Melvich Wind Energy Hub. Approximately 11 km of proposed OHL (between Towers 29<sup>2</sup> and Tower 64) would be constructed so that it would be capable of operating at 275 kV in the future, if required.
- The temporary diversion of part of the existing Strathy North 132 kV trident 'H' wood pole OHL to facilitate the construction of the new double circuit steel lattice OHL through the installation of four new trident 'H' wood pole terminal structures (to enable temporary underground cable (UGC) diversions).
- The temporary diversion of part of the existing Strathy North 132 kV trident 'H' wood pole OHL to facilitate the construction of the temporary UGC diversions through the installation of 26 new trident 'H' wood pole terminal structures.

#### 3.3 Ancillary Development for which Deemed Planning Permission (as part of the application for section 37 Consent) is sought

3.3.1 This is described in **Section 3.4 of Volume 1: Chapter 3: The Proposed Development** in relation to the Proposed Alignment. Specifically in relation to the Alternative Alignment, ancillary development would comprise:

<sup>1</sup> Capable of operating at 275 kV in the future, if required.

<sup>2</sup> Tower 29 is within proximity of the optimal site of the proposed Strathy Switching Station which once built, would allow the OHL to be operated at 275 kV. The Applicant would seek consent for the switching station under the Town & Country Planning (Scotland) Act 1997 (as amended). In tandem, the Applicant would seek consent under section 37 of the Electricity Act 1989 to accommodate the proposed double circuit 132 kV OHL teeing into the switching station.

- The construction of a CSE compound to facilitate the transition between OHL and UGC to be situated at approximate Ordnance Survey (OS) grid reference NC 903120, 59541 which is positioned to the south-west of the existing Connagill 275/132 kV substation;
- The formation of access tracks (permanent, temporary and upgrades to existing tracks) and the installation of culverts to facilitate access and ongoing maintenance where required;
- Working areas around infrastructure (i.e. around individual tower foundations) to facilitate construction;
- Tree felling and vegetation clearance to facilitate construction and operation of the Alternative Alignment, to comply with the Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002<sup>3</sup>;
- Temporary measures to protect water crossings (e.g. scaffolding and temporary bridges); and
- Dismantling redundant parts of the existing Strathy North 132 kV trident 'H' wood pole OHL following completion and commissioning of the Alternative Alignment. A Dismantling Plan explaining the works involved is provided in **Volume 4: Appendix V1-3.7: Dismantling Plan**.

### 3.4 Development which falls under the Town and Country Planning (General Permitted Development) (Scotland) Order 1992

3.4.1 The following works would fall under the Applicant's permitted development rights:

- The construction of two single-circuit 132 kV UGC connections<sup>4</sup>, each circuit comprising three cables per phase, is required. Deemed Planning Permission (as part of the application for the section 37 consent) is not sought for the UGC as the installation of the UGC falls under the Town and Country Planning (General Permitted Development) (Scotland) Order 1992; and
- The construction of a temporary UGC between the proposed new trident 'H' wood pole terminal structures to facilitate a temporary diversion of the Strathy North 132 kV trident 'H' wood pole OHL to facilitate construction of the new double circuit steel lattice OHL.

3.4.2 These works are described in further detail in Section 3.10 of this Chapter and the environmental effects of the installation of the UGCs are considered within this EIA only for completeness and ease of reporting and presenting those effects.

### 3.5 Associated Works

3.5.1 Associated works are described in **Section 3.6 of Volume 1: Chapter 3: The Proposed Development** in relation to the Proposed Alignment and would be applicable to the Alternative Alignment.

### 3.6 Limits of Deviation

3.6.1 Limits of Deviation (LoD) are described in **Section 3.7 of Volume 1: Chapter 3: The Proposed Development** in relation to the Proposed Alignment, and would be applicable to the Alternative Alignment, as set out below.

- OHL (Steel Lattice) – 100 m LoD (50 m either side of the centre line);
- UGC – 100 m LoD (50 m either side of the centre line);
- CSE Compound – 50 m LoD from the edge of the CSE compound;
- Access Tracks (new permanent and new temporary) – 50 m LoD (25 m either side of the centre line). There are instances however, where the LoD for the access track would need to be extended to the edge of the boundary of the OHL LoD. This is to account for the possible movement of the OHL within their respective LoDs that the access would still need to serve; and

<sup>3</sup> The Electricity Safety, Quality and Continuity Regulations (2002), available at <https://www.legislation.gov.uk/uksi/2002/2665/contents/made> [Accessed January 2025]

<sup>4</sup> The UGCs would be capable of operating at 275 kV in the future, if required.

- Temporary OHL (trident 'H' wood pole) – 100 m LoD (50 m either side of the centre line of the existing Strathy North 132 kV OHL).

3.6.2 A vertical LoD of 3.2 m is sought for the L7c series of tower design and 4 m is sought for the L8C series of tower design, as described in paragraph 3.7.6 of **Volume 1: Chapter 3: The Proposed Development**. The tower numbers and tower types for the Alternative Alignment are presented in **Volume 4: Appendix V5-3.1 - Indicative Tower Schedule - Alternative Alignment** and illustrated on **Volume 2: Figure V5-3.1: The Proposed Development - Alternative Alignment**.

### 3.7 Project Overview

3.7.1 An overview of the Alternative Alignment is shown on **Figure V5-3.1** and is described below.

3.7.2 The Alternative Alignment would be consistent with the Proposed Alignment between Towers 19 to 31. From Tower 31, the Alternative Alignment would deviate away from the Proposed Alignment for approximately 8 km, by heading in a north-easterly direction towards the A836 and traversing ground to the east of Cnoc a Bhodaich and Cnoc an Ruffer and once across the Baligill Burn, would pass between Cnoc na Cilliche and Cnoc Eadar Dha Allt (Towers A1-A15). Upon crossing the Allt na Cleite watercourse, the Alternative Alignment would head in a southerly direction, passing between local knolls (Towers A16-A27). The Alternative Alignment would rejoin the Proposed Alignment to the north of the Achridigill Burn and would follow the same alignment (between Towers 47 to 64) to the proposed new CSE compound. The Alternative Alignment would connect into Connagill 275/132 kV substation via two short sections of single circuit 132 kV UGC, as per the Proposed Alignment. The total length of the Alternative Alignment would be approximately 13.5 km.

3.7.3 To facilitate construction of the Alternative Alignment, sections of the existing Strathy North 132 kV trident 'H' wood pole OHL would need to be temporarily diverted at two separate locations where the Alternative Alignment would cross the existing trident 'H' wood pole OHL, as described below:

#### *Temporary UGC Diversion*

3.7.4 As mentioned in Section 3.4, these works would fall under the Applicant's permitted development rights.

- There would be a requirement to dismantle and remove four existing trident 'H' wood poles (Wood Pole No. 89, 88, 87 and 86) to be replaced with two temporary terminal 'H' poles (Wood Pole No. 86A and 89A). The existing span of OHL between the existing 'H' wood poles would be dismantled and removed and replaced with approximately 290 m of temporary UGC between Pole 86A and Pole 89A.
- There would be a requirement to dismantle and remove three existing trident 'H' wood poles (Wood Pole No. 48, 49 and 50) to be replaced with two temporary terminal 'H' poles (Wood Pole No. 48A and 50A). The existing span of OHL between the existing 'H' wood poles would be dismantled and removed and replaced with approximately 195 m of temporary UGC between Pole 48A and Pole 50A.

3.7.5 The co-ordinates of the temporary wood poles required for the temporary UGC diversions are presented in **Volume 4: Appendix V5-3.2 – Indicative Temporary Pole Schedule - Alternative Alignment** and illustrated on **Volume 2: Figure V5-3.2: Proposed Dismantling Works and Temporary Diversions - Alternative Alignment**.

### *Temporary OHL Diversion*

- 3.7.6 To facilitate the construction of the temporary UGC and avoid any long-term circuit outages, a temporary trident 'H' wood pole OHL diversion would be necessary to keep the existing Strathy North 132 kV circuit operational. This temporary diversion would be designed to connect to the existing angle poles at both ends, ensuring the additional tension from the new angle on the line is appropriately balanced out. Once the temporary OHL diversion is built offline, the Strathy North 132 kV circuit would be moved onto it and would become live. At the same time, the existing circuit would be dismantled to allow for the construction of the temporary UGC and temporary new trident 'H' wood poles terminal towers (as described above). After the new UGC and trident 'H' wood pole structures are completed, the Strathy North 132 kV circuit would be moved back to the temporary UGC and re-energised, and the temporary wood pole OHL diversion would be dismantled accordingly.
- 3.7.7 The co-ordinates of the temporary wood poles required for the temporary OHL diversions are presented in **Volume 4: Appendix V5-3.2 – Indicative Temporary Pole Schedule - Alternative Alignment** and illustrated on **Volume 2: Figure V5-3.2: Proposed Dismantling Works and Temporary Diversions - Alternative Alignment**.
- 3.7.8 Upon completion and commissioning of the Alternative Alignment, redundant parts of the existing Strathy North 132 kV trident 'H' wood pole OHL, including the temporary diversion works (new terminal 'H' wood poles and UGC), would be dismantled and removed, as per the Proposed Alignment. A Dismantling Plan explaining the works involved is provided in **Volume 4: Appendix V1-3.7**.

### **3.8 Description of Overhead Line Infrastructure**

#### Steel Lattice Towers

- 3.8.1 This is described in **Section 3.8 of Volume 1: Chapter 3: The Proposed Development**. Of relevance to the Alternative Alignment is the description of steel lattice towers, described in paragraphs 3.8.1 to 3.8.3 within the noted chapter, and summarised below.
- 3.8.2 The 58 steel lattice towers that form part of the Alternative Alignment would be constructed from fabricated galvanised steel and would be grey in colour. The towers would likely comprise a combination 'L7c' and 'L8c' series of steel lattice tower design, as set out in the indicative tower schedule included in **Volume 4: Appendix V5-3.1** and example schematics provided in **Volume 4: Appendix V1-3.2: Further Engineering Design Information**. Three types of tower are proposed to be used, as described below:
- Suspension towers: these are used for straight sections of OHL where there is no need to terminate the conductor. There are 37 suspension towers proposed (6 x L7c and 31 x L8c);
  - Angle / tension towers: these are typically used where there is a need to change the orientation of the OHL. There are 20 angle / tension towers proposed (4 x L7c and 16 x L8c); and
  - Terminal towers; where the OHL transitions to UGC, via a CSE. There is 1 terminal tower (L8c) proposed, where the OHL transitions to UGC.
- 3.8.3 Towers would carry two circuits, each with three conductors supported from either glass, porcelain, or composite insulators attached to the horizontal cross arms on both sides of each steel lattice tower. An Optical Ground Wire (OPGW)<sup>5</sup> would be suspended between tower peaks, above the conductors.

<sup>5</sup> Optical Ground Wire is a dual functioning cable, providing a 'shield' to conductors from lightning, whilst also comprising optical cables for telecommunication purposes.

- 3.8.4 The span length (distance between towers) would vary slightly depending on topography and land usage. Typically, the span lengths for the L7c standard tower are between approximately 200 - 250 m and for an L8c standard tower are between approximately 220 - 275 m. Tower heights would also vary, depending on local topography, but would typically be in the region of approximately 27.14 m for an L7c standard tower and 47.6 m for an L8c standard tower.

#### Trident 'H' Wood Poles

- 3.8.5 It is proposed that new temporary terminal 'H' wood pole structures would be required to facilitate a diversion of the existing Strathy North 132 kV trident 'H' wood pole OHL during construction of the Alternative Alignment (as described in paragraphs 3.7.6 to 3.7.7). Each proposed new trident 'H' wood pole terminal structure would have a nominal height of up to 15.5 m (including insulators and support), depending on ground conditions. Example schematics of trident 'H' wood pole terminal and angle structures are shown in **Volume 4: Appendix V1-3.2: Further Engineering Design Information**.

### **3.9 Typical Construction Activities for Overhead Line Infrastructure**

- 3.9.1 Enabling, construction, commissioning and reinstatement works for the OHL elements of the Proposed Alignment are described in **Section 3.9 of Volume 1: Chapter 3: The Proposed Development** and would largely be relevant to the Alternative Alignment, but where there are differences, this is summarised below.

#### *Forestry Clearance and Vegetation Management*

- 3.9.2 The Alternative Alignment is similar to the Proposed Alignment which has sought to minimise impacts on woodland and commercial forestry plantations where possible. The Alternative Alignment would interact with no further woodland or forestry plantations compared to the Proposed Alignment and therefore, there would be no change to the woodland loss and compensatory planting requirements from that required for the Proposed Alignment. Further details are set out within the Forestry Chapter (see **Volume 5: Chapter 10: Forestry – Alternative Alignment**).

#### *Road Improvements and Access*

- 3.9.3 The assumed delivery route of all construction materials and components and new and upgrade of existing bellmouths is described in **Section 3.9 of Volume 1: Chapter 3: The Proposed Development** and would be relevant to the Alternative Alignment.
- 3.9.4 Of relevance to the Alternative Alignment is the description of vehicle access arrangement required to access each tower and temporary pole location. **Volume 2: Figure V5-3.1: The Proposed Development - Alternative Alignment** shows the indicative access arrangements. These comprise existing (to remain unchanged), existing to be upgraded and a combination of new temporary and permanent access tracks to the Alternative Alignment, as they offer the most robust means of providing access for the heavy construction plant required, and would comprise:
- Use of approximately 5.7 km of existing access track which was upgraded for use during the construction of the operational Strathy North Wind Farm. The upgrade of the track is currently being extended for use during the construction of the consented Strathy Wood and Strathy South wind farms.
  - Upgrade of approximately 10.9 km of existing access tracks.

- New permanent and new temporary access routes required where there are no existing tracks. These are shown on **Volume 2: Figure V5-3.1: The Proposed Development - Alternative Alignment** and an access track schematic is included in **Volume 1: Appendix V1-3.3: Access Track Schematic**. Where the existing ground provides the appropriate bearing capacities, the new accesses would be constructed on-formation. Where the existing ground does not provide the appropriate bearing capacities and / or where peat is located, the new accesses would likely be floated on top of the soft ground, circumnavigating the requirement for deep excavations and disturbance to the peat. However, for the purposes of this EIA for the Alternative Alignment, it has been assumed for worst case, that all new access tracks would be constructed on-formation.

#### New Permanent Access Tracks

- 3.9.5 The construction of approximately 7.9 km of permanent new access tracks which are typically expected to have a running width of 5 m, with an overall construction corridor of 6.5 m to allow for suitable drainage and pollution prevention measures. To minimise longer-term impacts, the width would be reduced to approximately 3.5 m, with an overall construction corridor of 5 m to allow for suitable drainage and pollution prevention measures, for the operational period, with track-side habitat reinstated.

#### New Temporary Access Tracks

- 3.9.6 The construction of approximately 6 km of temporary new access tracks which are typically expected to have a running width of 3.5 m, with an overall construction corridor of 5 m to allow for suitable drainage and pollution prevention measures. The temporary tracks would be reinstated post construction.

#### Other Access

- 3.9.7 Other access by low ground pressure vehicles may be required between towers. Such access would not require formal access tracks as access would be via tracked vehicles, or temporary trackway systems would be utilised in boggy / soft ground areas where required.

#### *Temporary Trident 'H' Wood Pole - Construction Works*

#### Wood Pole - Foundations

- 3.9.8 For wood poles, a hole would be excavated to allow the pole brace block and / or steel foundation braces to be positioned in place. Each pole hole excavation would typically be 3 m long and 3 m wide (3m<sup>2</sup>), and at a depth of approximately 2.5 m. Excavated turf and sub soils would be stacked separately according to type so that they can be replaced in reverse order, with the turf being replaced on top.
- 3.9.9 In areas of soft ground and / or very deep peat where firm ground cannot be found, 'bog shoes' may be added to the pole foundations to maximise stability of the structure by floating the structure with wider foundations.
- 3.9.10 Foundation types and designs for each pole would be confirmed following detailed geotechnical investigation and analysis of geotechnical data at each pole position.
- 3.9.11 For the purposes of the EIA, it has been assumed that a working area of approximately 400 m<sup>2</sup> (20 m x 20 m) would be required around individual pole foundations, but the exact dimensions of the working area would be confirmed following micro-siting.

#### Wood Pole - Construction

- 3.9.12 Pole erection teams would consist of 5 - 6 operatives per team, each team equipped with tracked excavators, specialist tracked vehicles, rock breaking equipment and excavation formwork.



3.9.13 The 'H' poles are erected using normal agricultural machinery such as a digger with a lifting arm. The excavator would then hoist the assembled structure into position and, once the structure has been braced into position, the excavation would be backfilled. The hole would be backfilled with soil replaced in reverse order to the order of excavation and would be progressed in layers of approximately 300 – 400 mm deep, with stone hardcore added as required around foundation blocks to ensure adequate compaction and suitable geotechnical conditions are maintained between each layer.

3.9.14 When replacing the topsoil / turf around the pole it would be left slightly proud of ground level (approximately 150 / 300 mm) to allow for the excavation to naturally settle further over time.

### 3.10 Description of 132 kV Underground Cable Installation

3.10.1 The section of UGC between the CSE compound and Connagill 275/132 kV substation is described in **Section 3.10 of Volume 1: Chapter 3: The Proposed Development** in relation to the Proposed Alignment and would be relevant for the Alternative Alignment.

#### *Temporary UGC Diversion*

3.10.2 As discussed in paragraph 3.7.4 to facilitate construction of the Alternative Alignment, spans of the existing Strathy North 132 kV trident 'H' wood pole OHL would need to be temporarily diverted at two locations where the Alternative Alignment would cross the existing trident 'H' wood pole OHL, to enable construction of the new OHL. This is illustrated on **Figure V5-3.2: Proposed Dismantling Works and Temporary Diversions - Alternative Alignment**. This work would fall under the Applicant's permitted development rights.

3.10.3 The temporary diversion would involve the installation of 132 kV single circuit UGC between the proposed new trident 'H' wood pole terminal structures (as described in paragraph 3.7.5).

- Between Poles 86A and 89A, approximately 290 m of new temporary UGC would be installed; and
- Between Poles 48A and 50A, approximately 195 m of new temporary UGC would be installed.

3.10.4 The UGC would be installed via cable duct, with one cable per phase per circuit, meaning there would be three single-core UGC for each crossing. Five wood pole CSE structures would be constructed and installed at both ends, with one termination per cable. At each transition point where the UGCs connect to the OHL, there would be 5 no. wood pole arrangement at each end for each section.

3.10.5 The existing all-dielectric self supporting cables (ADSS) (the fibre optic cables) of the existing Strathy North 132 kV trident 'H' wood pole OHL would be undergrounded at the pole preceding each of the four new terminal structures. Intermediate stays would be required to balance the tension on these poles and would be installed on Pole 47, Pole 51, Pole 85 and Pole 90.

### 3.11 Description of Cable Sealing End Compounds

3.11.1 The proposed CSE compound is described in **Section 3.11 of Volume 1: Chapter 3: The Proposed Development** in relation to the Proposed Alignment and would remain relevant for the Alternative Alignment.

### 3.12 Land Take for Construction and Operation of the Alternative Alignment

3.12.1 **Table V5-3.1** summarises the indicative land take associated with the Alternative Alignment.

**Table V5-3.1: Indicative Land Take for Construction and Operation of the Alternative Alignment**

Activity	Quantum	Construction (ha) Temporary Land Take	Operation (ha) Permanent Land Take
Access Track (existing)	5.7 km	None – tracks are already present	None – tracks are already present
Access Track (Upgrade)	10.9 km	7.01	5.45
Access Track (Temporary)	6.0 km	3.0	None – all temporary land take would be reinstated post- construction
Access Track (Permanent)	7.9 km	5.14	3.95
Temporary Construction Working Area at towers	37 steel lattice suspension towers (including 6 no. x L7c towers and x 31 x L8c towers)  20 steel lattice angle/ tension towers (including 4 no. x L7c towers and 16 no. x L8c series)  1 steel lattice terminal tower (L8c tower)  30 (temporary) trident 'H' wood poles	23.29	None – all temporary land take would be reinstated post- construction
Cable Sealing End (CSE) Compound	1	0.3	0.3
Permanent Land Take for 132 kV towers (excluding terminal tower which is within the CSE Compound)	58	N/A	0.74  (relates just to tower feet)
Underground Cable (Permanent)	780 m	3.12	None – all temporary land take would be reinstated post- construction
Underground Cable (Temporary)	485 m	1.94	None – all temporary land take would be reinstated post- construction

### 3.13 Dismantling of the Existing OHL

3.13.1 This is described in **Section 3.13** of **Volume 1: Chapter 3: The Proposed Development** in relation to the Proposed Alignment and would be relevant for the Alternative Alignment.

3.13.2 Prior to construction of the Alternative Alignment, there would be a requirement to dismantle and remove the existing Strathy North 132 kV trident 'H' wood pole OHL along two sections of the OHL to facilitate construction of the Alternative Alignment where the lines cross. This would involve the removal of existing Poles 48, 49 and 50 (and the existing OHL conductor between these poles) and existing Poles 86, 87, 88 and 89 (and the existing OHL conductor between these poles) (see **Volume 2: Figure V5-3.2: Proposed Dismantling Works and Temporary Diversions - Alternative Alignment**).

### 3.14 Construction Programme

3.14.1 As set out in **Section 3.14 of Volume 1: Chapter 3: The Proposed Development**, it is anticipated that construction of the project as a whole would take place over a 15-month period, following the granting of consents and discharge of pre-commencement conditions. A further six months (approximately) would be required for dismantling works associated with the existing Strathy North 132 kV trident 'H' wood pole OHL. It is not anticipated that the construction of the Alternative Alignment would alter these programme estimates at this stage.

### 3.15 Construction Employment and Hours of Work

3.15.1 This is described in **Section 3.14 of Volume 1: Chapter 3: The Proposed Development** in relation to the Proposed Alignment and remains relevant to the Alternative Alignment.

3.15.2 Construction working is likely to be during daytime periods only. Working hours are anticipated 7 days a week between approximately 07.00 to 19.00 March to September and 07.30 to 17.00 (or within daylight hours) October to February. Working hours would be confirmed by the Principal Contractor and agreed with The Highland Council as the local authority.

### 3.16 Environmental Management during Construction

3.16.1 This is described in **Section 3.15 of Volume 1: Chapter 3: The Proposed Development** in relation to the Proposed Alignment and remains relevant to the Alternative Alignment.

3.16.2 A contractual management requirement of the Principal Contractor would be the development and implementation of a Construction Environmental Management Plan (CEMP). This document would detail how the Principal Contractor would manage the site in accordance with all commitments and mitigation detailed in the EIA Report, statutory consents and authorisations, and industry best practice and guidance. The CEMP would also reference the Applicant's General Environmental Management Plans (GEMPs) and Species Protection Plans (SPPs) (see **Volume 4: Appendix V1-3.4: General Environmental Management Plans (GEMPs)** and **Volume 4: Appendix V1-3.5: Species Protection Plans (SPPs)**). The implementation of the CEMP would be managed on site by a suitably qualified and experienced Environmental Clerk of Works (EnvCoW), with support from other environmental professionals as required.

3.16.3 An Outline CEMP is included in **Volume 4: Appendix V1-3.8: Outline CEMP**.

### 3.17 Operation and Maintenance

3.17.1 This is described in **Section 3.16 of Volume 1: Chapter 3: The Proposed Development** in relation to the Proposed Alignment and remains relevant to the Alternative Alignment.

3.17.2 In general, OHLs require very little maintenance. Regular inspections are undertaken to identify any unacceptable deterioration of components, so that they can be replaced. From time to time, inclement weather, storms or lightning can cause damage to either the insulators or the conductors on OHLs. If conductors are damaged, short sections may have to be replaced.

### **3.18 Decommissioning the Proposed Development**

- 3.18.1 This is described in **Section 3.17** of **Volume 1: Chapter 3: The Proposed Development** and remains relevant to the Alternative Alignment. The Alternative Alignment would not have a fixed operational life.