

Netherton Hub 400 kV OHL Connection to New Deer and Peterhead: Tie-In

Environmental Appraisal Report

Volume 1 Chapter 5: Landscape and Visual

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5. LANDSCAPE AND VISUAL

5.1 Non-technical Summary

- 5.1.1 The Landscape and Visual Impact Assessment (LVIA) for the Netherton Hub 400 kV OHL Connection to New Deer and Peterhead Tie-In, west of Peterhead, Aberdeenshire, has been prepared to assess the likely landscape and visual effects of the Proposed Development during construction and operation. The assessment accords with GLVIA3 and assesses the effects, including cumulative effects, on landscape character and visual receptors.
- 5.1.2 The Proposed Development would comprise modifications to the existing New Deer to Peterhead 400 kV OHL, including new OHL infrastructure associated with the wider Netherton Hub context, together with the removal of a short section of existing overhead line. The Proposed Development would be located within Landscape Character Type 17: Coastal Agricultural Plain – Aberdeenshire, a broad and largely undesignated agricultural landscape already negatively influenced in places by electrical infrastructure. Significant landscape effects are predicted during construction within the immediate locality of the works, which would also affect the Rural Local Landscape Character Subtype.
- 5.1.3 During operation, the characteristics associated with the construction phase, such as movement and contrasting colours, would cease. Effects on Landscape Character Type 21: Farmed and Wooded Policies and the Peterhead Urban Fringe local landscape character subtype would lead to an increase in the characterising influence of energy infrastructure in this landscape. Although negative, the effect on the existing landscape character would not be significant. Significant visual effects are predicted for some receptors within a localised area around the Proposed Development. These include residential receptors near Longside and Flushing, other individual scattered residential properties, road users on minor roads and part of the A950, and walkers / recreational users of the Formartine and Buchan Way Great Trail and Core Path 208.01. The landscape and visual effects of the Proposed Development would be localised in terms of NPF4 Policy 11 e) ii.
- 5.1.4 The removal of a short section of the existing 400 kV overhead line would provide a localised beneficial change to the same landscape character receptors, although it would affect similar visual receptors in different locations within the same localised area. The assessment of the beneficial effects associated with the removal of part of the existing 400 kV overhead line has been considered separately from the main assessment, which takes no account of this change.
- 5.1.5 Cumulative effects would be greatest around the Netherton Hub area, where the Proposed Development would be experienced alongside existing, consented and in-planning transmission, substation, converter station and battery energy storage infrastructure. Significant cumulative effects are predicted locally, particularly where multiple infrastructure elements are visible together or in close succession. The consented Netherton Hub substation includes extensive landscape mitigation, which will reduce the appearance of energy related infrastructure on this landscape once established.
- 5.1.6 Overall, the LVIA concludes that the Proposed Development would give rise to localised significant landscape and visual effects, particularly during construction and from receptors closest to the Netherton Hub and associated overhead line infrastructure. These effects would be localised in terms of NPF4 Policy 11 e) ii and experienced within a landscape that is increasingly influenced by existing and consented energy and transmission infrastructure. The Proposed Development would not therefore result in significant or fundamental change to the landscape character of the area.

5.2 Introduction

- 5.2.1 This Landscape and Visual Impact Assessment (LVIA) assesses the likely significant effects on landscape and visual amenity arising from the construction and operation of the new 400 kV overhead transmission line and associated works, hereafter referred to as the 'Proposed Development'.

- 5.2.2 This chapter should be read in conjunction with **Chapter 2: Description of Proposed Development (Volume 1)**. Supporting information, including figures, visualisations and technical appendices, is provided in **Volume 2** and **Volume 3**, respectively.
- 5.2.3 The Proposed Development comprises the construction and operation of a permanent 400 kV overhead line (OHL) diversion, referred to as the 'Tie-In', to connect the existing New Deer to Peterhead 400 kV OHL into the consented Netherton Hub 400 kV AC substation. The Tie-In would comprise two new sections of OHL: an 'In' leg extending from the existing New Deer to Peterhead OHL into the Netherton Hub over a distance of approximately 3.3 km; and an 'Out' leg extending eastwards from the Netherton Hub to connect into the proposed OHL known as 'The Rebuild', which would continue towards Peterhead Substation over a distance of approximately 2 km. The 'Rebuild' does not form part of this LVIA, as it would have no landscape or visual effect. The section of redundant existing New Deer to Peterhead 400 kV OHL between the 'In' and 'Out' sections would be dismantled.
- 5.2.4 The OHL connection would comprise 18 new steel lattice towers, including 11 towers along the 'In' leg and seven towers along the 'Out' leg. The 'In' leg would use L8(c) towers, consistent with the existing OHL, with an anticipated average height of approximately 55 m. The 'Out' leg would use the ASTI SSE400 tower design to accommodate larger conductors and facilitate increased power transfer, with an anticipated average height of approximately 57 m. The towers would support six conductor bundles on six cross arms, with an earth wire positioned between the tower peaks for lightning protection. The Proposed Development would also include temporary diversions to maintain the existing OHL connection during construction, the removal of redundant sections of the existing New Deer to Peterhead OHL and associated towers, and the formation and upgrading of access tracks to support construction, operation and maintenance activities. The five principal phases are summarised below:
- **Phase 1 – Enabling Works:** This phase would establish the temporary infrastructure required to safely access and prepare the working areas for construction. It would include the formation and upgrade of access tracks, construction of bellmouth junctions, temporary tower diversions, watercourse crossings, site compounds and limited vegetation clearance. Access arrangements would be refined by the Principal Contractor, with methods selected to respond to ground conditions, construction loading requirements, environmental constraints and the need to minimise disturbance where practicable;
 - **Phase 2 – Construction Works:** This phase would comprise the main construction activities associated with the Proposed Development, including the installation of tower foundations, assembly and erection of steel lattice towers, and conductor stringing. Foundation solutions would be determined following detailed geotechnical investigation and may include conventional pad and column foundations, steel grillages, piling, mini piles or rock anchors, depending on local ground conditions. Tower working areas, crane pads, piling pads, laydown areas and temporary protection measures would be established as required to facilitate safe tower erection and stringing operations;
 - **Phase 3 – Commissioning:** This phase would involve inspection, testing and snagging of the newly constructed OHL and associated support towers to confirm that the works have been completed in accordance with the required specification. The circuits would then be energised from the New Deer and Netherton Hub substations in a controlled, phased sequence, enabling the new infrastructure to become operational prior to the removal of redundant elements of the existing OHL;
 - **Phase 4 – Removal of Existing OHL Sections:** Once the new OHL is operational, redundant sections of the existing 400 kV New Deer to Peterhead OHL would be dismantled. This would include removal of conductors and insulators between the points of diversion, followed by the controlled dismantling and removal of 12 redundant towers. Materials would be recovered using suitable plant, ATV access or helicopter extraction where required. Tower leg stubs and concrete foundations would be removed to approximately 1.2 m below ground level, with remaining foundation material buried in situ prior to ground reinstatement; and
 - **Phase 5 – Reinstatement:** This final phase would restore construction areas following completion of the works and would form part of the Principal Contractor's contractual obligations. Reinstatement would include the removal of temporary tower diversions, temporary access tracks, tower working areas and

construction compounds, together with soil replacement, grading, drainage installation where required, turf replacement, natural regeneration and targeted seeding where necessary to stabilise disturbed ground and support vegetation recovery. It is not envisaged that any hedges, trees or woodland would be removed as part of the works.

5.2.5 The LVIA, including the Cumulative Landscape and Visual Assessment, has been prepared by Chartered Landscape Architects at WSP. Its purpose is to identify and evaluate the likely effects of the Proposed Development on landscape character and visual amenity. The assessment considers the following receptor groups:

- Landscape character, including key characteristics, constituent elements and perceptual qualities;
- Designated landscapes; and
- Views and visual amenity experienced by residents, visitors, recreational users, tourists and users of transport routes.

5.2.6 This chapter is supported by the following figures and technical appendices.

Figures (Volume 2)

- **Figure 5.1: Site Location and LVIA Study Area;**
- **Figure 5.2: Zone of Theoretical Visibility and LVIA Study Area;**
- **Figure 5.3: Landscape Character Areas;**
- **Figure 5.4: Landscape Planning Designations and Classifications; and**
- **Figure 5.5: Visual Receptors**

Visualisations (Volume 2)

- **Figure 5.6a-c: VPT1 – Mill Hill Farm, Looking East;**
- **Figure 5.7a-c: VPT2 – Clayhills Farm Lane, Looking East;**
- **Figure 5.8a-c: VPT3 – Core Path West of Longside Junction with Minor Highway;**
- **Figure 5.9a-c: VPT4 – A950 Looking West Towards Netherton Hub;**
- **Figure 5.10a-f: VPT5 – Parkhill Looking North West;**
- **Figure 5.11a-f: VPT6 – Toddlehills Looking West; and**
- **Figure 5.12a-i: VPT7 – Nether Kinmundy**

Technical Appendices (Volume 3)

- **Appendix 5.1: Landscape and Visual Assessment Methodology and Glossary; and**
- **Appendix 5.2: Viewpoint Analysis**

5.3 Relevant Legislation and Planning Policy

5.3.1 The LVIA has been prepared with regard to the relevant legislative and planning policy framework applicable to the Proposed Development, including the Town and Country Planning (Scotland) Act 1997, the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, National Planning Framework 4 (NPF4) (Scottish Government, 2023), the Aberdeenshire Local Development Plan 2023, and relevant Aberdeenshire Council planning advice relating to onshore wind energy development and landscape sensitivity. These matters are considered further in **Chapter 3: Planning Context (Volume 1)**.

Legislation and National Planning Policy

5.3.2 The scope and methodology of the LVIA, including proposed mitigation measures, reflect relevant national and regional planning policies. A comprehensive review of these policies is provided in **Chapter 3: Planning Context (Volume 1)**.

National Planning Framework 4

- 5.3.3 NPF4 now forms part of the statutory development plan for any area in Scotland.
- 5.3.4 Relevant landscape policies in NPF4 include:
- Policy 1 Tackling the Climate and Nature crisis;
 - Policy 3 Biodiversity;
 - Policy 4 Natural places;
 - Policy 6 Forestry, woodland, and trees; and
 - Policy 11 Energy.
- 5.3.5 In relation to the project design and LVIA, Policy 11, 'e' advises that "In addition, project design and mitigation will demonstrate how the following impacts are addressed:
- "...ii. significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/or appropriate design mitigation has been applied, they will generally be considered to be acceptable;

Aberdeenshire Council Planning Policy

Aberdeenshire Local Development Plan 2023

- 5.3.6 The Aberdeenshire Local Development Plan 2023 was adopted on 13 January 2023 and forms part of the statutory development plan for the area, alongside NPF4. The LDP sets out the local planning framework for managing development across Aberdeenshire, including the Buchan area to the west of Peterhead. Where there is any incompatibility between the LDP and NPF4, NPF4 takes precedence. The key LDP policies of relevance to the landscape and visual assessment of wind energy development and associated infrastructure include:
- Policy C2 Renewable Energy supports appropriately located renewable energy development where it can be demonstrated that the proposal has been sited and designed to avoid, reduce or otherwise appropriately mitigate unacceptable environmental, landscape, visual, amenity and cumulative effects.
 - Policy E2 Landscape requires development proposals to respond positively to landscape character and visual amenity, with consideration given to the siting, scale, design and mitigation of development in the receiving landscape.
 - The LDP therefore requires the Proposed Development to be assessed in terms of its effects on landscape character, landscape designations, visual amenity, public access routes and cumulative landscape and visual effects, as relevant to the site and surrounding context.

5.4 Consultation Undertaken to Date

- 5.4.1 Consultation relevant to the Landscape and Visual Impact Assessment (LVIA) is summarised in **Table 5.1** below. During the EIA scoping stage, targeted consultation was undertaken to confirm the scope and appropriate level of assessment required for the EIA. Engagement with Aberdeenshire Council (AC) and the Scottish Government Energy Consents Unit (ECU) considered matters including assessment methodology, baseline information sources, viewpoint selection, the geographical extent of the assessment, and cumulative development. A summary of the consultation responses received is provided in **Table 5.1**, with further detail presented in **Chapter 4: Appraisal Scope (Volume 1)**. The responses set out in the table below have been reviewed and addressed as appropriate and have informed the subsequent assessment process.

Table 5.1: Summary of consultation undertaken

Organisation	Type of Consultation	Response	Response/ Action Taken
Scottish Government Energy Consents Unit (ECU)	Screening response/July 2024	<i>“Visual and landscape impacts are likely impacts.</i> <i>Cumulative/sequential impact may be experienced by local residents given other energy developments within the area. Noise and LVIA assessment would be expected to consider cumulative impact.</i> <i>There will be a visual impact as a result of the proposed development. Increased noise is likely to occur. Detailed proposals would be needed to determine the nature and extent of impacts, but if constructed there is a potentially significant impact on landscape and visual impact.”</i>	Noted. Given the potential for landscape and visual effects, a proportionate hybrid approach has been adopted within the wider Environmental Assessment. While other technical disciplines have been reported on a non-EIA basis, it was agreed that the landscape and visual chapter should be prepared as a Landscape and Visual Impact Assessment (LVIA) to meet EIA requirements. It will therefore assess the level and significance of effects and their nature in terms of whether they are direct / indirect, temporary / permanent, positive or negative and / or cumulative. The LVIA accords with the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3). The detailed assessment methodology is set out in Section 5.5, below and Appendix 5.1: Landscape and Visual Impact Assessment Methodology and Glossary (Volume 3). A cumulative assessment has therefore been undertaken and is presented in Section 5.11.
Aberdeenshire Council	Screening response/July 2024	<i>“It is the view of the Planning Service that the development, will have landscape and visual impacts that will be required to be fully addressed, does not constitute an EIA development. The assessment of landscape and visual impact will need to address cumulative impacts, which are significant in this area of energy development pressure.”</i>	Noted, as set out above.
ECU/Aberdeenshire County Council (ACC)	Email issued to ECU November 2025	Response received from ACC 22nd January 2026 <i>“In terms of the SSE New Deer 400kV OHL Netherton Hub to Peterhead proposal, it appears that there will be two applications for a 'Tie In' and a 'Rebuild'. Two</i>	Noted. In March 2026, SSE Transmission provided further information confirming the extent and nature of the Proposed Development. The assessment presented in this chapter has therefore considered the full extent of the Proposed Development, including the detailed description of works set out in Section

Organisation	Type of Consultation	Response	Response/ Action Taken
		<i>figures numbered 5.2 have been produced by the Applicant showing assessment viewpoints for each of these proposals. I am unclear what works each application comprises and it would be useful for SSE to provide us with a description of each scheme, clarifying the works that will be undertaken and illustrating on plans where sections of the existing OHL may be permanently removed (if any).</i> <i>I am satisfied with the LVIA methodology attached in the Appendix document submitted by WSP and with the representative viewpoint locations selected. The Study Area set for the LVIA is 10km which although seems excessive when considering the likely extent of visual influence of a 400kV lattice transmission line, will be useful in determining potential cumulative landscape and visual effects with the many other energy related developments in the planning system between Netherton and Peterhead."</i>	5.2.6, together with the removal of a short section of the existing New Deer to Peterhead 400 kV overhead line, as illustrated on Figure 5.1: Site Location and LVIA Study Area (Volume 2). The agreement of the ECU and ACC with the LVIA methodology, Study Area and representative viewpoint locations is welcomed and noted. The 10 km Study Area has been adopted as a precautionary basis for assessment, reflecting a robust worst case approach to the identification and appraisal of potential landscape and visual receptors. The Study Area is however supported by viewpoint analysis to inform the likely extent of significant effects and inform the baseline selection and subsequent assessment. Together they provide an appropriate spatial framework within which to test the potential for landscape and visual effects. The approach is consistent with the principles set out in GLVIA3, which recognises the need for landscape and visual assessment to be informed by professional judgement, proportionate evidence gathering and clear reasoning, and with NatureScot guidance on cumulative landscape and visual assessment, which emphasises the importance of identifying relevant cumulative schemes, appropriate study areas, representative viewpoints and sequential receptors where cumulative interactions may arise. Further detail on the cumulative assessment methodology, including the criteria used to identify schemes for inclusion and the approach to assessing cumulative landscape and visual effects, is provided in Appendix 5.1: Landscape and Visual Impact Assessment Methodology and Glossary (Volume 3).

5.5 Approach to Assessment

Scope of Assessment

- 5.5.1 The scope of the assessment has been defined through the scoping process, with additional details available in **Chapter 4: Appraisal Scope (Volume 1)**. This section provides an updated overview of the assessment scope and clarifies the evidence base for excluding certain matters, following comprehensive analysis and

iterative review. A list of the landscape and visual receptors scoped into the LVIA is set out in Section 5.6. It includes areas of landscape character, residential, transport and recreational receptors.

Receptors/ Matters Scoped Out of Further Assessment

- 5.5.2 **Table 5.2** presents the receptors and matters that have been excluded from further assessment, accompanied by a clear and robust justification for their exclusion.

Table 5.2: Items scoped out of the Landscape and Visual Impact Assessment

Issues Scoped out of Assessment	Phase	Justification
Landscape Character: National Parks, National Scenic Areas and Wild Land Areas	<i>Construction and Operation</i>	There are no such designations within the 10km Study Area therefore these designations are outwith the scope of this LVIA.
Landscape Character: Northeastern Aberdeenshire Coast Special Landscape Area (SLA)	<i>Construction and Operation</i>	The SLA encompasses sections of the Aberdeenshire coast and its immediate hinterland to the north and south of Peterhead, approximately 6 km to 9 km east of the Proposed Development. Owing to distance, intervening landform, built form and vegetation, significant effects on local landscape character, special landscape qualities and visual amenity are unlikely.
Landscape Character Types (LCT)	<i>Construction and Operation</i>	LCT 11 Fragmented Rocky Coast is located approximately 4.9 km to the east of the Proposed Development. At this distance, and in the context of intervening topography, vegetation and built form, significant effects on this LCT are unlikely. This is supported by the limited and fragmented Zone of Theoretical Visibility (ZTV) shown on Figure 5.2: Zone of Theoretical Visibility and LVIA Study Area (Volume 2), Pages 2 and 4. LCT 12 Beaches, Dunes and Links is located approximately 3.9 km to the east. Given the intervening topography, vegetation and built form, significant effects on this LCT are unlikely. This is supported by the ZTV shown on Figure 5.2: Zone of Theoretical Visibility and LVIA Study Area (Volume 2). LCT 20 Undulating Agricultural Heartland is located approximately 3.0 km to the east. Figure 5.2: Zone of Theoretical Visibility and LVIA Study Area (Volume 2), indicates that a limited part of this LCT may have distant theoretical visibility of the Proposed Development. The wider LCT would remain largely unaffected due to intervening local topography, vegetation and built form. Significant effects on LCT 20 are therefore unlikely.
Visual Receptors: Receptors beyond 10 km from the Site boundary	<i>Construction and Operation</i>	These receptors are outwith the 10km Study Area. Fieldwork undertaken during the early stages of the assessment confirmed that, while the Proposed Development may be visible from locations beyond 10 km, significant visual effects are very unlikely beyond this distance from the

Issues Scoped out of Assessment	Phase	Justification
		Site boundary. This conclusion is informed by site reconnaissance and professional judgement.
Visual Receptors: Specific Residential Properties	<i>Construction and Operation</i>	Residential properties at Netherton Farm and ruin, Inverveddie House, Invereddie Cottage, Longside, Langlands and Tiffery are located within or in close proximity to the Netherton Hub development. These properties have been acquired by SSEN Transmission. Accordingly, they have been excluded from the scope of the LVIA. Netherton Farm is semi-derelict and ruinous and is understood to be due for demolition.
Visual Receptors: Derelict Properties	<i>Construction and Operation</i>	Several derelict farmsteads are present within the Study Area. At the time of assessment, their future use and function, including any potential redevelopment, are unknown. On this basis, these properties have been excluded from the scope of this report.
Visual Receptors: Recreational Routes	<i>Construction and Operation</i>	Core Paths located within and along the western edge of Peterhead have been scoped out, as they lie approximately 4 km to 5 km east of the Proposed Development. Significant visual effects are unlikely due to intervening topography, vegetation and built form.
Visual Receptors: Aberdeenshire Coastal Trail	<i>Construction and Operation</i>	The Aberdeenshire Coastal Trail, a regional scenic tourist route, is located approximately 5 km to the east of the Proposed Development. Owing to distance and the screening influence of intervening vegetation and topography, significant visual effects are not anticipated, and this receptor has been scoped out of the assessment.
Visual Receptors: beyond 2 km	<i>Construction and Operation</i>	Viewpoint analysis indicates that significant visual effects are likely to occur within 1.5-2km of the Proposed Development. Therefore, the assessment of visual receptors (residential, transport and recreation) beyond 2 km from the Study Area are unlikely to experience significant visual effects, principally due to separation distance, undulating landform and intervening vegetation.
Visual receptors: Tourist / visitor attractions that include local landmarks, Gardens and Designed Landscapes (GDL) that are accessible to the public, National Trust and Historic Environment Scotland sites. Other venues for team sports or recreational / tourist destinations where the primary activities do not focus on the landscape or occur indoors (such as museums, libraries, and gift shops).	<i>Construction and Operation</i>	These receptors have been excluded from the LVIA. There are no official tourist designations within the 10 km Study Area and no GDLs, National Trust and Historic Environment Scotland sites within the Study Area. Team sports and indoor activities are not relevant to LVIA and would not be adversely affected by landscape or visual effects.

Issues Scoped out of Assessment	Phase	Justification
Landscape and Visual: Night time Assessment	<i>Construction and Operation</i>	No permanent lighting is anticipated during operation, and access roads would not be lit. Emergency floodlighting would be installed for health and safety purposes. This would only be deployed in the event of an emergency. As such, no material light pollution effects are anticipated, and a nighttime visual assessment has been scoped out. Nighttime construction working is also not anticipated to be required; therefore, assessment of temporary construction lighting has also been scoped out.
Scope of Cumulative Assessment	<i>Construction and Operation</i>	Drawing from the results of the LVIA, a reduced study area for further cumulative assessment has been selected at 3 km. This area is sufficient to contain all significant landscape and visual effects likely to result from the Proposed Development and includes an additional buffer. The scope for the cumulative assessment is therefore reduced to 3 km, affording a proportionate approach to the assessment.
Cumulative Assessment	<i>Construction and Operation</i>	The underground cable projects connecting into Netherton Hub, including Spittal to Peterhead, EGL3 and EGL5, Buchan Offshore Wind Farm, Green Volt Offshore Wind Farm and Marram Wind Offshore Wind Farm, have been omitted from the cumulative assessment. Once operational, these works would be underground and would therefore have limited landscape and visual effects beyond the construction period.

5.5.3 Effects associated with the decommissioning of the Proposed Development have been scoped out of the assessment, as the Proposed Development is considered to represent a permanent addition to the landscape. Should decommissioning occur, any associated effects are expected to be comparable to, or less significant than, those identified for the construction phase.

Assessment Methodology

5.5.4 The assessment methodology is set out in **Appendix 5.1: Landscape and Visual Impact Assessment Methodology and Glossary (Volume 3)**, which includes a glossary of terms and describes the approach adopted for Viewpoint Analysis. The findings of the Viewpoint Analysis are presented separately within **Appendix 5.2: Viewpoint Analysis (Volume 3)**.

5.5.5 The LVIA methodology accords with GLVIA3⁷ and other relevant guidance the main ones of which are listed below:

- Landscape Institute and Institute of Environmental Management and Assessment's 'Guidance for Landscape and Visual Impact Assessment – Third Edition' (GLVIA3) (2013)¹;
- Landscape Institute Technical Guidance Note 01/24 'Notes and Clarifications on aspects of the 3rd Edition Guidelines for Landscape and Visual Impact Assessment (GLVIA3)²;

¹ Landscape Institute. and IEMA, 2013. Guidelines for Landscape and Environmental Impact Assessment. Hoboken: Taylor and Francis.

² Landscape Institute (2024). Notes and Clarifications on aspects of the 3rd Edition Guidelines on Landscape and Visual Impact Assessment (GLVIA3) LITGN-2024-01. [online] Available at: www.landscapeinstitute.org/technical-resource/notes-and-clarifications-on-aspects-of-the-3rd-edition-guidelines-on-landscape-and-visual-impact-assessment-glvia3-litgn-2024-01/

- NatureScot Guidance: Assessing the Cumulative Landscape and Visual Impact of Onshore Wind Energy Developments NatureScot (2021)³;
- Landscape Institute's 'Technical Guidance Note 06/2019: Visual Representation of Development Proposals' (2019)⁴.
- NatureScot Landscape Sensitivity Assessment Guidance (Methodology)⁵ ;

Data/ Information Sources

5.5.6 The LVIA utilises data/ information gathered from the following sources:

- Ordnance Survey Terrain 5 m Digital Terrain Model (DTM);
- Ordnance Survey mapping (1:25,000, 1:50,000);
- Fieldwork survey carried out in February 2026;
- Commercially available aerial photography;
- NatureScot Landscape Character Types⁶;
- Aberdeenshire Council: Aberdeenshire Local Development Plan (LDP)**Error! Bookmark not defined.** and
- Aberdeenshire Council: Public access - planning and building register in relation to cumulative data.
- Computer generated ZTVs (based on 5 m DTM data);
- Site photography; and
- Google Street View⁷

5.5.7 Data was verified during field reconnaissance undertaken in February 2026.

Defining the LVIA Study Area

5.5.8 It is standard practice to define the Study Area for the Proposed Development with reference to the anticipated extent of theoretical visibility, informed by the Zone of Theoretical Visibility (ZTV), the Red Line Boundary (RLB), and professional judgement regarding the scale and nature of the proposed infrastructure. For the purposes of this LVIA, a Study Area extending 10 kilometres (km) from the outermost overhead line towers has been adopted. This provides a proportionate and suitably comprehensive spatial framework within which to identify and assess potentially significant landscape and visual effects. The extent of the Study Area has been informed by an understanding of the receiving landscape character within the Aberdeen and wider Aberdeenshire context, the scale of the proposed construction and operational development, and a review of study areas applied to comparable transmission infrastructure projects within northeast Scotland.

5.5.9 The same 10 km Study Area has been applied to the cumulative assessment to ensure a consistent and robust approach to the consideration of potential cumulative landscape and visual effects.

5.5.10 It should be noted that the boundary of the LVIA Study Area does not represent the outer limit of all potential visibility. Rather, it establishes the geographic scope within which potentially significant landscape and visual effects are most likely to arise and can be assessed in a focused, proportionate and technically robust manner. The Study Area has therefore been defined to provide an appropriate basis for assessing transmission infrastructure within the receiving landscape context, while ensuring that the LVIA remains appropriately scoped and responsive to the likely extent of material effects.

3 NatureScot. (2021). Guidance: Assessing the Cumulative Landscape and Visual Impact of Onshore Wind Energy Developments. NatureScot. Available at: www.nature.scot/doc/guidance-assessing-cumulative-landscape-and-visual-impact-onshore-wind-energy-developments

4 Landscape Institute 2019. Visual Representation of Development Proposals. 1st ed. Landscape Institute.

5 NatureScot. Landscape Character Assessment: Aberdeenshire - Landscape Evolution and Influences. [Online] Available at: <https://www.nature.scot/doc/landscape-character-assessment-aberdeenshire-landscape-evolution-and-influences>

6 NatureScot, (2019). Scottish Landscape Character Types Map and Descriptions. [Online] Available at: <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions>

7 Google Maps (2026). Available at <https://www.google.com/maps> (Accessed: February 2026)

Viewpoint Selection

5.5.11 A series of assessment viewpoints (VPs) was selected to inform the assessment of visual effects from representative locations within the study area. The viewpoints were chosen to illustrate the range of sensitive landscape and visual receptors with potential visibility of the Proposed Development, as identified through the Zone of Theoretical Visibility (ZTV) and verified through baseline review and fieldwork. In order to substantiate the baseline appraisal and assessment findings, seven assessment viewpoints were identified and assessed (refer to **Figure 5.5: Visual Receptors (Volume 2)**). The selected viewpoints were chosen with regard to their:

- Distance, elevation and orientation relative to the Proposed Development;
- Capacity to represent relevant landscape character, landscape features and special qualities; and
- The ability to demonstrate the nature, composition and experience of views available to key visual receptors.

LVIA Approach

5.5.12 As detailed in **Section 5.4, Table 5.1**, above, the wider environmental assessment for the Proposed Development is being prepared on a non-EIA basis. A standalone LVIA has been undertaken to provide a proportionate and transparent appraisal of landscape and visual matters.

5.5.13 The scope of the LVIA, including the 10 km Study Area, methodology and representative viewpoint locations, has been agreed with the ECU and AC.

LVIA Assessment Stages

5.5.14 The LVIA assesses the following construction and operational phases of the Proposed Development:

- **Construction Phase** – This stage extends from site mobilisation through to the practical completion of the works. The assessment considers the temporary alterations to landscape character arising from construction activity, including the presence and operation of plant and machinery, movement of construction personnel, delivery and storage of materials, and the installation of key infrastructure components. Temporary construction elements, including access routes, site compounds and stockpiles, are also considered, together with potential short-term effects on views and visual amenity experienced by surrounding visual receptors; and
- **Year 1 (Operational Commencement)** – This stage immediately follows construction handover and represents the initial operational period of the Proposed Development. The assessment considers the completed permanent infrastructure, including the OHL pylons and associated vertical components, permanent vegetation removal within the 90 m operational wayleave, and established permanent access tracks of the Proposed Development.
- The removal of a short section of the existing New Deer to Peterhead OHL located between the 'In' leg and 'Out' leg sections of the Proposed Development will result in localised beneficial landscape and visual effects as part of the rationalisation of this part of the electrical network.

5.5.15 The assessment of the Proposed Development includes two parts. The first is a 'comparative assessment', which compares the Proposed Development to the existing New Deer to Peterhead OHL which would be removed. This is useful because it explains the extent of change that would be apparent. The second assessment assesses the Proposed Development on a stand-alone or individual basis, which does not take account of any removed sections of the New Deer to Peterhead OHL. This part of the assessment is useful because it allows a clear basis for the cumulative assessment that follows, where each cumulative development is assessed on the same basis. It also provides a clear assessment of the stand-alone effects, regardless of any influence related to the removed section of the New Deer to Peterhead OHL, which may be greater or lesser than the Proposed Development, or not visible from the particular viewpoint or receptor.

Landscape Effects

5.5.16 Landscape effects are defined by the Landscape Institute in GLVIA3, paragraphs 5.1 and 5.2, as follows:

- 5.5.17 *“An assessment of landscape effects deals with the effects of change and development on landscape as a resource. The concern ... is with how the proposal will affect the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character. ... The area of landscape that should be covered in assessing landscape effects should include the site itself and the full extent of the wider landscape around it which the Proposed Development may influence in a significant manner.”*
- 5.5.18 The potential landscape effects occurring during the construction and operation period may therefore include, but are not restricted to, the following:
- Changes to landscape elements: the addition of new elements (in this case towers and OHL) or the removal of existing elements such as trees, vegetation and buildings and other characteristic elements of the landscape character type;
 - Changes to landscape qualities: degradation or erosion of landscape elements and patterns and perceptual characteristics, particularly those that form key characteristic elements of landscape character types/areas or contribute to the landscape value;
 - Changes to landscape character: landscape character may be affected through the incremental effect on characteristic elements, landscape patterns and qualities (including perceptual characteristics) and the addition of new features, the magnitude of which is sufficient to alter the overall landscape character within a particular area; and
 - Cumulative landscape effects: where more than one wind farm may lead to a potential landscape effect.

Visual Effects

- 5.5.19 Visual effects are concerned wholly with the effect of the development on views and general visual amenity and are defined by the Landscape Institute in GLVIA3, paragraph 6.1, as follows:
- 5.5.20 *“An assessment of visual effects deals with the effects of change and development on views available to people and their visual amenity. The concern ... is with assessing how the surroundings of individuals or groups of people may be specifically affected by changes in the context and character of views.”*
- 5.5.21 Visual effects are identified for different receptors (people) who would experience the view at their places of residence, during recreational activities, at work, or when travelling through the area. The visual effects may include the following:
- Visual effect: a change to an existing static view, sequential views, or wider visual amenity as a result of development or the loss of particular landscape elements or features already present in the view; and
 - Cumulative visual effects: the cumulative or incremental visibility of similar types of development combining to have a cumulative visual effect.

Landscape and Visual Impact Assessment

- 5.5.22 Landscape and visual effects, including whether such effects are significant, are determined through an assessment of the sensitivity of each receptor or receptor group and the magnitude of change that would arise as a result of the Proposed Development. Receptor sensitivity is informed by consideration of landscape or visual value, together with the susceptibility of the receptor to the type and scale of development proposed. Magnitude of change is assessed with reference to the size and scale of the change, its geographical extent, and the degree to which the Proposed Development would alter the baseline conditions experienced by the receptor. Additional considerations, including the duration, reversibility, and cumulative nature of effects, are reported separately where relevant. By combining judgements on sensitivity and magnitude of change, the level and nature of landscape or visual effect can be identified, and the significance of that effect determined in accordance with established LVIA methodology.
- 5.5.23 The resulting level of effect is described as significant or not significant, as appropriate. The nature of each effect is further defined with reference to whether it is direct or indirect, temporary or permanent, reversible or irreversible, cumulative, and beneficial, neutral, or adverse. The assessment also considers the potential

for cumulative landscape and visual effects arising from the Proposed Development in combination with other existing, consented, and proposed wind energy developments within the relevant study area.

- 5.5.24 LVIA necessarily involves the application of both quantitative analysis and informed professional judgement. Wherever possible, judgements have been supported by consultation, internal technical review, and the consistent application of a systematic, transparent, and impartial assessment approach.

Cumulative Landscape and Visual Impact Assessment

- 5.5.25 The assessment of cumulative effects follows the same overarching principles as the LVIA of the individual Proposed Development assessed on a solus basis. The level of landscape and visual effect is determined through consideration of the sensitivity of the landscape or visual receptor and the magnitude of change arising. The cumulative assessment, however, considers the extent to which change may occur as a result of multiple developments and whether the Proposed Development would give rise to additional or combined landscape and visual effects in conjunction with other relevant schemes.
- 5.5.26 The cumulative assessment includes existing and consented energy-related infrastructure developments and proposed energy-related infrastructure which is supported by a registered planning application within 3 km of the Proposed Development, as identified in **Section 5.5, Table 5.2**.
- 5.5.27 The cumulative assessment accords with GLVIA3 and also takes account of NatureScot guidance (2021)¹⁰. The cumulative assessment has been prepared to ensure that, in addition to the effects of the Proposed Development considered within the LVIA, both 'additional' cumulative effects and 'combined' cumulative effects are reported. The assessment considers the following two cumulative scenarios:
- **Scenario 1: Existing + Consented + the Proposed Development:** The additional and combined cumulative landscape and visual effects of existing and consented developments, together with the Proposed Development, are assessed; and
 - **Scenario 2: Existing + Consented + Applications + the Proposed Development:** The additional and combined cumulative landscape and visual effects of existing and consented developments, together with relevant applications and the Proposed Development, are assessed.
- 5.5.28 Whilst the existing development is already part of the baseline, selected OHLs and related energy infrastructure have been included in the assessment to ensure a transparent assessment of the potential for cumulative effects, such as wirescape, is included in the LVIA. A 'wirescape' may result from a cumulative concentration of OHLs appearing in one area. As a worst case, the number of OHLs may increase to a level that is overwhelming and appear as a dominant and negative characteristic. It can result from the cumulative effects of new development and existing OHLs, usually on transmission towers, as well as consented development and other related development which is the subject of a planning assessment. For this reason, selected existing OHLs with the potential for increased wirescape have been included in the cumulative assessment. In addition, the cumulative assessment has regard to the timescales and consented operational periods of the consented developments within 3 km of the Proposed Development, as identified in **Section 5.5, Table 5.2**, where relevant to the assessment of cumulative landscape and visual effects.

Evaluation of Significance and Nature of Effect

- 5.5.29 In accordance with the relevant EIA Regulations, it is important to determine whether the effects assessed as a result of the Proposed Development are likely to be significant. Significant landscape and visual effects would be highlighted in bold in the text and, in most cases, relate to all those effects that result in a '**Substantial**', '**Major**' or '**Major to Moderate**' effect, as indicated in **Table 5.3** (and shaded dark grey). '**Moderate**' levels of effect (shaded grey) can also be assessed as significant, subject to the assessor's opinion, which should be clearly explained as part of the assessment.
- 5.5.30 White or unshaded boxes in **Table 5.3** indicate a non-significant effect. Where no effect is identified, the magnitude of change has been recorded as 'Zero' and the level of effect as 'None' or 'No View', as appropriate. Intermediate levels of magnitude and effect may also be applied within the LVIA, as shown in **Table 5.3** in italics, for example High – Medium magnitude of change or a Substantial to Major level of effect.

Table 5.3: Evaluation of Landscape and Visual Effects

Magnitude of Change	Landscape and Visual Sensitivity		
	High	Medium	Low
High	Substantial	Major	Moderate
High - Medium	Substantial to Major	Major to Moderate	Moderate to Minor
Medium	Major	Moderate	Minor
Medium - Low	Major to Moderate	Moderate to Minor	Minor
Low	Moderate	Minor	Negligible
Low – Very Low	Moderate to Minor	Negligible	Negligible
Very Low	Minor	Negligible	Negligible
Zero	None/ No View		

5.5.31 In accordance with the EIA Regulations the type or nature of effect is also described in terms of whether it is direct or indirect; its duration (temporary / permanent or reversible) cumulative; and whether the effect is positive, neutral, or negative.

Cumulative Development

5.5.32 The baseline of other transmission and wind energy developments scoped into the assessment has been informed by Aberdeenshire Council planning records, the Scottish Government Energy Consents Unit (ECU), and information published by other transmission and wind energy developers, up to the working cut off date of 31st March 2026.

5.5.33 In total, nine additional transmission and other largescale developments have been incorporated into the cumulative landscape assessment, as detailed in **Table 5.4** and illustrated in **Figure 12.1: Cumulative Developments (Volume 2)**. As of 31st March 2026, the LVIA Study Area contains three operational transmission or largescale energy developments, one consented development, and five applications currently under consideration. In accordance with NatureScot guidance, proposals at scoping stage have been omitted, as have micro generation renewable energy schemes, including small scale hydroelectric developments.

Table 5.4: Cumulative Developments included within the CLVIA

Name	Distance (m)	Host Landscape Character Typology
Existing Transmission/ Largescale Development within 3 km		
Existing 132 kV OHL	1990	<i>LCT17: Coastal Agricultural Plain – Aberdeenshire; and LCC: Peterhead Urban Fringe</i>
Existing 275 kV OHL	1340	<i>LCT17: Coastal Agricultural Plain – Aberdeenshire; and LCC: Peterhead Urban Fringe</i>
Existing New Deer to Peterhead 400 kV OHL	0	<i>LCT20: Undulating Agricultural Heartland; LCT21: Farmed and Wooded Policies; and LLCS: Peterhead Urban Fringe</i>
Consented Transmission/ wind Energy Development within 3 km		
Netherton Hub, 400 kV Substation and Converter Station (Development 3 on Figure 12.1: Cumulative Developments (Volume 2))	0	<i>LCT17: Coastal Agricultural Plain – Aberdeenshire</i>
Application/ In-planning Transmission/ Wind Energy Development within 3 km		

Name	Distance (m)	Host Landscape Character Typology
West of Greystone, BESS and Peterhead Flexpower 500 MW BESS (Development 1 & 10 on Figure 12.1: Cumulative Developments (Volume 2))	2,325	<i>LCT17: Coastal Agricultural Plain – Aberdeenshire</i>
Flushing BESS (Development 4 on Figure 12.1: Cumulative Developments (Volume 2))	1,271	<i>LCT17: Coastal Agricultural Plain – Aberdeenshire</i>
New Deer 400 kV OHL Diversion ‘Rebuild’ (Development 9 on Figure 12.1: Cumulative Developments (Volume 2))	0	<i>LCT17: Coastal Agricultural Plain – Aberdeenshire; and LCC: Peterhead Urban Fringe</i>
Netherton BESS (Development 11 on Figure 12.1: Cumulative Developments (Volume 2))	0	<i>LCT17: Coastal Agricultural Plain – Aberdeenshire</i>
Beaully to Peterhead 400 kV OHL (Development 12 on Figure 12.1: Cumulative Developments (Volume 2))	80	<i>LCT17: Coastal Agricultural Plain – Aberdeenshire; and LCT21: Farmed and Wooded Policies</i>

Zone of Theoretical Visibility and Viewpoint Analysis

- 5.5.34 Prior to undertaking the main assessment, ZTV and viewpoint analysis were employed to refine the scope of the evaluation process. Specifically, a significance threshold, representing the distance from the Proposed Development within which significant effects are considered likely, has been established. This threshold has informed the collation of baseline data and the detailed reporting presented in this chapter.

ZTV Analysis

- 5.5.35 The ZTV has been generated utilising ReSoft® WindFarm computer software to delineate areas with potential visibility of any element of the Proposed Development, calculated to tower height and incorporating any vertical Level of Deviation (LOD) or selected infrastructure. It should be noted, however, that the ZTV does not account for existing built structures or vegetation, both of which can substantially diminish the actual extent and area of visibility experienced on the ground. Consequently, the ZTV defines the outer limits for the visual assessment within the LVIA Study Area. As such, there may be roads, tracks and footpaths within the broader setting that, while indicated as being within the ZTV, offer limited visibility due to significant screening or filtering from banks, walls or vegetation. Therefore, the ZTVs serve as an initial tool in the assessment process and, as a result, may overstate the potential visibility of the Proposed Development.

ZTV Analysis: Proposed Development

- 5.5.36 The pattern of theoretical visibility for the Proposed Development reflects the underlying landform of the wider 10 km Study Area, which is characterised by a patchwork of rolling agricultural hills across Aberdeenshire.
- 5.5.37 The ZTV for the Proposed Development, as illustrated on **Figure 5.2: Zone of Theoretical Visibility and LVIA Study Area (Volume 2)**, indicates widespread theoretical visibility, extending across well over half of the Study Area. The majority of the Study Area, including its central extent, is defined by a patchwork of agricultural fields set within a gently undulating landscape, interspersed with hedgerows, shelterbelts, individual properties and settlements. In combination, these features would provide a degree of intervening visual screening and would serve to limit the extent of visibility experienced in actual views.
- 5.5.38 Largescale transmission infrastructure is an established component of the receiving landscape, alongside small to medium scale wind energy development, with several operational developments present and further schemes either consented or at the planning stage, including Netherton Hub. Agricultural fields, hedgerows and shelterbelts form the dominant land use and land cover across the Study Area. Beyond approximately 6 km to the south, southeast and southwest, theoretical visibility is more limited and is

generally restricted to more elevated locations at greater distance. From these locations, any views of the Proposed Development would be experienced as part of expansive, long range panoramic views extending northwards and eastwards across the surrounding landscape and towards the North Sea.

Viewpoint and Cumulative Viewpoint Analysis

- 5.5.39 The Viewpoint Analysis (refer to **Appendix 5.2: Viewpoint Analysis (Volume 3)**) has been undertaken from seven viewpoint locations, as depicted in **Figures 5.6a-5.12i (Volume 2)**. For each viewpoint, baseline photography and visualisations (photowires), comprising cumulative wirelines and/or photomontages, are presented in **Figures 5.6a-5.12i (Volume 2)**.
- 5.5.40 Cumulative transmission and wind energy developments within the LVIA Study Area, which would theoretically be visible from each viewpoint, are illustrated either within the baseline photography (showing existing infrastructure) or in cumulative photomontages (representing consented and/or proposed developments).

Potential for Significant Effects: Proposed Development

- 5.5.41 The viewpoint analysis identifies that significant visual effects are likely to arise from all seven assessed viewpoint locations within the study area where views of the Proposed Development would be available. These significant effects are associated with Viewpoints T1 to T7, where the combination of receptor susceptibility and value, together with the predicted magnitude of visual change, results in effects judged to be significant in accordance with GLVIA3.
- 5.5.42 The assessment concludes that significant visual effects would occur during both the construction and operational phases, although the nature and intensity of effects would vary according to viewpoint and receptor group. Construction phase effects are assessed as significant at all assessed viewpoints, reflecting the temporary but perceptible presence of construction activity, including cranes, plant, machinery, personnel movements, temporary access arrangements, conductor stringing, potential helicopter use, and the removal of sections of the existing 400 kV New Deer overhead line.
- 5.5.43 The greatest construction phase magnitude of change is identified at Viewpoint T7, where the change is assessed as High, resulting in a **Substantial** (significant) residual effect for residential receptors and a **Major** (significant) residual effect for general road users. High-Medium construction magnitude is also predicted at Viewpoints T5 and T6, giving rise to **Substantial to Major** (significant) residual effects for residential receptors and **Major to Moderate** (significant) effects for general road users.
- 5.5.44 Operational phase effects are also predicted to be significant at the majority of assessed viewpoints, particularly where the proposed steel lattice towers would form prominent new vertical infrastructure within relatively open or medium scale rural views. Significant operational effects are identified at Viewpoints T2, T3, T4, T5, T6 and T7, with the magnitude of operational change ranging from Medium-Low to Medium. Residual effects are typically assessed as **Major to Moderate** (significant) or **Major** (significant) for higher sensitivity receptors and, in several cases, **Moderate** (significant) for general road users.
- 5.5.45 Viewpoint T1 is the only assessed location where operational residual effects are not judged to be significant, with the magnitude of change assessed as Low due to limited actual visibility, intervening vegetation and the moderating influence of removing a section of the existing 400 kV New Deer overhead line. However, a significant construction phase effect is predicted for residential receptors at this location, due to the temporary visibility of construction activity and the *High* sensitivity of those receptors.
- 5.5.46 Receptors experiencing significant effects include residential receptors near Viewpoints T1, T2, T3, T5, T6 and T7; recreational users at Viewpoint T3, including users of Core Path 208.01; receptors travelling along the A950 at Viewpoint T4; and general road users at several locations where the predicted magnitude of change is sufficient to exceed the threshold of significance. Overall, significant effects associated with the Proposed Development are concentrated where views are relatively open, receptor sensitivity is *High*, and the proposed OHL towers and associated construction activity would be experienced as a noticeable or prominent change within the existing visual composition.

5.5.47 Potential for Significant Cumulative Effects

- 5.5.48 All assessed viewpoint locations have been reviewed in relation to cumulative visual effects under Scenario 1 and Scenario 2. Under Scenario 1, significant cumulative effects are predicted at Viewpoints T2, T3, T4, T5, T6 and T7, with Viewpoint T1 remaining not significant due to the limited additional and combined cumulative change associated with the Proposed Development.
- 5.5.49 For Scenario 1, the most notable cumulative effects occur where the Proposed Development would be experienced in combination with the consented Netherton Hub 400 kV Substation and Converter Station. This is particularly evident at Viewpoints T4, T6 and T7, where combined effects increase above those attributable to the Proposed Development alone, resulting in significant effects for higher sensitivity receptors and, in some cases, road users. Significant effects are also identified at Viewpoints T2, T3 and T5, albeit generally at lower levels for general road users.
- 5.5.50 Under Scenario 2, which includes existing, consented and in-planning developments, the potential for significant cumulative effects increases across the assessment. Significant combined cumulative visual effects are predicted at all viewpoint locations, with the exception of Viewpoint T1 for general road users only. The highest levels of effect are identified at Viewpoints T2, T4, T5 and T6, where the Proposed Development would be seen within a broader and more complex cumulative infrastructure context.
- 5.5.51 The principal contributors to the Scenario 2 cumulative effects are the in-planning Beaulay to Peterhead 400 kV overhead line and, in closer views, the in-planning Netherton BESS in combination with the consented Netherton Hub. These developments would increase the perceived extent, scale and complexity of electrical infrastructure, with the Beaulay to Peterhead 400 kV overhead line frequently appearing in close spatial association with the Proposed Development and contributing to a more pronounced wirescape character.
- 5.5.52 It is important to distinguish between additional cumulative effects arising from the Proposed Development and combined cumulative effects associated with the wider cumulative baseline. Across the assessment, the additional magnitude attributable to the Proposed Development is generally lower than, or comparable with, the combined cumulative magnitude. This indicates that the most substantial cumulative effects would principally arise from the interaction of the Proposed Development with larger consented and in-planning infrastructure, rather than from the Proposed Development in isolation.
- 5.5.53 The identified levels of cumulative effect relate specifically to the individual viewpoint locations assessed and should not be interpreted as representative of the wider visual experience across the study area. The viewpoints have been selected to represent locations where visibility, receptor sensitivity and the potential for cumulative interaction are typically greater. Consequently, the findings should be understood as applying to the specific views and receptor groups assessed, rather than indicating a uniform level of cumulative effect across the broader landscape.

Assumptions and Limitations

- 5.5.54 The following assumptions and limitation apply for this LVIA:
- Field reconnaissance was conducted from both publicly accessible areas and privately owned locations where permission had been obtained from landowners;
 - It is anticipated that any ground affected by temporary works would be restored to a condition closely resembling its original state upon completion;
 - The LVIA was conducted under the assumption of maximum visibility conditions, specifically on a clear, bright spring day without any major screening from deciduous foliage;
 - The ZTV, illustrated in **Figure 5.2: Zone of Theoretical Visibility and LVIA Study Area (Volume 2)**, is derived from a 'bare ground' Digital Terrain Model (DTM) to identify areas theoretically visible from the Proposed Development viewshed. It should be recognised that the ZTV does not account for potential screening or filtering effects caused by existing structures, forestry, woodland, roadside vegetation, distance, or weather conditions. These factors may diminish or screen visibility, thereby the ZTV reflects a worst case scenario with respect to the overall theoretical visibility of the Proposed Development. The

ZTV has been prepared based on the maximum heights of the Proposed Development, plus a 9 m for the proposed steel lattice pylons, taking into consideration the maximum vertical LOD (see **Figure 5.2: Zone of Theoretical Visibility and LVIA Study Area (Volume 2)**); and

5.6 Baseline Environment

Baseline Landscape Character

- 5.6.1 Within the 10 km Study Area, seven Landscape Character Types (LCTs) have been identified, two (including two sub-types) of which have been taken forward for assessment within the LVIA. **Figure 5.3: Landscape Character Areas (Volume 2)** illustrates the LCTs as classified by the NatureScot assessment (ref) and further developed within Aberdeenshire Council's *Landscape Sensitivity Assessment – Onshore Wind Energy Development* and demonstrates their relationship with the corresponding NatureScot landscape character classifications. While there is a degree of overlap between the respective landscape character typologies, Aberdeenshire Council's *Landscape Sensitivity Assessment* provides a more locally refined subdivision of landscape character and has therefore been used to inform the assessment of the value, susceptibility and overall sensitivity of the relevant LCTs. Detailed descriptions of the LCTs included within the LVIA are provided below.
- 5.6.2 Local landscape designations have been scoped out of the assessment.

Landscape Character

LCT17: Coastal Agricultural Plain – Aberdeenshire

- 5.6.3 The Site is located within LCT 17 Coastal Agricultural Plain – Aberdeenshire, as defined within the NatureScot Landscape Character Assessment. This is an extensive landscape character type, extending from Dyce in the south to Fraserburgh in the north, and typically extending inland by approximately 10 km from the coastal edge. The NatureScot assessment describes LCT 17 as being “*characterised by its gently undulating landform, relatively large scale, extensive mosses and the influence of development including transmission masts, electricity transmission lines, the A90 and A953, and the gas terminal at St Fergus on its eastern edge.*”
- 5.6.4 The key characteristics of LCT 17, as identified by NatureScot11, which are of particular relevance to the Study Area comprise the following:
- a low lying and very gently undulating landform, with a pattern of subtle ridges and valleys in the northeast;
 - watercourses contained within broad, shallow valleys;
 - predominantly arable agricultural land use, interspersed with relatively extensive areas of moss and wetland;
 - largescale, open and geometric field patterns;
 - coniferous forestry, which is particularly extensive within the southern part of the character type;
 - limited broadleaved woodland cover, typically occurring as infrequent shelterbelts and small groups associated with farmsteads;
 - a well settled landscape comprising dispersed farms, numerous more recent dwellings, a number of settlements, and occasional mansions set within designed landscapes; and
 - communication structures and tall masts located on some areas of higher ground, together with electricity transmission infrastructure radiating from Peterhead Power Station, which forms a highly visible feature within the wider landscape.

LCT 21: Farmland and Woodland Policies

- 5.6.5 The key characteristic features of LCT 21 relevant to the Study Area are:
- Rolling landscape with diverse woodland cover;

- The area is cut through by the South Ugie Water, with a valley enclosed by softly rolling hills, an open river floodplain and lower farmed slopes;
- Policy plantings trace ridge lines and curve around valley sides;
- Distinct roundel and crescent shaped woodlands on small hilltops in parts of the area;
- Diverse mixed farmland on lower hill slopes, with compact farms, beech shelterbelts, smaller woodlands and conifer forest in parts of the area;
- More open, larger scale farmland on gentler slopes at the transition with the Undulating Agricultural Heartlands;
- Numerous remnant built features associated with former estates;
- Well settled landscape with planned villages, numerous farmsteads, manes and farmhouses, as well as the historic village of Old Deer;
- Contained views from roads and paths due to rolling landform and woodland cover;
- A timeless quality to the landscape; and
- A richly scenic landscape.

Local Landscape Character Subtype

- 5.6.6 Given the extent of LCT 21, two local landscape character subtypes have been identified to reflect more nuanced variations in landscape character within the 10 km Study Area. These comprise the ***'Peterhead Urban Fringe'*** and ***'Rural Area'*** subtypes. The Proposed Development is located within the Rural Area, approximately 1 km west of the edge of the Peterhead Urban Fringe. The subtypes are shown on **Figure 5.3: Landscape Character Areas (Volume 2)**.

Local Landscape Character Subtype (LLCS Rural Area)

- 5.6.7 The local key characteristics relevant to the Study Area and the Rural Area subtype have been identified through site visits by the landscape architect for this project and include:
- Gently undulating topography affording broad, open and often panoramic views across the surrounding landscape;
 - A mixed arable and pastoral land use pattern, enclosed predominantly by hedgerows and stockproof fencing, with occasional drystone walling and field boundaries frequently associated with drainage ditches; fields are generally medium in scale;
 - Tree belts forming field boundaries or providing shelter along roads;
 - Dispersed farmsteads and isolated residential properties, frequently associated with woodland or shelter planting;
 - Large grain storage sheds, typically located adjacent to farmsteads or in isolated positions within the agricultural landscape;
 - Occasional woodland copses comprising native deciduous or mixed species, together with occasional conifer plantations arranged within a geometric field pattern;
 - The presence of vertical and largescale man made elements, including wind turbines, transmission lines, Peterhead Power Station and occasional large industrial or agricultural buildings; and
 - A network of minor roads, with occasional footpaths associated with school access.

Local Landscape Character Subtype (LLCS Peterhead Urban Fringe)

- 5.6.8 The Peterhead Urban Fringe subtype encompasses land around the perimeter of Peterhead, including the industrial areas to the south and west of the settlement, and isolated commercial development extending along the principal commuter routes of the A90 and A950. It also includes Longside Airfield and land to the east of the airfield within the A950 corridor, where isolated industrial units and largescale sheds are present.

This contrasts with the Rural Area subtype, which is more strongly associated with agricultural production, including large grain storage sheds located either in isolated positions or adjacent to farmsteads.

5.6.9 The local key characteristics relevant to the Peterhead Urban Fringe subtype have been identified through site visits by the landscape architect for this project and include:

- Undulating landform with a gradual transition towards the coast, where industrial development is interspersed with areas of pasture;
- Industrial units associated with Longside Airfield or located alongside the A950 corridor;
- Occasional woodland copses comprising native deciduous or mixed species; and
- The presence of vertical and largescale man made elements, including transmission lines, anaerobic digestion infrastructure, single wind turbines, wind farms and largescale industrial sheds.

Baseline of Visual Receptors

5.6.10 The baseline environment review employs the ZTV, as depicted in **Figure 5.2: Zone of Theoretical Visibility and LVIA Study Area (Volume 2)**, in conjunction with field surveys and viewpoint analyses, to evaluate the potential visual impact on views and visual amenity that may be experienced by receptors (i.e., individuals) within the 10 km Study Area. The ZTV and viewpoint analysis indicates that significant visual effects are likely to occur within 1 km of the Proposed Development and those receptors within 2km have been included in the assessment on a precautionary basis.

5.6.11 The location and geographical extent of principal visual receptors within the 10 km Study Area are illustrated in **Figure 5.5: Visual Receptors (Volume 2)**.

Visual Receptors: Settlements and Residential Properties

Settlement

5.6.12 These settlements included in the LVIA are listed as follows:

- Longside - Located to the northwest of the Site, Longside is a compact rural settlement situated on gently undulating ground within the wider agricultural landscape. The settlement is associated with the A950 and local minor road network, with the southern edge of Longside adjoining open farmland and recreational routes, including the core path network. The closest part of the settlement lies approximately 3 km northwest of the Site, with views towards the Site influenced by intervening landform, field boundary vegetation, shelterbelts and existing infrastructure within the wider landscape; and
- Flushing - Situated to the north and northeast of the Site, Flushing comprises a small roadside settlement and dispersed properties located along and in proximity to the A950. The settlement occupies a locally open agricultural context, where views are available across medium to largescale fields towards the wider Netherton landscape. The closest part of Flushing lies approximately 1.7 km north of the Site with visual connectivity influenced by the open character of the intervening farmland, the orientation of the A950 corridor, localised field boundary vegetation and the presence of existing and emerging energy infrastructure.

Residential Properties

5.6.13 The LVIA considers scattered residential receptors as groups and clusters of properties, categorised by distance from the Site as set out below. These groupings are principally based on place names identified on the Ordnance Survey Landranger (OSL) mapping, as illustrated on **Figure 5.2 Zone of Theoretical Visibility and LVIA Study Area (Volume 2)** and **Figure 5.5 Visual Receptors (Volume 2)**. The list is not intended to represent an exhaustive record of all residential properties that may experience views of the Proposed Development; rather, it provides a representative and robust sample to ensure that potential views are considered from a range of distances and directions around the Site. It is recognised that some individual properties may be unnamed and therefore not identified on the OSL mapping.

5.6.14 Drawing from the viewpoint analysis which indicated that significant visual effects are likely to occur within 1 km of the Proposed Development, the assessment has included scattered residential properties within 2km of the Proposed Development as follows:

Residential receptors within 1 km

- Parkhill, east, 1 km;
- Mains of Kinmundy, south, 0.5 km;
- Toddlehills, east, 1 km;
- Newmill, Drums and North Linshart, west, 1 km;
- Hillhead Dairy, south, 0 km;
- Knockleith, south, 1 km;
- South Braeside of Ludquharn, southwest, 0.5 km; and
- Clayhills, west, 1 km.

Residential receptors within 1 km to 2 km

- Longside, north, 2 km;
- Flushing, north, 1.5 km;
- North Linshart, north, 1.5 km;
- Fairfield House and Thunderton, northeast, 1.5 km;
- Denholm, east, 1.5 km;
- Hillhead of Cocklaw, east, 2 km;
- Blackhill Farm and surrounding properties, southeast, 1.5 km to 2 km;
- Hill of Dens, south, 1.5 km;
- Nether Kinmundy, several properties, south, 1 km to 2 km;
- Esterton of Lenabo, southwest, 1.5 km; and
- Millhill and Clayhill, west, 1 km to 2 km.

Visual Receptors: Transport Routes

5.6.15 Drawing from the viewpoint analysis which indicated that significant visual effects are likely to occur within 1 km of the Proposed Development, the assessment has included a number of transport routes partly overlapped by the ZTV indicated on **Figure 5.2: Zone of Theoretical Visibility and LVIA Study Area (Volume 2)**. These are listed as follows:

- A952 – Located approximately 3.5 km to the southwest, west and northwest of the Proposed Development, the A952 forms part of the wider strategic road network serving Buchan and connecting settlements including Mintlaw and Fraserburgh with onward routes towards Aberdeen. Views from this route are likely to be experienced by receptors travelling at higher speeds and would generally be oblique, transient and intermittent. Intervening landform, roadside vegetation, settlement edges and agricultural infrastructure are likely to reduce the extent and duration of views towards the Proposed Development, although more open sections of the road may allow longer distance visibility across the surrounding farmland;
- A950 – Located approximately 1.5 km to the northwest, north and northeast of the Proposed Development, the A950 is a principal local route between Peterhead and Mintlaw, passing through the wider rural setting of Longside. The route is likely to accommodate a mixture of commuter, local, agricultural and service traffic. Views towards the Proposed Development would be experienced sequentially from a moving vehicle and would vary according to roadside enclosure, field boundary vegetation and the orientation of the road. Where open views are available, the Proposed Development

may be perceived within the context of an established agricultural and infrastructure influenced landscape;

- Minor roads to the north – These include the minor road connecting Stuartfield to the A952 and Longside (79B), travelling east/ west approximately 2 km from the Proposed Development; the minor road connecting Flushing at the A950 to Peterhead (C43B), travelling east–west approximately 1.5 km from the Proposed Development; and the minor road connecting the A950 to Toddlehill adjacent to Netherton Hub (C56B), travelling north/ south approximately 0.5 km from the Proposed Development. These routes are likely to provide a combination of oblique and more direct localised views, particularly where they pass through open agricultural land with limited roadside screening;
- Minor roads to the east – These comprise the C56B connecting the A950 to Toddlehill and Hill of Dens, travelling north/ south approximately 1 km from the Proposed Development; the C63B connecting Parkhill to the A950, travelling southwest to northeast approximately 1 km from the Proposed Development; the minor road connecting Meikle Dens to the A90, travelling east/ west approximately 1 km from the Proposed Development; and the minor road connecting Blackhill to the A950, travelling north/ south approximately 1.5 km from the Proposed Development. Users of these roads are likely to experience varied sequential views, with visibility influenced by subtle changes in local landform, farm buildings, field boundaries and shelterbelts;
- Minor roads to the south – These include the C55B adjacent to Netherton Hub, travelling east–west at approximately 0 km from the Proposed Development; the C38B connecting Parkhill to Peterhead, travelling east/west approximately 1 km from the Proposed Development; the 181B linking C55B to C38B, travelling north/south at approximately 0 km from the Proposed Development; the C57B connecting C38B to Newton, travelling north/ south approximately 1 km from the Proposed Development; and the minor road from C57B to C56B, travelling west/ east approximately 0.5 km from the Proposed Development. These roads are likely to be amongst the closest transport receptors and may allow more immediate and sustained views of the Proposed Development, particularly where the road alignment affords open, direct or elevated views across the site and adjoining farmland; and
- Minor roads to the west – The minor road connecting Clola to Longside (52B), travelling west/ east approximately 2 km from the Proposed Development, provides a further local route within the surrounding rural road network. Views from this route are likely to be experienced at lower speeds and may include intermittent visibility towards the Proposed Development where not screened by roadside vegetation, intervening landform, built form or woodland belts. The route contributes to the wider sequential visual experience of local road users moving through the agricultural landscape around Longside and Netherton.

Visual Receptors: Recreational Routes

- 5.6.16 Recreational receptors within the Study Area are identified on **Figure 5.5: Visual Receptors (Volume 2)**. These receptors comprise users of promoted long distance routes, local Core Paths and informal recreational routes, including walkers, cyclists and equestrians where routes are accessible for shared use. Recreational activity is generally concentrated along established linear corridors within the wider rural landscape, with users typically experiencing sequential views while travelling through a gently undulating agricultural setting. Drawing from the viewpoint analysis which indicated that significant visual effects are likely to occur within 1 km of the Proposed Development, the assessment has included the local Core Path network provides additional recreational access within the Study Area, including Aberdeenshire Council Core Path 208.01 at Longside, located approximately 1.5 km northeast of the Proposed Development. This route lies on the western side of Longside and crosses open agricultural fields, providing local connectivity and short distance recreational access within the settlement edge and its rural hinterland. Other Core Paths and locally used access routes within the wider Study Area are generally associated with settlement edges, minor roads, farm tracks and field boundaries, and are therefore likely to afford a combination of enclosed, filtered and open views depending on local landform, vegetation and built form. These routes are shown, where relevant, on **Figure 5.5 Visual Receptors (Volume 2)**.

- 5.6.17 As an exception the LVIA has also included the Formartine and Buchan Way, which is recognised as one of Scotland's Great Trails and therefore of national importance. The route follows the alignment of the former railway between Dyce and Maud and provides a largely off road, gently graded corridor used by walkers, cyclists and, in places, horse riders. Within the northern part of the Study Area, the route passes broadly eastwest approximately 2.5 km north of the Proposed Development, forming a distinctive recreational corridor through open farmland and small settlements. The route is shown on **Figure 5.5 Visual Receptors (Volume 2)**.

Future Baseline

- 5.6.18 Scottish Government renewable and low carbon energy policy continues to promote opportunities for onshore and offshore renewable energy, the development of the hydrogen sector, and carbon capture and storage, including through mechanisms such as the Emerging Energy Technologies Fund. These policy drivers have the potential to influence the future character of the landscape. Given its proximity to the coast and exposure to comparatively high wind speeds, this part of Aberdeenshire may continue to be attractive for renewable energy development.
- 5.6.19 In the event that the Proposed Development does not proceed, the majority of the landscape and visual baseline within the planning application boundary is likely to remain broadly comparable to the current baseline, which is principally characterised by agricultural land use. Whilst the abundance and distribution of vegetation species within the planning application boundary may vary over time, no material change to species composition, or the geographical extent of vegetation cover is anticipated where the Site remains in agricultural use. In areas where management lapses, natural succession from grassland to scrub and woodland may occur. However, future baseline conditions are also likely to be influenced by the transition towards carbon neutrality and net zero energy targets, which may increase the potential for the land to be promoted for renewable energy development, or for the existing overhead line infrastructure to be retained or replaced beyond its current operational lifespan.
- 5.6.20 Substations with available grid connection capacity may also attract associated energy storage proposals. Accordingly, applications for battery energy storage systems or other forms of storage infrastructure within the surrounding area would not be unexpected, particularly in light of recent changes in planning policy and the increasing requirement for network flexibility.
- 5.6.21 The Scottish Government is progressing a range of initiatives to address the twin climate and biodiversity crises. Aberdeenshire Council completed a Regional Land Use Pilot in 2016, which considered nature based solutions including woodland expansion, peatland restoration, natural flood management and the creation of green spaces. More recently, Aberdeenshire Council published its Forestry and Woodland Strategy, identifying areas of existing woodland and preferred areas for new woodland creation. Within this context, the Site is identified as both 'Sensitive', where one or more significant constraints may be present, including agricultural value or nature conservation interest, and 'Preferred', where no significant constraints are identified. On this basis, there may be opportunities for new woodland creation within parts of the Site, where this is supported by the Local Planning Authority and is consistent with wider Scottish Government objectives.
- 5.6.22 More incremental changes to the landscape baseline may also arise from alterations to deer management regimes and the commercial thinning of plantation woodland, both of which may influence the extent to which natural woodland regeneration is promoted or suppressed.
- 5.6.23 Small fluctuations in population density within the surrounding area may occur, with a corresponding minor increase in traffic on the local road network. However, the extent of any such change is not anticipated to be material in landscape or visual terms.
- 5.6.24 Future changes associated with the Scottish Government's new agriculture support framework may also influence the appearance and management of the rural landscape, including through changes to land management practices, livestock production, and measures relating to nature protection and restoration.

5.7 Mitigation

- 5.7.1 Embedded mitigation comprises measures incorporated into the design of the Proposed Development to avoid, reduce or minimise potential landscape and visual effects. For an OHL, such mitigation is primarily achieved through the routeing and alignment selection process, the siting and design of towers, the relationship of conductors with landform and skylines, and the careful planning of access and reinstatement requirements. These considerations have informed the development of the Proposed Development from the outset and have been integral to its integration within the receiving landscape.

OHL alignment selection process

- 5.7.2 Given the height, linear form and potential visual prominence of an OHL, the principal means of mitigating potential landscape and visual effects is the identification of an appropriate alignment within the receiving landscape. An alignment selection process was undertaken by SSEN Transmission between 2023 and 2025. This process considered a range of environmental and technical factors, with landscape and visual matters forming an important consideration in the development and refinement of alignment options. OHL specific considerations included the relationship of towers and conductors with skylines, the potential for cumulative or visually complex wirescape effects, the siting of angle towers, the use of landform to provide containment or visual backdrop, and the avoidance of unnecessary interruption to distinctive landscape features or key views. These matters were reviewed through desktop study, fieldwork and iterative design development to inform the Proposed Alignment of the Proposed Development.
- 5.7.3 The following principles were taken into account, where practicable, during the routeing stage, in accordance with the steps set out in the Holford Rules:
- Avoid, where possible, major areas of highest landscape value, including those subject to national and international designations and other sensitive landscapes;
 - Avoid, by deviation, smaller areas of high amenity value;
 - Avoid, where possible, sharp changes in direction and reduce the number of larger angle towers required;
 - Avoid skylining the route in key views and, where necessary, cross ridges obliquely where a dip in the ridge provides an opportunity;
 - Target the route towards open valleys and woodland areas where the scale of poles or towers would be reduced and views broken by trees, avoiding the division of landscape types and seeking to follow edges and landscape transitions where practicable;
 - Consider the appearance of other overhead lines in the landscape to avoid a dominant or visually confusing wirescape effect, and arrange, where practicable, for parallel or closely related routes to be planned so that tower types, spans and conductors form a coherent appearance; and
 - Approach urban areas through industrial zones and consider undergrounding in residential and valued recreational areas.
- 5.7.4 In addition to the routeing principles set out above, the following measures have been incorporated, where practicable, to reduce operational landscape and visual effects:
- Siting the Proposed Development to maintain appropriate separation from major settlements and clusters of sensitive receptors;
 - Utilising existing tracks preferentially throughout the operational OHL corridor, where practicable, to reduce the requirement for new permanent access and associated landscape and visual effects;
 - Positioning towers at lower elevations where feasible, allowing topography to provide a visual backdrop and reducing the extent to which towers and conductors are skylined in key views;
 - Siting towers away from sensitive or distinctive landscape features where their scale, form or setting could otherwise be compromised;

- Aligning the OHL, where practicable, through larger scale and more modified landscapes, including areas already influenced by existing or consented infrastructure, where there is greater capacity to accommodate transmission infrastructure, subject to avoiding creation of wirescape;
- 5.7.5 Reducing visibility and prominence from key sensitive receptor locations, including settlements, transport corridors, tourist or scenic routes and recreational routes within the Study Area, wherever practicable, Following a comprehensive design process undertaken by the Applicant's engineering, civil engineering and environmental disciplines, the Proposed Alignment was developed, as shown in **Figure 1.2: Site Layout Plan (Volume 2)**. The LVIA has been undertaken on the basis of this alignment.

Construction phase

- 5.7.6 During construction, best practice methods and reinstatement measures would be adopted to reduce localised landscape and visual effects and support the recovery of disturbed ground and landscape features. Particular attention would be given to the management of working areas, temporary access, material storage, tower foundation works and temporary diversions, with reinstatement undertaken as soon as practicable. Further details of typical construction activities are provided in **Chapter 2: Description of Proposed Development (Volume 1)** and include:
- Working areas would be restricted to designated zones and clearly demarcated to prevent plant, materials and construction activity from encroaching into non construction areas;
 - Use of existing public roads and existing farm or forestry tracks wherever possible, to minimise the need for new temporary access;
 - Material storage and temporary stockpiles would be retained for the shortest practicable duration and positioned, where possible, to reduce visual intrusion, avoid prominent skylining and limit effects on neighbouring receptors;
 - Reinstatement of permanent access tracks to a width typically suitable for 4x4 vehicles, subject to the extent of upgrade required and landowner requirements;
 - Management of potential effects associated with construction compounds through the Construction Environmental Management Plan (CEMP);
 - Excavations for tower foundations, laydown areas and temporary tracks would be reinstated prior to the operational phase, with affected ground restored to reflect surrounding landcover and vegetation patterns where practicable;
 - Temporary towers installed during the construction phase, prior to energisation, would be dismantled following use and the surrounding areas reinstated;
 - Location of typical tower foundations below ground level, with sufficient soil cover to allow habitats to reinstate. The permanent above ground footprint is typically 1 m x 1 m, with a maximum dimension of 1.5 m x 1.5 m;
 - All construction sites would be reinstated, including the removal of temporary lattice tower diversions, temporary access tracks and work sites around tower locations, together with the revegetation of construction compounds. Permanent track edges would be restored with appropriate materials to assist integration with adjacent vegetation and landcover within the OHL corridor. Reinstatement principles are detailed in the Applicant's General Environmental Management Plans, provided in **Appendix 2.1: General Environmental Management Plans (GEMPs) (Volume 3)**; and
 - Concrete for tower foundations would be delivered ready mixed to site, reducing the requirement for onsite batching and helping to limit the extent and duration of construction activity within the landscape.

Partial reinstatement and mitigation measures for access tracks

- 5.7.7 Where permanent access tracks are required for maintenance during operation, they would be designed and reinstated to minimise their longterm landscape and visual influence. The following measures would be considered:

- Designing road upgrades, junctions and access points to reflect an appropriate rural character and local vernacular, including boundary treatments and entrance features, with hedgerows reinstated where affected;
- Narrowing tracks following completion of construction works through the placement of excavated soils or turves along verges to achieve a width suitable for Land Rover or ATV access. Where cut and fill tracks are proposed, surplus material may be used to form localised mounding to help reduce wider visual prominence; and
- Surfacing tracks, where possible, with locally sourced stone of a colour and tone that reflects existing locally exposed bedrock or stone.

5.7.8 These measures would help to ensure that permanent access tracks are assimilated into the surrounding landscape and do not appear substantially more engineered or robust in character than comparable existing farm or forestry tracks.

5.8 Residual Landscape Effects

5.8.1 The section below sets out the potential landscape effects of the Proposed Development.

Effects on Landscape Character

Landscape Character Type 17: Coastal Agricultural Plain – Aberdeenshire

- 5.8.2 The Coastal Agricultural Plain – Aberdeenshire Landscape Character Type (LCT 17) comprises a predominantly agricultural landscape, characterised by gently undulating landform, open farmland, dispersed settlement and a working rural character. The landscape is largely undesignated and is influenced in places by existing energy infrastructure, industrial development and transport corridors, including overhead line infrastructure which forms a recognised and frequently perceptible component of the receiving landscape context. Taking account of its predominantly undesignated status, productive agricultural land use and the presence of existing infrastructure influences, the value attributed to LCT 17 is assessed as *Medium*.
- 5.8.3 Susceptibility to change arising from the introduction of the Proposed Development is assessed as *Medium*. This reflects the existing presence and perceptibility of overhead line infrastructure within this part of the landscape, generally, together with the capacity of the wider agricultural landscape to accommodate further change of this type without fundamentally altering its prevailing character. With the combination of *Medium* susceptibility and *Medium* value, the overall sensitivity of LCT 17 to the Proposed Development is assessed as *Medium*.

Construction

- 5.8.4 During the construction phase, the Proposed Development would give rise to limited and temporary effects on LCT 17. Construction activity would include tower construction, demolition of existing infrastructure, access works, conductor stringing and the movement of plant and construction vehicles. These activities would be most apparent within the immediate locality of the works, where cranes, tower sections and associated construction activity would introduce additional movement, activity and vertical emphasis into the rural landscape.
- 5.8.5 At the scale of the wider LCT, the construction related changes would be geographically limited and would be experienced within a landscape context already influenced by overhead lines. While construction activity and particularly taller plant and tower elements are visible within open agricultural views, these effects would be temporary and would not materially alter the defining characteristics of the wider Coastal Agricultural Plain.
- 5.8.6 On this basis, the magnitude of change during construction is assessed as Medium within approximately 500m to 1km, reducing to Low to Zero across the wider LCT. Taking account of the *Medium* sensitivity of LCT 17 and the Medium magnitude of change, the maximum resulting landscape effect is assessed as **Moderate**

adverse (significant), reducing to Zero with increased distance. These construction related effects would be temporary, of short term duration and adverse in nature.

Operation

- 5.8.7 During operation, the Proposed Development would alter the local configuration of overhead line infrastructure within LCT 17 through the introduction of the 'In' and 'Out' leg towers and the removal of part of the existing New Deer to Peterhead 400 kV overhead line. The new tower arrangement would be visible within the local landscape, particularly where towers are seen on or close to the skyline, and would introduce a new pattern of vertical infrastructure within the immediate receiving context.
- 5.8.8 In comparative terms, the Proposed Development would increase the magnitude of change slightly in comparison with the section of the existing 400 kV New Deer OHL which is to be removed, mainly because it would be more extensive and would include both 'In' and 'Out' sections.
- 5.8.9 On a standalone basis, the magnitude of change resulting from the Proposed Development during operation is assessed as Medium within approximately 500m, reducing to Low to Zero across the wider LCT. When considered in combination with the *Medium* sensitivity of the LCT, the resulting landscape effect is assessed as Moderate adverse (not significant). These operational effects would be permanent, and adverse, although geographically limited and would not be significant because they would be experienced within an agricultural landscape context that is partly characterised by other existing OHLs.

Landscape Character Type 21: Farmed and Wooded Policies

- 5.8.10 LCT 21: Farmed and Wooded Policies is assessed as having *Medium* value, reflecting its enclosed, wooded and scenic qualities. Susceptibility to change arising from the introduction of the Proposed Development is assessed as *Medium*, taking account of the LCT's separation from the site and the limited extent to which the Proposed Development would influence its defining characteristics. With the combination of *Medium* value and *Medium* susceptibility, the overall sensitivity of the LCT to change is evaluated as *Medium*.

Construction

- 5.8.11 The Proposed Development lies outside LCT 21. During the construction phase, effects on this LCT would be indirect and perceptual in nature, limited to distant views from elevated locations where elements of the altered overhead line configuration may be discernible on the horizon. Ground level construction activity would be substantially screened by the intervening distance, landform, vegetation and built form. As such, the magnitude of change during construction is assessed as Low, giving rise to a Minor adverse (not significant) residual effect on the LCT during the construction phase of the Proposed Development. These construction related effects would be temporary, short term and adverse in nature.

Operation

- 5.8.12 During operation, effects would similarly remain indirect and perceptual in nature, arising only from distant visibility of the modified overhead line configuration from elevated locations. The Proposed Development would not materially alter, or otherwise influence, the defining characteristics of LCT 21. Visibility would continue to be moderated by separation distance, intervening landform, woodland, vegetation and built development. The magnitude of change is therefore assessed as Low-Very Low, resulting in a Negligible adverse residual effect (not significant). Operational effects would be long term and adverse, albeit geographically limited and experienced within a landscape context already influenced by existing infrastructure.

Local Landscape Character Subtype: Rural

- 5.8.13 The Rural Local Landscape Character Subtype is characterised by a predominantly working agricultural landscape, comprising open fields, farmsteads, localised rural settlement and associated infrastructure. While the subtype retains discernible rural qualities, these are influenced by the presence of existing overhead line infrastructure, wind energy development, farm buildings and the wider context of nearby

energy related development. As such, the landscape is not especially intact or rare, and its perceptual qualities are already moderated by existing built and operational elements. The value attributed to this subtype is assessed as *Low*.

- 5.8.14 Susceptibility to change arising from the Proposed Development is assessed as *Medium*, reflecting the subtype's existing capacity to accommodate energy infrastructure and other rural development influences, while recognising that localised changes may be perceptible where works occur in closer proximity to open or elevated parts of the landscape. With the combination of *Low* value and *Medium* susceptibility, the overall sensitivity of the Rural Local Landscape Character Subtype is assessed as *Medium*.

Construction

- 5.8.15 The construction phase of the Proposed Development would give rise to the greatest degree of localised change within this subtype. Construction activity would include the presence and movement of plant, tower construction operations, temporary working areas, and the removal of existing towers. These activities would introduce temporary and localised disturbance within the rural landscape fabric, with effects most apparent in the immediate vicinity of the works.
- 5.8.16 During the construction phase, the magnitude of change is assessed as *Medium* within the immediate locality of the works, reducing to *Low* across the subtype as distance increases and the influence of construction activity becomes less perceptible within the wider landscape context. Taking account of the *Medium* sensitivity of the subtype, the resulting landscape effect during construction is assessed as **Moderate adverse** (significant) within the immediate locality, reducing to *Minor adverse* (not significant) across the wider subtype. These construction related effects would be temporary, short term and adverse in nature.

Operation

- 5.8.17 During operation, the revised configuration of towers would remain perceptible from elevated and more open parts of the Rural Local Landscape Character Subtype. The operational influence would be most evident where new towers are experienced in close association with the Netherton Hub and existing transmission infrastructure, where the Proposed Development would form part of an established pattern of energy related elements within the landscape.
- 5.8.18 The magnitude of change during operation is assessed as *Medium-Low* locally, reducing with distance and where the Proposed Development is perceived in the context of existing infrastructure. On this basis and taking account of the *Medium* sensitivity of the subtype, the resulting operational landscape effect is assessed as *Moderate to Minor adverse* (not significant). These effects would be long term and indirect, but would remain limited in extent and would not materially alter the overall character of the subtype.

Local Landscape Character Subtype: Peterhead Urban Fringe

- 5.8.19 The Peterhead Urban Fringe local landscape character subtype is assessed as having *Low* sensitivity to change. This reflects its established association with industrial, transport, airfield and energy infrastructure, which already exerts a strong influence on the perceptual and physical characteristics of the landscape. The Proposed Development would not be located within this subtype and, as such, any effects would be indirect in nature, arising only through views towards the altered overhead line configuration from parts of its western and northwestern extent.
- 5.8.20 Susceptibility to change arising from the introduction of the Proposed Development is assessed as *Low*, reflecting the subtype's existing relationship with comparable infrastructure and developed land uses. With the combination of *Low* susceptibility and the overall *Low* sensitivity attributed to the subtype, the Peterhead Urban Fringe local landscape character subtype is considered to have a *Low* overall sensitivity to the type of change proposed.

Construction

- 5.8.21 During the construction phase, the Proposed Development would give rise to indirect and temporary effects on the Peterhead Urban Fringe local landscape character subtype. Construction activity associated with the altered overhead line configuration would be perceived only from parts of the western and northwestern extent of the subtype, where views towards the Proposed Development are available.
- 5.8.22 Within these limited areas, construction activity would form a small additional component within a landscape context already characterised by industrial, transport, airfield and energy infrastructure. Consequently, the scale of alteration would be contained and would not materially alter the established character or perceptual qualities of the subtype.
- 5.8.23 The magnitude of change during construction is therefore assessed as Low. Taking account of the *Low* sensitivity of the subtype and the Low magnitude of change, the residual landscape effect is considered Negligible adverse (not significant). These construction related effects would be temporary, indirect and adverse in nature.

Operation

- 5.8.24 During the operational phase, the Proposed Development would continue to be perceived as a small additional component in views from parts of the western and northwestern extent of the Peterhead Urban Fringe local landscape character subtype. The Proposed Development would remain outside the subtype and operational effects would therefore be indirect, arising through limited visibility of the altered overhead line configuration.
- 5.8.25 In the context of existing industrial, transport, airfield and energy infrastructure influences, the operational presence of the Proposed Development would not introduce an incongruous or uncharacteristic element, nor would it materially alter the baseline character of the subtype. The magnitude of change during operation is assessed as Low, giving rise to a Negligible adverse (not significant) landscape effect. These effects would be long term and indirect; however, they would remain limited in extent and would not materially alter the overall character or defining characteristics of the subtype.

5.9 Residual Visual Effects

- 5.9.1 Visual effects are assessed by considering the sensitivity of the receptor (people in the landscape) and the magnitude of change that would affect the view or overall visual amenity. They are defined by the Landscape Institute in GLVIA3¹, paragraphs 6.2 as follows:
- 5.9.2 *“An assessment of visual effects deals with the effects of change and development on the views available to people and their visual amenity. The concern here is with assessing how the surroundings of individuals or groups of people may be specifically affected by changes in the content and character of views as a result of the change or loss of existing elements of the landscape and/or introduction of new elements.”*
- 5.9.3 The visual assessment is set out as follows:
- Visual effects on views from settlements and individual residential properties;
 - Visual effect on views from transport routes; and
 - Visual effect on views from recreational routes.
- 5.9.4 Visualisations and wirelines of the Proposed Development are provided from seven viewpoint locations, illustrated in **Figure 5.6a** to **Figure 5.12i (Volume 2)**. Each of these viewpoint locations have been assessed in a separate appendix (**Appendix 5.2: Viewpoint Analysis (Volume 3)**). The viewpoint analysis indicated that significant visual effects are likely to occur within 1 km of the Proposed Development.

Visual Effects from Settlements

- 5.9.5 The sensitivity of all residential receptors either within settlements or within isolated residential properties is assessed as *High*.

Longside

Construction

- 5.9.6 During construction, views from Longside towards the 'In' and 'Out' OHL structures at Netherton Hub would be available in views to the southeast, although visibility would generally be experienced at approximately 1.8-3 km distance and would be partially interrupted or filtered by intervening landform, field boundary vegetation, shelterbelts, built form on the settlement edge and existing infrastructure within the wider landscape. The greatest degree of intervisibility would be associated with the more vertical construction elements, including cranes and the potential use of helicopters for conductor stringing, which may be perceptible above intervening vegetation and localised built form. More vertically limited activities, including personnel movement, heavy machinery and the storage or movement of materials, would be less apparent and would benefit from the backclothing influence of the surrounding landform and the screening influence of intervening vegetation. Overall, construction phase activity would give rise to notable, partially interrupted or filtered views at varying distances, with the activity progressively diminishing in prominence with distance and where views are enclosed by settlement or vegetation. The magnitude of change arising from the construction phase is assessed as Low – Very Low, giving rise to Moderate to Minor (not significant) residual effects on the views and visual amenity experienced from Longside. These construction related effects would be short term, temporary and adverse in nature, reducing further where visibility is screened, filtered or otherwise restricted.

Operation

- 5.9.7 During operation, the 'In' and 'Out' OHL structures at Netherton Hub would continue to be experienced from Longside within a context of intermittent visibility from the outer, southern edges of the settlement. Views of the permanent infrastructure would be frequently screened, filtered or foreshortened by intervening landform, vegetation, shelterbelts and built form associated with the settlement edge. Where visible, the proposed steel lattice towers would introduce additional man-made elements into views to the southeast and east, although these would be perceived at greater distance and would generally form a recessive component of the wider agricultural and infrastructure influenced landscape.
- 5.9.8 In comparative terms the Proposed Development would increase the magnitude of change from Very Low to Low in comparison with the section of the existing 400 kV New Deer OHL which is to be removed.
- 5.9.9 On a standalone or individual basis the magnitude of change resulting from the Proposed Development during the operational phase is assessed as Low, reflecting a perceptible but limited change in views experienced by receptors where visibility is not otherwise interrupted or partly screened. The corresponding residual effect on the views and visual amenity experienced from Longside would be **Moderate** (significant), due to the context of these views which are often partially screened, filtered or more distant. These effects would be permanent, direct and adverse in nature, although they would not materially alter the overall character or experience of views from Longside as a whole.

Flushing

Construction

- 5.9.10 During the construction phase of the Proposed Development, views from Flushing towards the 'In' and 'Out' OHL structures at Netherton Hub would be more direct than those available from Longside, reflecting the settlement's closer proximity to the Site and the relatively open agricultural context between the settlement and the wider Netherton landscape. Construction activity would be clearly apparent in views to the south and southeast from parts of the settlement, particularly from properties and locations along or in proximity to the A950 where views are orientated across medium to largescale fields. The greatest degree of intervisibility would be associated with the more vertical construction elements, including cranes and the potential use of helicopters for conductor stringing, which would introduce noticeable detracting features into the existing baseline view. More vertically limited activities, including personnel movement, heavy machinery and the storage or movement of materials, may also be perceptible within the lower extents of

the tower locations; however, these elements would benefit from the backclothing influence of surrounding landform and would be partially screened or filtered in places by roadside, shelterbelt and boundary vegetation. Overall, construction phase activity would give rise to notable, partially interrupted or filtered views at varying distances, with activity closest to the settlement being most evident and progressively diminishing in prominence with distance to the south and east. The magnitude of change arising from the construction phase is assessed as Medium, giving rise to **Major** (significant) residual effects for residential and recreational receptors of High sensitivity in and around Flushing. These construction related effects would be short term, temporary and adverse in nature.

Operation

- 5.9.11 Operational views, following the end of the construction phase, the 'In' and 'Out' OHL structures at Netherton Hub would be experienced from Flushing within a context of medium distance and locally open views across the intervening agricultural landscape. The proposed steel lattice towers may be visible from parts of the settlement, particularly where views are orientated southwards and southeastwards and are not substantially interrupted by roadside or field boundary vegetation. In these locations, the towers would extend transmission infrastructure further north and increase the visibility of such development within views where the existing baseline is more open and where comparable vertical infrastructure is less apparent. The introduction of the proposed towers would therefore result in a notable alteration to the character and composition of available views. Taking into account the removal of a short section of the existing 400 kV New Deer OHL between the 'In' leg and the 'Out' leg, which would reduce the potential for accumulation and stacking of wirescape within the wider view, the magnitude of change during the operational phase is assessed as Medium-Low. The corresponding residual effect on residential and recreational receptors of High sensitivity is assessed as **Major to Moderate** (significant), reducing where intervening vegetation, built form or oblique viewing angles restrict the visibility or prominence of the infrastructure. These effects would be long term, reversible, direct and adverse in nature.

Visual Effects on Views from Individual Residential Properties

- 5.9.12 Views experienced from residential properties, including associated domestic curtilage and principal outlooks, are recognised as being of particular importance to those receptors. Such views are typically experienced on a daily basis and often from the same parts of a property or its immediate surroundings. Accordingly, residential receptors are assessed as having *High* sensitivity. The nature and extent of visual effects would, however, vary considerably according to distance, orientation, elevation, intervening landform, vegetation and built form, and the extent to which receptors already experience existing overhead line infrastructure within their baseline views.

Construction

- 5.9.13 During the construction phase, visual effects on residential receptors located within approximately 1 km of the Proposed Development would be variable. Construction activity would be highly apparent from some properties, particularly where open and sustained views are available towards tower construction, demolition activity, temporary works and associated construction movements. In such circumstances, construction related elements would introduce a noticeable and, in some instances, prominent temporary change to the residential outlook.
- 5.9.14 Conversely, where views are screened, filtered by intervening vegetation or built form, or experienced obliquely in relation to the principal outlook from the property, the degree of perceptibility would be substantially reduced. Overall, the magnitude of change is assessed as ranging from Low-Very Low where visibility is limited or indirect, to Medium where residential receptors experience close range, open and sustained views of construction activity and the emerging tower arrangements. Consequently, the overall residual effect would range from Moderate to Minor (not significant) for more distant properties with limited or indirect visibility, to **Major** (significant) for close range receptors with open views of the construction phase. These construction related effects would be temporary, short term and adverse in nature.

- 5.9.15 The removal of part of the existing overhead line would result in a beneficial change for some residential receptors, particularly where existing towers currently form a prominent component of the principal outlook. In these locations, the reduction or removal of existing infrastructure from the view would lessen the degree of visual intrusion experienced in the baseline situation.
- 5.9.16 Between approximately 1 km and 2 km, construction related effects would remain variable but would generally reduce with distance from the works. Some residential properties would continue to experience open views of the altered overhead line arrangement and associated construction activity, while others would benefit from screening or substantial filtering by intervening landform, vegetation and built form. On this basis, the assessed magnitude of change would range from Very Low to Medium-Low, giving rise to residual effects ranging from Minor (not significant) to **Major to Moderate** (significant). Significant effects would be limited to those residential receptors with clear, sustained and relatively direct views of the construction works.
- 5.9.17 Beyond approximately 2 km, the Proposed Development would generally form a smaller and less visually prominent component within wider views. Lower level construction activity would be increasingly screened by intervening landform, vegetation and built form, with only the more elevated or vertically prominent elements likely to remain perceptible from certain locations. Accordingly, the magnitude of change for more distantly located properties is assessed as ranging from Very Low to Low. This would result in a residual effect of Minor (not significant) for properties with limited intervisibility, and **Moderate** (significant) for properties with open, channelled and otherwise unobstructed views, albeit at distances beyond 2 km.

Operation

- 5.9.18 During the operational phase of the Proposed Development, the new 'In' and 'Out' leg towers would remain visible from a number of residential properties and, in some locations, would be experienced as part of a broader, more complex, or more visually apparent arrangement of transmission infrastructure. The magnitude of change for residential receptors within 1 km and beyond 2 km would range from Very Low to Medium. Higher levels of change would generally be associated with residential properties located in closer proximity to the Proposed Development, particularly where open views of the proposed towers are available. Consequently, residual visual effects would range from Minor (not significant) to **Major** (significant), depending on receptor location, the extent and nature of actual visibility, the relationship of the infrastructure to principal residential outlooks, and the balance between the removal of existing towers and the introduction of new tower infrastructure. Significant effects would be limited to a small number of residential locations in close proximity to the Proposed Development. It should also be noted that the removal of part of the existing overhead line would result in a beneficial change for some residential receptors, particularly where existing towers currently form a prominent component of the principal outlook. In these locations, the reduction or removal of existing infrastructure from the view would lessen the degree of visual intrusion experienced in the baseline situation.

Visual Effects on Views from Transport Routes

- 5.9.19 Views from transport corridors would be experienced by road users, including drivers, cyclists and other recreational or tourist receptors, as part of the sequential progression of views along each route. The assessment of transport receptors has therefore considered the transient nature of views, the direction and duration of visibility, and the extent to which the surrounding landscape forms part of the user experience.
- 5.9.20 For the purposes of this assessment, users of major and minor roads are generally assessed as having *Medium* sensitivity, reflecting the fact that their primary focus is typically movement, route navigation and road safety, rather than the appreciation of surrounding views.

A952

Construction

- 5.9.21 During construction, views from the A952 would be intermittent and largely distant. Construction activity associated with the Proposed Development would be frequently screened or filtered by roadside vegetation, intervening landform and settlement, limiting the extent to which such activity would be perceived as a prominent component of the sequential visual experience. Taking account of the temporary nature of construction activity, the intermittent and largely distant visibility, and the filtering influence of intervening features, the magnitude of visual change during construction is assessed as Low, reducing to Very Low where visibility is more restricted. The corresponding residual effect on road users of *Medium* sensitivity is assessed as ranging from Minor (not significant) to Negligible (not significant). For more sensitive tourist users (*High* sensitivity) of the A952, where journeys coincide with areas of overlapping ZTV coverage, the overall residual effect would range from **Moderate** (significant) to Minor (not significant). These construction related effects would be temporary, short term and adverse in nature, and would reduce considerably to None within a short distance both north and south of the areas of ZTV coverage.

Operation

- 5.9.22 During operation, the Proposed Development would continue to be experienced from the A952 within a context of intermittent and predominantly distant visibility. Views of the permanent infrastructure would be frequently screened, filtered or foreshortened by roadside vegetation, intervening landform and built form associated with settlement and the wider rural road corridor. Where visibility is available, the Proposed Development would generally form a limited and recessive component of the wider view, experienced sequentially and at speed by road users rather than as a sustained or stationary visual focus. On this basis, the magnitude of visual change during operation is assessed as Low – Very Low to Very Low, reflecting the restricted extent, limited duration and reduced prominence of the visible infrastructure. The resulting residual effect for road users of *Medium* sensitivity is assessed as Negligible (not significant). For more sensitive tourist users of *High* sensitivity, the residual effect is assessed as ranging from Moderate to Minor (not significant) to Minor (not significant). These effects would be long term and reversible and would not materially alter the overall character or experience of views from the route. Furthermore, these residual effects would reduce with distance, heading north and south away from the areas of overlapping ZTV coverage.

A950

Construction

- 5.9.23 During the construction phase, the Proposed Development would be experienced intermittently from the A950 in oblique views towards the south and southwest. Construction activity associated with the revised tower arrangement would be discernible from open sections of the route, particularly where works associated with the existing and proposed overhead line infrastructure would be seen on, or in proximity to, the skyline. Taking account of the increased level of visual activity during the construction stage, the magnitude of change would range from Medium to Low, with the higher magnitude of change limited to the more open sections of the road where construction works would be more readily apparent, including locations in the vicinity of Viewpoint T4 (refer to **Figure 5.9a-b: VPT4 – A950 Looking West Towards Netherton Hub (Volume 2)**). The corresponding residual effects for general road users, who are considered to be of *Medium* sensitivity, are assessed as ranging from **Moderate** (significant) to Minor (not significant). Significant effects would be limited to locations at closer range with overlapping ZTV coverage, such as Viewpoint T4, reducing as the road extends east and west. For more sensitive receptors, including tourists, who are considered to be of *High* sensitivity, residual effects are assessed as ranging from **Major** (significant) to **Moderate** (significant), again reducing rapidly with distance to the east and west. Significant effects would therefore be limited to those shorter sections of the route where the change in overhead line infrastructure

would remain most apparent. These construction related effects would be temporary, short term and adverse in nature.

Operation

- 5.9.24 During operation, the degree of visual change experienced from the A950 would vary along the route, reflecting the intermittent nature of available views, the oblique orientation of receptors relative to the Proposed Development, and the influence of localised screening by roadside vegetation, landform and built form. From more open sections of the route, the revised overhead line infrastructure would be perceptible in views to the south and southwest, particularly where towers are seen on, or in proximity to, the skyline. In these locations, the change would be more readily discernible, although it would remain experienced as part of a transient sequence of views by road users travelling along the corridor. Elsewhere, visibility would be more restricted, filtered or interrupted, reducing the prominence of the Proposed Development within the wider visual experience. Taking account of this variation, the magnitude of visual change during operation is assessed as Medium-Low to Very Low, with the upper end of this range limited to short, more open sections where the change in overhead line infrastructure would be most apparent. The corresponding residual effect for general road users, who are assessed as having *Medium* sensitivity, would range from Moderate to Minor (not significant) to Negligible (not significant). For more sensitive receptors, including tourists, and taking account of *High* sensitivity, the residual effect is assessed as ranging from **Major to Moderate** (significant) to Minor (not significant), with significant effects limited to short sections of the route where the operational change would be most perceptible. These operational effects would be long term, reversible and adverse in nature, reducing notably to the west and east of Viewpoint 4 (refer to **Figure 5.9a-b: VPT4 – A950 Looking West Towards Netherton Hub (Volume 2)**).

Minor Roads to the North, East, South and West

Construction

- 5.9.25 During the construction phase, visual effects experienced by users of minor roads within approximately 2 km of the Proposed Development would be more pronounced where routes pass in close proximity to the works, or where open views are available towards tower construction and tower removal activities. The extent and nature of these effects would vary according to proximity, orientation, roadside containment and the availability of intervening screening. Given the close range visibility of construction works from some local routes, the magnitude of visual change during construction is assessed as ranging from Low to High, with the highest magnitude limited to those locations closest to the Netherton Hub and the 'In' and 'Out' alignments, where construction activity would form a prominent component of the view. Taking into account the *Medium* sensitivity of receptors, the resulting residual construction effects on users of minor roads are assessed as ranging from Negligible (not significant) to **Major** (significant), with significant effects concentrated on those local roads closest to the Netherton Hub and the 'In' and 'Out' leg alignments. These construction effects would be short term, temporary and adverse in nature.

Operation

- 5.9.26 During operation, visual effects experienced from minor roads to the north, east, south and west of the Proposed Development would vary considerably, depending on proximity, orientation, localised screening and the extent to which the operational infrastructure is visible within open or more enclosed views. From more distant sections of the minor road network, or where views are visually contained, the Proposed Development would be screened, filtered or perceived as a relatively limited component within the wider landscape context, giving rise to a low level of visual change. By contrast, from local roads in closer proximity to the Netherton Hub and the 'In' and 'Out' alignments, particularly where open, close range views are available, the operational towers and associated infrastructure would be more readily apparent and would form a more prominent feature within the visual experience. In these locations, the magnitude of visual change during operation is assessed as ranging from Very Low to High-Medium, with the highest levels of change limited to short sections of route where the infrastructure would be seen at close range and where

intervening vegetation or landform provides limited screening. For users of minor roads, assessed as receptors of *Medium* sensitivity, the resulting residual operational effects would range from Negligible (not significant) to **Major to Moderate adverse** (significant). Significant effects would be concentrated on those local roads closest to the Netherton Hub and the 'In' and 'Out' alignments. These effects would be long term and reversible, and would diminish with increasing distance, changes in viewing orientation and the presence of intervening screening.

Visual Effects from Recreational Routes

- 5.9.27 Recreational receptors, including users of the Formartine and Buchan Way and local Core Paths, are assessed as having *High* sensitivity where appreciation of the surrounding landscape forms an important component of the recreational experience.

Formartine and Buchan Way

Construction

- 5.9.28 Views from the Formartine and Buchan Way towards the Proposed Development would vary appreciably along the route, reflecting the changing relationship between the receptor and intervening landform, settlement edge influences, field boundary vegetation and localised built form. The route is experienced sequentially, with users obtaining a series of changing views rather than a single, sustained outlook. In locations where the route is enclosed by vegetation, hedgerows, woodland belts or intervening development, visibility of construction activity would be notably restricted or entirely screened. Conversely, where the route passes through more open sections of farmland, outward visibility would increase and construction activity associated with the altered overhead line arrangement would become perceptible within the wider landscape context.
- 5.9.29 During the construction phase, activity would principally comprise temporary operations associated with the revised overhead line alignment and associated tower arrangement. Where visible, these activities would be seen within the context of an already managed agricultural landscape and, in places, in association with existing transmission infrastructure. The visual influence of construction would generally be moderated by distance, the oblique angle of view relative to the direction of travel, and the intermittent nature of available visibility. Nevertheless, within the clearest and most open sections, the presence of construction plant, temporary works, tower assembly and associated activity would introduce a perceptible, albeit temporary, alteration to the composition of views experienced by recreational users. The degree of visual influence would therefore vary considerably along the route, reflecting the intermittent nature of visibility and the extent to which intervening features filter or screen views. The construction phase magnitude of change is assessed as ranging from Very Low to Medium-Low, resulting in a residual effect for recreational users, who are considered to be of *High* sensitivity, ranging from Minor (not significant) to **Major to Moderate** (significant). Significant effects would be limited to short sections where visibility is clearest, and the tower arrangement forms a noticeable component of the view.

Operation

- 5.9.30 During operation, the amended overhead line arrangement would remain perceptible from the Formartine and Buchan Way only in locations where open views are available. The Proposed Development would generally be experienced as a distant and intermittent element on the skyline or horizon, set within a wider rural landscape that already contains infrastructure influences. Views would frequently be obtained obliquely, rather than directly along the direction of travel, and would be perceived as part of a sequential experience along the route. In many locations, intervening landform, roadside and field boundary vegetation, woodland, and localised built form would continue to filter or screen views, reducing the degree to which the Proposed Development would influence the overall visual experience of path users.
- 5.9.31 Where visible, the operational overhead line infrastructure would introduce a discernible but localised change to the composition of views, principally within the more open sections of the route where the tower

arrangement would be seen against the wider landscape backdrop. The Proposed Development would not form a continuous or dominant feature along the route, and its influence would be moderated by the limited extent of sustained visibility, the presence of existing infrastructure, and the wider panoramic context available to users. The operational phase magnitude of change is assessed as ranging from Very Low to Medium-Low. Taking account of the *High* sensitivity of recreational users, this would result in residual effects ranging from Minor (not significant) to **Major to Moderate** (significant), with significant effects limited to short sections where visibility is clearest and the tower arrangement forms a noticeable component of the view.

Core Path 208.01 at Longside

Construction

- 5.9.32 From Core Path 208.01 at Longside, users travelling south would experience relatively open views across the undulating agricultural landscape towards the existing and proposed overhead line infrastructure. This section of the route is therefore more visually exposed than locations where views are filtered or contained by intervening vegetation, landform or built form. In this location, the open character of the farmland, combined with the direction of travel and the relative proximity of the overhead line corridor, would increase the potential for construction activity to be perceived as a prominent and readily discernible component of the view.
- 5.9.33 During construction, tower assembly, dismantling works and the altered arrangement of overhead line structures would be noticeable within these open views. Temporary construction plant, working areas and associated vehicle and personnel movements would introduce additional activity and visual complexity into a view otherwise characterised primarily by undulating farmland, settlement edge influences and existing transmission infrastructure. Although the existing overhead line elements provide a degree of contextual familiarity, the construction phase would represent a more active and visually intrusive period, particularly where works are perceived in combination with the existing infrastructure corridor. Taking account of the open nature of views, the proximity and visibility of construction activity, and the *High* sensitivity of users of the Core Path, the magnitude of change during construction is assessed as Medium. This would give rise to a **Major** (significant) residual effect, where views are sustained and open. These findings are further illustrated in Viewpoint 3 (refer to **Figure 5.8a–c: VPT3 – Core Path West of Longside Junction with Minor Highway (Volume 2)**). Construction effects would be short term, temporary and adverse in nature.

Operation

- 5.9.34 During operation, the Proposed Development would remain perceptible from Core Path 208.01 as part of the wider transmission infrastructure context. For users travelling south, the revised arrangement of structures would be experienced across open, undulating farmland, in association with existing overhead line infrastructure. The route affords a relatively open outlook in this direction and, where intervening screening is limited, the operational infrastructure would have the potential to influence the composition and character of views, particularly where the towers are perceived within the middle distance.
- 5.9.35 The Proposed Development would be perceived within the context of an established infrastructure corridor, which would moderate the degree of contrast introduced into the view. Nevertheless, the revised arrangement of structures would remain apparent within the open agricultural setting and would continue to draw attention where views are sustained and unobstructed. The operational influence would be less active than that experienced during construction; however, it would be longer term and would form a persistent component of the visual baseline experienced from the most open sections of the route. The operational stage magnitude of change for the Proposed Development is assessed as Medium-Low in and around Viewpoint 3 (refer to **Figure 5.8a–c: VPT3 – Core Path West of Longside Junction with Minor Highway (Volume 2)**), reducing with distance to the northwest to Very Low. The corresponding residual effect, taking account of the *High* sensitivity of recreational users, is assessed as **Major to Moderate** (significant) to Minor (not significant). Significant effects would be restricted to the most open section of the Core Path in and around Viewpoint 3, where sustained views of the Proposed Development would form a perceptible

component of the wider transmission infrastructure context. These effects would be long term and reversible and would diminish with increasing distance..

5.10 Assessment of Cumulative Effects

5.10.1 The cumulative assessment has been prepared to ensure that, in addition to the ‘solus’ or primary effects of the Proposed Development, both ‘additional’ and ‘combined’ cumulative effects are considered. The assessment follows the approach set out in **Appendix 5.1: Landscape and Visual Impact Assessment Methodology and Glossary (Volume 3)** and addresses the cumulative scenarios outlined below:

- **Scenario 1: Existing + Consented + the Proposed Development:** The additional and combined cumulative landscape and visual effects of existing and consented developments, in conjunction with the Proposed Development, are assessed; and
- **Scenario 2: Existing + Consented + Applications + the Proposed Development:** The additional and combined cumulative landscape and visual effects of existing, consented and application stage developments, in conjunction with the Proposed Development, are assessed.

5.10.2 Where multiple developments are present within the wider landscape context to the west of Peterhead, cumulative effects may exceed the primary or additional effects identified for the Proposed Development within the main landscape and visual assessment. Depending on the nature, scale, proximity and perceptual relationship of other developments, the overall cumulative effect may remain unchanged or increase.

5.10.3 Cumulative landscape and visual effects may be characterised as direct or indirect, temporary or permanent, and beneficial or adverse. Their likelihood may be classified as certain, likely, or uncertain/unknown, depending on whether the relevant developments are existing, under construction, consented, or at application stage, as outlined in **Appendix 5.1: Landscape and Visual Impact Assessment Methodology and Glossary (Volume 3)**.

5.10.4 The cumulative assessment is set out as follows:

- Cumulative effects on landscape character; and
- Cumulative effects on views from visual receptors.

Cumulative Effects on Landscape Character

Landscape Character Type 17: Coastal Agricultural Plain – Aberdeenshire

Cumulative Scenario 1: Existing and Consented Developments

5.10.5 Under Scenario 1, the cumulative baseline comprises the retained sections of the existing New Deer to Peterhead 400 kV overhead line and the consented Cumulative Development 3, Netherton Hub.

5.10.6 The additional cumulative effect arising from the Proposed Development would remain consistent with the standalone assessment, resulting in a Moderate effect that would not be significant.

5.10.7 The combined cumulative effect, taking account of the retained sections of the existing New Deer to Peterhead 400 kV overhead line (Very Low magnitude) and the consented Cumulative Development 3, Netherton Hub (High-Medium magnitude within 600 m, reducing to Low to Zero across the wider LCT), would be **Major** and significant. This would principally arise from the combined influence of Netherton Hub and the Proposed Development. Once the proposed Netherton Hub landscape mitigation has established, in accordance with the relevant planning condition, the effect associated with Netherton Hub would reduce to Low and would not be significant. However, as the landscape mitigation would require approximately 15 years to establish, the interim combined cumulative effect would remain elevated before reducing to Moderate to Minor and not significant in the longer term. The nature of these effects would be permanent, direct and adverse.

Cumulative Scenario 2: Existing, Consented and In-planning Developments

5.10.9 Scenario 2 incorporates the existing and consented developments described under Scenario 1, together with the relevant in-planning cumulative schemes within or influencing the LCT, including Cumulative Development 1, West of Greystone BESS; Cumulative Development 10, Peterhead Flexpower 500 MW BESS; Cumulative

Development 4, Flushing BESS; Cumulative Development 9, New Deer 400 kV OHL Diversion 'Rebuild'; Cumulative Development 11, Netherton BESS; and Cumulative Development 12, Beauly to Peterhead 400 kV OHL. Collectively, these schemes would further consolidate the role of the Netherton and Peterhead hinterland as a focus for large scale electrical transmission, conversion and storage infrastructure within the Coastal Agricultural Plain.

- 5.10.10 The in-planning Beauly to Peterhead 400 kV OHL and New Deer 400 kV OHL Diversion 'Rebuild' would increase the extent and density of overhead line infrastructure within the LCT, particularly in proximity to Netherton Hub. In combination with the Proposed Development, these schemes would introduce a more complex pattern of towers, conductors and associated linear infrastructure across parts of the open agricultural plain. The BESS schemes at West of Greystone, Peterhead Flexpower, Flushing and Netherton would add further low level but large footprint energy infrastructure, reinforcing an increasingly infrastructure led character in the local landscape surrounding the Hub.
- 5.10.1 The additional cumulative effect of the Proposed Development would be the same as the standalone assessment, resulting in a Moderate effect that would not be significant.
- 5.10.2 The combined cumulative effect arising from these developments would be **Major** and significant, principally as a result of the interaction between the Netherton Hub, the Beauly to Peterhead OHL and the Proposed Development. Taking account of the proposed landscape mitigation associated with Netherton Hub, which is subject to planning condition, the level of effect would reduce over time as the mitigation planting establishes. On the basis that the planting would require approximately 15 years to establish, the combined cumulative effect would reduce to Moderate to Minor and would not be significant. The nature of these effects would be permanent, direct and adverse.

Landscape Character Type 21: Farmed and Wooded Policies

Cumulative Scenario 1: Existing and Consented Developments

- 5.10.3 Under Scenario 1, the cumulative baseline comprises the existing New Deer to Peterhead 400 kV OHL and the consented Cumulative Development 3, Netherton Hub. Of these developments, the existing New Deer to Peterhead 400 kV OHL is located partly within LCT 21 and therefore gives rise to direct cumulative influence on the character type, while the consented Netherton Hub lies outwith the LCT and would contribute to cumulative effects indirectly, through its perceptual and visual relationship with the host landscape.
- 5.10.4 The Proposed Development would not be located within LCT 21, but within the adjacent LCT 17, and would therefore give rise to indirect cumulative effects on LCT 21 through its perceptual and visual relationship with the Farmed and Wooded Policies landscape. In combination with the retained elements of the existing New Deer to Peterhead 400 kV OHL and the consented Netherton Hub, it would reinforce the concentration of overhead line, substation and converter station infrastructure within the localised landscape around Netherton, particularly where open agricultural fields, limited woodland cover and gently undulating landform allow intervisibility between infrastructure elements. Cumulative effects would be most apparent within the part of LCT 21 closest to Netherton Hub, where the Proposed Development, although located in adjacent LCT 17, would contribute indirectly to a more complex and concentrated infrastructure character. Within this localised part of the Farmed and Wooded Policies landscape, the presence of retained sections of existing overhead line within LCT 21, together with nearby proposed and consented infrastructure outwith the LCT, would collectively increase the prominence of largescale energy development, locally weakening the characteristic balance of agricultural land, wooded policy features, shelterbelts and dispersed rural settlement.
- 5.10.5 LCT 21: Farmed and Wooded Policies is, however, a broad and varied landscape character type, characterised by a settled agricultural landscape, policy woodlands, field boundary trees, shelterbelts, estate landscapes, farmsteads and scattered rural settlement. These characteristics provide a degree of containment and visual filtering, particularly where woodland blocks, tree belts and built form interrupt longer range views. The influence of cumulative infrastructure would therefore diminish appreciably with distance from Netherton, and beyond the

immediate hub context the Proposed Development would be perceived as an adjacent influence from LCT 17 rather than as a direct physical component of LCT 21.

- 5.10.6 Under Scenario 1, the in-addition magnitude of cumulative change arising from the Proposed Development is assessed as Low, giving rise to a Minor adverse (not significant) in addition cumulative residual effect on LCT 21. This reflects the fact that the Proposed Development would be located within adjacent LCT 17 and would not result in direct physical change to LCT 21, with its influence on the Farmed and Wooded Policies landscape being indirect, localised and moderated by distance, intervening landform and wooded containment.
- 5.10.7 In combination, the cumulative magnitude of change associated with the existing New Deer to Peterhead 400 kV OHL, the consented Netherton Hub and the Proposed Development is assessed as Medium-Low, giving rise to a Moderate to Minor adverse (not significant) cumulative residual effect on LCT 21. This judgement reflects a localised intensification of energy infrastructure within and around the Netherton part of the Farmed and Wooded Policies landscape, balanced against the expansive extent of the LCT, its settled and wooded character, and the fact that the Proposed Development and consented Netherton Hub would both lie outwith the character type. Effects would be locally concentrated around Netherton Hub and would reduce progressively with distance as characteristic woodland, shelterbelts, field pattern and intervening landform reassert the underlying LCT 21 character.

Cumulative Scenario 2: Existing, Consented and In-planning Developments

- 5.10.8 Scenario 2 considers the cumulative influence of the existing New Deer to Peterhead 400 kV OHL and consented Netherton Hub, together with the following in-planning developments: Cumulative Development 1, West of Greystone BESS; Cumulative Development 10, Peterhead Flexpower 500 MW BESS; Cumulative Development 4, Flushing BESS; Cumulative Development 9, New Deer 400 kV OHL Diversion 'Rebuild'; Cumulative Development 11, Netherton BESS; and Cumulative Development 12, Beauly to Peterhead 400 kV OHL. With the exception of the existing New Deer to Peterhead 400 kV OHL and Cumulative Development 12, Beauly to Peterhead 400 kV OHL, the cumulative developments considered under this scenario, including the Proposed Development in adjacent LCT 17, would be located outwith LCT 21 and would therefore contribute to cumulative change indirectly, rather than through direct physical change to the Farmed and Wooded Policies character type.
- 5.10.9 The addition of these in-planning developments would further intensify the cumulative influence of energy infrastructure within and around the Netherton part of LCT 21. The most notable cumulative interactions would arise from the direct influence of the existing New Deer to Peterhead 400 kV OHL and the in-planning Beauly to Peterhead 400 kV OHL within the Farmed and Wooded Policies landscape, together with the indirect influence of the Proposed Development in adjacent LCT 17, the New Deer 400 kV OHL Diversion 'Rebuild', the Netherton BESS and the consented hub infrastructure located outwith the character type. In this context, the overlapping presence of towers, conductors, substation components, converter station buildings and BESS infrastructure would contribute to a pronounced infrastructure cluster, locally contrasting with the LCT's characteristic pattern of agricultural land, policy woodland, shelterbelts and dispersed settlement.
- 5.10.10 The in-planning Beauly to Peterhead 400 kV OHL and the existing New Deer to Peterhead 400 kV OHL would be the principal direct contributors to cumulative change within LCT 21, owing to their scale, verticality and potential intervisibility with the Proposed Development located in adjacent LCT 17. The New Deer 400 kV OHL Diversion 'Rebuild' and associated BESS developments at West of Greystone, Peterhead Flexpower, Flushing and Netherton would add further electrical infrastructure influence, although their location outwith the LCT, lower profile built form, and separation from parts of the character type would generally limit their contribution to indirect perceptual and visual cumulative effects.
- 5.10.11 Cumulative effects under Scenario 2 would remain highly localised within LCT 21, with the greatest change concentrated in and around Netherton Hub and the adjoining overhead line corridors. Within this part of the Farmed and Wooded Policies landscape, the cumulative scenario would strengthen the perception of a planned energy infrastructure landscape and would locally reduce the influence of the underlying agricultural, wooded policy and settled rural characteristics. Nevertheless, the effect would diminish over distance across the wider and

expansive LCT, where landform variation, policy woodland, tree belts, shelterbelts, field pattern and the scale of the receiving landscape would moderate the perception of cumulative change. The in-addition magnitude of change arising from the Proposed Development is assessed as Low, resulting in a Minor adverse (not significant) in addition cumulative residual effect, reflecting its location in adjacent LCT 17 and its indirect relationship with LCT 21. The in-combination magnitude of cumulative change is assessed as Medium-Low, giving rise to a Moderate to Minor adverse (not significant) cumulative residual effect across LCT 21. This judgement reflects the limited number of developments giving rise to direct change within the LCT, the outwith location of the majority of the cumulative developments, including the Proposed Development, and the highly localised nature of the greatest cumulative influence around Netherton Hub within the wider Farmed and Wooded Policies landscape.

Local Landscape Character Subtype: Rural

Cumulative Scenario 1: Existing and Consented Developments

- 5.10.12 The Rural LLC has a strong spatial and character overlap with LCT 17, and the assessment of cumulative effects on the Rural LLC is therefore very similar to that of LCT 17, as the two overlap as shown on **Figure 5.3: Landscape Character Areas (Volume 2)**. The Proposed Development would be experienced within this wider rural landscape context. All cumulative developments considered in this scenario are located within LCT 17, with the exception of the easternmost extent New Deer 400 kV OHL Diversion 'Rebuild'. Accordingly, effects on the Rural LLC would primarily relate to changes in the perception of rural character arising from the addition and intensification of electrical infrastructure within an already modified rural landscape, rather than effects associated with a separate or distinct landscape character context. The Rural LLC is already notably eroded in character in the vicinity of Netherton and Peterhead, with a strong urbanising and infrastructure influenced context arising from existing transmission infrastructure, energy related development, road corridors, settlement edge influences and other man-made elements.
- 5.10.13 The existing New Deer to Peterhead 400 kV OHL already forms a notable component of the baseline within the Rural LLC, introducing a linear electrical infrastructure influence across an already modified rural landscape. Given the close overlap between the Rural LLC and LCT 17, the Proposed Development would be perceived as part of the same broad rural landscape context as the existing and cumulative infrastructure. The removal and rationalisation of a short section of existing overhead line associated with the Proposed Development would locally reduce the extent of existing infrastructure in its immediate setting; however, the prevailing rural character would remain strongly influenced by existing man made and electrical infrastructure elements.
- 5.10.14 Within Scenario 1, the principal consented cumulative development influencing the Rural LLC is Cumulative Development 3, Netherton Hub, which is located within LCT 17 and would introduce a substantial cluster of largescale electrical infrastructure into the local rural landscape. In-combination with the existing New Deer to Peterhead 400 kV OHL, Netherton Hub would further reinforce the urbanised and infrastructure led character of the locality, particularly where substation, converter and overhead line elements are perceived together. The Proposed Development would contribute to this pattern as part of the same LCT 17 rural context, although the principal driver of cumulative change would remain the consented Netherton Hub and the existing transmission baseline.
- 5.10.15 The cumulative change arising under Scenario 1 would be concentrated within the immediate and middle distance rural landscape surrounding Netherton Hub, where electrical infrastructure already forms a strong component of the Rural LLC. Beyond this localised area, the influence of the Proposed Development and other cumulative schemes within LCT 17 would become more intermittent and increasingly moderated by distance, intervening landform, woodland cover, settlement edge influences and the broad scale of the wider rural landscape context. Under Scenario 1, the in-addition magnitude of cumulative change attributable to the Proposed Development would be Low. This reflects its relationship with the already eroded and infrastructure influenced Rural LLC, the limited geographical extent over which it would be perceived in association with other cumulative development, and the existing modified rural baseline around Netherton and Peterhead. The resulting in-addition cumulative effect is assessed as Minor (not significant).

- 5.10.16 Considering the combined influence of the existing New Deer to Peterhead 400 kV OHL, the consented Netherton Hub and the Proposed Development, the in-combination cumulative magnitude of change would be Medium within the localised Netherton area of the Rural LLC, reducing to Low across the wider rural subtype. Locally, the consented Netherton Hub and existing overhead line infrastructure would be the principal drivers of cumulative change, with the Proposed Development forming an additional but secondary contributor within the wider LCT 17 rural context. The overall in-combination cumulative effect is therefore assessed as **Moderate** (significant) locally, reducing to Minor (not significant) across the wider Rural LLC.

Cumulative Scenario 2: Existing, Consented and In-planning Developments

- 5.10.17 Scenario 2 includes the existing and consented developments described above, together with the in-planning cumulative developments comprising Cumulative Development 1, West of Greystone BESS; Cumulative Development 10, Peterhead Flexpower 500 MW BESS; Cumulative Development 4, Flushing BESS; Cumulative Development 9, New Deer 400 kV OHL Diversion 'Rebuild'; Cumulative Development 11, Netherton BESS; and Cumulative Development 12, Beauly to Peterhead 400 kV OHL. All of these developments are located within LCT 17, with the exception of the eastern most extent of the New Deer 400 kV OHL Diversion 'Rebuild'. Given the strong overlap between LCT 17 and the Rural LLC, the cumulative assessment is therefore focussed on the extent to which these developments would further influence the perceived rural character of the subtype, particularly where experienced in association with the existing and emerging energy infrastructure around Netherton and Peterhead. The in-planning BESS developments would be experienced as additional electrical infrastructure within an already urban influenced and highly modified LLC. West of Greystone BESS, being located within the subtype, would contribute directly to the further erosion of rural landscape character, while the Netherton, Flushing and Peterhead Flexpower BESS schemes would reinforce the wider perception of an energy infrastructure cluster around Netherton and Peterhead. Although these developments would generally be lower lying than OHL infrastructure, their combined presence would add to the density and extent of man-made influences within the locality.
- 5.10.18 The in-planning New Deer 400 kV OHL Diversion 'Rebuild' and Beauly to Peterhead 400 kV OHL would have a more pronounced cumulative influence due to the scale and verticality of overhead line infrastructure. Of these, the Rebuild is the only cumulative development not located within LCT 17; however, it would still be experienced in relation to the same wider rural and infrastructure influenced landscape context. In combination with the existing New Deer to Peterhead 400 kV OHL and the Proposed Development, these schemes would increase the potential for layering and stacking of towers and conductors, particularly where routes converge around the Netherton infrastructure cluster. Notwithstanding this wider cumulative context, effects under Scenario 2 would remain geographically constrained. The greatest effects would arise in the immediate rural landscape surrounding Netherton Hub and West of Greystone, where consented and in-planning substations, BESS developments and multiple OHL routes would be experienced as a concentrated infrastructure node. As distance from this locality increases, the influence of individual developments would become progressively more dispersed, fragmented and moderated by the expansive scale of the wider rural landscape context, intervening landform, woodland cover and the already modified settlement edge context.

- 5.10.19 Under Scenario 2, the in-addition magnitude of cumulative change attributable to the Proposed Development would remain Low. Although the wider cumulative context would be intensified by the concentration of in-planning development within LCT 17, including West of Greystone BESS, Netherton BESS, Flushing BESS, Peterhead Flexpower BESS and Beaulay to Peterhead 400 kV OHL, the Proposed Development would form only one component of a broader pattern of infrastructure influence affecting the Rural LLC. Its influence would be most apparent where experienced in association with the Netherton Hub infrastructure cluster, however, would reduce rapidly with distance. The resulting in-addition cumulative effect is assessed as Minor (not significant).
- 5.10.20 When considering the combined influence of existing, consented and in-planning developments, the overall in-combination cumulative magnitude of change would be High-Medium within the localised Netherton and West of Greystone area of the Rural LLC, reducing to Medium-Low across the wider rural subtype. The principal contributors to this cumulative change would be the consented Netherton Hub and the concentration of BESS and transmission infrastructure located within LCT 17, together with the wider influence of the New Deer 400 kV OHL Diversion 'Rebuild' beyond LCT 17. The Proposed Development would form a secondary contributor within this broader rural infrastructure context. On this basis, Scenario 2 would give rise to a **Major to Moderate** (significant) cumulative effect locally, within the immediate infrastructure cluster, reducing to Moderate to Minor (not significant) across the wider Rural LLC.

Local Landscape Character Subtype: Peterhead Urban Fringe

Cumulative Scenario 1: Existing and Consented Developments

- 5.10.21 The Proposed Development would be experienced within the Local Landscape Character Subtype: Peterhead Urban Fringe, a landscape already strongly influenced by the settlement edge and outward expansion of Peterhead. The character of this subtype has been progressively eroded by urbanising influences, including residential and industrial development, transport corridors, transmission infrastructure and other largescale energy and utility uses. As a result, the receiving landscape is not strongly rural in character, but instead comprises a locally modified and visually complex urban fringe context in which infrastructure and built development are established and prominent features.
- 5.10.22 Under Scenario 1, cumulative effects would principally arise from the interaction between the Proposed Development, the existing New Deer to Peterhead 400 kV overhead line and Cumulative Development 3: Netherton Hub, which is consented. These developments would be concentrated within and around the Netherton area of the Peterhead Urban Fringe, where substations, converter station infrastructure, overhead line towers and associated electrical apparatus would reinforce an already established infrastructure character. The cumulative influence would be most apparent within the immediate locality, where infrastructure elements would be perceived in close succession and, in some instances, in combination within the same field of view.
- 5.10.23 The resulting cumulative effects would therefore be highly localised and focused around the concentration of infrastructure at Netherton Hub and the adjoining settlement edge of Peterhead. In this area, the Proposed Development would add to the perceived scale, density and complexity of electrical infrastructure, contributing to a more pronounced infrastructure led character. However, this change would occur within a landscape subtype where baseline character has already been substantially weakened by settlement expansion, industrial land uses, existing transmission infrastructure and largescale development, thereby reducing sensitivity to further infrastructure of a comparable type and scale.
- 5.10.24 Beyond the immediate Netherton and Peterhead urban fringe context, cumulative influence would reduce appreciably with distance. The effects would be most strongly associated with those parts of the subtype already influenced by the settlement edge, energy infrastructure and industrial development, while more peripheral areas would experience a reduced degree of cumulative change due to separation distance, intervening landform, vegetation, built form and the fragmented nature of visibility.
- 5.10.25 Overall, under Scenario 1, the Proposed Development would give rise to a localised in-addition cumulative change within the LLC, principally where seen in association with the existing New Deer to Peterhead 400 kV overhead line

and the consented Netherton Hub. The cumulative effect would be greatest within and immediately around the Netherton infrastructure cluster, where the baseline character is already strongly modified. The in-addition magnitude of cumulative change arising from the Proposed Development is therefore assessed as Medium-Low, reflecting a discernible but geographically contained intensification of an existing infrastructure led character, resulting in a residual in-addition cumulative effect assessed as Minor (not significant). The in-combination magnitude of cumulative change on the LLC is assessed as Medium, recognising the established presence of settlement expansion, transmission infrastructure and consented energy infrastructure within the subtype, while noting that cumulative effects would remain focused on the Netherton area rather than being experienced uniformly across the subtype as a whole. The in-combination cumulative residual effect under Scenario 2 is assessed as Minor (not significant).

Cumulative Scenario 2: Existing, Consented and In-planning Developments

- 5.10.26 Under Scenario 2, the cumulative baseline would include the existing and consented developments identified under Scenario 1, together with the in-planning developments comprising Cumulative Development 1, West of Greystone BESS; Cumulative Development 10, Peterhead Flexpower 500 MW BESS; Cumulative Development 4, Flushing BESS; Cumulative Development 9, New Deer 400 kV OHL Diversion 'Rebuild'; Cumulative Development 11, Netherton BESS; and Cumulative Development 12, Beauly to Peterhead 400 kV overhead line. Of these, the New Deer 400 kV OHL Diversion 'Rebuild' is the only cumulative development located within the LLC. The remaining cumulative developments are located within adjacent LCT 17 and would therefore give rise to indirect cumulative effects on the LLC, through their influence on its setting and the perception of nearby largescale energy and transmission infrastructure.
- 5.10.27 The cumulative influence of the in-planning BESS developments would be primarily associated with the introduction of additional compound based infrastructure, security fencing, access tracks, ancillary equipment and built form within adjacent LCT 17. These elements would not directly alter the physical fabric of the LLC, but would be experienced as part of an expanding pattern of largescale infrastructure adjoining the subtype, particularly where located in close proximity to the consented Netherton Hub and existing transmission network. The in-planning New Deer 400 kV OHL Diversion 'Rebuild', located within the LLC, would directly reinforce the wirescape character of the subtype, while the Beauly to Peterhead 400 kV overhead line in adjacent LCT 17 would contribute indirectly to the prominence of towers, conductors and associated electrical infrastructure within the local landscape context.
- 5.10.28 In combination, these developments would give rise to a more developed, urbanised and infrastructure led setting to the LLC, particularly in the Netherton area and along the wider settlement edge of Peterhead. The direct cumulative influence within the LLC would be limited to the New Deer 400 kV OHL Diversion 'Rebuild'; however, the adjacent BESS, substation, converter station and overhead line developments within LCT 17 would exert an indirect cumulative influence through their proximity, intervisibility and contribution to the broader infrastructure character of the local landscape. In these locations, the Proposed Development would form one component of a wider cluster of energy infrastructure, adding to the established erosion of rural character within the local context rather than introducing a new or uncharacteristic form of development.
- 5.10.29 The cumulative influence would diminish beyond the more developed parts of the LLC. While theoretical visibility may extend across peripheral parts of the subtype, the perceptual influence of the infrastructure cluster would reduce with distance and would be moderated by intervening built form, localised vegetation, landform and the existing complexity of the urban fringe landscape. Consequently, cumulative effects would be most apparent in close association with the existing and emerging infrastructure cluster, rather than being evenly experienced across the subtype as a whole.
- 5.10.30 Overall, under Scenario 2, cumulative effects would remain concentrated within and around Netherton Hub and the LLC, where settlement expansion, industrial land uses, transmission infrastructure and in-planning energy developments in adjacent LCT 17 would combine with the New Deer 400 kV OHL Diversion 'Rebuild' within the LLC to create a locally intensified infrastructure landscape. The Proposed Development would contribute to this cumulative context, with direct cumulative interaction principally associated with the Rebuild development within

the LLC, and indirect cumulative interaction arising from the Beauly to Peterhead 400 kV overhead line and nearby BESS developments in adjacent LCT 17. The LLC is assessed as being of *Low* sensitivity. The in-addition magnitude of cumulative change arising from the Proposed Development is assessed as Medium, reflecting its direct contribution to a more developed wirescape within the LLC and its indirect relationship with the wider cluster of in-planning energy developments in adjacent LCT 17. Taking account of the *Low* sensitivity of the LLC, this would result in a Minor (not significant) in addition residual cumulative effect. The in-combination magnitude of cumulative change on the LLC is assessed as High-Medium, owing to the direct influence of the Rebuild development within the LLC and the indirect cumulative influence of BESS, substation, converter station and overhead line infrastructure within adjacent LCT 17. Taking account of the *Low* sensitivity of the LLC, this would result in a Moderate to Minor (not significant) in-combination residual cumulative effect. However, given the already modified and eroded character of the subtype, the established presence of largescale infrastructure and the localised nature of direct and indirect cumulative influence, the Proposed Development would not fundamentally alter the character of the LLC, however, would intensify the existing pattern of cumulative landscape change.

5.11 Cumulative Visual Effects

Cumulative Visual Effects on Views from Settlements

Longside and Flushing

Cumulative Scenario 1: Existing and Consented Developments

- 5.11.1 Under Scenario 1, the cumulative baseline for visual receptors within Longside and Flushing would comprise the existing New Deer to Peterhead 400 kV OHL and the consented Cumulative Development 3, Netherton Hub. These developments would be experienced principally in views to the east, southeast and south, alongside the Proposed Development, where the landform and settlement edge allow more open views towards the concentration of largescale electrical infrastructure at and around Netherton. As settlement receptors, residents and visitors within Longside and Flushing are considered to have a *High* sensitivity to the type of development proposed, with cumulative effects arising indirectly through changes to views experienced from the settlement edge, residential outlooks, local roads and publicly accessible areas.
- 5.11.2 The existing New Deer to Peterhead 400 kV OHL forms an established component of the wider transmission infrastructure context and, where visible, is generally perceived as a linear element crossing the wider rural landscape. In contrast, the consented Netherton Hub would represent a more concentrated and prominent form of electrical infrastructure, comprising largescale substation and converter station elements within the middle ground of easterly, southeasterly and southerly views. This would introduce a pronounced node of infrastructure activity, increasing the scale, massing and industrial character of the view in the vicinity of Netherton.
- 5.11.3 The Proposed Development would be perceived in conjunction with this established and consented baseline, adding further OHL infrastructure within the same broad sector of the view. However, during the operational stage of the Proposed Development, a short section of the existing New Deer to Peterhead 400 kV OHL would be removed between the proposed 'In' and 'Out' legs. This would result in a localised qualitative improvement, reducing the extent of visible transmission infrastructure in this part of the view and partially offsetting the perceived addition of new overhead line elements. The influence of the Proposed Development would nevertheless be most apparent in the vicinity of Netherton Hub, where the spatial relationship between towers, conductors and largescale substation infrastructure would increase the degree of visual association between electrical infrastructure elements. This would give rise to highly localised cumulative visual effects in and around the principal concentration of development at Netherton Hub. However, these effects would reduce over distance from the hub, as the constituent elements become more dispersed, increasingly filtered by intervening landform, vegetation and built form, and less readily discernible within the wider landscape composition.

5.11.4 Overall, the Proposed Development would give rise to a Medium-Low in-addition cumulative magnitude of change for visual receptors within Longside and Flushing under Scenario 1, with the greatest effects experienced from southern and southeastern settlement edges and more open locations where views are directed towards Netherton Hub. On the basis of the *High* sensitivity of settlement receptors, the residual in-addition cumulative visual effect is assessed as **Major to Moderate** (significant) in localised views closest to the Netherton concentration, reducing to Moderate to Minor (not significant) where the Proposed Development is more distant, filtered or less visually associated with the wider infrastructure context. The in-combination cumulative magnitude of change would be High-Medium, reflecting the combined influence of the existing New Deer to Peterhead 400 kV OHL and the consented Netherton Hub. This would result in a **Substantial to Major** (significant) residual in-combination cumulative visual effect, significant in localised views from the eastern, southeastern and southern aspects of Longside and Flushing, but diminishing appreciably with distance and increasing separation from the Netherton infrastructure cluster.

Cumulative Scenario 2: Existing, Consented and In-planning Developments

- 5.11.5 Scenario 2 introduces a wider range of in-planning developments into the cumulative baseline, including Cumulative Development 1, West of Greystone BESS, Cumulative Development 10, Peterhead Flexpower 500 MW BESS, Cumulative Development 4, Flushing BESS, Cumulative Development 9, New Deer 400 kV OHL Diversion 'Rebuild', Cumulative Development 11, Netherton BESS, and Cumulative Development 12, Beauly to Peterhead 400 kV OHL. These developments would be considered alongside the existing New Deer to Peterhead 400 kV OHL and the consented Netherton Hub, resulting in a more intensive and layered cumulative infrastructure context visible to the south and southwest of Longside and Flushing, as well as within the wider easterly, southeasterly and southerly viewing arc associated with Scenario 1.
- 5.11.6 The cumulative influence under Scenario 2 would be characterised by the clustering of BESS, substation and OHL infrastructure in the vicinity of Netherton Hub, together with additional linear transmission infrastructure associated with the New Deer 400 kV OHL Diversion 'Rebuild' and Beauly to Peterhead 400 kV OHL. In views from the southern and southwestern aspects of both settlements, these developments would increase the perceived density, scale and complexity of electrical infrastructure, with potential for visual stacking between towers, conductors, BESS compounds and larger substation elements. The resultant cumulative composition would be most pronounced where open views are available towards Netherton and would reinforce the emerging perception of this part of the landscape as a focal area for major grid and energy storage infrastructure.
- 5.11.7 The Proposed Development would form part of this broader cumulative pattern and would be perceived as an additional OHL element within an already complex infrastructure setting. During the operational stage, a short section of the existing New Deer to Peterhead 400 kV OHL would be removed between the proposed 'In' and 'Out' legs, resulting in a localised qualitative improvement through a reduction in the amount of visible transmission infrastructure. Its incremental contribution would therefore be partly moderated by the removal of this existing section of OHL, although the Proposed Development would remain most influential where it is seen in close visual association with Netherton Hub, Netherton BESS, the Beauly to Peterhead 400 kV OHL and the New Deer 400 kV OHL Diversion 'Rebuild'. In these locations, the cumulative effect would be intensified by the proximity and intervisibility of multiple infrastructure components. However, the influence of the Proposed Development would reduce with increasing distance from the Netherton cluster, as individual elements become less distinct and more readily absorbed into the wider landscape and settlement edge context.
- 5.11.8 Overall, under Scenario 2, the Proposed Development would give rise to a Medium in-addition cumulative magnitude of change for visual receptors within Longside and Flushing, with the highest degree of effect experienced from locations on the southern and southwestern edges of the settlements and from more open views orientated towards Netherton Hub and the wider infrastructure corridor. Taking account of the High sensitivity of settlement receptors, the residual in-addition cumulative visual effect is assessed as **Major** (significant) in localised views where the Proposed Development is seen in close association with the wider infrastructure cluster, reducing to Moderate to Minor (not significant) where intervening landform, vegetation, built form and distance lessen its perceptual contribution. The in-combination cumulative magnitude of change

would be High-Medium, reflecting the combined presence of existing, consented and in-planning transmission, BESS and substation infrastructure. This would result in a **Substantial to Major** (significant) residual in-combination cumulative visual effect, significant in localised views from the southern and southwestern aspects of Longside and Flushing, however, becoming progressively less pronounced with distance as the perceptibility and visual coalescence of cumulative developments reduces.

Cumulative Visual Effects on Views from Residential Properties

Cumulative Scenario 1: Existing and Consented Developments

- 5.11.9 Under Cumulative Scenario 1, the assessment considers the operational and consented cumulative baseline comprising the existing New Deer to Peterhead 400 kV overhead line and Cumulative Development 3, the consented Netherton Hub. For residential receptors in and around the Proposed Development, these developments would form part of an already infrastructure influenced baseline, within which largescale electricity transmission and energy related development is a perceptible and, in certain locations, prominent component of the wider outlook. Cumulative effects would be most apparent for individual residential receptors located in and around the concentration of development at Netherton Hub, where the Proposed Development would be experienced in close visual association with existing transmission infrastructure and the consented hub development. In these locations, views from the southern aspect of the surrounding residential properties would have the potential to include a more concentrated arrangement of OHL infrastructure, substation related development and associated energy infrastructure, resulting in a locally intensified pattern of development within the receiving landscape. The cumulative visual influence would, however, be highly localised. The degree of cumulative change would reduce progressively with distance from the Netherton Hub area and would also be moderated by the orientation of residential properties, the presence of intervening landform, settlement edge vegetation, garden and field boundary planting, and the extent to which views are experienced directly, obliquely or as part of a wider panoramic context. For receptors where the Proposed Development is seen against, or in close proximity to, the existing New Deer to Peterhead 400 kV overhead line, the additional cumulative influence would generally be perceived as an intensification of an established infrastructure character rather than the introduction of a wholly new type of visual feature.
- 5.11.10 On this basis, and taking account of the *High* sensitivity attributed to residential receptors, the in-addition cumulative magnitude of change attributable to the Proposed Development under Scenario 1 is assessed as ranging from Very Low to Medium-Low. The upper end of this range would be limited to close range properties with open, sustained and relatively direct views towards the Proposed Development in association with the consented Netherton Hub and existing transmission infrastructure. This would give rise to cumulative residual effects ranging from Minor (not significant) to **Major to Moderate** (significant). The in-combination cumulative magnitude of change, reflecting the combined presence of the Proposed Development with the existing New Deer to Peterhead 400 kV overhead line and the consented Netherton Hub, is assessed as ranging from Low to Medium, resulting in cumulative residual effects ranging from **Moderate** (significant) to **Major** (significant). Significant effects would be localised and principally confined to receptors with open southerly outlooks towards the Netherton Hub concentration.

Cumulative Scenario 2: Existing, Consented and In-planning Developments

- 5.11.11 Cumulative Scenario 2 introduces the wider in-planning cumulative baseline, comprising Cumulative Development 1, West of Greystone BESS; Cumulative Development 10, Peterhead Flexpower 500 MW BESS; Cumulative Development 4, Flushing BESS; Cumulative Development 9, New Deer 400 kV OHL Diversion 'Rebuild'; Cumulative Development 11, Netherton BESS; and Cumulative Development 12, Beauly to Peterhead 400 kV OHL, in addition to the existing and consented developments considered under Scenario 1.
- 5.11.12 The introduction of these in-planning developments would increase the overall density, complexity and spatial extent of energy infrastructure within the wider Netherton and Peterhead context. The cumulative composition would include a combination of OHL infrastructure, grid connection works and battery energy storage developments, with the greatest concentration of cumulative change occurring in and around Netherton Hub.

From residential receptors with open southern or southeastern aspects towards this area, the cumulative baseline would therefore be characterised by a more developed and infrastructure led visual context than under Scenario 1. In this heightened cumulative baseline, the Proposed Development would be perceived as part of a broader pattern of electricity transmission and energy related infrastructure rather than as an isolated element. Its cumulative contribution would be most apparent where new tower infrastructure is seen in close visual association with the existing New Deer to Peterhead 400 kV overhead line, the proposed New Deer 400 kV OHL Diversion 'Rebuild', the Beauly to Peterhead 400 kV OHL and the cluster of BESS developments around Netherton. In such views, the Proposed Development would contribute to the consolidation and intensification of infrastructure character, particularly for close range receptors with open, sustained and direct views towards the concentration of development.

- 5.11.13 The cumulative effects would remain geographically contained and would diminish noticeably with increasing distance from the Netherton Hub area. For properties located beyond the immediate concentration of development, intervening landform, built form, woodland vegetation, hedgerows and localised tree cover would increasingly filter or screen lower level infrastructure, while the tower elements would occupy a smaller proportion of the available view. The perceptual influence of the Proposed Development would therefore reduce in more distant, oblique or partially screened views, particularly where it is absorbed within an already complex infrastructure setting.
- 5.11.14 Taking account of the *High* sensitivity of residential receptors, the Scenario 2 in-addition cumulative magnitude of change attributable to the Proposed Development is assessed as ranging from Very Low to Medium. The Medium magnitude would be limited to those individual residential receptors closest to the Proposed Development and the Netherton Hub concentration, where open and sustained views would be available towards multiple infrastructure components. This would result in cumulative residual effects ranging from Minor (not significant) to **Major** (significant). When considered in combination with the existing New Deer to Peterhead 400 kV overhead line, the consented Netherton Hub and the identified in-planning developments, the in-combination cumulative magnitude of change is assessed as ranging from Medium-Low to High-Medium, giving rise to cumulative residual effects ranging from **Major to Moderate** (significant) to **Substantial to Major** (significant). These significant in-combination effects would be principally attributable to the combined concentration of existing, consented and in-planning energy infrastructure at and around Netherton Hub, rather than to the Proposed Development in isolation.

Cumulative Visual Effects on Views from Transport Routes

A952

Cumulative Scenario 1: Existing and Consented Developments

- 5.11.15 Cumulative Scenario 1, the assessment considers the Proposed Development in the context of existing infrastructure, including the New Deer to Peterhead 400 kV overhead line, and consented cumulative development at Cumulative Development 3, Netherton Hub. From the A952, theoretical and practical visibility of these developments would be concentrated within a relatively localised part of the route, principally where eastward views are available towards the Netherton Hub area. Within these short sections, the visual context is already influenced by existing electricity transmission infrastructure and associated energy development, which provide an established framework for the perception of further grid related infrastructure. In this context, cumulative effects would be highly localised in and around the concentration of development at Netherton Hub, where the Proposed Development may be perceived in conjunction with existing and consented infrastructure. The combined influence of these elements would be most apparent in a limited section of the A952 where views are directed eastwards; however, the extent of visibility would reduce appreciably over distance, with roadside vegetation, intervening landform, settlement edge features and the oblique nature of sequential views limiting the duration and prominence of cumulative visibility.
- 5.11.16 The in-addition cumulative magnitude of change attributable to the Proposed Development is assessed as Very Low, reducing to Zero beyond the short sections of the route where overlapping visibility may occur. This results in

a Negligible (not significant) in-addition cumulative effect for road users of *Medium* sensitivity, and a Minor (not significant) in-addition cumulative effect for tourist users of *High* sensitivity. When considered in-combination with the existing New Deer to Peterhead 400 kV overhead line and the consented Netherton Hub development, the combined cumulative magnitude of change is assessed as Medium-Low within the limited area of overlapping visibility, resulting in a Moderate to Minor (not significant) cumulative effect for road users and a **Major to Moderate** (significant) cumulative effect for tourist users. Any such effects would be localised, adverse and would diminish rapidly with distance north and south of the Netherton Hub area.

Cumulative Scenario 2: Existing, Consented and In-planning Developments

5.11.17 For Scenario 2 includes the existing and consented developments identified under Scenario 1, together with in-planning developments comprising Cumulative Development 1, West of Greystone BESS; Cumulative Development 10, Peterhead Flexpower 500 MW BESS; Cumulative Development 4, Flushing BESS; Cumulative Development 9, New Deer 400 kV OHL Diversion 'Rebuild'; Cumulative Development 11, Netherton BESS; and Cumulative Development 12, Beaulay to Peterhead 400 kV OHL. Collectively, these developments would increase the perceived concentration of energy and electricity transmission infrastructure within and around the Netherton Hub area, particularly in views looking east from short sections of the A952. The cumulative influence of Scenario 2 would remain geographically contained, with the greatest potential for combined visibility occurring in close association with the Netherton Hub cluster. In these views, the addition of further BESS infrastructure and OHL development would increase the density and complexity of grid related elements in the wider view. Nevertheless, the Proposed Development would continue to be experienced sequentially and briefly by road users, with visibility often filtered or interrupted by roadside vegetation, built form, landform and the changing orientation of the route. Beyond the limited sections of the A952 where eastward views are available, cumulative visibility would reduce quickly and the Proposed Development would not materially influence the wider visual experience of the route.

5.11.18 The in-addition cumulative magnitude of change associated with the Proposed Development is therefore assessed as Very Low, resulting in a Negligible (not significant) cumulative effect for road users of *Medium* sensitivity and a Minor (not significant) cumulative effect for tourist users of *High* sensitivity. When considered in-combination with all existing, consented and in-planning cumulative developments, the combined cumulative magnitude of change within the short A952 sections with overlapping visibility is assessed as Medium, reflecting the increased concentration of infrastructure around Netherton Hub. This would result in a **Moderate** (significant) cumulative effect for road users and a **Major** (significant) cumulative effect for tourist users, significant where the clearest and closest eastward views towards the Netherton Hub concentration occur. The Proposed Development's contribution to this combined outcome would be limited and incremental and would not materially alter the overall cumulative pattern of effects, which would remain highly localised and would reduce over distance.

A950

Cumulative Scenario 1: Existing and Consented Developments

5.11.19 Cumulative Scenario 1 considers the Proposed Development in the context of existing and consented cumulative developments within the wider A950 visual corridor, including the existing New Deer to Peterhead 400 kV OHL and Cumulative Development 3, Netherton Hub (consented). Views from the A950 are experienced sequentially and at varying degrees of openness, with the most direct and sustained visibility occurring along sections of the route where receptors look south, southwest and southeast towards the concentration of electrical infrastructure and energy related development around Netherton Hub. In these locations, cumulative development would form a locally concentrated feature within the available view, with OHL infrastructure, substation related development and associated energy infrastructure perceived in combination across a relatively contained part of the landscape.

5.11.20 The cumulative influence would be most apparent in the vicinity of Viewpoint T4 (refer to **Figure 5.9a-c: VPT4 – A950 Looking West Towards Netherton Hub (Volume 2)**) and along other open sections of the A950 where intervening screening is limited and the Netherton Hub area is visible as a focus of infrastructure in the middle distance. Within these localised extents, the Proposed Development would be read alongside existing and consented electrical infrastructure, contributing to an intensification of the infrastructure character already

evident in the view. However, this combined influence would reduce appreciably with distance to the east and west as views become more oblique, filtered by roadside vegetation, partially screened by landform and built form, or interrupted by the changing alignment of the road. Beyond the principal areas of overlapping visibility, cumulative effects would diminish rapidly and would not materially alter the wider visual experience of the route.

- 5.11.21 For general road users on the A950, who are assessed as having *Medium* sensitivity, the in-addition cumulative magnitude of change attributable to the Proposed Development is assessed as Low to Very Low, with the upper end of this range confined to the short, more open sections of the route around the Netherton Hub concentration. This would result in a Minor (not significant), reducing to Negligible (not significant) to the east and west, cumulative effect. For tourists and other more sensitive road users, who are assessed as having *High* sensitivity, the in-addition cumulative effect would range from Minor (not significant) to **Moderate** (significant), with any **Moderate** effects being highly localised and limited to those sections where the Proposed Development would be seen most clearly in conjunction with existing and consented infrastructure.
- 5.11.22 When considered in combination with existing and consented cumulative development, the combined cumulative magnitude of change along the short A950 sections with overlapping visibility is assessed as Medium, reflecting the localised concentration of infrastructure around Netherton Hub. This would result in a **Moderate** (significant) cumulative effect for general road users of *Medium* sensitivity and a **Major** (significant) cumulative effect for tourists of *High* sensitivity. These effects would be significant only within the limited, open sections of the A950 where cumulative development is most apparent, reducing to Minor or Negligible and not significant over the wider route to the east and west.

Cumulative Scenario 2: Existing, Consented and In-planning Developments

- 5.11.23 Scenario 2 considers the Proposed Development in conjunction with existing, consented and in-planning cumulative developments, including the existing New Deer to Peterhead 400 kV overhead line; Cumulative Development 1, West of Greystone BESS and Cumulative Development 10, Peterhead Flexpower 500 MW BESS (in-planning); Cumulative Development 3, Netherton Hub (consented); Cumulative Development 4, Flushing BESS (in-planning); Cumulative Development 9, New Deer 400 kV OHL Diversion 'Rebuild' (in-planning); Cumulative Development 11, Netherton BESS (in-planning); and Cumulative Development 12, Beauly to Peterhead 400 kV OHL (in-planning). Collectively, these developments would increase the perceived density and spatial concentration of electrical and energy related infrastructure within and around the Netherton Hub area.
- 5.11.24 From large sections of the A950, particularly where views open towards the south, southwest and southeast, the cumulative baseline would be more strongly influenced by the presence of OHL infrastructure, BESS development and substation related components. The principal cumulative effect would remain highly localised around the Netherton Hub concentration, where multiple infrastructure elements would be perceived within a relatively compact part of the view. In these circumstances, the Proposed Development would form part of a broader cumulative infrastructure setting, contributing to the overall perception of electrical transmission and energy storage development within the landscape. Nevertheless, its contribution would be moderated by the existing and emerging infrastructure context, the oblique nature of many views from the route, and the transient experience of road users. The in-planning schemes identified in Scenario 2 would increase the cumulative intensity of development visible from the A950 when compared with Scenario 1, particularly in the vicinity of Netherton Hub and from open sections of the road where the development concentration is seen in successive or combined views. The cumulative influence would, however, continue to reduce with distance from this focus of development. To the east and west, roadside vegetation, intervening landform, built form and the changing orientation of the route would progressively limit or fragment views, such that the cumulative impression would become less continuous and less prominent within the overall visual experience.
- 5.11.25 For general road users on the A950, who are assessed as having *Medium* sensitivity, the in-addition cumulative magnitude of change attributable to the Proposed Development is assessed as Low to Very Low, resulting in a Minor (not significant) to Negligible (not significant) cumulative effect. For tourists and other more sensitive road users, who are assessed as having *High* sensitivity, the in-addition cumulative effect would range from Moderate (significant) to Minor (not significant), with the higher level of effect restricted to the most open and locally

affected sections of the route around Netherton Hub. The Proposed Development would not, in itself, materially extend the geographical extent of cumulative visibility along the A950. When assessed in combination with all existing, consented and in-planning cumulative developments, the combined cumulative magnitude of change along the principal sections of overlapping visibility is assessed as High-Medium, reflecting the increased concentration, density and variety of infrastructure elements visible in and around Netherton Hub. This would give rise to a **Substantial to Major** (significant) cumulative effect for tourists of *High* sensitivity and a **Major to Moderate** (significant) cumulative effect for general road users of *Medium* sensitivity. These combined effects would be significant within the highly localised sections of the A950 where the cumulative concentration is most apparent, reducing to Minor or Negligible and not significant where views become more distant, oblique, filtered or screened. The Proposed Development's individual contribution to this combined cumulative outcome would remain incremental and would not materially alter the overall pattern of cumulative effects along the wider A950 corridor.

Minor Roads to the North, East, South and West

Cumulative Scenario 1: Existing and Consented Developments

5.11.26 Scenario 1 considers the cumulative influence of the existing New Deer to Peterhead 400 kV OHL in combination with Cumulative Development 3, Netherton Hub, which is consented. For road users travelling along the minor roads to the north, east, south and west of Netherton Hub, theoretical and actual visibility would vary according to proximity, viewing orientation, roadside vegetation, localised landform and the degree of containment provided by field boundaries and built elements. The clearest cumulative interactions would occur from short and intermittent sections of the minor road network in closest proximity to the Netherton Hub, where open views are available towards the consented hub infrastructure and the existing overhead line corridor. In these locations, the cumulative visual context would already be strongly influenced by largescale electrical transmission infrastructure, including towers, conductors, substation components, access infrastructure and associated earthworks. Within this established context, the Proposed Development would be perceived as an additional OHL component associated with the 'In' leg and 'Out' leg to the existing New Deer to Peterhead 400 kV OHL. Its contribution to cumulative change would be most apparent where new towers and conductors are seen in close visual association with the consented hub infrastructure and retained sections of existing OHL. In such views, the Proposed Development would increase the density and complexity of electrical infrastructure, reinforcing the perception of this locality as an emerging focus for strategic transmission development. However, these effects would be highly localised and would reduce rapidly with distance from Netherton Hub, as individual infrastructure elements become less distinct, more frequently filtered by intervening vegetation and increasingly absorbed into the wider agricultural and infrastructure influenced landscape context.

5.11.27 The in-addition cumulative magnitude of change attributable to the Proposed Development is therefore assessed as ranging from Very Low to Medium, with the upper end of the range confined to short sections of minor road closest to Netherton Hub and the 'In' and 'Out' alignments. Taking account of the *Medium* sensitivity of road users, the resulting in-addition cumulative effect would range from Negligible (not significant) to **Moderate** (significant). When considered in combination with the existing New Deer to Peterhead 400 kV OHL and the consented Netherton Hub, the combined cumulative magnitude of change would range from Low to High-Medium, resulting in a Minor (not significant) to **Major to Moderate** (significant) cumulative effect for road users of *Medium* sensitivity. Significant effects would be concentrated in and around the localised cluster of development at Netherton Hub and would diminish across the wider minor road network to the north, east, south and west as distance, screening and changes in viewing angle reduce the perceptual prominence of the cumulative infrastructure.

Cumulative Scenario 2: Existing, Consented and In-planning Developments

5.11.28 Scenario 2 incorporates the existing and consented developments described under Scenario 1, together with the relevant in-planning cumulative schemes influencing the minor road network around Netherton Hub. These comprise Cumulative Development 1, West of Greystone BESS; Cumulative Development 10, Peterhead Flexpower

500 MW BESS; Cumulative Development 4, Flushing BESS; Cumulative Development 9, New Deer 400 kV OHL Diversion 'Rebuild'; Cumulative Development 11, Netherton BESS; and Cumulative Development 12, Beauly to Peterhead 400 kV OHL. Collectively, these developments would increase the perceived density, complexity and spatial extent of energy infrastructure within the wider Netherton and Peterhead hinterland, particularly where the proposed and emerging overhead line infrastructure is experienced in close association with the consented hub and surrounding battery energy storage schemes. For road users on minor roads to the north, east, south and west of Netherton Hub, the greatest cumulative visual effects would arise from sections where open or partially open views are available towards the concentration of infrastructure around the hub. From these routes, the in-planning Beauly to Peterhead 400 kV OHL and New Deer 400 kV OHL Diversion 'Rebuild' would add further towers, conductors and associated linear infrastructure, increasing the perception of a more complex and layered overhead line environment. The BESS developments at West of Greystone, Peterhead Flexpower, Flushing and Netherton would introduce additional low level but large footprint electrical infrastructure, reinforcing the localised perception of Netherton as a focal area for grid connection and energy storage development. The cumulative composition would therefore be most pronounced where road users experience sequential or combined views of the Proposed Development, the consented Netherton Hub, the existing New Deer to Peterhead 400 kV OHL, the in-planning OHL developments and the surrounding BESS schemes within the same broad field of view or during a short sequence of travel.

5.11.29 The Proposed Development would form part of this wider cumulative pattern and would be perceived as an additional OHL element within an already infrastructure led visual context. Although the removal of a short section of the existing New Deer to Peterhead 400 kV OHL between the proposed 'In' leg and 'Out' leg would provide some localised moderation of cumulative change, this would not fully offset the increased extent, prominence and visual complexity associated with the combined scenario. The cumulative effects would remain highly localised in and around the concentration of development at Netherton Hub, with effects reducing progressively over distance as the scale of individual elements diminishes, intervening vegetation and landform provide filtering, and the developments become less readily distinguishable within the wider landscape.

5.11.30 The in-addition cumulative magnitude of change associated with the Proposed Development under Scenario 2 is assessed as ranging from Very Low to Medium, resulting in a Negligible (not significant) to **Moderate** (significant) cumulative effect for road users of *Medium* sensitivity. When considered in combination with all existing, consented and in-planning developments, the combined cumulative magnitude of change would range from Low to High, with the highest magnitude limited to short sections of minor road in closest proximity to Netherton Hub and locations where open views allow multiple infrastructure components to be experienced together. This would result in a Minor (not significant) to **Major** (significant) cumulative effect for road users of *Medium* sensitivity. Significant cumulative effects would be concentrated on the minor road network in and around Netherton Hub, particularly to the north, east, south and west where visibility is available towards the principal cluster of development. Beyond these localised areas, cumulative effects would reduce to not significant as distance, roadside containment, intervening landform and vegetation lessen the prominence and intervisibility of the cumulative infrastructure.

Cumulative Visual Effects from Recreational Routes

Formartine and Buchan Way

Cumulative Scenario 1: Existing and Consented Developments

5.11.31 Scenario 1 considers the cumulative influence of the existing New Deer to Peterhead 400 kV OHL in combination with Cumulative Development 3, Netherton Hub (consented). For recreational users of the Formartine and Buchan Way to the north of the Proposed Development, who are considered to be of *High* sensitivity, cumulative visibility would vary appreciably along the route, reflecting the changing relationship between the receptor, the Netherton infrastructure cluster, intervening landform, roadside and field boundary vegetation, localised built form and the sequential nature of views experienced from the route. The clearest cumulative interactions would be experienced from those more open sections of the Formartine and Buchan Way where views are orientated towards Netherton

Hub and the existing OHL corridor. In these locations, the consented Netherton Hub would introduce a substantial concentration of transmission and converter station infrastructure into the middle ground, while the existing New Deer to Peterhead 400 kV OHL would continue to form a recognised linear infrastructure component within the wider landscape. The Proposed Development would be perceived in close association with these elements, particularly where new towers and conductors are seen above or against the wider Netherton Hub complex, thereby increasing the density and visual complexity of electrical infrastructure within an already infrastructure influenced locality. Cumulative effects would be highly localised and focused in and around the concentration of development at Netherton Hub. From sections of the route in views to the south, the combined presence of the existing OHL, the Proposed Development and the consented Hub infrastructure would reinforce the perception of this area as an emerging focus for strategic transmission development. However, this influence would reduce with distance, as individual components become less distinct and are increasingly filtered by intervening landform, settlement edge features, woodland, hedgerows and roadside vegetation. Consequently, the cumulative effect would not be experienced continuously along the route, but rather as a series of intermittent and locally concentrated views.

- 5.11.32 Taking account of the limited spatial extent of sustained visibility, the presence of existing transmission infrastructure, the consented character of Netherton Hub and the sequential experience of recreational users, the in-addition cumulative magnitude of change under Scenario 1 is assessed as Medium-Low, giving rise to a **Major to Moderate** (significant) in-addition cumulative effect for *High* sensitivity recreational receptors along short, open sections of the Formartine and Buchan Way. Elsewhere, where views are more oblique, distant or filtered, effects would reduce to Moderate to Minor (not significant). The combined cumulative magnitude is assessed as Medium-Low to Medium in the most open locations, resulting in a **Major to Moderate** (significant) and Major (significant) combined cumulative effect where the Proposed Development, the existing New Deer to Peterhead 400 kV OHL and Netherton Hub are experienced together.

Cumulative Scenario 2: Existing, Consented and In-planning Developments

- 5.11.33 Scenario 2 considers the cumulative influence of existing and consented development, as assessed under Scenario 1, together with the in-planning cumulative developments comprising Cumulative Development 1, West of Greystone BESS; Cumulative Development 10, Peterhead Flexpower 500 MW BESS; Cumulative Development 4, Flushing BESS; Cumulative Development 9, New Deer 400 kV OHL Diversion 'Rebuild'; Cumulative Development 11, Netherton BESS; and Cumulative Development 12, Beauly to Peterhead 400 kV OHL. This scenario would materially increase the extent, scale and complexity of energy and transmission infrastructure within the wider Netherton and Peterhead landscape context. For users of the Formartine and Buchan Way to the north of the Proposed Development, the most pronounced cumulative effects would remain highly localised in and around Netherton Hub, where multiple components of transmission, converter station and battery energy storage infrastructure would be experienced in close visual association. The New Deer 400 kV OHL Diversion 'Rebuild' and the Beauly to Peterhead 400 kV OHL would reinforce the overhead line and wirescape character of the locality, introducing additional towers and conductors of comparable scale and form. In parallel, the Netherton BESS, Flushing BESS, West of Greystone BESS and Peterhead Flexpower 500 MW BESS would contribute to the broader perception of the area as a focal point for energy generation, storage and grid connection infrastructure. Where open views are available from the Formartine and Buchan Way to the south, the cumulative composition would comprise a more complex arrangement of towers, conductors, substation buildings, converter station infrastructure, BESS compounds, access infrastructure and associated earthworks. In these locations, the Proposed Development would form one component within a wider cluster of strategic electrical infrastructure, adding to the perceived scale, density and visual layering of infrastructure rather than introducing a wholly new or uncharacteristic influence. The removal of a short section of the existing New Deer to Peterhead 400 kV OHL between the proposed 'In' leg and 'Out' leg would provide a limited localised reduction in visible infrastructure; however, this would not fully offset the additional prominence and complexity associated with the wider in-planning cumulative scenario. Beyond the immediate Netherton Hub concentration, cumulative influence would reduce appreciably with distance. The larger infrastructure components would become less legible as individual features, and their visual influence would be moderated by intervening landform, field boundary vegetation, shelterbelts, roadside

planting, settlement edge development and the oblique orientation of many available views. As such, while theoretical visibility may extend across sections of the route and surrounding minor road network, meaningful cumulative effects would be concentrated within those shorter, more open sections where multiple developments are jointly visible and read as part of the same infrastructure setting.

5.11.34 Overall, under Scenario 2, the in-addition cumulative magnitude of change for recreational users of the Formartine and Buchan Way is assessed as Medium, reducing to Low or Very Low where views are distant, oblique, screened or filtered. For *High* sensitivity recreational receptors, this would result in a **Major** (significant) in-addition cumulative effect along short, open sections where the Proposed Development is seen in close association with Netherton Hub, the New Deer 400 kV OHL Diversion 'Rebuild', Netherton BESS and the Beauly to Peterhead 400 kV OHL. Elsewhere along the route, effects would reduce to **Moderate** (significant) or Minor (not significant). On a worst case sequential basis, the combined cumulative magnitude is assessed as Medium to High-Medium in the most open and proximate locations, resulting in a **Major** (significant) to **Substantial to Major** (significant) combined cumulative effect where multiple developments are experienced together within the same infrastructure focused panorama.

Core Path 208.01 at Longside

Cumulative Scenario 1: Existing and Consented Developments

5.11.35 Cumulative Scenario 1, the cumulative baseline experienced by recreational users on Core Path 208.01 at Longside would comprise the existing New Deer to Peterhead 400 kV overhead line and the consented Netherton Hub. These elements would be perceived within an established and emerging transmission infrastructure context to the southeast of the route, with the strongest cumulative influence occurring in and around the concentration of development associated with Netherton Hub. From the more open sections of the Core Path, particularly in the vicinity of Viewpoint 3, the existing 400 kV overhead line and the consented Hub infrastructure would be read in conjunction with the Proposed Development, increasing the density and complexity of energy infrastructure within the view. The resulting cumulative effects would be highly localised, arising principally where open views are available across the undulating agricultural landscape towards the Netherton Hub area and associated overhead line infrastructure. In these locations, the Proposed Development would contribute to a perceptible intensification of transmission related features, although this would occur within a landscape already influenced by largescale electricity infrastructure. The cumulative influence would reduce rapidly with distance to the northwest as the route moves away from the main concentration of development and where intervening landform, vegetation and settlement edge features provide increasing containment and filtering of views.

5.11.36 Taking account of the open character of views in the vicinity of Viewpoint 3, the proximity of the existing and consented infrastructure, and the *High* sensitivity of recreational users, the in-addition cumulative magnitude of change under Scenario 1 is assessed as Medium in the most open and directly affected sections of the route, reducing to Low and Very Low with increasing distance and screening. This would give rise to a **Major** (significant) in-addition cumulative effect over a short, localised section of Core Path 208.01, reducing to **Moderate** (significant) and Minor (not significant) effects where visibility becomes more oblique, intermittent or filtered. Effects would be long term and reversible in nature. On an in-combination basis, where the Proposed Development is experienced jointly or sequentially with the existing New Deer to Peterhead 400 kV OHL and the consented Netherton Hub, the cumulative magnitude of change is assessed as Medium over the most open and directly affected section of Core Path 208.01, reducing to Low and Very Low with increasing distance and screening. This would result in a **Major** (significant) in-combination residual cumulative effect for *High* sensitivity recreational users in the vicinity of Viewpoint 3, reducing to **Moderate** (significant) and Minor (not significant) effects along more distant or visually contained sections of the route.

Cumulative Scenario 2: Existing, Consented and In-planning Developments

5.11.37 Cumulative Scenario 2 incorporates the existing New Deer to Peterhead 400 kV overhead line, the consented Netherton Hub, and the identified in-planning cumulative developments, including Cumulative Development 1

West of Greystone BESS, Cumulative Development 10 Peterhead Flexpower 500 MW BESS, Cumulative Development 4 Flushing BESS, Cumulative Development 9 New Deer 400 kV OHL Diversion 'Rebuild', Cumulative Development 11 Netherton BESS, and Cumulative Development 12 Beaully to Peterhead 400 kV OHL. The Beaully to Peterhead 400 kV OHL is described as a major 400 kV transmission reinforcement connecting new substation sites including Netherton, while the Proposed Development would connect the proposed 400 kV substation within the Hub to the existing transmission network. These schemes would collectively reinforce the perception of the Netherton area as a focus for largescale transmission and energy storage infrastructure. For recreational users on Core Path 208.01, the additional in-planning developments would have the potential to increase the apparent concentration, layering and visual complexity of infrastructure in views towards and around Netherton Hub. This would be most apparent from the more open sections of the route to the northwest of the Proposed Development, where south and southeast facing views are less constrained and where OHL structures, substation related infrastructure and BESS developments may be perceived in combination or succession. In these circumstances, the Proposed Development would not be experienced as an isolated feature, but as part of a broader, locally concentrated pattern of energy infrastructure development. The cumulative effect would remain geographically limited, with the greatest perceptual influence focused in and around the Netherton Hub area and the associated OHL corridors. Beyond this localised area, the influence of the cumulative developments would diminish progressively as distance increases, views become more oblique, and intervening landform, vegetation and built form reduce the degree of intervisibility. Consequently, while Scenario 2 would intensify the infrastructure character of views from the most exposed sections of Core Path 208.01, it would not result in a continuous or route wide cumulative effect.

5.11.38 Taking a worst case approach, the in-addition cumulative magnitude of change under Scenario 2 is assessed as Medium in the vicinity of Viewpoint 3 and other short, open sections of the Core Path where multiple developments may be perceived together or sequentially. This would result in a **Major** (significant) in-addition cumulative effect for *High* sensitivity recreational users in these localised locations. With increasing distance to the northwest, and where views are partially screened or filtered, the magnitude would reduce to Low or Very Low, giving rise to **Moderate** (significant) to Minor (not significant) cumulative effects. Overall, the cumulative effect would be significant only across short, locally exposed sections of the route, with effects reducing appreciably over distance from the concentration of development at Netherton Hub. On in-combination basis, the Proposed Development, when experienced together or sequentially with the existing, consented and in-planning cumulative developments, would contribute to a more complex and infrastructure influenced visual baseline focused around Netherton Hub. The in-combination cumulative magnitude is assessed as High-Medium in the most open sections of Core Path 208.01, particularly around Viewpoint 3, reducing to Low and Very Low with distance, obliqueness of view and intervening screening. This would give rise to a **Substantial to Major** (significant) in-combination residual cumulative effect for *High* sensitivity recreational users over a short, localised section of the route, reducing to **Moderate** (significant) and Minor (not significant) effects elsewhere.

5.12 Summary and Conclusion of Landscape and Visual Effects

5.12.1 **Table 5.5** provides a summary of the predicted landscape and visual effects, including the significance of effects on sensitive receptors arising from the Proposed Development.

Landscape Effects

5.12.2 The Proposed Development would give rise to a contained and geographically localised pattern of landscape effects, principally associated with the alteration of OHL infrastructure within and around the existing New Deer to Peterhead 400 kV OHL corridor and the emerging Netherton Hub context. Within LCT 17: Coastal Agricultural Plain – Aberdeenshire, construction activity would introduce temporary movement, plant, cranes and tower works into a working agricultural landscape already influenced by energy and transmission infrastructure. Effects would be greatest in the immediate vicinity of the works, where construction change is assessed as **Moderate** adverse (significant), reducing to Moderate to Minor (not significant) across the wider LCT. During operation, the revised tower arrangement would remain perceptible locally, but would be experienced within a landscape where

overhead line infrastructure is already a familiar component; operational effects are therefore assessed as Moderate to Minor adverse (not significant).

- 5.12.3 Effects on LCT 21: Farmed and Wooded Policies would be indirect and perceptual, reflecting the location of the Proposed Development outside this character type and the moderating influence of separation distance, intervening landform, woodland, vegetation and built form. Construction effects are assessed as Minor adverse (not significant), while operational effects reduce further to Negligible adverse (not significant). At the more local scale, the Rural Local Landscape Character Subtype would experience the greatest degree of change in the immediate locality of the works, with temporary construction effects assessed as Moderate adverse (significant) locally, reducing to Minor adverse (not significant) across the wider subtype. Operational effects within this subtype would be Moderate to Minor adverse (not significant), reflecting the limited extent of change and its association with an established infrastructure context. Effects on the Peterhead Urban Fringe subtype would remain indirect, limited and not significant during both construction and operation, given the subtype's existing association with settlement edge, industrial, transport, airfield and energy infrastructure.

Visual Effects

- 5.12.4 The assessment identifies that the most notable visual effects would occur where receptors experience open, sustained or relatively direct views towards the Proposed Development and associated works. For settlement receptors located within Longside and Flushing, construction effects would be significant where views are available towards the 'In' and 'Out' OHL structures at Netherton Hub, with **Major** (significant) residual effects identified for *High* sensitivity receptors. During operation, effects would remain significant in those locations where the proposed towers are visible within open or partially filtered views, giving rise to **Major to Moderate** (significant) residual effects, although these would reduce where views are screened, filtered, oblique or more distant. The removal of a short section of the existing 400 kV overhead line would provide a localised moderating influence in some views, partially offsetting the introduction of new tower infrastructure.
- 5.12.5 For individual residential properties, effects would vary according to distance, orientation, elevation, intervening landform, vegetation and built form, and the relationship between existing and proposed OHL infrastructure. Significant effects would be limited to a small number of close range or more visually exposed receptors with open and sustained views of construction activity or operational towers. Elsewhere, effects would reduce to not significant where visibility is indirect, filtered or more distant. Although significant visual effects are predicted for some residential receptors, the assessment concludes that no property would experience visual change approaching the RVAT having regard to the nature, scale, proximity and extent of the change, the availability of screening and alternative outlooks, and the existing infrastructure baseline.
- 5.12.6 Visual effects on transport routes would be variable and strongly influenced by the sequential and transient nature of views. From the A952, visibility would be intermittent, largely distant and frequently filtered, resulting in effects ranging from Negligible to Minor (not significant) for general road users and up to **Moderate** (significant) for more sensitive tourist receptors in limited locations. Along the A950, significant effects would be concentrated on short, more open sections around Viewpoint T4 and other locations where the revised overhead line arrangement is most apparent, with effects reducing rapidly to the east and west. Minor roads closest to Netherton Hub and the 'In' and 'Out' alignments would experience the greatest degree of change, with significant effects concentrated on short localised sections where open, close range views are available. Recreational receptors, including users of the Formartine and Buchan Way and Core Path 208.01 at Longside, would experience significant effects in more open sections where the tower arrangement forms a noticeable component of the view, particularly around Viewpoint T3; however, these effects would be localised and would reduce where views are oblique, distant, screened or filtered.

Cumulative Effects

- 5.12.7 Cumulative landscape and visual effects have been assessed under two scenarios: Scenario 1, comprising existing and consented developments together with the Proposed Development; and Scenario 2, comprising existing, consented and in-planning developments together with the Proposed Development. Across the landscape assessment, cumulative effects would be focused principally around Netherton Hub and the wider Peterhead hinterland, where existing, consented and emerging energy infrastructure would reinforce an increasingly

infrastructure led local landscape context. Within LCT 17, Scenario 1 would result in a localised **Moderate** (significant) combined cumulative effect around Netherton Hub, while Scenario 2 would increase this to **Major to Moderate** (significant) locally, reflecting the additional influence of in-planning BESS and OHL developments. Effects would reduce rapidly beyond this concentration and would not result in a widespread or fundamental change to the character of LCT 17 as a whole.

- 5.12.8 For LCT 21, cumulative effects would remain indirect and not significant, with the principal direct influences arising from existing and in-planning overhead line infrastructure rather than the Proposed Development, which lies in adjacent LCT 17. The Rural Local Landscape Character Subtype would experience significant combined cumulative effects locally under both scenarios, rising to **Major to Moderate** (significant) under Scenario 2 in the immediate Netherton and West of Greystone area, where substations, BESS developments and multiple OHL routes would be experienced as a concentrated infrastructure node. Within the Peterhead Urban Fringe subtype, cumulative effects would remain not significant, reflecting the *Low* sensitivity of this already modified landscape and the localised nature of direct and indirect cumulative influence.
- 5.12.9 Cumulative visual effects would be most pronounced where the Proposed Development is experienced in close visual association with Netherton Hub, the existing New Deer to Peterhead 400 kV OHL, and the identified consented and in-planning energy infrastructure. For settlement receptors at Longside and Flushing, significant cumulative effects would be concentrated on the southern, southeastern and southwestern aspects where views towards the Netherton infrastructure cluster are available. Scenario 1 would give rise to localised **Major to Moderate** (significant) in-addition effects and **Substantial to Major** (significant) in-combination effects, while Scenario 2 would increase the density and complexity of infrastructure visible from these settlements, although effects would continue to reduce with distance, screening and separation from the cluster.
- 5.12.10 For residential receptors, significant cumulative effects would be limited to a small number of properties with open and sustained outlooks towards the concentration of infrastructure at and around Netherton Hub. Scenario 2 would result in the highest levels of combined cumulative effect, with **Substantial to Major** (significant) effects predicted in the most affected views; however, these effects would be principally attributable to the combined concentration of existing, consented and in-planning energy infrastructure rather than to the Proposed Development in isolation. The cumulative assessment also confirms that, notwithstanding the potential for significant cumulative visual effects, no individual residential property would experience a level of cumulative visual change that would breach the Residential Visual Amenity Threshold.
- 5.12.11 For transport and recreational routes, cumulative effects would be geographically focused and sequential in nature. From the A952, significant cumulative effects would be limited to short sections where eastward views towards Netherton Hub are available, with the Proposed Development making a limited and incremental contribution. Along the A950, significant combined cumulative effects would occur around the more open sections near Viewpoint T4, increasing under Scenario 2 where in-planning infrastructure adds to the density and complexity of the view. Minor roads closest to Netherton Hub would experience the greatest cumulative change, particularly where multiple infrastructure components are visible together. Recreational receptors on the Formartine and Buchan Way and Core Path 208.01 would experience significant cumulative effects in short, open sections where the Proposed Development is viewed in conjunction with existing, consented and in-planning infrastructure, with the highest effects under Scenario 2 associated with the Beauly to Peterhead 400 kV OHL, Netherton BESS and the wider Netherton Hub cluster.

Conclusion

- 5.12.12 Overall, the LVIA identifies that the Proposed Development would give rise to a limited, proportionate and highly localised pattern of landscape and visual effects. Significant effects would occur in a small number of locations where visibility is greatest, where receptors are closest to, or most directly orientated towards, the proposed works and operational infrastructure, and where existing screening by landform, vegetation or built form is limited. This outcome is not unusual for a development of this nature, size and scale, particularly where new and modified OHL infrastructure is introduced into open or partially open rural views. The most notable effects would arise during construction, when temporary activity, plant, cranes, tower assembly and dismantling would increase movement and visual prominence within the local landscape. Operational effects would generally be lower and

more contained, reflecting the cessation of construction activity, the limited extent of new infrastructure, the removal of a short section of the existing 400 kV overhead line, and the established presence of energy infrastructure within the receiving landscape.

- 5.12.13 In isolation effects arising from the Proposed Development would therefore be geographically limited and would not result in a widespread or fundamental change to landscape character or visual amenity across the wider Study Area. Similarly, where significant cumulative effects are identified, these would also be highly localised and concentrated around Netherton Hub, nearby open views, and short sections of affected routes or receptor locations where multiple infrastructure elements may be experienced together or sequentially. The highest cumulative effects would be driven primarily by the scale, concentration and intervisibility of the wider cumulative infrastructure baseline, including the consented Netherton Hub, existing transmission infrastructure and, under Scenario 2, the wider suite of in-planning BESS and OHL developments. The Proposed Development would form a secondary and incremental component within this broader infrastructure context and would not materially extend the geographical extent of significant cumulative landscape or visual effects.
- 5.12.14 Accordingly, the assessment demonstrates that both the in isolation and cumulative significant landscape and visual effects would be limited in spatial extent, focussed around the immediate Netherton Hub context and associated nearby receptors, and consistent with the type of localised effects that can reasonably be expected for strategic electricity transmission infrastructure of this scale. Policy 11 of NPF4 recognises that significant landscape and visual impacts are to be expected for some forms of renewable energy and associated infrastructure, and that where such impacts are localised and/or appropriate design mitigation has been applied, they will generally be considered acceptable. In this context, the Proposed Development is considered to accord with the policy direction of NPF4, with significant effects being highly localised, proportionate to the scale of the development, moderated by the existing and emerging energy infrastructure baseline, and acceptable in landscape and visual terms.

Table 5.5: Summary of Landscape and Visual effects

Receptor							Proposed Development (PD) and other Cumulative Developments					
	Construction:			Operation:			Cumulative Scenario 1:			Cumulative Scenario 2:		
	Sensitivity:	Magnitude:	Level of Effect:	Sensitivity:	Magnitude:	Level of Effect:	Magnitude (Existing and Consented)	Additional Level of Effect (PD)	Combined Level of Effect	Magnitude (in-planning)	Additional Level of Effect (PD)	Combined Level of Effect
Landscape Character												
LCT17: Coastal Agricultural Plain - Aberdeenshire	<i>Medium</i>	Medium within 500 m to 1 km; Low to Zero across wider LCT	Moderate adverse (significant) locally; reducing to Zero with distance	<i>Medium</i>	Medium within approximately 500 m; Low to Zero across wider LCT	Moderate to Minor adverse (not significant)	High-Medium within 600 m; Low to Zero across wider LCT	Moderate to Minor (not significant)	Major (significant) locally; reducing to Moderate to Minor (not significant) as mitigation establishes	High-Medium locally	Moderate (significant) locally	Major (significant) locally; reducing to Moderate to Minor (not significant) as mitigation establishes
LCT21: Farmed and Woodland Policies	<i>Medium</i>	Low	Minor adverse (not significant)	<i>Medium</i>	Low-Very Low	Negligible adverse (not significant)	Medium-Low	Minor adverse (not significant)	Moderate to Minor adverse (not significant)	Medium-Low	Minor adverse (not significant)	Moderate to Minor adverse (not significant)
Local Landscape Character Subtype: Rural	<i>Medium</i>	Medium locally; Low wider subtype	Moderate adverse (significant) locally; Minor adverse (not significant) wider subtype	<i>Medium</i>	Medium-Low locally	Moderate to Minor adverse (not significant)	Medium locally; Low wider subtype	Minor (not significant)	Moderate (significant) locally; Minor (not significant) wider subtype	High-Medium locally; Medium-Low wider subtype	Minor (not significant)	Major to Moderate (significant) locally; Moderate to Minor (not significant) wider subtype
Local Landscape Character Subtype: Peterhead Urban Fringe	<i>Low</i>	Low	Negligible adverse (not significant)	<i>Low</i>	Low	Negligible adverse (not significant)	Medium	Minor (not significant)	Minor (not significant)	High-Medium	Minor (not significant)	Moderate to Minor (not significant)
Visual Receptors												
Settlement												
Longside	<i>High</i>	Low to Very Low	Moderate to Minor (not significant)	<i>High</i>	Low	Moderate (significant)	High-Medium	Major to Moderate (significant) locally	Substantial to Major (significant) locally	High-Medium	Major (significant) locally	Substantial to Major (significant) locally
Flushing	<i>High</i>	Medium	Major (significant)	<i>High</i>	Medium-Low	Major to Moderate (significant)	High-Medium	Major to Moderate (significant) locally	Substantial to Major (significant) locally	High-Medium	Major (significant) locally	Substantial to Major (significant) locally
Individual Residential Properties	<i>High</i>	Low-Very Low to Medium	Moderate to Minor (not significant) to Major (significant)	<i>High</i>	Very Low to Medium	Minor (not significant) to Major (significant)	Low to Medium	Minor (not significant) to Major to Moderate (significant)	Moderate (significant) to Major (significant)	Medium-Low to High-Medium	Minor (not significant) to Major (significant)	Major to Moderate (significant) to Substantial to Major (significant)
Transport Routes												
A952	<i>Medium Road User / High tourist</i>	Low to Very Low	Minor to Negligible (not significant); tourists Moderate to Minor (not significant)	<i>Medium Road User / High tourist</i>	Low-Very Low to Very Low	Negligible; tourists Moderate to Minor to Minor (not significant)	Medium-Low	Negligible / Minor (not significant)	Moderate to Minor (not significant); tourists Major to Moderate (significant)	Medium	Negligible / Minor (not significant)	Moderate (significant); tourists Major (significant)



Receptor	Construction:			Operation:			Proposed Development (PD) and other Cumulative Developments					
							Cumulative Scenario 1:			Cumulative Scenario 2:		
	Sensitivity:	Magnitude:	Level of Effect:	Sensitivity:	Magnitude:	Level of Effect:	Magnitude (Existing and Consented)	Additional Level of Effect (PD)	Combined Level of Effect	Magnitude (in-planning)	Additional Level of Effect (PD)	Combined Level of Effect
A950	<i>Medium Road User / High tourist</i>	Medium to Low	Moderate to Minor; tourists Major to Moderate	<i>Medium Road User / High tourist</i>	Medium-Low to Very Low	Moderate to Minor to Negligible; tourists Major to Moderate to Minor	Medium	Minor to Negligible; tourists Minor to Moderate	Moderate ; tourists Major	High-Medium	Minor to Negligible; tourists Moderate to Minor	Major to Moderate ; tourists Substantial to Major
Minor Roads to the North, East, South and West	<i>Medium</i>	Low to High	Negligible to Major (significant)	<i>Medium</i>	Very Low to High-Medium	Negligible to Major to Moderate (significant)	Low to High-Medium	Negligible to Moderate (significant)	Minor to Major to Moderate (significant)	Low to High	Negligible to Moderate (significant)	Minor to Major (significant)
Recreational Routes												
Formartine and Buchan Way	<i>High</i>	Very Low to Medium-Low	Minor to Major to Moderate (significant)	<i>High</i>	Very Low to Medium-Low	Minor to Major to Moderate (significant)	Medium-Low to Medium	Major to Moderate (significant) locally	Major to Moderate to Major (significant)	Medium to High-Medium	Major (significant) locally	Major to Substantial to Major (significant)
Core Path 208.01 at Longside	<i>High</i>	Medium	Major (significant)	<i>High</i>	Medium-Low locally; Very Low with distance	Major to Moderate (significant) to Minor (not significant)	Medium locally; Low to Very Low with distance	Major (significant) locally	Major (significant) locally	High-Medium locally; Low to Very Low with distance	Major (significant) locally	Substantial to Major (significant) locally